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Problems and Prospects of Car Transit to Russia through Finland

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ABSTRACT

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The actuality of the subject is proved by the increased volumes of car transit through Finland to Russia in recent years. Despite a 50% automotive market decline in Russia in 2009 caused by economic crisis, the volumes of delivered cars already in 2010 performed a considerable growth. Hence the purpose of the thesis was to identify the main problems in that logistics field and to review possible solutions which could be applied for best optimization of the cars’ transportation processes.

The thesis topic considers applying of a qualitative research method. Lots of printed sources such as documents, professional magazines and interviews of different businesses’ and officials’ representatives were studied. Due to that approach the obtained information was most up-to-date and the research experience was thorough. As the thesis covers broad aspects of cars delivery process, its results will be useful both for logistics companies involved in the cars transportation business and economic organizations like The Russian-Finnish Chamber of Commerce.

The research consists of three parts. First, it was necessary to conduct the Russian automotive market research for the pre- and post-crisis periods. A theoretical material was also used widely. Second chapter contains actual problematic of cars delivery process eliminated through its different aspects. The last chapter proposes a variety of possible solutions of the reviewed problems, which will provide best results only being implemented integrally by different market participants including the Russian Government.

The study found that the Finnish route of cars import to Russia still enjoys high popularity among Russian car dealers. According to the data by May 2012, its transit transportation volumes decreased by 51% in February-March 2012. These results in many respects can be explained by growing competition from Russian port of Ust-Luga, which performed 70% increase of transshipment volumes in 2011. However, the Finnish transit route is expected to remain actual for exporting Russian manufactured vehicles to Europe and other parts of the World.

Key words: car delivery, car transporters, truck queues, transshipment, HaminaKotka OY, Hanko, Ust-Luga, customs clearance, transit routes.
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INTRODUCTION

The topic of the current research was chosen due to high importance of that logistics process both for Finnish and Russian economies. Traditionally car supplies to Russia were implemented by the transit transportation route through the Central and Eastern Europe (Poland, the Baltic States and Belorussia). Gradually with the sales growth cargo traffic was reoriented towards the sea route in Finnish ports, from where the vehicles were delivered to the destination point in Russia by official dealers’ car hauling trailers or outsourcing companies.

Car hauling market participants evaluated the advantages of the new route quickly. First, now there was no need to cross the borders of several European states, respectively the risk of delayed deliveries could be reduced. Second, the specialized RoRo ships guarantee better transportation safety. Third, developed maritime ports’ infrastructure of Kotka, Hamina, Hanko, Turku and Helsinki provides reliability and efficiency of transshipment, as well as a possibility of long storage and dispatching cars to Russia. Already since 2005 Finnish maritime ports have started to work in emergency mode. Their administration had to take measures on expanding their port areas for organization special grounds to storage arriving cars, which can’t be delivered to Russia in time due to a number of reasons.

Today over 70% of cars are imported through Finland to Russia; however, as of 2011 there remains the same complex of problems which appeared in 2005. Rapid demand in the Russian market has become a challenge to Finnish maritime ports’ facilities, Russian logistics companies’ resources and the whole Russian customs system.

The main objective of the current research is to analyse main problems in the field of car deliveries through Finland, and to evaluate the prospects of Russian-Finnish economic cooperation in this field. The reviewed period is limited with timescales of the first decade of the XXI century, because active usage of the cars supply maritime route through the Baltic Sea was started this time. In the chapter dedicated to the problems of the current cars delivery route through Finland were considered ports with the largest figures of transshipment performance – HaminaKotka, Hanko and Ust-Luga. Ports of Helsinki, Turku and
Saint-Petersburg have large areas and long history, and they also participate in transshipment of cars. However, their market share in this logistics business sector is rather limited in comparison with the three ports mentioned above. This is the reason for their exclusion from the review.

To achieve this objective the following tasks were scheduled:

- Toanalyse demand dynamics on cars in Russian market;
- Toexplore the scheme and conditions for the cars supply through Finland;
- Toreview the key problems in the Finnish route of cars delivery. This tasks can be subdivided into three objectives:
  - Evaluation of both port facilities of Finnish ports transhipping cars and prospects of their operating in this field;
  - Market conditions of cars delivery business and the situation on the market of car haulier trailers;
  - The research of the problem of frontier traffic jams;
- Todefine main ways of problems solution in the field of cars deliveries to Russia through Finland;

The topic of this Thesis is rather broad. Except the evident system of the cars delivering process there are also a number of aspects to be reviewed alongside with it. Many of them have a considerable influence on the future prospects of cars imports to Russia. For example, these are:

- Complex issues of customs clearance and problems of bureaucracy connected with them;
- Not always sufficient facilities of Finnish maritime ports in periods of increased demand on foreign cars in Russia;
- Undeveloped system of railway cars deliveries;
- Competitiveness of alternative car delivery routes;
- Influence of two countries’ political and economic relationships on this logistics field;
- Prospects of Russian automotive industries’ development.
Considering the multiplicity and complexity of these factors, as well as their influence on each other, in framework of the current thesis there are reviewed the most influencing factors on the transit delivery of cars.

