

ERASMUS UNIVERISITY ROTTERDAM

BACHELOR THESIS:

SUBJECT: *The Freeport of Riga, Latvia*

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Executive Summary

During the years the Freeport of Riga has experienced major shifts in its operations. With changing political and economic situations in Latvia itself and its trading partners, the port has adjusted its infrastructure, superstructure including its management. Therefore considering the existing uncertainty in the market, the existing literature on supply chain management and port performance has mainly highlighted the need for agile and flexible decision making of the port authority. This motivated to further research how the Authority of the Freeport of Riga accounts for flexibility in its decision making.

The analysis is based on the “The Project of Krievu Sala” and is split into three sub-questions. In order to examine the first sub-question about the role of flexibility in supply chain and port performance management findings in the recent literature, different theories are presented about the notions of flexibility and agility in current market trends. It can be concluded that currently the port is the key element of a well-integrated supply chain; therefore it has to account for flexibility in designing their projects as well as in their management. The second sub-question aims to describe the nature of the Freeport of Riga by explaining different factors that directly affect its sustainable development. Different legal aspects as well as political developments are extremely influential in the eyes of the society when examining the decisions of the Authority of the Freeport. This is mainly based on different interviews, discourse analysis and desk research. The third and final sub-question of the paper deals with the actual examination of flexibility in “The Project of Krievu Sala” based on two dimensions, namely range and adaptability. Both the choice of the model and dimensions are based on the relevant theoretical literature. The results of the examination differs between both of the dimensions, indicating that the possibilities for the improvement of the range options accounts more for inclusion of flexibility in its developments. Whereas the evaluation of adaptability proves more unclear and lacking a thorough flexibility planning. Thus the examination of the execution of “The Project of Krievu Sala” reveals that the Board of officials are the ones who decide upon the planning and actual execution of the project. Thus it can be concluded that the extent of the integration of flexibility notions for the long term development of the port are purely defined, based on the decisions of the Board of the Freeport of Riga.

Chapter 1: Introduction

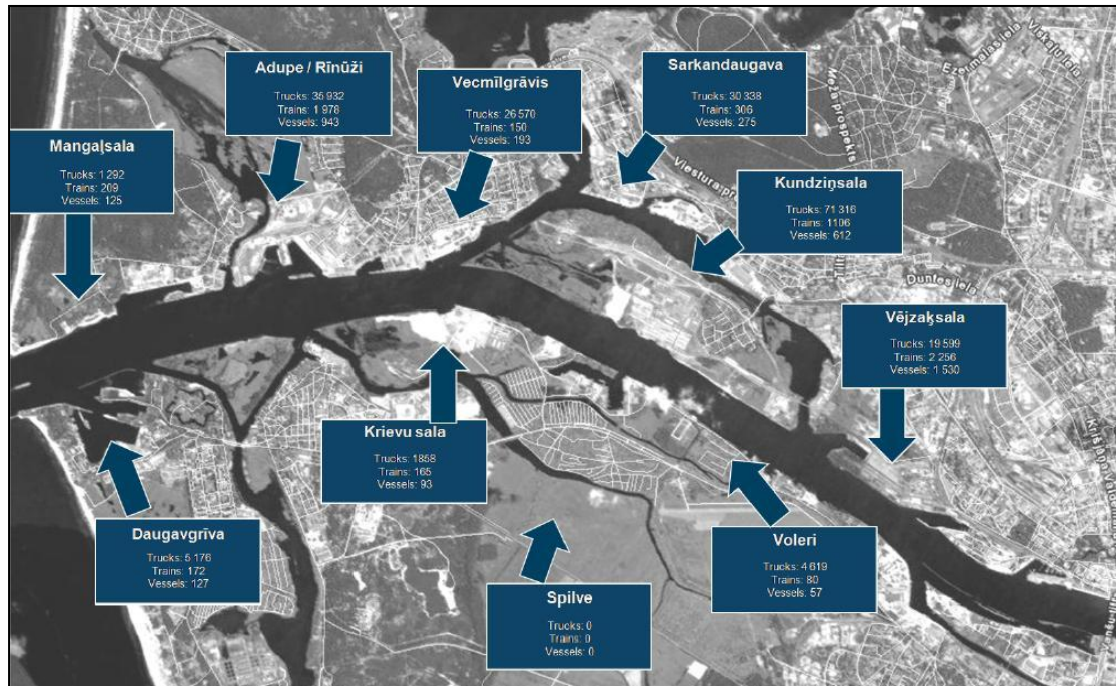
The current development of Baltic States namely Estonia, Latvia and Lithuania are highly dependent upon their historical development. Already since the twelfth century due to their strategic location, they have served as a fertile battleground for series of foreign invasions (Manning & Poljeva, 1999). Since 1980s when the Soviet Union fell apart and Baltic States declared their independence, the euphoria went hand in hand with arising problems. They faced the reality of increasing unemployment, underdeveloped and outmoded infrastructure and most importantly a heavy reliance on imported raw materials from the former Soviet Union (Manning & Poljeva, 1999).

During the Soviet Union time, Latvia was the main transit country in the Baltic. In comparison to its neighbours, its large industrial enterprises, producing phones and minibuses, was a cause of the tight control from Moscow (Latvia's post-soviet transition, piie). Thus to secure the demand of goods of Soviet Union through its own supply chains, the port of Riga was a crucial element for its market. Riga, the capital city of Latvia, used to be one of the leading centres and busiest railroads of imperial Russia. In 1913 Port of Riga claimed 17.2 % of all trade logged by Russian ports, even exceeding the volumes of port of St. Petersburg (Dreifelds, 1996). Especially after the collapse of former Soviet Union both of the parties had to find their own ways to secure its demand and for Latvia the Port of Riga has been one of its main strengths. This and many other factors contribute to the binding relationship that has had a major influence on the development of the Port of Riga.

The Freeport of Riga (since 2000) in itself includes various territories on the both sides of the River Daugava as can be seen in Figure 1. They can be classified into two groups, the ones located on the right side being Mangaļsala, Adupe, Vecmīlgrāvis, Sarkandaugava, Kundiņsala and Vējzaķsala, and the ones located on the left side namely Daugavgrīva, Krievu sala, Spilve and Voleri. Already historically each of the sides has experienced a different pace of development, which can partly explain the situation nowadays. The volumes of turnover in 2008 can be read from Figure 1, indicating that the right side of the riverbank has captured the most of the turnover which as of recent has started to face major problems. The growing volumes of cargo

turnover have caused a debate how to increase the efficiency of existing territories in order to compete with neighbour ports and facilitate the rising amounts of cargo.

Figure 1: The territorial allocation of The Freeport of Riga (Upper side is right side of Daugava) (The Freeport Authority, 2008).



One of the main problems the Freeport of Riga is facing is the close proximity to the city centre as can be seen in Appendix Figure 2. Due to the nearby living areas it is impossible to expand the port territories. As well the noise and pollution coming from the terminal operators has been a major concern of the City Council. This has led the Authority of the Freeport to pursue a project of “Development of Infrastructure of Krievu Sala for the Transfer of Port Activities from the City Centre”. After three years of discussions and lawsuits the project has been approved to secure the wellbeing of the population of Riga and to promote the expansion of the Freeport of Riga. However, there are many factors that are highly important to carry out the actual moving, like construction of the new infrastructure as well as the new superstructure on the terminals. The trends in the world’s economy as well as the high level of uncertainty that every business is facing has major implications for strategic decision making of the port’s potential expansion.

During the years the Freeport of Riga has experienced major shifts in its operations. With changing political and economic situations in Latvia itself and its trading

partners, the port has had to adjust its activities throughout the years. It has been done by adjusting the port's infrastructure, superstructure and finally its management. Therefore considering the high pace in the market mobility, currently the existing literature on supply chain management and port performance has mainly highlighted the need for agile and flexible decision making of the port authority. There are various theories available concentrating on different characteristics that different authors have examined on flexibility, agility and mobile plan adjustment. Therefore different theoretical models will allow examining how the existing trends in the literature actually are included in the projects of the Freeport of Riga.

The aim of this research paper is to examine the level of flexibility that the current decision making is taking into account in order to face the existing uncertainty. Therefore, the research question of this paper will examine to *what extent the Freeport Authority of Riga accounts for flexibility in the execution of "The Project of Krievu Sala"*? To answer the proposed research question the analysis is split into three sub-questions:

1. What is the role of flexibility in supply chain management and port performance?
2. What is the nature of the Freeport of Riga? Examining the economic, legal, technological, political and environmental factors.
3. How the planning of "The Project of Krievu Sala" accounts for flexibility in its decision making?

The method of examination differs between the sub-questions. The first sub-question presented in Chapter 2 reviews different research papers on the subject of flexibility. The second sub-question in Chapter 3 presents the nature of the Freeport of Riga based on desk research, discourse analysis and interviews from different officials. There are two interviews from the representatives of the Freeport of Riga Authority, V. Makarovs, Director of Strategic Planning and Project Management Department, and H. Apogs, Project Manager at Freeport of Riga. Additional two interviews from officials of the Riga City Council City Development Department, A. Kuskis, Urban Planning Board Member and Head of Historic Centre Projects' Unit, and A. Ločmanis, Urban Management Master Plan Department Project Chief Manager. One interview from the official of "Latvian Railway", G. Jansons, Director of Technical

Management Development Unit. While the third sub-question analysed in Chapter 4 combines the findings of the previous chapters with the chosen model for the analysis. To conclude the analysis, Chapter 5 provides an evaluation of the analysis and conclusions based on the findings throughout the paper.

Chapter 2: Literature Review

The goal of this chapter is to present how the issues of flexibility and agility relate to both supply chain and the port performance management. The literature highlights that the successful existence of the whole supply chain is dependent upon the developments in the port. Therefore, it is necessary to show how the decision making of one party can affect the operations of the whole supply chain mechanism. The following outline of the chapter is used to present the findings. Section 2.1 shows how flexibility is embedded in the supply chain management. The section 2.2 based on the ideas presented in the first section elaborates on the issues of agility in the port performance. The section 2.3 presents the theoretical grounds of flexibility illustrating different strategies and their characteristics. The last section 2.4 shows how the decisions of the Authority of the Freeport account for different factors when designing its projects and presents the model that is used as the basis for analysing how the planning of “The Project of Krievu Sala” accounts for flexibility.

2.1. How flexibility is embedded in supply chain and the port performance management?

Today’s hyper-competitive environment is characterized by constant change and market unpredictability, thus organizations constantly have to remain competitive while adapting to changing marketplace conditions (Brown and Eisenhardt, 1998). To secure this position, manufacturers are nowadays operating as nodes in a network of suppliers, customers and other service providers united into one supply chain network (Chan and Chan, 2009). Therefore, supply chain members unite into one chain in order to successfully adapt to the uncertain environment. Additionally this pushes the members to offer the best service possible in order to increase the competitive advantage. The role of the port as an element of the supply chain mechanism has evolved over the years. It used to be seen as very traditional, almost old-fashioned environment, however nowadays ports adapt a new attitude. Nowadays, due to the changing environment and conditions of the competition, ports are seen as a key logistic element of the supply chain sustainability (Marlow and Paixao, 2003).

For the supply chain to compete in current market conditions, it needs to have its competitive advantage over its competitors. This advantage can be exploited by successful implementation of ports' operations into the chain mechanism. The old view of a port as a uniting element between the seaway and hinterland is over. Nowadays ports are elements in value-driven chain systems or in value chain constellations as they deliver value to shippers and to third party service providers. The port captures value for itself and for the chain in which it is embedded by customer segmentation and the further targeting based on specified value propositions (Robinson, 2002). The research proves that due to the progressive integration of ports in supply chains, it has become clear that shippers no longer choose a port per se, but rather a supply chain. As it can be seen as a package or bundle of logistics services, a pathway to markets in which a port is just an element albeit an important one of the system (Magala, 2008). Therefore, it can be concluded that the choice of the port for a shipping line is not a matter of a coincidence, but rather based on the quality and reliability of the services that it can offer.

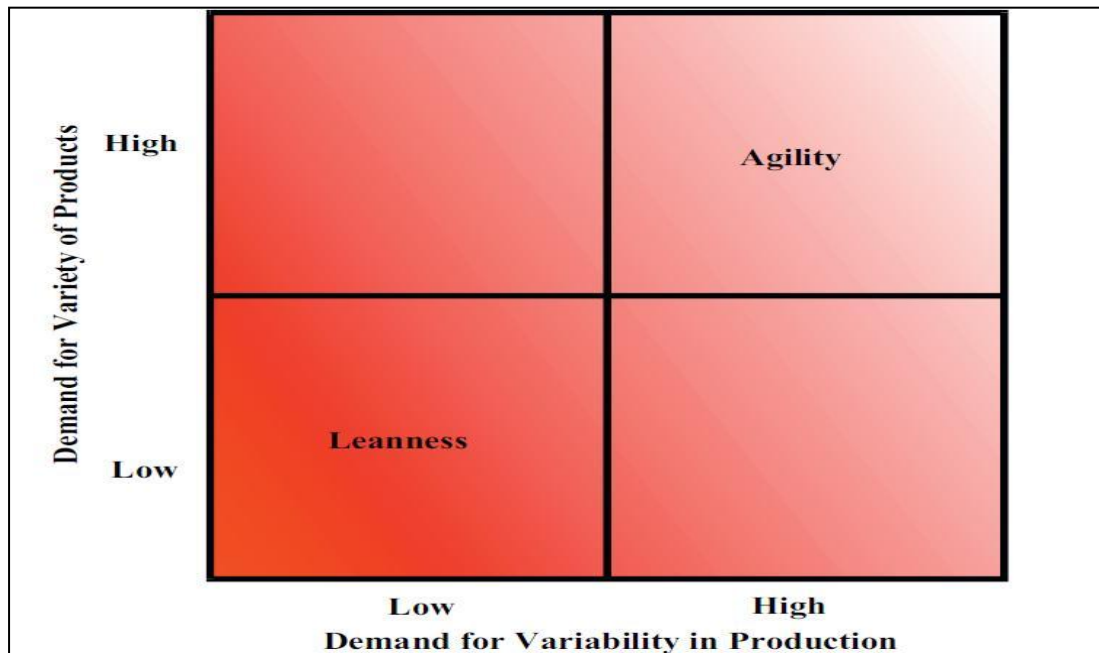
Robinson (2002) focused his research on the subject of ports being the elements of value driven chain systems, identified as a new paradigm. Robinson stated that port authorities have to identify their current competitive advantage whether it is in its assets, strategic location or existing supply chains and work from there in order to improve the provision of its services. It has to capture, deliver and sustain its competitive advantage while delivering the highest value-added service possible. Although the view presents, that in the reality those are supply chains that have to compete against each other, the ports themselves cannot rely solely on the success for the chains. Ports themselves have to make long term investments and sustain their competitive advantage due to the competition faced from the neighbouring ports. Especially due to external environment today, exhibiting constant changes that result into high level of market uncertainty, suggests that ports have to adapt more agile logistic approach (Marlow and Paixao, 2003).

2.2. The need for agile port performance

One of the first authors discussing the concepts of agility and lean manufacturing systems was J. B. Naylor (1997). The aim of his research was to define and

distinguish the main differences and similarities of the concepts as previously no one had attempted to do that. Based on his model Figure 3, presents a notion that by combining agility, being defined as a measuring of market knowledge and a virtual corporation to exploit profitable opportunities in a volatile market place, and leanness, a development of value stream to eliminate all waste, including time, and to ensure a level schedule, a new concept as “leagility” can be derived (Naylor, 1997), which has been supported by Mohammed and Gosling (2011) findings that distinct supply chain types may be labelled as lean, agile and ‘leagile’ depending upon the choice of the chosen strategy.

Figure 3: Flexibility in satisfying demand for variety of products and variability in demand (Naylor et al., 1997).