The subject of the thesis is specific in its actuality; hence, one of the most challenging tasks during the research was the search for the most up-to-date informational sources. Accordingly, the theoretical basis has been provided by professional magazines on the reviewed chapter’s topic and publications from the Internet. It was also aimed to use both Russian and Finnish sources to make the research most impartial.

In the current thesis has been applied basically a qualitative research method. Additionally to the statistics materials used in the second chapter which reflect the dynamics of demand on cars on the Russian market, it has been personally analyzed different researchers’ and authors’ points of view, and finally a personal conclusion has been made. The starting point of the research was the article “By sea and land” in the economical magazine Kommersant, 2006. There were given the common characteristics of cars delivery process through Finland to Russia with its problems, opportunities and market research. Based on the article it was possible to structure the topic and to point out the main directions of the research, which formed the basis of the plan. Also it was made an attempt to carry out a survey of HaminaKotka sea port on 7 May 2011, and to be employed in Inter-Auto Ltd., Rolf-logistics Ltd. and FinnLife OY car carrier companies. Actual working experience could provide me with the most actual information inside the very company operating in the field of my research; however none of these attempts were successful. So, the implemented work is based on sources with free access – articles from thematic professional magazines and Internet, as well as textbooks on logistics.

The working process on the thesis can be represented by the following scheme:
Firstly it is necessary to define the factors inspiring the foreign cars imports to Russia. In the second chapter is conducted a market research for the period 2008-2010, where demand dynamics on cars is thoroughly studied within the chosen time period. Also there are listed the market participants, its main players and such a specific topic for Russian automotive market as influence of homeland automotive industries on their national market conjuncture. In a detailed way is described the scheme of cars delivery from Japanese, American and European manufacturers to Russia, which includes the Finnish transit route. In framework of the third chapter is reviewed an important influence of Russian-Finnish bilateral economic and political relationships on cargo delivery logistics business through Finland to Russia.
transportation volumes and, consequently, on cars hauling as well. Based on the higher reviewed material is conducted a SWOT-analysis of the Finnish transit delivery route. One of the key topics of the third chapter is the analysis of Finnish and Russian sea ports’ facilities and their sufficiency for handling current volumes of cars exported to Russia. Alongside with the problem of cars storage areas is reviewed a deficiency of cars transporters in automotive parks of Russian car carriers and difficulties in procurement of these vehicles. A serious inhibitor in road cargo flows between Finland and Russia is long queues of vehicles on the Russian border. When studying that problem it was found that Russian customs system requires complex optimizations. So the paragraph reviewing different customs issues is divided to several subparagraphs according to their subject matter.

The purpose of the fourth chapter was to propose different solutions for solving the reviewed problems in the car delivery field. There are proposed alternative routes of cars deliveries, which can be used for unloading Finnish ports. Separately are described the prospects of launching the project of Eurasian transport corridors, which can be implemented to 2020. As an alternative approach to the problem of overloading Finnish sea ports facilities and road infrastructure can be considered the development of Russian domestic automotive industries.

In the Conclusion is summarized the whole experience of the thesis. In a detailed way are described the main achievements, the conclusions concerning current situation within the cars delivery field, its prospects and main trends of future development. The thesis is also supplemented with three appendices. They reflect the current cars sales dynamics, contain a scheme of cars transportation from Japanese and European manufacturers to Russia and figures of Finnish and Russian ports’ transshipment capacity.

The presented thesis material can be found useful for both Finnish and Russian entrepreneurs, who are planning to set up a logistics business in cars delivery sector. There are eliminated numerous professionally valuable issues, such as present market conditions of car hauling business, currently existing problems and future opportunities. Another interested party can be the Finnish-Russian
Chamber of Commerce. The Chamber has sufficient resources and value for searching for optimal solutions in Russian-Finnish joint business projects, whereas car deliveries to Russia are a highly profitable and rapidly developed field. When performing as a consolidation platform, Chamber’s activities may include setting up joint logistics companies and establishment of a regional Finnish-Russian car carriers' professional organization. As experience of European Association of Car Carriers evidences, in frameworks of such an organization activities on generation of solutions to common problems and multilateral cooperation can be highly effective.

2 MARKET CONDITIONS OF CARS DELIVERY LOGISTICS BUSINESS THROUGH FINLAND TO RUSSIA

2.1 Dynamics of demand for cars in Russia

The objective in the current chapter is the review of demand dynamics on cars in 2008-2010 in Russian automotive market. These statistics data both reflect the current marketing situation and could determine the future trends of the most demanded cars. Among them are to be defined the imported models, 70% of which is supplied by transit route through Finland.