In the research of Marlow and Paixao (2003) the characteristics of lean and agile port performance are the main drivers to deliver the competitive advantage. They presented a set of port performance indicators that the port has to meet in order to measure lean port performance and sustain the subsequent development of its agility:

- it requires its own infrastructure,
- continuous market research has to be carried out to anticipate market trends;

- ports must act like distribution centres by controlling all of the trade routes, suggesting a proactive attitude;
- all collaborators must be able to make decisions just in time without following a bureaucratic system;
- top management is required to adapting a new management philosophy of eliminating hierarchical organisational structure;
- successful development depends on the human element of the inputs and the intelligent application of knowledge rather than on technology and capital.

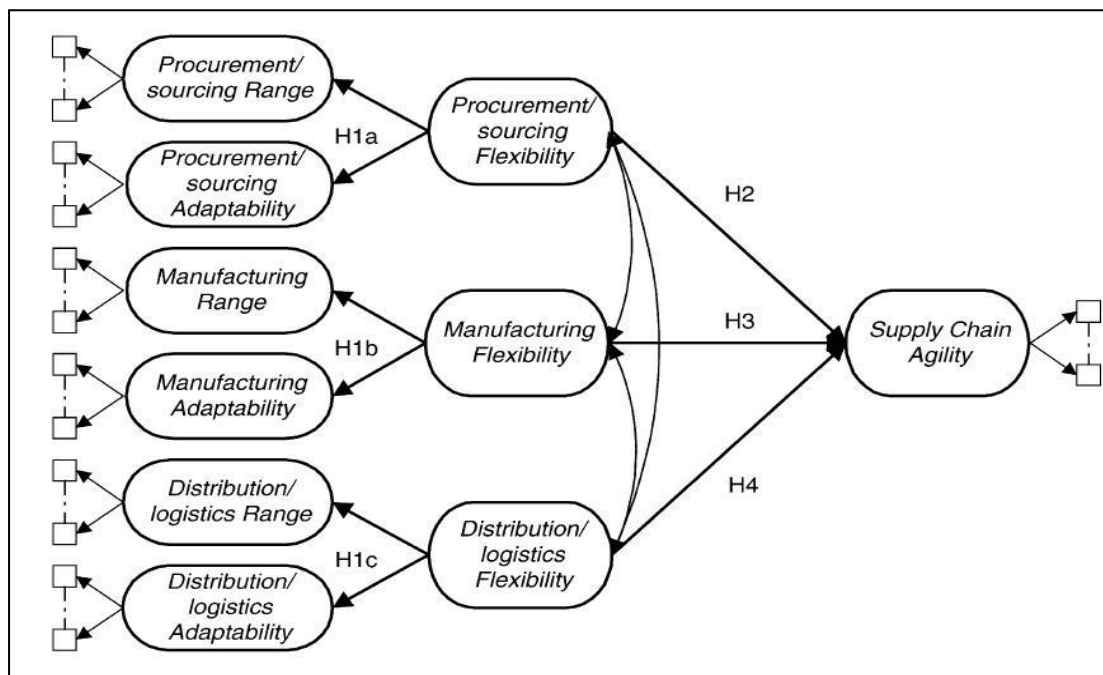
By following these criteria, ports will become more flexible, adaptable and responsive by enhancing their compatibility. According to the authors, before the port could become agile, it has to become lean which would mean that it has to reduce all non-value added activities, smooth the delivering process and eliminate all waste. This could be best achieved if several ports in the region would collaborate and unify into one lean network, as suggested by Marlow and Paixao (2003).

It is considered that qualitative indicators are at heart of agile performance. They bring increasing visibility within the port environment and the transport chain, enhancing a better integration of all supply chain logistics elements. The presented framework by Marlow and Paixao is made up of two performance levels, external and internal. The latter provides the ranking of all network ports, inland terminals and transport operators in terms of their efficiency and also constitutes the basis for an effective and efficient way of controlling and monitoring port operations. The ability to measure flexibility of operations performance is crucial for developing an agile port. Thus suggestion that the degree of success in delivering a service successfully providing customer satisfaction, could be used as a measure of total flexibility in an agile port (Marlow and Paixao, 2003).

In 2006 Swafford presented a view that flexibility is what actually defines and drives the successful supply chain agility in the first place. Swafford concluded that supply chain agility is directly and positively impacted by the degree of flexibility. She classified that the manufacturing and procurement/sourcing processes of the supply chain are directly impacted by inclusion of flexibility; while it is indirectly impacted

by the level of flexibility within its distribution/logistics process (Swafford et al, 2006). This has been proved by a framework that establishes key factors that determine flexibility attributes of three critical processes, namely procurement/sourcing, manufacturing, and distribution/logistics. As shown in Figure 4 an overall structure presents how combined chosen factors are determined by two key dimensions of range and adaptability. Each of the processes has their own sub-classification of the range of sources and process adaptability in order to be more flexible and agile in its performance.

Figure 4: Framework of supply chain agility (Swafford et al, 2006)

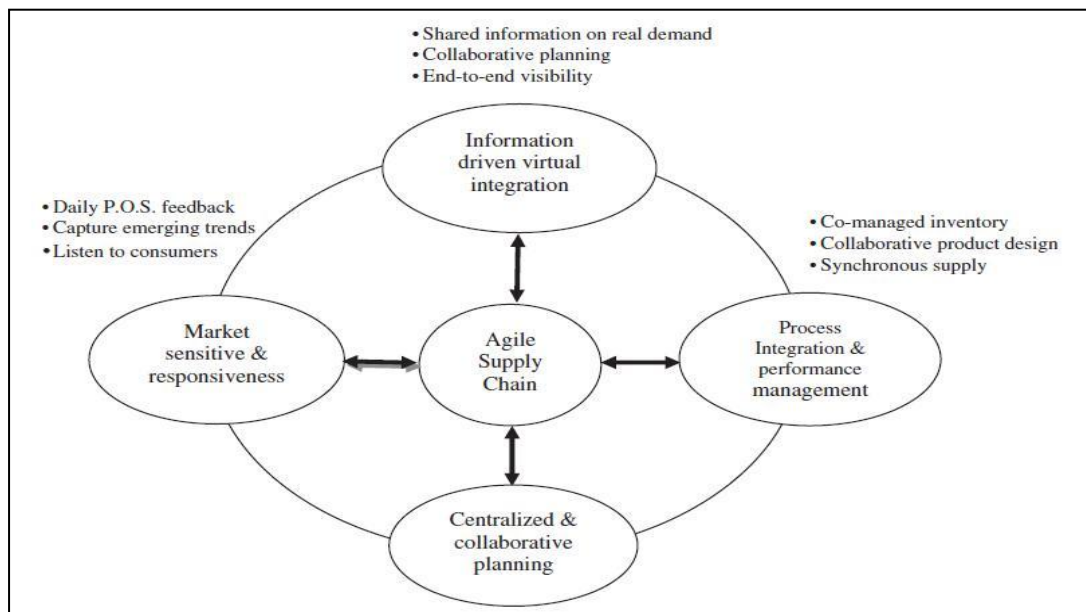


2.3. Theoretical grounds of flexibility

For the analysis presented in this research paper it is important to define the concept of flexibility as it serves as a ground for the proposed argumentation. The definition is based on two dimensions, range, being the number of different states (levels, positions, or options) that can be achieved with existing resources; and adaptability, being the ability to change from one state to another state in a timely and cost effective manner (Swafford, 2006). Both of the dimensions are important in order to capture the overall effect of flexibility when examining “The Project of Krievu Sala”. The definition of agility is the ability to respond rapidly to markets that are driven by sudden changes in customer demand and, by doing so, enable businesses to grow in

competitive markets of continuous and unanticipated change (Yusuf, 1999). The overall effect can be characterised by various other variables that directly and indirectly affect both agility and flexibility. In Figure 5 the diagram presents how the variables can be classified in order to observe the overall effect, as well as help to develop a suitable framework in order to improve the supply chain management (Agarwal, 2006). The main findings were that lead time reduction, use of IT tools; centralized and collaborative planning and process integration are significant drivers. Hence they must be at the top priority for an agile port as only an integrated port is capable of responding to customer demand in a volatile market conditions (Agarwal, 2006).

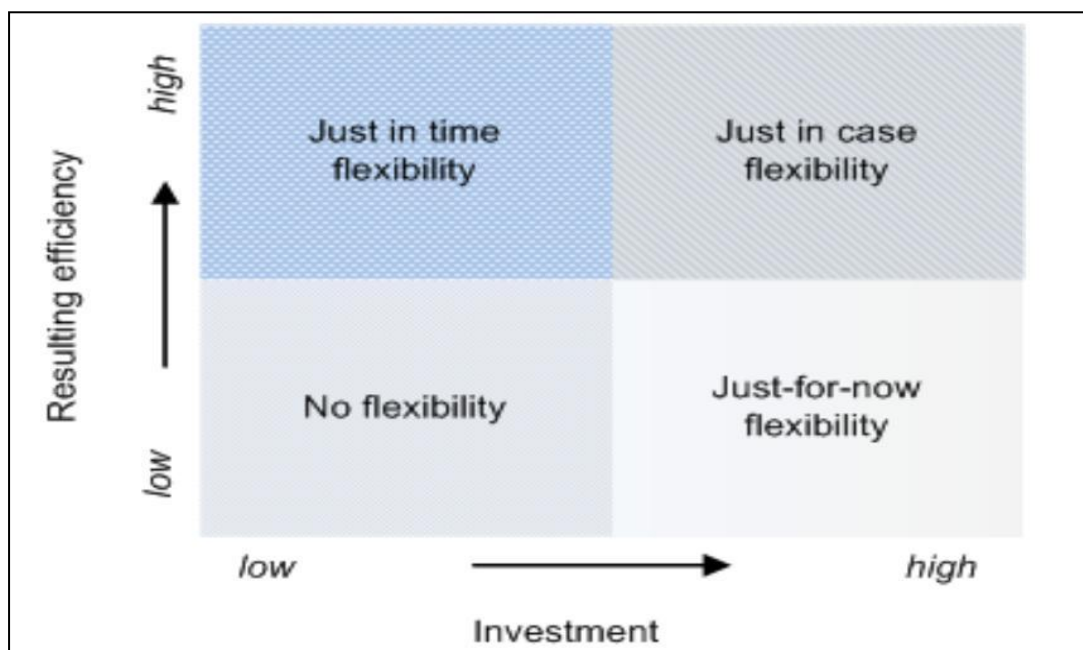
Figure 5: Characteristics of agile supply chain (modified from Harrison et al., 1999)



By reflecting on previously described characteristics, the literature has classified them into four possible strategies that can be considered when executing projects that have to consider flexibility issues. Figure 6 presents the strategies of no flexibility, just-in-time flexibility, just-in-case flexibility and just-for-now flexibility. The unifying aspect of the strategies is the employment of flexibility. As presented in the research paper of Taneja, Ligteringen and Walker (2011), these are the descriptions of the four strategies:

- no flexibility- implies that the decision making does not exhibit any degree of flexibility for the future purposes as each of the steps is tailored for a short term use or designed for a single purpose;
- just-in-time flexibility- this is the most efficient strategy, however the most problematic to implement due to high investments into infrastructure, requiring careful and continuous market examination;
- just-in-case flexibility- the most expensive and with the highest potential of efficiency, as defined refers to building in margins that the system can adapt in response to changing trends;
- just-for-now flexibility- the choice of this system depends on the level of possible flexibility, as if the market place exhibits no assurance of the outcome, then the timing of the choice can vary based on the situation.

Figure 6: Strategies accounting for different levels of flexibility (Taneja, et al, 2011)



This research paper aims at presenting what approaches could be used in port planning, design and project evaluation in order to deal with the growing uncertainty in the port industry. The paper suggests how port authorities are dealing with the volatile environment, highlighting aspects like the use of Master Plans¹ into development forecasts, the favouring of low-cost engineering plans instead of

¹ A layout of the port wherein land is allocated to the various uses required, describes the phases needed to implement the plan and gives an indicative implementation scheme per development phase.

examining their long term sustainability. The problem lies in the fact that risk analysis and strategic planning are treated as independent activities leaving no scope for including flexibility in the front-end phase of projects. Therefore, their findings suggest that Adaptive Port Planning² methods described in Appendix, which include Real Options Analysis³ for valuing flexibility, are better suited in times of uncertainty (Taneja, et al, 2011).

2.4. The planned design of the projects by the port authority; presenting the model of structural layers for the examination of the flexibility

The whole planning process that the authority designs is a highly complex set of planned decisions. Especially due to the existing nature of the port operating on the grounds of the state, which is followed by strict set of laws and rules guiding the decision process, the legislative body is of a great importance for the authority's decisions. As indicated by Gong and Janssen (2011) the main difficulty to sustain this competitive advantage of agility and flexibility, is due to complexity of implementing business processes, including the uncertainties about precisely what it is to which one needs to adapt, the many stakeholders, the negotiations among many implementation options, the lack of overview on related processes as well as the policy executors dependence upon other systems in the environment. The authors strengthen the belief that actual policy makers are not well aware of the flexibility that current market conditions demand, thus being a main cause of the existing miscommunication between the ports and its governing institutions. Therefore, in the paper a framework is design to improve the communication by:

- defining and using business services;
- integrating and orchestrating business services through the use of events;
- separating process, knowledge and resources;
- implementing policy in an integrated manner.

² An integrated planning method that offers a unified approach for strategic planning and risk management, and guides planners to systematically deal with uncertainties that appear over the lifetime of an infrastructure project.

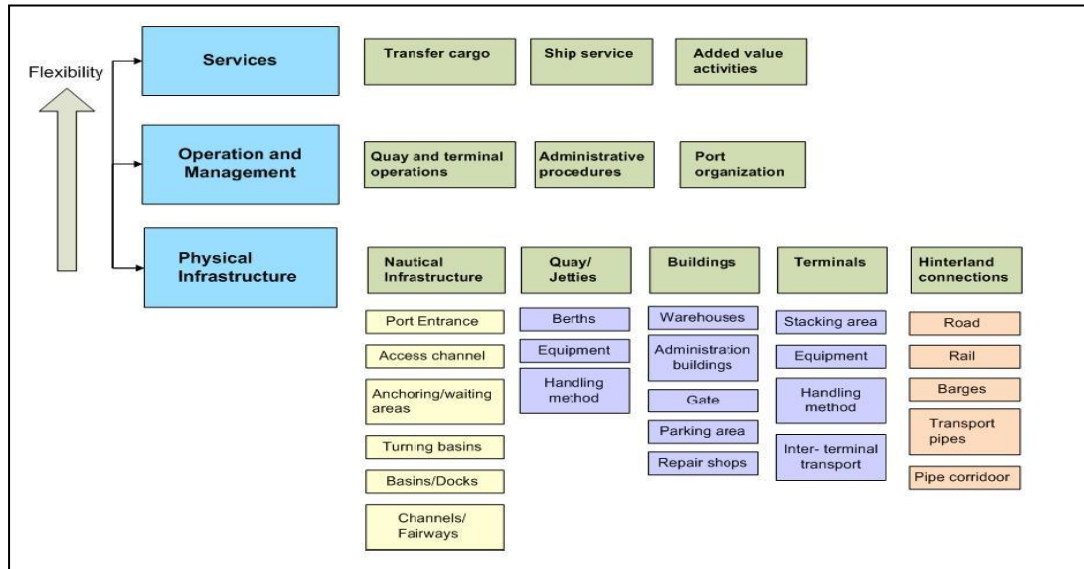
³ A systematic and integrated decision analysis process used to evaluate investment projects, which are facing uncertainty. It uses DCF methods as a building block, and integrates decision trees into a sophisticated framework that provides analysts and decision makers with more meaningful information.

Gong and Janssen concluded that defining clear responsibilities and accountabilities from both sides will enhance the effectiveness and speed of the policy implementation. However to sustain the competitive advantage port has to be innovative starting from infrastructure until the business process management, as the combination of all of these aspects will raise the level of flexibility and agility of the performance.

The presented suggestions were drawn based on the analysis of the existing approach of design and planning employed by port authorities. There are various barriers and obstacles that have to be tackled by decision makers in order to incorporate possible flexibility solutions into their decisions.

However not everything is actually in hands of the port authority. Figure 7 in text presents a model which is going to be used for the analysis of “The Project of Krievu Sala” presented in Chapter 4. It gives a clear view of three layered model to describe the structure of the port allowing to draw a detailed conclusion based on accounting for flexibility. This model was presented by Thissen and Herder (2003) to illustrate that the overall structure is affected by external influences, however the port itself can try to adapt to changing market conditions via usage of flexibility into its decision making. These three layers can be classified as physical infrastructure, operational and service layer. The first two layers can be directly planned, designed and implemented by the port authority. However the third layer of the services being the types of cargo, handled volumes or decisions of terminal operators cannot be influenced to such a great extent due to different types of the classifications of the ports.

Figure 7: The Three Layered Model of the Structure of the Port (Thissen and Herder, 2003)



This model gives a detailed and well worked out presentation of the structure of the port, therefore allowing to examine how in each of the presented sub-classes of the diagram accounts for the planned decision for flexibility. By combining this model together with characteristics of Adaptive Port Planning method based on range and adaptability the analysis of “The Project of Krievu Sala” can be carried out. The idea exhibited in the proposed model allows for the concrete and valid examination of the Freeport of Riga, in the light of the recent project execution.

The goal of this chapter was to answer the first sub-question dealing with the role of flexibility in supply chain management and port performance improvement. After a thorough overview of different research papers of this subject, it can be concluded that flexibility is an issue for every member of a supply chain. Especially, as the port is considered a key element of a well-functioning and successfully integrated supply chain, it has to account for flexibility in each stage of its development. Based on the paper by Taneja, it is possible to differentiate between different dimensions of flexibility, namely the range of number of different states that can be achieved with existing resources; and adaptability, the ability to transform in timely and cost effective manner. Therefore, for the analysis of “The Project of Krievu Sala” both of these dimensions are going to be analysed together with the three layered model

presented in the Figure 7, in order to account for the overall flexibility integration by the Freeport Authority.

Chapter 3: The Nature of the Freeport of Riga, Latvia

The proposed “Krievu Sala Project” will serve as a strategic move not only to free the centre of port activities, but allow the extension of port activities on the left side of the Daugava. This will encourage development of infrastructure and terminals to support the growth of the port activities, however the execution of these activities are of a main importance for the long term sustainability. There are various factors that must be considered by the port authority, especially taking into consideration the high level of uncertainty of the future of the Freeport of Riga as a link between Russia and EU. Therefore, this chapter will give an overview of the existing framework of the Freeport of Riga. It is divided into five separate sections, namely economic, legal, political, technological and environmental factor overview, in order to portray an overall situation in the port.

3.1 Economic factors

The overall state of the economy in Latvia has a direct effect on the port operations, while the Freeport of Riga contributes to the overall GDP of the country around 3% (V. Makarovs, 2012). Thus the potential increase in the cargo turnover handled in the port could help the country to stabilize its economy in the long run. The recent crises hit Latvian economy severely. Although the government states that the economy is recovering, some statistics portray a controversial picture. While the real GDP growth rate for EU in 2011 was 1.5%, Latvia experienced 5.5% change in comparison to the previous year (Eurostat, 2012). Therefore, in some instances Latvian economy is signalling a recovery from the recession. Currently, the unemployment level is still at 14.8% which is the fourth highest in the EU (Eurostat, 2012). At the beginning of 2010, approximately 20 thousand people were employed in enterprises that run its operations on the grounds of the Freeport of Riga connected with the business of port, but after putting the new terminals and infrastructure objects into operation the number of employees will directly and indirectly grow by at least 5 thousand. Approximately two thousand people will be involved already in the implementation process of the Project of Krievu sala (The Freeport Authority, 2012).

The cargo turnover has increased throughout the years. As Figure 8 indicates, in comparison to period from 2008 till 2010, in 2011 the throughput considerably rose.

And as Figures 9 and 10 indicate, all the cargo handled augmented, except general cargo that already reached 46% increase in 2010. Loading capacity at the terminals of the Freeport of Riga amounts to 45 million tons a year, however due to the Project of Krievu Sala and the expansion plans at Kundziņsala, the capacity will increase to around 67 million tons (The Freeport Authority, 2012).

Figure 8: Cargo Throughput 2005-2011 in the Freeport of Riga (The Freeport Authority, 2012)

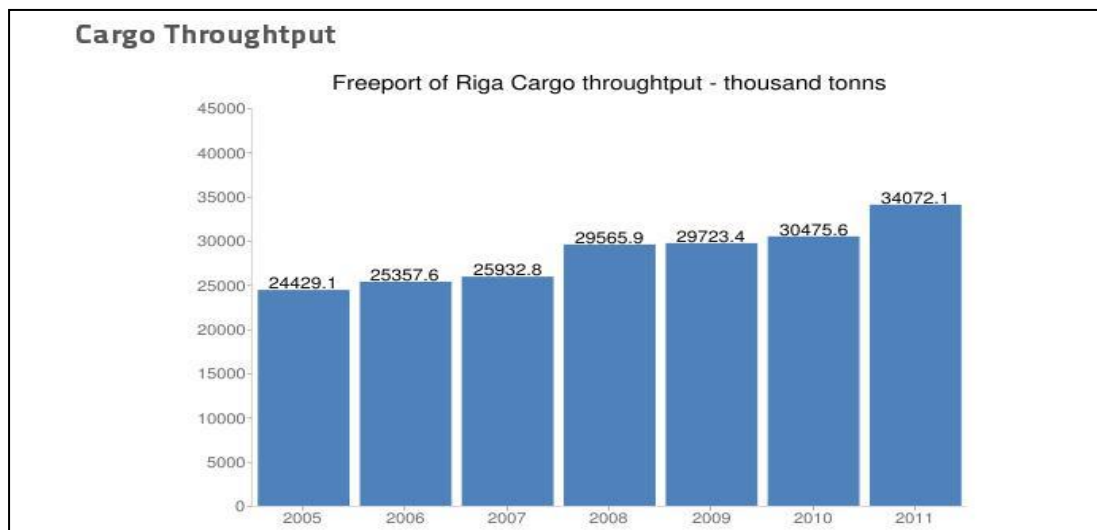


Figure 9: The split of cargo turnover in 2010 in the Freeport of Riga (The Freeport Authority, 2012)

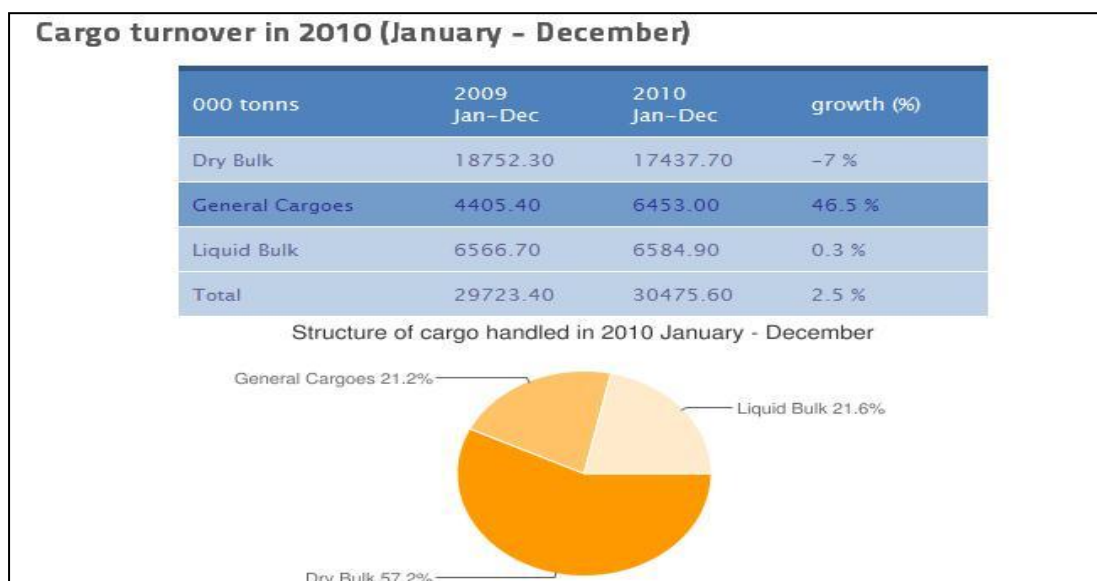
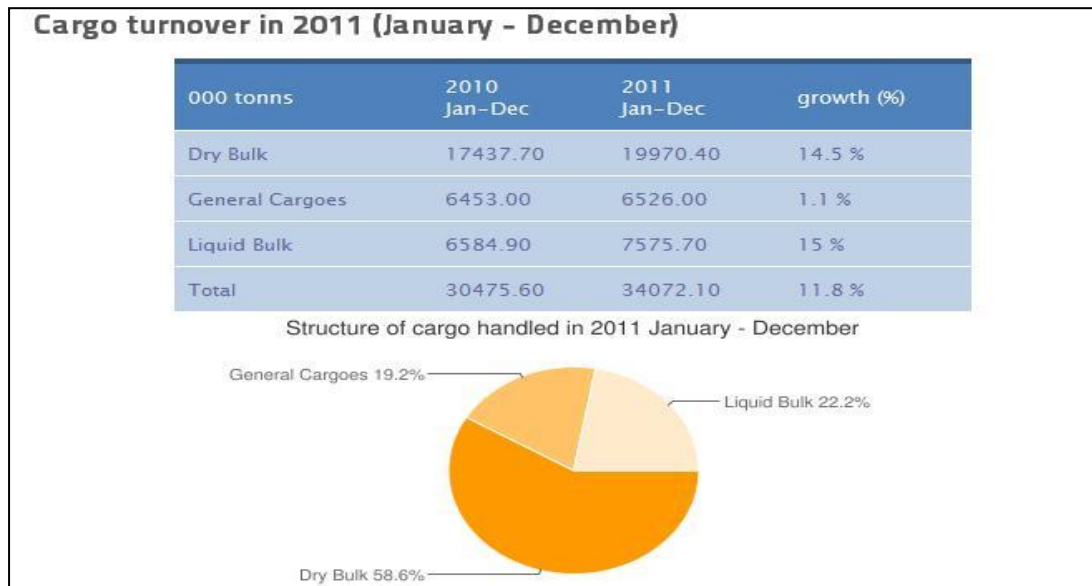
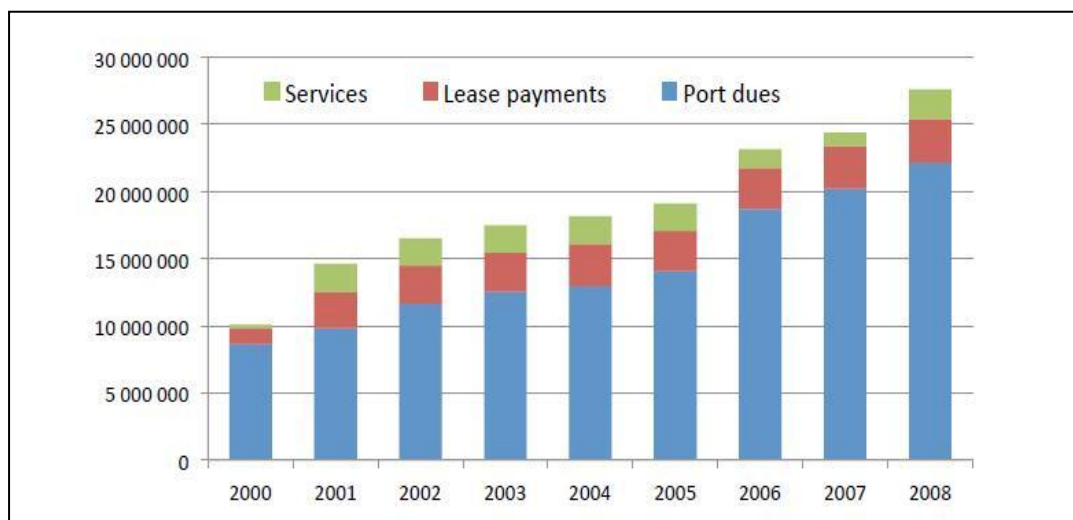


Figure 10: The split of cargo turnover in 2011 in the Freeport of Riga (The Freeport Authority, 2012)



The system of port dues and tariffs is one of the main competing points for ports operating in the Baltic region. And the Freeport of Riga lists as one of its strengths the system of tariffs and port dues as generally competitive and yielding strong financial results. The Figure 11 shows that approximately 70% of the total revenues are port dues and charges, while real estate lease payments constitute to 15%, services and other authority's revenues correspondingly to 15% of the total revenues (The Authority of the Freeport, 2012). However, at the same time as one of the potential weaknesses, the Freeport has stated the not transparency and insufficiently communicated tariff policy to its customers (V. Makarovs, 2012). Allowing for the conclusion, there is a space and a need for the improvement of the system as other ports in the region like the Port of Klaipeda had already announced of the decrease in its port dues (Port of Klaipeda Authority, 2010).

Figure 11: The split of port revenues, 2000-2008, in the Freeport of Riga (The Freeport Authority, 2008)



The Freeport of Riga by law has to comply with the principles of non-profit organizations, that its financial resources may be utilized only for management and development of the port and its infrastructure. Especially as investments into the development of port is expensive and lengthy process, Latvia as being a member of EU is subject to different subsidies for port projects. The biggest ones are for TEN-T program that are meant for improvement of sea and land superstructure, Cohesion fund contributes to interventions in the field of the environment and trans-European transport networks, thus finances large investments into infrastructure (Europa, 2012).

3.2. Legal factors

When analysing the Freeport of Riga there are two important sets of laws that have to be taken into account. One is the overall Law on Ports since 12 July 1994 and Rules and Applications of Taxes in Free Ports and Special Economic Zones (Likumi, 2012). Firstly, the most important aspects of the Law on Ports are going to be described, which is going to be followed with elaboration about the Freeport status.

The Freeport of Riga is “landlord” type of port as the land of the port may be a property of the State, local government or other legal or natural person, while navigation equipment and apparatus is the property of the port authority and quaysides may also be the property of other legal persons. The Freeport Authority is

not allowed to sell the land, but to lease the land for a period till 30 years, except in cases when the amount of investments planned for the port is higher than 50 million lati as each such agreement has been approved by the Latvian Port Council (V.Makarovs, 2012). And currently, the State is a major owner of lands and the superstructure which is leased to private companies. Within the set of laws are listed benchmarks are rules for the port authority, development projects and entrepreneurial activities.

The aim of development of Special Economic Zone differs between the countries. Developed countries use it as a tool to improve the political stability, decrease the unemployment, and improve deprived regional areas, while developing countries concentrate on increased levels of investments (Guļāns, 2003). According to the Free Port of Riga Law, companies that use land on legal basis, whose activities and development prospects conform with the development programme of the Free Port and that plan to make investments, can be entitled to receive a licensed company status and receive direct and indirect tax reliefs (The Freeport Authority, 2012). The investments made by a licensed company have to be considered a long term investments into capital assets as tangible investments like buildings, constructions, technological equipment and machines, unfinished construction objects and intangible investments like costs of acquisition of patents and technology (V. Makarovs, 2012). As well it was indicated that around a half of companies that are active on the grounds of the port are subject to this license. This can be explained due to high transparency and an extensive bureaucratic system that company has to follow in order to be entitled for tax relief that not all of the companies are willing to apply for the license.

The Freeport of Riga Authority has issued permissions to apply different direct tax reliefs. As examples can be used, the immovable property tax rebate in the amount of 80 per cent of the tax amount calculated or an enterprise income tax rebate in the amount of 80 per cent of the tax amount calculated, etc (Likumi, 2012). There are specific regulations on goods and services that are for usage in the Free Zone. Like petroleum products are exempted from taxes in case products are utilised by a licensed capital company for ships for manufacture, testing, maintenance, for works of excavation and enlargement of waterways and for electricity generation or in combined equipment which generates electricity and heat (Saeima, 2001).

The Ministry of Economics published in its report that in 2010 17 companies were entitled for a Free Zone license out of which 9 were active in cargo handling which together handled 40% of the total cargo handled at the port amounting to 19.12 million tons. The investments of free zone companies amounted to 8.45 million USD mainly into equipment, machinery, buildings and construction work in progress. According to Freeport's business survey in 2011, the Free Zone companies planned to invest 14.48 million LVL into equipment and buildings during the year 2011 (Pavļuts, 2011). Currently there are 19 licensed enterprises operating on the grounds of the Freeport of Riga. As of 2017 the Free Zone regime is subject to cancelation.

3.3. Technological factors

Around 80% of cargo that is handled at the Freeport of Riga goes further for transit (V. Makarovs, 2012). Therefore, the accessibility and the infrastructure of the port are of a great importance in order to ensure the effectiveness of the cargo flows. As the trend is to ensure the whole chain of door to door service provision, the port is the key part of the chain that can make the chain more competitive relative to other chains in the area. Therefore, a beneficial location is not all, it is essential to ensure a good provision of railway and roads for transportation of goods.

The density on Latvian Railway reached 35.1km/1000km², which is relatively high achievement as the average in EU is 48.4 km/1000km² (Latvian Railway, 2012). The current provision of railway is enough to facilitate the existing 4 railway service providers, however as the amount of cargo is going to increase reaching 100 million tons, it is necessary to improve the condition of existing railway infrastructure (G. Jansons, 2012). The main problems concerning the existing infrastructure are the average speed decreases over the years due to the worn out and highly depreciated railway tracks, as well as a different width of railway tracks in order to transport cargo to Europe. In the interview it was explained that the railway infrastructure that is built in the port belongs to the port. The only provision of services that the railway provides is the actual building and maintenance. Therefore, if the port authority makes the decision to pursue a project that includes the development of railway tracks, it is a matter of time till both of the projects can be synchronized. Additionally, the fact that "The Project of Krievu Sala" has started with 3 year delay is beneficial as "Latvian Railway" is only now finally able to start the actual building of the infrastructure.

There are various improvements necessary to improve the port's infrastructure. The Freeport of Riga has commenced reconstruction works of shipping channel, comprising both deepening and widening works of the ship pass in order to facilitate the big Panamax ship types. The work is going to be done in two phases, first the deepening of the channel will be carried out by Kundiņsala and afterwards in the period 2014-2018 deepening of the channel up to 17 meters in section from reception buoy up to Rīnūži. Additionally, within the framework of the TEN-T program of the European Commission 50% or 225 000 EUR of the necessary financing were obtained for research and elaboration of technical Project (The Freeport Authority, 2012).

Riga is a popular destination for cruise ships. The Figure 12 portrays that the number of cruise ships is increasing, however it could be higher. Figure 13 shows how the levels of passengers visiting the port in nearby ports is much higher than in Riga, allowing to speculate that by successfully developing the infrastructure and tourism industry, the number of visitors could increase. Currently the existing operator has not carried out any additional improvements for the cruise terminal or has not attracted any new lines. Therefore, in the long term after the contract will terminate with the existing operator in 2017, it is planned to move the current passenger terminal to the left side of Daugava to Ķīpsala. However, this is not supported by the Riga City Council (A. Kuskis, 2012). Therefore, the possible resolving of this project is highly unclear.

Figure 12: Cruise Ship and Passenger visits in the Freeport of Riga, 2000-2012 (The Freeport Authority, 2012)

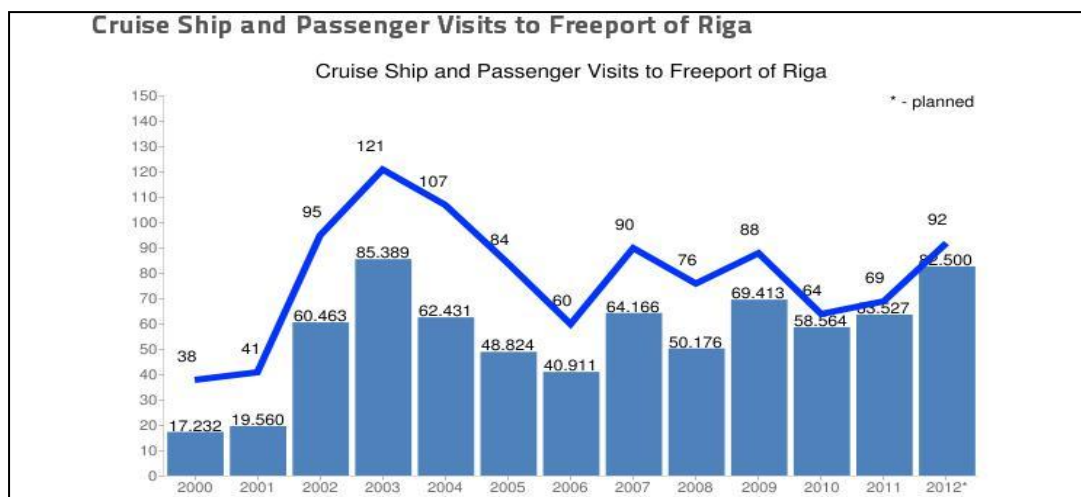
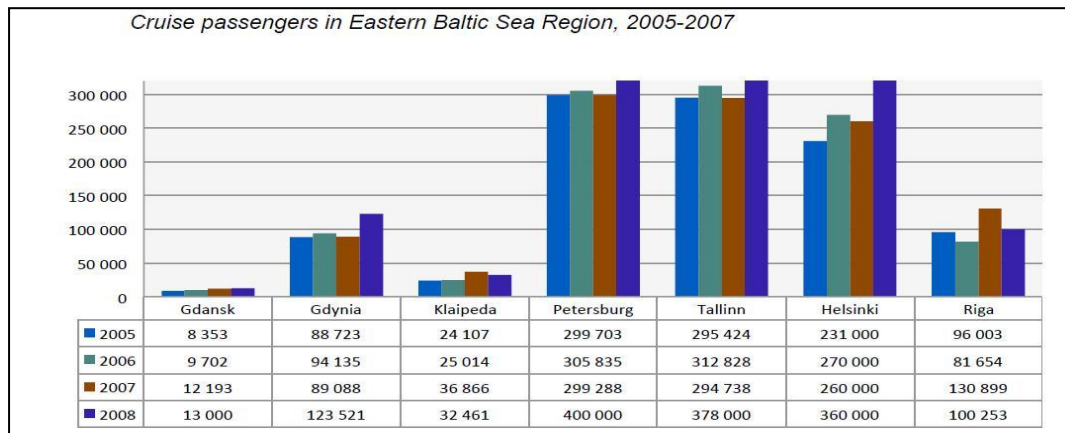


Figure 13: Cruise passengers in Eastern Baltic Region, 2005-2007 (The Freeport Authority, 2008)



Projects carried out by terminal operators will improve the technological performance of the port. It is planned to develop a new container terminal “Nacionalais konteineru termināls” as the current one was built in 1981 and since then is still operating without improved technological base (V. Makarovs, 2012). Licensed terminal operator “Energo SG” has received an approval to construct a liquefied natural gas LNG terminal together with cyclical power plant (Ulane, 2009). And there are more projects planned to be executed by different investors, therefore the port authority should follow the example and improve the infrastructure in order to attract more potential investors and terminal operators.

3.4. Political factors

The fact that was indicated in all the interviews as a major drawback for a port industry in Latvia is the missing unified strategy for all the ports (H. Apogs, 2012). Mainly, due to this reason there exists a competition between the Freeport of Riga and Freeport of Venstpils. A representative example is the handling of coal in both of the ports. One of the interviewed officials recalled that several years ago both of the ports were actually sharing the cargo handling, mainly because The Freeport of Riga did not have a necessary depth of births. First, when ship was leaving its starting point in Riga it was filled only 2/3 as the Freeport of Riga lacked the amounts, therefore afterwards the ship sailed to Ventspils where the rest 1/3 of coal were added. This was a successful cooperation for both sides at that time, but due to existing competition the strategies changed (H. Apogs, 2012). The Freeport of Riga relocated its handling

terminal to Žurku Sala which is closer to the Baltic Sea and as of then was able to fill the whole ship excluding The Freeport of Ventspils out of the partnership.

However, The Freeport of Ventspils responded to this move. A licensed company operating on the grounds of port The Baltic Coal Terminal pursued a new project to build s the first closed-end coal terminal in the Baltic region. The total amount of the investments reached €75 millions, which was financed by bank loans and private investors (The Baltic Coal Terminal, 2012). Therefore, the price of their services increased in comparison with ones offered by The Freeport of Riga, as their investments into Žurku Sala where substantially lower as this reallocation is for a temporary base till the Project of Krievu Sala will be ready. Although, the investment carried out by The Baltic Coal Terminal can be viewed as more sustainable in the long run, its price is not able to compete with the one offered elsewhere, and therefore coal is being handled in Riga or other neighbouring ports (V. Makarovs, 2012). This would not be the case, if ports of Latvia would cooperate and divide its cargo handling based on each ones specialisation.

The Board of the Freeport of Riga consists of eight members. There are four officials from the local government, and four nominated by the Minister of Economy, Minister of Finance, Minister of Transport and Minister of Environmental Protection (The Authority of the Freeport, 2012). Therefore, it is clear that the political stability of the country is a highly important variable in the successful and sustainable development of the board. This unfortunately is not the case in Latvia. Within the last two years the Latvian government has changed three times meaning that officials appointed for different boards have been removed and reappointed again (Central Election Bureau, 2012). As indicated by officials both at The Freeport of Riga and at the Riga City Council City Development Department, the strategies employed of changing political parties play a crucial role for different development plans. For example, the development projects of the Freeport of Riga are slowed down or even cancelled for indefinite time if the Union of Greens and Farmers wins seats in the parliament as one of the leaders of this political party is the Mayor of Ventspils who at the same time is a member of the Board of the Freeport of Ventspils.

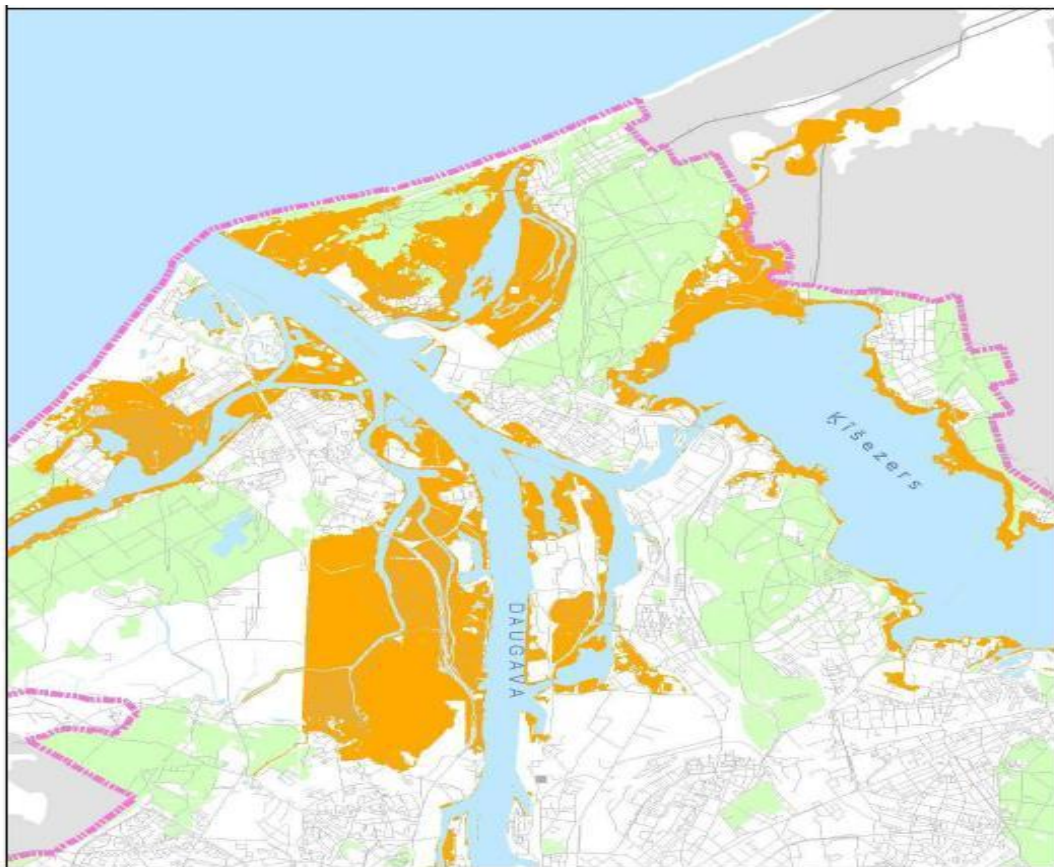
3.5. Environment factors

Already historically the uneven allocation of port territories has not resulted into effective and optimal use of the territory. Considerable amount of investment is required to improve the conditions within the unused areas and make them suitable for operations, including land reclamation activities. Appendix Figure 3 indicates the green areas as nature conservancy and nature parks, while the red line indicates the borders of the port. Thus certain parts of port territory cannot be used for industry activities, as it is not allowed in the zoning plan, or in other regulations like Natura 2000, e.g., Kremeri Nature Reserve, Piejura Nature Park (*Milestibas Island*), heritage sites (Kometforta dam, Daugavgriva and Mangalsala forts, Voleru manor house) and micro-reserve territories in the West part of Spilves Plavas (The Freeport Authority, 2008).

River deltas have always been equally attractive to birds, mammals and rear species. Due to this, major projects have experienced years of delays. Since 2007, attempts have been made to encourage a nesting colony of *Larus ridibundus*, on Krievu sala due to the growing problems in nesting birds present amongst roof tops (The Freeport Authority, 2008). Today, Krievu sala is no longer fit for bird nesting due to the Project of Krievu sala. Therefore, areas like Milestibas Island and Kremeri would be a better allocation as any port operations are prohibited in these areas.

In the interviews it was indicated that in the project ASTRA, an EU-funded project completed in December 2007, the most important risks associated with climate change for Riga and the associated port territory are the increased flood risk, rise in the frequency and intensity of storms with associated risk of damage and flooding and coastal erosion. In Figure 14 the high risk flood areas with a flood risk of 1% (in 100 years) are reflected indicating the threatened areas (A. Locmanis, 2012). Therefore, the Freeport Authority has taken this into account and raised the level of the grounds, especially in Kundziņsala and Krievu sala in order to avoid possible flooding threats in the future.

Figure 14: The flood risk of the areas in the port territory (The Freeport Authority, 2008)



Source: "Map of Daugava river flood risk in Riga city territory", Riga City Council Development Department, 2007

Being a part of an international network, in 2003 the Freeport of Riga has qualified for ISO 9001:2000 and in 2004 qualified for ISO 14001:2004 certifications by the Bureau Veritas Quality International, which confirms compliance of the operation of the Freeport Authority with the EU environmental preservation directives (The Authority of the Freeport, 2012).

Chapter 4: The examination of flexibility in “The Project of Krievu Sala”

“The Project of Krievu Sala” serves as an example how by relocating the port operations away from the city centre, it is possible to sustain the historical centre and expand the port operations on the grounds not used before. However before the overall examination of flexibility in “The Project of Krievu Sala” it is important to highlight the main findings of the previous chapters that are going to be used in the analysis. The previous chapter provided a clear overview of the Freeport’s operations based on economical, legal, political, technological and environmental factors. Therefore, it can be concluded that the Authority of the Freeport is not the only decision maker concerning the future of the port. The decisions and projects carried out by the port authority, is a combination of different external factors that directly influence the timing and results of the final decisions. Therefore, before going into the discussion of different flexibility issues, it is important to portray the projected and actual timeline of “The Project of Krievu Sala” in order to highlight how various circumstances have influenced the execution of the project.

Planned Timeline of “The Project of Krievu Sala”:

1. 2005: The finalising of the port expansion plans
2. 2010-2012: Construction of terminals in Krievu Sala
3. 2011: Upgrade of Rail Station Bolderaja, Phase 1
Construction of Rail Station Bolderaja 2, Phase 1
Upgrade of Skirotava Rail Station, Phase 1
4. 2012: Reconstruction of Daugavgrivas Street and Highway
5. 2013: Relocation of terminal operators to the new terminal Krievu Sala
6. 2014: Construction of Riga Rail Station Bolderaja 2
7. 2014: New terminals start to function (The Authority of the Freeport, 2008).

The overall project development started already in 2005 when the port authority planned to extend its territories. The priority was assigned for the reduction of port activities on the right side of the Daugava. Especially the area of Vējzaķsala Figure 1 in the close proximity to the city centre was of main concern due to the growing volumes of freight associated with both increased turnover in terminals and increased

usage of rail and road infrastructure. As Figure 1 presents the area of Eksportosta and Andrejsota (named Vējzaķsala) were highly important as in 2007 they faced 40% of the overall turnover of the Freeport of Riga. However, due to its location the activities caused major degradation for the environment of the historical centre and affected the wellbeing of the residents of nearby areas. Therefore, the decision was made to move the port terminals to a vacant territory in Krievu Sala (H. Apogs, 2012). The overall execution of the project was planned in several stages. In the period of 2011-2012 it was planned to develop the terminals. During 2013 the operations of terminal operators from Vējzaķsala will be relocated to the terminal and as of 2014 the new port facilities in Krievu Sala are scheduled to start to function (The Authority of the Freeport, 20008). Each of the stages included thorough decision making from the side of the port authority for the long term strategic planning including the development of infrastructure and superstructure as show in the Timeline. However, due to different circumstance the overall execution of the project has been delayed due to lawsuits and various environmental disputes discussed in the previous chapter. Therefore, an actual development of terminals has started just now in May 2012.

After the examination of the planned timeline, the actual examination of flexibility based on the findings in Chapter 2 can be described. The main tools used for the analysis is the combination of the Three Layered Model of the Structure of The Port and the Adaptive Port Planning Method. The model is constructed of three layers, namely physical infrastructure, operations and management, and service provision. Each of these layers consists out of different sub-classes which are going to be examined based on the Adaptive Port Planning Method presented in Appendix. The range and adaptability are the dimensions used from this method for drawing the conclusion of the accounting for the flexibility in “The Project of Krievu Sala”. Accounting for flexibility in the decision making of the Freeport Authority will be classified as positive if flexibility has been accounted for, negative if flexibility has been ignored or unclear if there is no indication of the presence of flexibility based on the examination of the activities of the authority. Additionally, when examining the third layer of the service provision within the operators, the Freeport of Riga being a landlord type of a port, does not have a big influence on the decision making of terminal operators, therefore, the third layer will not be examined in the analysis.

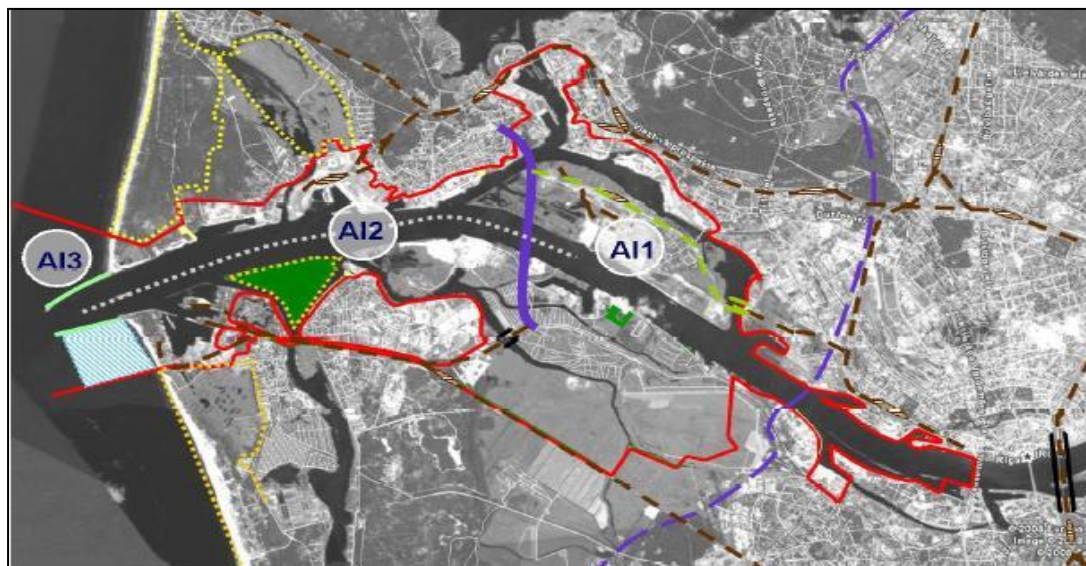
Additionally several sub-classifications are grouped together in order to examine the overall framework of the project in question.

4.1. Layer 1: Physical Infrastructure

4.1.1 Nautical Infrastructure

The on-going project reconstructing the access channel for ships entrance into the port provides safe entering and navigation possibility of heavy tonnage ships. The part of the fairway from reception buoy till the berth at Krievu Sala is planned to be deepened till 17m from the existing 12.2m. This has to be combined with the waterfront reinforcement works after the dredging will be carried out as well as the reconstruction of the breakwaters. These plans are correspondingly indicated under the symbols of AI2 and AI3 in the Figure 15 (The Authority of the Freeport, 2008).

Figure 15: Projected improvements in port infrastructure (The Freeport Authority, 2012)



The location of Krievu Sala is more closely located to the port entrance channel as can be seen in Figure 1. This allows for additional saving time as ships do not have to enter further into the hinterland to access the current terminals located in the area of AI1. This will increase the competitive position of the Freeport of Riga as it will be able to serve bigger Pannamax ships in comparison to the ports nearby. Currently there are three turning basins and four roads for the lay-up of vessel in case of the emergency. The vessel draught in the shipping channel varies in different parts of the port. There are several on-going projects to increase the depth for example the cruise

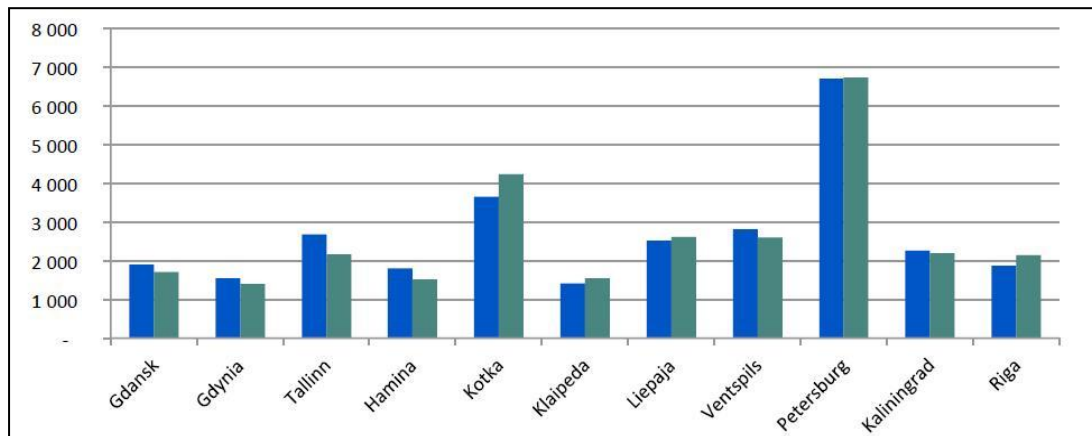
terminal that is located in Vējzaķsala Figure 1 has been deepened for additional 2 metres. This allows for the advancement of the competing position, adjusts for the changing markets and takes into account possible uncertainty.

Therefore, based on the Adaptive Port Planning Method it can be examined how the decisions of the Freeport Authority accounts for the flexibility. Due to the thorough structuring of different phases of the execution, as well as monitoring of the external environment to reduce the likelihood of uncertainties, it seems that the port follows pro-active policy in order to quickly respond to changes in the external environment. The speed of the decision making and actual execution has been carried out in timely and well budgeted manner due to cost effective and well defined manner. The potential for the port's long term sustainability can be evaluated as promising due to the decision makers explicit communication about the assumptions underlying their future plans for the expansion. The adaptability can be evaluated as positive as The Freeport of Riga is working on the sustainability of its competitive advantage in the eyes of potential clients. Therefore, it can be concluded that based on the proposed dimensions of flexibility both range and adaptability, the Freeport Authority has accounted for its inclusion in the adjustment of the nautical infrastructure.

4.1.2. Quays

The current quay length amounts to 13 818m, which compared with the total throughput of cargo has been one of the lowest in the area as shown in Figure 16 underneath. Thus during the execution of the first stage of the project of Krievu Sala it is planned to extend the quay length by 1780m in order to construct seven new berths. Out of which four that are located by the river Daugava are going to be for dry bulk amounting the depth of 15m, while the rest three located in the channel of Hapaks will concentrate on general cargo and meet the depth of 12m (The Authority of the Freeport, 2008). Therefore, due to increased cargo and the length of quays the ratio can be raised to accompany the growth and competitive advantage in the area.

Figure 16: The port utilisation- tons/quay m. 2007-2008 (The Freeport Authority, 2012).



In order to examine how the future construction of different quays accounts for flexibility issues is more challenging. The potential locations for construction of quays are highly limited due to the location of Krievu Sala. As well it must be considered that quays on the side of the channel of Hapaks are constructed under the provision of private investors. Therefore based on characteristics of Adaptive Port Planning Method, in order to account for flexibility in the actions of the Freeport, the conclusion is more difficult to draw. In Figure 16 this idea is supported, due to the extremely low position in comparison to the neighbouring ports, while ports like the Freeport of Ventspils or Liepaja prove to perform better even though the potential sources for their construction quays are fairly limited. Therefore, the examination of accounting for flexibility based on the proposed dimensions in decision making of the Freeport Authority is unclear.

4.1.4. Buildings and Terminals

The grounds of Krievu Sala terminal are planned to be used for different types of cargo. In Figure 17 it can be seen that throughout the years it is planned to increase the overall turnover in the Krievu Sala area and territories nearby. On the grounds of Krievu Sala it is planned to facilitate mainly the dry and general cargo, while the side of the channel of Hapaks will be devoted for Ro-Ro. For the dry bulk cargo the biggest proportion is coal for which the new terminal will be more adequate as on one hand there are more territories for expansion, while benefiting the residents of areas of Bolderaja and historical centre. The layout of Krievu Sala is more appropriate in its planning as coal terminals are located on the east side of the area further away from

the residents. In addition the new technology is more environmentally friendly. The area beside the channel of Hapaks as devoted for Ro-Ro and general cargo is not such a threat for the pollution having almost no effect on the environment. Concerning the increased volumes of the turnover that the expansion will facilitate, the forecasts amount to 28 million tonnes per year as the first year increase is already expected to amount to 3.5 million tonnes a year per berth (The Authority of the Freeport, 2012). Out of these 28 million tonnes, 12 million are considered to be coal production.

Figure 17: Projected cargo forecasts for the period of 2010-2020 (The Freeport Authority, 2008).

Share in %	Dry Bulk			Liquid Bulk			General Cargo			Container			RoRo		
	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020	2010	2015	2020
Adupe/Rinuzi	10%	10%	10%	90%	63%	58%	25%	20%	15%	5%	7%	9%			
Daugavgriva	5%	5%	5%		20%	30%	5%	5%	5%						
Krievu Sala	2%	41%	71%	5%	2%	1%		10%	15%				5%	5%	5%
Kundzinsala										90%	85%	80%	75%	85%	85%
Mangalsala	5%	5%	5%	3%	10%	6%									
Sakrandau.	5%	5%	5%				30%	30%	25%	5%	7%	9%	5%	5%	5%
Spilve								5%	10%		1%	2%			
Vecmigravis	2%	2%	2%				30%	25%	25%				5%	5%	5%
Vejksaksala	70%	30%					5%						10%		
Voleri	1%	2%	2%	2%	5%	5%	5%	5%	5%						

Although, the forecasts for dry bulk seem highly promising in the Figure above, the actual picture might be different as this forecast was developed in 2008. The changing political and economic situation has produced various changes in projected forecasts. A major setback concerns the coal turnover. The Freeport of Riga as described before is considered a transit port and its main trading partner especially in coal is Russia. Therefore, any policy changes from their side highly affect the future of Latvian port.

The binding relationship between Latvia and Russia is directly affected by the political decisions and thus the transit strategies employed by both countries. 70% of cargo handled in Latvian ports is destined for Russian markets and out of which one third is coal. Therefore, any changes in the decisions concerning the coal trade by Russian government will directly affect Latvian ports (V. Makarovs, 2012). In autumn 2009 at the meeting of the Maritime Collegium in Kaliningrad, Transport Minister Igor Levitin stated that the total capacity of the ports of northwest Russia would

double by 2015 to up to 440 million tons a year, mainly through the increase in cargo handling in the port of Ust-Luga (Pynnoniemi, 2011). Meaning that by growing into more competitive economy and able to facilitate its exports and imports only through their own ports, Russia will be less needed for the transit from Latvia.

However this is not the only factor that in the reality affects the transit through both of the economies. The existing discriminating railway fees when cargo is sent from Russia to Latvia are even more than double than the fees when cargo is sent from Latvia to Russia. Both governments have tried to work this issue out, but Russia's transit strategy has not changed already for years. The same applies for the problem of never-ending bottleneck on the borders between Latvia and Russia. Already in 2002 after a number of diplomatic complaints due to long lines of trucks and cars at the checkpoint, the agreement was seen as crucial in developing bilateral relations and easing tensions among frustrated truckers who have been forced to endure days-long waits on the border (Kudrjavceva, 2002). As a result an agreement was signed between Russian and Latvian officials to resolve the issue. However, even in 2012 truckers are still waiting for days in order to cross the border as the efficiency and services offered by Russian customs have not improved.

These aspects have to be included into the strategic planning for the sustainability of the Freeport of Riga. As commented in the interview due to this political instability and changing trading patterns, the goal of the Freeport is to achieve that the turnover of coal is about one third of the total turnover. The diversification of risk can be achieved by concentrating on different types of cargo like oil, wood, iron and containers (Kondrāts, 2010). In addition, the handling of coal adds the lowest margin to the overall fees, plus it is damaging to the environment. Therefore, for the design of terminals and purchases of the superstructure, this has been kept in mind and the terminal is going to be developed with an aim to be easily transformable if the need arises. Although, this has increased the overall costs of the construction, the long term vision has to be sustained. This was stressed in the interview of V. Makarovs as well.

What concerns the buildings and superstructure on the land of terminals, as the Freeport of Riga is the „landlord” type of port thus the entire infrastructure is provided by the port authority, but the superstructure is in hands of the terminal operators. Therefore, concerning the choice of usage of technology, plants and

equipment the choice is done by operators. Only in the areas where contracts are not yet set in place and Krievu Sala is one of them, the port authority is able to negotiate particular conditions. As well if the company has chosen to function under the Free Zone Regime it has to comply with increased transitivity and more bureaucratic rules and decision making. In this case the port authority can ensure that the planned strategic framework can be sustained in the long run.

The project of Krievu Sala will create spill-over effects for the development of the left side of the river Daugava. A. Ameriks indicated that until the recent the left side of the river has been highly underdeveloped, however due to the project of Krievu Sala implementation, the situation will change significantly (Kondrāts, 2010). Due to the newly built and renovated infrastructure, Territories nearby the terminal in Krievu Sala and Spilves Pļavas (Figure 1) are going to be developed. V. Makarovs approved that in the area of Volei (Figure 1) a company “JP Terminal” has planned to construct a bio-fuel factory. It is planned to produce around 1.5 mil tons of bio-fuels and which end products will be transported by sea or rail. To ensure the safe trafficking it is planned to construct a pipeline for this purpose. To secure the development of the left side of the riverbank, it is planned to construct the “Baltic Oil Terminal”. The Freeport Authority has approved to lease 27 ha of land in the area of Daugavgrīva for the period till 2031. Tank capacity is planned to reach 370 000 m³ (Baltic Oil Terminal, 2012). However, the potential functioning of these projects is highly dependent upon the state of the hinterland accessibility that is reviewed in the next section.

For the examination of the flexibility in decisions of the Freeport, it can be immediately concluded that concerning the flexibility of range, its potential is highly limited. This is due to the fact that operators that were previously located in Vējzaķsala are the ones who are going to be situated on the grounds of the Krievu Sala, limiting the options for the possibilities to evaluate the range potential. Therefore, this challenges the pro-active strategy of the port to respond to expected and unexpected challenges in the market place when it concerns the choice between different terminal operators. As already discussed, terminals are leased for long term contracts limiting the involvement of the Freeport Authority in decisions of port operators. However, as already mentioned earlier, due to the thorough planning and

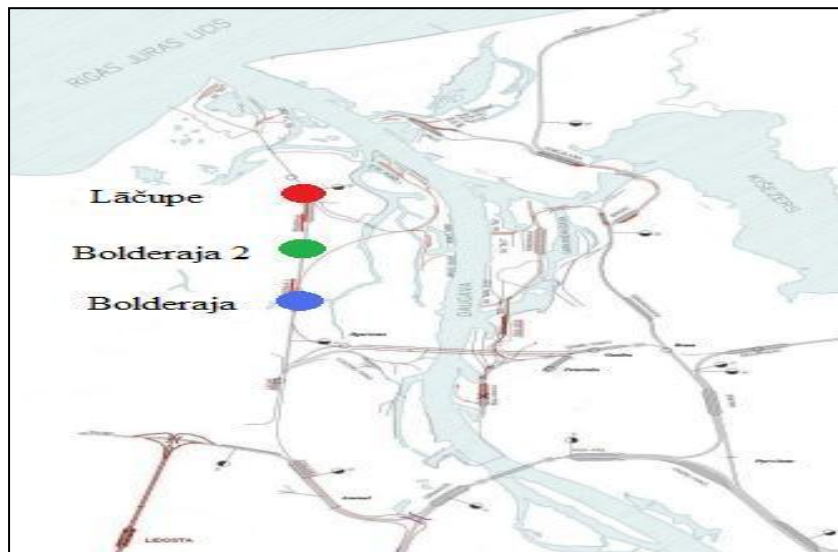
accounting for flexibility options, the superstructure that is built on the grounds of terminal is convertible. This highlights the role of adaptability that has been included in the project. Although, due to the delays of the project, the timing of the different phases has been affected as well as the cost allocation, an overall goal to build a superstructure that can be quickly and cost efficiently altered, has been taken into consideration. Therefore, it can be concluded that although the range of possible options can be valued as negative, the accounting for adaptability has been taken into account.

4.1.5. Hinterland Connections

Rail

The potential development of the railway system has been assigned as top priority because of the planned growth opportunities for the whole region of the left side of the river Daugava. For the strategic expansion of the operations not only in Krievu Sala but in Spilves plavas and Voleri it is important that appropriate hinterland accessibility is developed to facilitate the further movement of the cargo. Figure 18 underneath shows the currently planned railway adjustment projects for the future, thus differently coloured circles in the map represent different stations that are of main importance for this project. It is necessary to renovate the station Bolderaja, construct a new station Bolderaja 2 and renovate the station Lāčupe, as well as build new track connection to the Krievu Sala and renovate and improve the existing connection between currently functioning stations of Bolderaja and Lāčupe (The Authority of the Freeport, 2008).

Figure 18: Planned railway infrastructure in Riga, Latvia (The Freeport Authority, 2012).



The station Bolderaja 2 is of main importance as it is going to serve as the main meeting point for connections from Krievu Sala, Spilves pļavas and Voleri, thus for its construction port authority has assigned a funding of €43 million which is more than 20% of the total budget for the project of Krievu Sala. Currently it is projected that around 2020 the freight capacity in the area will increase to 25 million tonnes per year, including the new station Bolderaja 2 processing and transmitting cargo to/from the Krievu Sala amounting to 15 million tonnes while at the renovated station Bolderaja 10 million tonnes of cargo (V. Makarovs, 2012). Therefore, the planned operations in the long term would result into significant improvements the rail support and overall inland logistics chain by introducing a new management and communication tools, reducing train stopping and manoeuvring time. Overall this would result into increased usage of railway systems while allowing for reduced trafficking on the roads.

Although planned developments are partly subsidised by EU funds, it is important to utilise their usage for the long term. Already in Chapter 3 when discussing the technological factors important for the ports operations, the different widths of the tracks used in Latvia and the rest of the Europe were mentioned. Therefore, especially for this project it is important to examine what would be the consequences of pursuing either the European size tracks or the Russian ones. In the interview with official from “Latvian Railway” it was explained that the existing situation concerning the

importance of the different widths of tracks. His main point was that in the direction North-South where the Rail-Baltica is planned, Latvian Railway is able to switch from the currently used wide tracks to the European standard ones. This can be explained due to the reason as currently only 25% out of overall usage capacity is being exploited for trafficking cargo in this direction, thus for the long term it would be beneficial to switch. However, in the direction of West- East there are no incentives to switch as 90% of cargo handled in this direction is sent to Russian markets which are using the wide tracks. Therefore, as long as there is demand from the eastern markets, there is no reason to reconstruct the tracks.

Therefore, this decision has major implication for the development of the infrastructure in the Freeport of Riga. Due to the project of Krievu Sala hundreds of km is necessary to be constructed to access the new grounds, and it is important to make a decision which width of tracks to use. Although, statistical data gives an idea that it would be logical to use tracks based on Russian market, however due to the changing policies of the government, it might not be sustainable for the long run as Russian government has declared its goal to decrease the usage of their neighbour ports. Therefore, the port authority together with officials from Latvian Railway has to consider the flexibility issues before the final decision. Although in the short run it would be wise to go ahead with the wide tracks, whether such an action would decrease the costs in the long run, can be doubtful. However, port official in his interview was highly sceptical of the Russian policy and concluded that it does not matter what is stated in the Russian press, the country is not yet able to support its market only by using their own ports; therefore the role of Latvian ports will remain the same for at least the next 10 years.

When examining how Adaptive Port Planning Method can be applied when evaluating the dimensions of flexibility for the railway, it is necessary to stress that the actual decision has not yet been made concerning the choice of the width of the tracks. It proves that the evaluation of possible solutions is carried out by the authority, accounting for the possible developments in the external environment. Therefore, based on this it can be concluded that possible range of options to account for flexibility can be evaluated as positive. Thus when examining the situation in the current state, the adaptability can be evaluated as positive as well. However after the implementation of one of the possible options, adaptability will be limited. The

reconstruction of tracks is costly and time consuming process; therefore not limiting the complexity of the decision in question. As well, it is necessary to remark that concerning this decision the Authority of the Freeport cannot follow a pro-active strategy as the end result is highly dependent upon the decisions and policies of the trading partners of the port. To sum up, the range options are evaluated as positive when valuing the flexibility, whereas the adaptability is ranked as negative.

Roads

For the development of the Project, the state of the roads is highly important. Currently the roads that are planned to be used as highways or connections to railway stations are in a very poor state and not suitable for high usage. Major renovation is necessary to support the growing cargo throughput. In Figure 19 underneath it can be seen that the roads that are coloured in red needs to be renovated and made more suitable for larger trucks. Additional traffic lights and sounds barriers have to be put in place because this territory is inside the city and is currently mostly used by residents. Namely streets of Daugavgrivas, Bullu and Slokas are scheduled for the thorough reconstruction works (The Authority of the Freeport, 2008).

Figure 19: The road system on the way to the Krievu Sala terminal (Riga Maps, 2012).

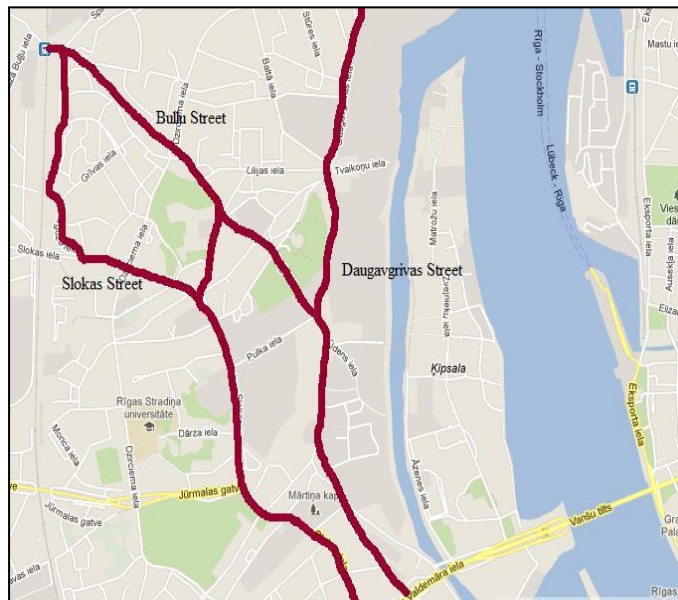


Figure 20 presents Daugavgrivas Highway that in the previous Figure was called Daugavgrivas Street as it is located outside the city borders. In order to adjust the highway and improve its state a major reconstruction and widening of the road is

necessary. Currently there is one lane going in each of the directions thus it has to be extended to at least 3 lanes in each of the directions because this highway is not used only by port but as well by residents of the areas nearby. The renovation of Zila Street is necessary as it connects the highway with Krievu Sala terminal, additionally roads have to be both renovated and constructed that connect the highway with future terminals nearby like Voleri that would develop in the right side or Spilves Plavas on the left side of the highway. Therefore, the actual development and the sustainability of its long term usage are essential for functioning of the whole area (Rīgas Dome, 2010).

Figure 20: Daugavgrivas Highway leading to Krievu Sala terminal (Riga Maps, 2012).



However, one must consider the financial side of this reconstruction. Already more than 25% of the overall budget of the Project Krievu Sala is devoted for the development of the railway system that could support the growing volumes of cargo as projected the volume of cargo brought by road will increase to 9 million tonnes per year meaning 26 trucks entering and leaving the port territory a day. However, there is

not a lot of funding to be spent on the roads construction and renovation. As indicated by the Minister of Transport A. Ronis, the overall state of the roads in Latvia is highly problematic. Due to the changing policies of the government, the funding for road improvement was cut and available funding for the future is highly limited. Especially due to the fact that Latvia has to comply with EU standards, around €4 billion are necessary to adjust all the roads to meet the specific criteria, therefore at least in the short run ministry will mainly concentrate on the roads that are of strategic importance like the ones connecting ports, used for international trade (Veidemane, 2012). Therefore, for the successful functioning of port operations, this turnout of the events would be highly beneficial.

Although the government will pursue the road reconstruction to support the trade, it is essential to review already discussed problem of the waiting time spent on customs between Latvia and Russia. As long as the situation is not going to be improved and services provided by both sides at EU standards, railway should be considered as the main mode of inland transport for the future. However, one should not ignore the existing tariff system in Russia that does not favour any trafficking from their country to outside ports. Although this is not in hands of Latvian government officials, the port authority must account for tariff policies that influence the future prospects of trade.

Referring to the literature on different modes of transport, railway is the most environmentally friendly thus its usage instead of the road would decrease the possible future congestion and environmental pollution. However, it is important that a reliable road system is developed because to facilitate the trafficking both between the terminals and outside the port, one cannot just concentrate on usage of railway or road. Both systems must be constructed due to the flexibility in the choice of mode it can provide. Especially due to constantly changing market conditions from both sides of Russia and EU, it is important to be able to switch whenever one of the modes provides the cheapest trafficking possibilities, in order to compete with the neighbour ports. In conclusion, it can be stated that the possible development of any alternatives is only favourable as it increases the flexibility and agility for the beneficial position in the world port markets.

When accounting for possibilities of range options available, in order to improve the overall state of the roads, the situation can be evaluated as positive. Due to a well-planned and combining the possibilities for cargo handling by both road and railway, allows for more thorough and systematic allocation of growing volumes of the cargo. As well, by construction of roads in order to improve the connectivity between the terminals as well as connecting them with main highway and rail stations, the complexity of future processes is reduced. However, the role of the adaptability is more questionable when examining the state of the external environment. The manner of the road construction is evaluated as rather poor in Latvia. Therefore, the potential for cost and time efficient reconstruction is fairly doubtful. This can be mainly explained due to the limited transparency and extremely slow speed of actual work execution when it comes to the construction of the roads in Latvia. Additionally, a systematic and well planned decision making can be challenged due to the ignorance on the side of the management. Therefore, similarly as for the rail development, the flexibility has been integrated in the range possibilities, whereas for adaptability its role can be considered limited.

4.2. Layer 2: Operations and Management

4.2.1. Quay and terminal operations

As indicated in interviews, within the framework of the project, new operators for the operations in Krievu Sala terminal are not going to be considered. Companies that operated in Vējzaķsala grounds Figure 1 have been granted a possibility to relocate its operations until the end of the signed lease. However, regarding the development of the infrastructure on the new grounds, several major law suits have delayed the actual execution of the project. Out of the three bidders namely Germany's Josef Möbius Bau-Aktiengesellschaft and Aarsleff-Merko, an association of Denmark's Aarsleff and Estonia's Merko Ehitus and Latvian contractor BMGS, the rights were granted to the Latvian company. The losing parties complained that the choice of the assigned party was not transparent and the arguments provided by the officials were not fulfilling. The contract prices offered by the bidders were in the range between €115 million and €130 million (Mārtiņa, 2011). The winning parties bid was in-between these two, and as claimed by the port's official was that the underlying rationale was the choice of the most economically advantageous tender and not the lowest price

bidder, proving that the aim was not to find the cheapest possible solution, but instead consider the most sustainable choice for the longer term. This aspect accounts for not only for flexible decision making, but concentrates how the agility of the provided service could be sustained. Thus, after three year delay the Latvian Procurement Supervision Bureau in 2012 finally approved the rights to BMGS.

Regarding the territories in Vējzaķsala, the port's official commented that there have been several plans what to do with the grounds that are going to be freed from ports activities. Firstly there was an idea to build a business district by a Dutch architect R. Koolhaas, however due to the economic crises and the collapse of the government, this plan was cancelled. Currently, the port authority hopes that the grounds are going to stay under their control so that the existing infrastructure could be still used with the purpose and would not be left for nothing (H. Apogs, 2012). Therefore, one of the ideas is to extend the exiting cruise terminal. The cruise terminal does not welcome only cruise ships; it has a contract with scheduled ferry line Riga-Stockholm that brings in additional revenue as it also carries trucks. Therefore, when the big cruise ships come in, they just need a place enough for docking and the ladder where to embark and disembark passengers. Whereas for the regular line there has to be enough area for busses that awaits the passengers, as well as the area for Ro-Ro purposes (V. Makarovs, 2012). Therefore, as the cruise lines give the city substantial revenue from tourism it would be a wise alternative to pursue this plan. Thus the existing alternatives provide the space for the flexibility when considering different ideas worth pursuing and by developing the area closest to the city centre as attractive destination for cruise tourism would be a beneficial outcome as discussed earlier.

The examination of the range and adaptability options to measure the overall flexibility of quay and terminal operators is highly complex. As the Freeport of Riga is a landlord type of the port, the Authority cannot influence the decisions made by terminal operators. The only way how to ensure that terminal operators act in accordance with the long term strategic plan is by settling the terms before the signing the long term lease. After the contract is finalised, the Authority of the Freeport is excluded from the decisions of the operators based on what kind of cargo it is going to handle or who are the cargo suppliers. The only condition the operator has to meet is the amount of cargo that has been specified in the contract. Therefore, when

examining the possibilities for range options, the operators can be evaluated negatively, because their decisions are not affected to any extent by the Authority of the Freeport. However, in order to evaluate what is the state for the adaptability of quay and terminal operators, the result is unclear. It can be explained due to the individual capabilities of the operators to finance or account for different outcomes in the market. Therefore, an overall accounting for flexibility in decisions of quay and terminal operators based on the proposed dimensions differs. It is concluded that range options are seen as negative, whereas the adaptability as unclear.

4.2.2. Port Organisation and Administration Processes

As explained in the previous Chapter under the section of Political factors, the board of the Freeport authority is closely related to the political issues as several members of different parties are a part of the decision making. Therefore, when pursuing different projects they are influenced by political situation in the country. Changing parties or even governments can quicken, delay or even cancel some of the projects. Therefore, although the project of Krievu Sala is already taking place, one can never be too sure about the final outcome. Cases like the lack of budget or years of delays serve as a frequent end result of different projects. Thus it can be highly questionable if it is even possible to account for flexibility in the decision making of the port authority, as one cannot be sure of the end result. As commented by A. Ameriks although the port is sensitive to political exposure and policies of different parties, the possible improvement of the model of the port authority is a minor part as officials have to consider issues of more serious nature (Veidemane, 2012).

Another important aspect brought up in the interview was that the territory of the port has not been strategically planned and as a result of this mistake in the past, terminal operators file complaints due to their neighbouring operators' activities (V. Makarovs, 2012). As an example was brought a case when one terminal is devoted to wood but the neighbouring to coal, which is highly damaging to the quality of the wood cargo. Thus, asked how this situation is being improved in order to systemise the allocated grounds and avoid these kinds of complaints, it was concluded that due to long term tenancy agreements and port's policy not to intervene into operations of terminal operators, the terms are going to be negotiated in the long run (H. Apogs, 2012). When asked how long this going to take, the port's official was not able to answer.

Although this fact allows for a major flexibility in hands of the operators, they must account for the damaging aspects of this lack of the control of the port authority.

When examining which characteristics of the Adaptive Port Planning Method the Authority of the Freeport actually meets, the result is not positive. Neither does the Authority provide clear and explicit motivation of assumptions underlying their decisions. Neither do their plans result in well-timed and budgeted results. Therefore, based on the criteria presented in Appendix, the Freeport of Riga cannot be evaluated as flexible and mobile port. Although, when examining both of the proposed dimensions, it can be concluded that adaptability is ranked as negative, the potential of range options is not as bad. The Authority of the Freeport does account for changes in external environment, as well evaluates possible uncertainties and plans their projects in order to enhance the competitive advantage of the port. The Authority follows a pro-active strategy in order to improve the position of the Freeport in comparison to other neighbouring ports. Therefore, the potential for range improvement can be evaluated as positive.

The Figure 21 gives a summary of the results obtained after the examination of both of the layers and their sub-classifications. When examining the potential of range options for accounting for flexibility in decision making for “The Project of Krievu Sala” the results show four positive, two negative and one unclear result. Allowing to conclude, that the options that are in hands on the Authority of the Freeport are worked out well, whereas when it comes to terminal operators and their decisions that are out of the competency of the Authority of the Freeport, the result is negative or unclear. Therefore, it can be concluded that the Authority has to improve the communication and organisational issues with its terminal operators in order to work for a unified long term strategy. The results gathered for the evaluation of adaptability contradict to the ones gathered about the range options. The summary shows that adaptability is evaluated as positive in two sub-classifications, whereas three are concluded as negative and two as unclear. This stresses the need for improved communication for the side if the Authority not only with the terminal operators, but as well with a broader audience. The results show an alarming picture when it comes to the individualistic decision making on the behalf of the authority delaying the actual project. Series of lawsuits, lack of transparency and complete lack of cost

effective decision making, has hampered the potential of the long term adaptability and thus the improvement for more flexible and sustainable future of the port.

Figure 21: The summary of results for flexibility dimensions

Layer Sub-classification	Flexibility Dimensions	
	Range	Adaptability
Nautical Infrastructure	Positive	Positive
Quays	Unclear	Unclear
Buildings and Terminals	Negative	Positive
Rail	Positive	Negative
Roads	Positive	Negative
Quay and Terminal Operators	Negative	Unclear
Administration and Port Organisation	Positive	Negative

Chapter 5: Evaluation and Conclusion

The goal of this paper has been to examine the level of flexibility that the current project execution is taking into account in order to face the existing uncertainty. Therefore, the proposed research question of to what extent the Freeport Authority of Riga account for flexibility in the execution of “The Project of Krievu Sala” was split into three sub-questions, each providing a separate sub-conclusion in order to reach the aim of this paper. In order to examine the first sub-question about the role of flexibility in supply chain and port performance management, different theories were presented about the notions of flexibility and agility in current market trends. It was concluded that currently the port is the key element of a well-integrated supply chain; therefore it has to account for flexibility in designing their projects as well as in their management. Based on the review of different models and theoretical basis of the notion of flexibility, the dimensions, range and adaptability, of flexibility were defined in order to account for flexibility in “The Project of Krievu Sala”.

The second sub-question aimed to describe the nature of the Freeport of Riga by explaining different factors that directly affect its sustainable development. Different legal aspects as well as political developments are extremely influential in the eyes of the society when examining the decisions of the Authority of the Freeport. Whereas the third and final sub-question of the paper dealt with the actual examination of flexibility in the recent “The Project of Krievu Sala” based on two dimensions, namely range and adaptability. Both the model and dimensions were chosen based on the relevant theoretical background. The results of the examination differed between both of the dimensions, indicating that the possibilities for the improvement of the range options accounts more for inclusion of flexibility in its developments. Whereas the evaluation of adaptability proved more unclear and lacking a thorough flexibility planning. These are important conclusions based on the theoretical examination.

The used model presented three layers of the port’s structure upon which the flexibility in different levels was examined. Thus it can be concluded that the Authority of the Freeport is able to account for flexibility when it concerns the

operational level. By adjusting its nautical infrastructure and hinterland connections, possible uncertainties and the long term sustainability are given a priority. However, when it comes to the management organization, decisions and the planning is not based on the flexibility for a long run. The Authority of the Freeport is dependent upon the decision making of the Board of the Freeport. Thus due to exiting bureaucracy and lack of transparency in decision making, the situation between both of the parties seems unclear. Additionally, due to the lack of a comprehensive strategic plan for the terminal allocation in the Freeport, the Authority currently is not able to ensure that the value added activities are actually offered in the market place. There is no systematic allocation of terminals, no negotiation power between the port and its leasers therefore, the level of flexibility is doubtful when it comes to companies outside the authority's competence. To sum up, the extent to which port authority can account for the flexibility issues being included into the project development is unclear. When examining the execution of the "Project of Krievu Sala" it is clear that the Board of officials are the ones who decide upon the planning and actual execution of the project. Thus it can be concluded that the extent of the integration of flexibility notions for the long term development of the port are purely defined, based on the decisions of the Board of the Freeport of Riga.

Although the justification behind some specifics in project is fairly weak, overall by evaluating all advantages and disadvantages, it can be concluded that the moving of the activities to the left side of the riverbank Daugava has more beneficial aspects than negative ones. As indicated in the interviews, the main strength that the Freeport has to maintain is the possibility to supply Russian markets with goods that their ports are yet unable to offer with lower costs than the Freeport of Riga. This provides a competitive advantage that can be exploited to account for flexibility in the project planning. As well the plans to expand more into Eastern regions like Ukraine and Kazakhstan would decrease the risk if Russian policy takes place.

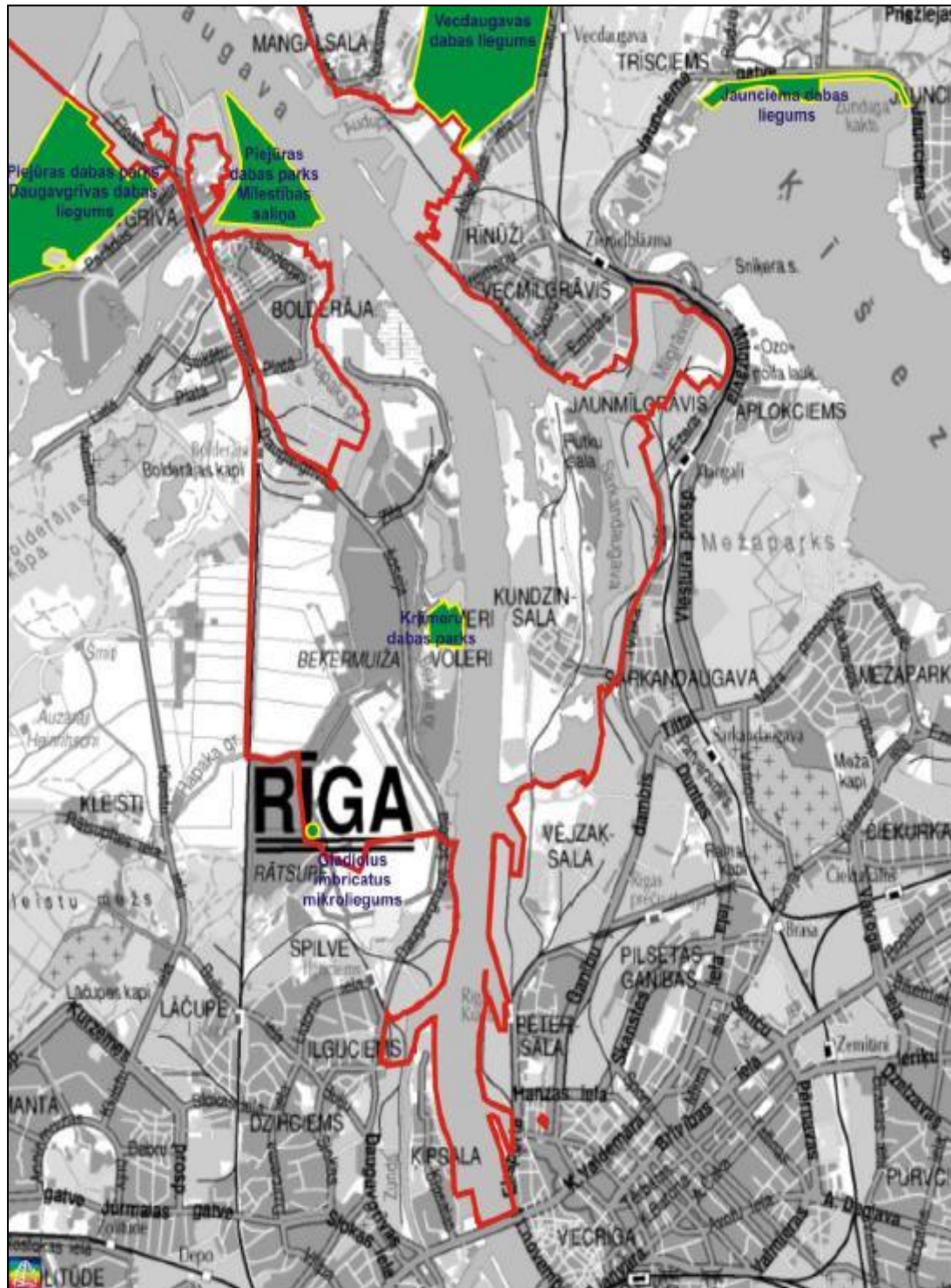
Additionally, as a point that the port officials should consider for the long term sustainability, is the possible improvement of its reputation in the eyes of the society. After reviewing the main factors that affect the Freeport of Riga it seems that the operations though being viewed in the eyes of the society as a political mess and bided by scandals are essential for the potential growth of the country. By facilitating the port activities all year around, the port is attractive for investment possibilities,

although the existing bureaucracy and political instability, overshadows the possible attractiveness. The Freeport Authority is lacking a strong and sustainable plan from how to deal with existing problems both from technological as well as planning aspects, because only afterwards big investors and international companies will enter its grounds for a longer term.

Overall it can be concluded that the Project of Krievu Sala has more impact on the strategic decision making than one might assume in the first place. Although its stated goal is to free the city centre from the polluting externalities by relocating the activities to Krievu Sala, there are more side effects that can be observed from this plan. Firstly through this project a favourable expansion of the port territory will take place. As the terminal of Krievu Sala is located at the end of the port territory on the left side, it is necessary to construct the whole infrastructure to facilitate the trafficking of the cargo. Thus this will grant more favourable grounds to develop the areas of Voleri and Spilves Plavas. Thus this project can be considered as a breakthrough for the development of the left side of the riverbank Daugava. Secondly, this step will allow for more structuring on the grounds of the Freeport. As was indicated before, the terminals are located by random without any systematic allocation, therefore by moving all the activities connected with coal, oil and other general cargo it will free more space on the right side of the riverbank Daugava, allowing for potential planning and design on both sides of the river. And thirdly, the planned restructuring will create more incentives for cruise operators to attract more tourists, thus enhancing the position of Riga as an attractive destination for tourism. Therefore, it can be concluded that “The Project of Krievu Sala” accounts for a major strategic expansion of the port in order to secure its position between neighbouring ports of the region.

Appendix

Figure 2: Borders of the territory of the Freeport of Riga and the indication of the proximity to the city (The Freeport Authority, 2012).



Adaptive Port Planning Method (Taneja et al, 2009)

- considers a range of plausible futures;
- takes into account the full range of uncertainties, including those external to the system those with respect to the system model, and those associated with stakeholder valuation of outcomes;
- includes pro-active actions for responding to expected and unexpected changes (before and during the project);
- systematically guides the planner or decision-maker to look for flexible options; monitors the external environment for developments as well as the result of actions taken to reduce the uncertainties (likelihood of occurrence or its impact);
- includes a method for valuing flexibility, so that the cost-effectiveness of the flexible option can be demonstrated;
- reduces surprises as to time and budget;
- helps to increase the speed of decision-making, thus working as an enabler of flexibility;
- demonstrates the cost-benefit of the risk management effort;
- forces the decision-makers to be more explicit about the assumptions underlying their plans;
- provides a way to handle complexity;
- reduces the consequences of complexity;
- provides structure in the preparation, implementation, and exploitation phases of a project;
- routinely examines assumptions on the basis of new knowledge from the strategic environment;
- is continuous and a very dynamic process.

Interview Section

Vladimirs Makarovs

Position: Director of Strategic Planning and Project Management Department of the
Freeport of Riga

Q1: How would you assess the current cooperation of the Freeport of Riga with EU?
What are the developments of SSS in the region?

Based on the numbers for the incoming trade that is facilitated based on the Latvia being a member of EU, has only enhanced the position of the port as well. However, due to the past of the port, existing bureaucracy and the privatisation of terminals, there is a limited future for the improving of SSS in Riga. Terminals are leased to private operators for long term, thus the Authority of the Freeport cannot impose their wants and needs, and therefore it will take other 30-50 years to actually face any developments towards SSS facilitation.

Q2: In your recent interview you indicated that the port has to improve its attractiveness in the eyes of the East? Despite all of the political instability of the region, why it is more attractive than EU?

All we care about is that there is cargo coming into the port. Who are the owners and where it is destined to go, does not affect our plans. Although, if there are difficulties due to the further trafficking of the cargo, then it becomes our concern as well. Before that, we simply cannot waste money and time to try to investigate who is the actual owner of the ship or cargo each time it visits the port.

Q3: You mention the fact that you step into the game only if there are difficulties with the further haulage of the cargo. However, the existing lines on borders between Russia and Latvia impact costs and time lost waiting in lines? And still you are trying to advertise east as a potential partner?

The lines exist due to the Russian transit policy, which actually is basically inexistent. The way they are favouring the imports into their country while discriminating any

possible exports by tripling tariffs and limiting potential border points, do affect our choice of partners. However, by being located in such a strategic location has to be exploited to the maximum. Russia is connected to different major market of the east like Kazakhstan, Ukraine, therefore, by using their connections we can benefit as well. The Freeport of Riga is a transit port and we should concentrate on that by securing new partners in the region.

Q4: How are you trying to compete with other ports in the area?

Each of the ports tries to concentrate on some niche. The port of Klaipeda mainly is carrying its own production which accounts for 60% of its total turnover. Its main strength is its connection “K2” being connected by railway with Kaliningrad. The port of Tallinn concentrates on heavy oil products and non-military cargo. Therefore, we are not rushing to enter into the market for this cargo as it is handled in the nearby ports. We mainly carry coal and try to rebuild the cold storages as that will provide us with the competitive advantage in the area.

Q5: The Freeport of Riga is a landlord type of a port, how does that reflect on the ownership of the terminals?

The current division is halved. One half is owned by the state, while the other one is partly leased and partly owned by private investors due to the privatisation. The situation can be evaluated as positive as the main income of the port is earned through leasing and ship fees and we are not complaining.

Q6: What is the role of the Special Economic Zone for the existence of the port? And what could be the implications due to the possible cancelling in 2017?

Currently around half of the operators work under this regime as it favours large investments and the contraction of new superstructure. However, one might expect that this number would be higher, but due to increased transparency and all of the bureaucratic paper work, not many companies are willing to engage. But port itself benefits a lot as it does not have to carry out these investments themselves, as there are companies who due to different tax allowances construct the infrastructure. But what concerns the possible cancelation, I refuse to think that it is going to take place. The government should account more for all the beneficial aspects that we as a country are getting due to the big investors coming into the port due to this regime.

Q7: What are the main disadvantages of the current position of the port?

One important aspect is that the society and people tend to change their understanding of what is acceptable and what is not. People are becoming more of a philosophers rather than entrepreneurs. This caused the delays in project execution. Another important aspect is already mentioned disadvantaged Russian transit policy as that affects the whole trafficking to the east. The existing bureaucracy and possible countless possibilities to appeal against different decisions, is a major setback for possible development as well. And of course the existing political instability of the government does have its role in the development in the port.

Q8: Talking about “The Project of Krievu Sala” and the relocation of port’s activities away from the centre, why Krievu Sala was chosen as a destination? Additionally, how is the budget of €150 million will be split?

Out of available 90ha of the territory, only 56ha are actually used therefore, the decision was made to relocate to a place where the operations are not yet present. And due to different environmental setbacks, Krievu Sala proved to be the best location. Aspects like complaints filed by people living in the area will never stop, does not matter where you chose to locate the activity. Additionally, due to well worked out regulations of the project and current economic situation, the project is timed perfectly. The budget will be split as following; €50-60 million are going to be assigned for construction of terminals, while the rest €100 million will be spent on the development of the infrastructure.

Q9: And finally what are the potential advantages for the Freeport of Riga due to this project?

The current capacity of the cargo handling amounts to 45 million tonnes per year, due to this project and other smaller scale developments, the capacity will reach 60 million tonnes per year. Thus “The Project of Krievu Sala” by itself will add other 20 million tonnes. As well due to the choice of the cargo being coal and general cargo, there is no need for large investments that cannot be changed in timely and in a cost effective manner. Most importantly, it will improve the position of the port in comparison to the other ports in the area.

Haralds Apogs

Position: Project Manager at the Freeport of Riga

Q1: What is the current strategy that ports in Latvia have agreed upon?

Let's say that there is no any kind of strategy, agreement or cooperation existing between the ports in the country. Each fights for themselves causing major political and strategic problems for the beneficial coexistence. Every time a new political party comes into the government which in the reality happens quite often, all of the projects concerning the Freeport of Riga are revised. For example, a political party that is led by a member of the board of the Freeport of Ventspils tries to delay or cancel any positive project developments concerning the expansion of the port's activities. Therefore, due to existing competition between the ports, the development of their respective cities is affected. A good example is the unfavourable result of the distribution of coal cargo between both of the ports. Right after the collapse of the Soviet Union, the Freeport of Ventspils was the main contributor to Latvian GDP due to the high volumes of chemicals being handled. However after the big boom, the management decided to concentrate more on coal and other general cargo by building expensive infrastructure. Thus nowadays when the cost of handling is the most important factor for the choice of port call, the Freeport of Riga is in a better position due to lower costs.

Q2: In your opinion, what could be the solution for this problem?

It would be only rational to take the example of Estonia and establish a unified joint stock company with one board for all the ports. This would allow preparing a proper strategic planning based on different competitive advantages of ports. This would improve the existing bad reputation of the port's affairs in the eyes of the society. Currently you can read a lot of rumours about the CEO of the Freeport of Riga, as well as people discussing whether the capital actually needs a port. People are ignoring how much Latvian economy gains by having a well-functioning port.

Q3: What do you see as a major setback when evaluating the managerial level of the Freeport?

The existing bureaucracy would be the first problem. For example an important drawback when considering the developments of terminals, is the rule that when submitting a plan for the development of the terminal, one must account for the possible developments in the whole area. Therefore, as this project will get evaluated on a bigger scale, there are more parties that have to approve it. And due to this fact, there are always sides that will not agree with some aspects, by delaying the whole plan. Another important aspect is the lack of a systemised terminal allocation. Currently terminal operators choose for themselves what cargo to handle. The only permits they have to acquire are from the environmental and development departments. Thus the Authority of the Freeport cannot impose any terms or restrictions after the lease has already been signed. Therefore, different terminal operators have filed complaints, especially the ones who handle wood materials and are located in a close proximity to the coal cargo terminals.

Q4: In your opinion, what is the role of the Project of Krievu Sala for the Freeport of Riga?

Many other ports in the area have overcome this stage like 20 years ago. Ports like Tallinn or Stockholm relocated their port activities from the centre in order to sustain the historical monuments and not affect the residents living in these areas. However, for the Freeport of Riga this will encourage a more strategic expansion. On the left side of the river Daugava there are huge areas that could be actually used. Therefore, by developing and constructing the main infrastructure the overall development of the left side could begin.

Q5: The area of Spilves Plavas is not really used currently, what developments do you see for these grounds?

Currently almost the whole area is leased out for different proposes. Whether their operations can be seen as effective, efficient or useful, I do not think so. Whereas for the Authority of the Freeport, the most important is the revenue earned from the rents, not how this money is made. Additionally, the current instability of the government and their decisions, directly affects the willingness of bigger investors to start up on the grounds of the Freeport. Of course, we can hope that after the construction of the infrastructure, new investors are going to be more enthusiastic about investing into the development of the Freeport, but currently the situation does not seem too positive.

The fact that the grounds of Spilves Plavas are owned by different parties like government, private owners and the Authority of the Freeport, does not ease the process of negotiations due to the increased bureaucracy and existing different interests.

Q6: Despite the objections of the residents of Ķīpsala, the Authority of the Freeport plans to relocate the cruise terminal to the left side of the river Daugava. How do you see this as possible alternative for the existing cruise terminal?

There is indeed a need to relocate the cruise terminal to more attractive location and this alternative has been found. The area of Ķīpsala would indeed serve as a better place. The fact that residents of the area file complaints is only normal. In reality it does not really matter what the port decides as people will never be happy. The reasoning behind the relocation provides a detailed justification for this step providing arguments for the possible relocation. However, the current operator still has a lease for other 5 years and it is unclear whether he will want to leave the Freeport or will be willing to invest into the new relocation.

Q7: What are in your opinion the possible alternatives for the area freed from the port's activities in Vējaķsala?

There have been different plans what to do with the area. Right before the crises a Dutch architect Rem Koolhaas was invited to design possible alternatives. His project was to build a business district, more Manhattan style office and apartment block. However, due to the crisis this plan was revised and currently is put on hold. Maybe in some time if new investors come, the plan would be put in place again. However, in my opinion, it would be more rational to use the grounds for port's activities. The best possible alternative would be to improve the infrastructure to facilitate Ro-Ro handling. Currently, it was already been applied but to only a small extent, therefore by improving the design and planning of the grounds, possible growth in that field could be achieved as well.

Q7: Due to exiting delays of projects, how do you think when the terminal of Krievu Sala will start to function?

The Project of Krievu Sala is a major driving force for the development and strategic expansion of the port. But concerning the timing issues, it is very difficult to forecast.

Although, V. Makarovs indicated in his interview that in 4-6 months everything will start to function, I would not be so optimistic. I would say maybe in 2 years' time, but there is always hope for a quicker result.

Andris Kuskis and Aivars Ločmanis

Positions: Urban Planning Board Member and Head of Historic Centre Projects' Unit and Urban Management Master Plan Department Project Chief Manager

Q1: As the governmental institution, how do you value the Freeport of Riga?

Our department can definitely indicate the good and bad aspects of being located in such a close proximity to the port. When it concerns the overall picture, there are some difficulties we have tried to work out but they still remain unsolved, but you cannot concentrate only on that. Through negotiations we have achieved quite a lot. We have agreed on specific location of the port, suggested various improvements to enhance the efficiency. If you look at the old maps, the port was not using even 10% of the grounds that were allocated for their activities, whereas nowadays they have achieved quite an expansion for their activities.

Q2: In all of my interviews, officials have indicated problems with the existing political instability. You are a governmental institution, how would you comment on that?

That is true; the Freeport of Riga is directly exposed to the existing political battle. As in the Board of the Freeport there are 4 members of changing political parties, the decision making is strongly affected. Currently the council of Riga is led by socialists, thus their projects are more active rather than different development projects. However, you never know, after the new elections next year, the situation might change again. But it is true, that due to the non-existent policy agreed by all ports of the country, the lobbying is an important characteristic of the political environment.

Q3: Based on the information found in the press, I have understood that one of your main concerns is how the activities of the port affect the residents in those areas. How do you see the existing picture of people living next to terminals?

That is true, that most of the decisions of the Authority of the Freeport are delayed especially due to the claims of residents of the neighbourhoods in the close proximity

to the port. Sometimes these objections are taken into account, but that could be improved. For example, in the areas of Babīte and Mangaļsala, residents have barely any access to the open waters, due to the terminal location. We have tried to negotiate the access, whether the Authority will take that into account, we are not sure. Their main argument is that grounds are leased for years, and to take away some leased land just to construct a beach or possible access of water for residents, currently is not possible. Similar picture can be observed in Kundziņsala, where out of the windows of the people houses you can see operations on terminals. As well when looking at “The Project of Krievu Sala” we see that people living in Bolderaja are not too glad about the construction of new terminals. As people are moving away from the city centre, neighbourhoods like Bolderaja are very popular due to the quick access to the city centre and good provision of public transport. Residents claim that the noise and pollution that come from already construction of Krievu Sala terminals affects their everyday life, what is going to happen when all the trucks and cargo is going to be constantly handled through their roads. We will see how that is going to work out.

Q4: You mentioned “The Project of Krievu Sala”, how do you see the success of the expansion of port’s activities on the left side of river Daugava?

The project itself is a major step achieved in order to develop the activities on the left side of the river. The territories on the right side are facing severe bottlenecks, thus by trying to set new grounds and expand through development of the infrastructure and constructing terminals in Krievu Sala, the long term efficiency and position of the Freeport can be improved. If you look at different components on the left side like Spilves Pļavas or the small airport, there is potential for bigger investors to come in and develop the area. How much time it will take, is very difficult to forecast. Plans and ideas in current political picture vary a lot. If you look at the project of Rem Koolhaas, the plan was well worked out and the idea was great. But the new government came on everything was put on hold. The same might happen here as well.

Q5: I was reading that The Freeport is facing different issues concerning flooding, etc. And you have written different research papers on the issue. What are your comments for that?

That is true; the Authority of the Freeport has to and their already are accounting for different environmental issues concerning the areas of Krievu Sala. In Krievu Sala and Kundziņsala before the whole construction started, the height of the ground was increased. Due to the specifics of the location and changing winds and levels of water, several areas including Krievu Sala are running the risk to be under the water in 20 years. Therefore, the Authority is taking that into consideration and adjusts the grounds for that. But they are not the only ones who have to work on that, there are areas in the close proximity to the grounds of port that are endangered, thus the council of the city has to deal with this as well.

Q6: The officials of the Freeport mentioned the plans to move the cruise terminal to the area of Ķīpsala in order to enhance the developments on the left side of the river Daugava. How do you look at that?

We are very sceptical about this plan. Neither there are enough grounds to facilitate the entire tourist welcoming; neither residents of the area will approve this step. The grounds that the Authority is planning to use are not in their possession. Those are private owners who might or might not approve this project. Although, the Authority has already planned to deepen the births in the area, whether that is an indication that there are some negotiations or contracts already signed, we do not know.

Guntars Jansons,

Position: Director of Technical Management Development Unit

Q1: How would you describe the current position of “Latvian Railway”?

In comparison to other parties, we survived the crises pretty well. While our partners experienced a decrease of 30% of their turnover, ours changed only for 10%. Thus I hope that after everyone in the industry will again prove to be better, the growth potential for our company will be exploited to the maximum. The projects like TEN-T and Rail-Baltica are our driving force to improve the poor state of our rails and decrease the existing bureaucracy in order to be prepared for the actual execution.

Q2: By that you mean, that neither for the project have started?

Yes, currently due to the crises and different other circumstances, all of the projects are put on hold. We have plans but when they will take place is very difficult to predict.

Q3: Could you please elaborate about the current flows of the cargo, their destinations, volumes, etc.?

The current flows can be evaluated as positive. The connection of Ventspils, Riga and Russian markets works very well. We handle around 60 million tonnes per year. Around 95% of cargo goes to Russian markets, but the number could be increased but it is more up to Russian tariff policies. The direction North-South does not perform that well. The current volumes are around 2-3 million tonnes per year. In comparison to the other direction, it is barely anything. Therefore all the reconstructions and modifications done are mainly financed by the revenue earned from Ventspils-Russia direction. Therefore, there exists the plan to reconstruction the direction North-South for the track of EU standards. That would improve the connectivity and increase the usage of our tracks. But for the direction Ventspils-Russia no adjustments are planned.

Q4: And how are your relations with current cargo carriers? If the new tracks will be used, new carriers will enter their territory, how are you planning to deal with that?

Currently we are cooperating with 4 carriers. Our only relations with them are that we provide the infrastructure, whereas freight stock is theirs. In the reality, their stocks are of poor condition, damaging to our tracks and are already used for 20 years, therefore, if new carriers would enter the market with a better stock, we could only gain. But for such an outcome, a lot has to change. We have to build the new railway tracks and improve all the infrastructure and we have to do that with our money and EU subsidies. The Latvian government barely provides any financing, only if it is mandated by EU. Therefore, as in the rest of EU governments are partly subsidizing the infrastructure, in our situation, it is not the case. Therefore, as well our carriers face higher tariffs and no EU carrier wants to enter our grounds due to the high costs.

Q5: What kind of cargo is carried via rail and what are the projected forecasts?

We mainly experience general cargo, coal, oil, barely any containers or Ro-Ro. And we cannot project anything. Everything depends on our carriers, with whom they sign contracts as we have no authority or power to negotiate these kinds of terms.

Q6: What is your relationship with the Freeport of Riga?

Mainly we cooperate for execution of different projects. Sometimes the Freeport is the initiator and we try to adapt to their decisions. In some cases we offer some new deals and then we try to settle these negotiations. It depends on the scale and timing mainly. But what we do, we build the infrastructure and sell it to the port. The only role we play in the further picture are the maintenance works. Although everything is financed by us, due to the political instability some projects are delayed or cancelled. Many things have to fall into right places and at the right time, to actually execute the whole plan.

Q7: As you define yourself as the provider of the infrastructure, due to the decrease in volumes of cargo handled through the Freeport of Ventspils, how that has influenced the profitability of that side?

Years ago, the Freeport of Ventspils was the main source of income. We have invested a lot of time and resources into infrastructure there. Their decision to build a new and expensive terminal for coal handling completely destroyed their competency right now. The Freeport of Riga took over almost their entire cargo turnover, so currently on that side it is pretty calm, but we hope that the situation will improve. The government has to work out the plan how to unify all the Latvian ports as that would allow us to adapt and improve the overall result. As well a unified database to examine the overall state of the connections and volumes handled, could improve our service provision.

Q8: You mentioned that the current state of the railway is quite poor and major reconstruction is necessary, are there any other plans for the future?

That is true, we have to reconstruct and modify a lot of connections. In the port territory itself we have signed a lot of projected works, especially for the terminal Krievu Sala. After deciding upon the choice of tracks and getting the access to the finances, the works are planned to begin. Now it is only a matter of time, when the works will begin.

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