Russian automotive market is largely inclined to repeat the European trends, however at the same time a number of specific factors affect demand dynamics on cars in Russia. To a large extent due to them there is a stable demand for cars of different price segments. Moreover that, some world automotive manufacturers’ models enjoy the greatest popularity on the Russian market, such as Ford Focus, Mazda 3 and Mitsubishi Lancer.

An analysis of these factors’ nature should be a deep marketing research considering numerous issues. There are the definite circumstances of car opera-
tion, e.g. seasonal, regional, depending on frequency of car use, etc. Separately can be assessed age and customer’s economic status. Usually not less important factors are degree of certain manufacturer’s dealer network development in a country, maintenance costs and fuel consumption. At the same time it is the factor of car price which has the utmost importance for a considerable part of Russian customer auditorium. For example a remarkable fact is that traditionally the absolute leader on Russian automotive market was a production of homeland’s largest car manufacturer – AvtoVAZ JSC, despite its rather poor assembling quality. In 2009 that Russian automobile concern left behind its nearest competitor in sales volumes (which is, however, a sales leader in another price class) Ford Motor Company producing its model “Focus” in Russia by almost 2 times (Avto.ru 2011), so, the production of such cars as Ford Focus and Renault Logan is oriented on the customer, for whom a price-quality correlation has a paramount importance.

At the same time, Russian automotive market is currently considered to be the seventh largest market in the world. Despite the significant market share of 25% belongs to AvtoVAZ JSC (as in 2011), world leading car manufacturers actively build their plants in Russia and even technically adjust some models for severe Russian conditions. In 2009 there were 20 brands assembling their most successful models in Russia, however the rest of them still have to deliver their cars using different transportation routes and logistics solutions. According to Chuprov (2011), the number of realized cars of foreign brands assembled in Russia amounted to 471,2 thousand units, and the annual growth was 83,3%. Their market share also extended from 34% to 39,9%. Alongside with that, the agency published the data of new imported cars’ sales. These volumes increased by 53,7% to 392,8 thousand cars, however their market share decreased by 0,6 points to 33,2%. (Chuprov 2011.)

But to make certain predictions about the near future of Russian automotive market and the demand for cars importing from abroad it is firstly to analyze the market performance data for the last three years 2008-2010. Such an analysis can help to identify the most important trends and market dynamics related to different car manufacturers.
For visibility of that information it has been drawn two car sales statistics charts. The one, which reflects the cars sales volumes in Russian market in 2008-2010 is presented in Appendix 1. Its purpose is to provide the reader with certain figures of cars sales in the mentioned period. In framework of the current chapter is thoroughly analyzed the second chart of sales dynamics in Russian market in the periods of 2009-2008 and 2010-2009.

Chart 2.1 Difference in sales volumes 2009-2008, 2010-2009 (%) (Green Site SerēGa 2011)
As follows from the chart, the world economic crisis affected Russian automotive market most seriously in 2009. In overall the market decline was 60% compared with 2008. However in 2010 there was a steady 30% growth.

The top five market leaders of 2009 became Lada, Chevrolet, Ford, Hyundai and Renault. In 2010 Hyundai was superseded the rating position to its homeland competitor KIA, which succeeded to take the second place. During a tough economical period they succeeded to focus on the most demanded niche – on budget cars, which prices don’t exceed in average $ 20 000. The Lada case is especially remarkable, as far as this brand became the most popular one due to the lowest prices on its production. Also this Russian manufacturer was actively supported by the Russian government during the crisis period. Main competitors of Lada had also performed well with actual proposal of budget class cars.

Additional factor inspired as the whole market growth in common as the budget-class cars in particular was a governmental program of old cars utilization. In framework of the program, an owner of a ten-year car can take his car for scrap metal and get RUB 50 000 (about € 1 165 by 25 October 2011) discount on a number of specified models, produced in Russia. According to Fialko & Tovkailo (2011), initially the program was planned to be implemented from the 1-st January 2010 till the 31-st December 2010, however, then it was extended to 31 December 2011. As by October 2010, the results of the program were estimated as positive: in January – September 2010 it was realized in Russia 1,32 million passenger cars and LCVs, which is 18% more than by the same period in 2009.

It also has to be mentioned that nine of ten mostly popular models in the market are produced in Russia. Alongside with them in 2010 the growth of imported cars sales was also considerable. These dynamics of demand growth are presented in the chart (2.2) Sales dynamics of imported cars for the period 2007-2010.
There are separately assessed the dynamics of two popular models’ dynamics of Hyundai and Nissan in the Russian market, as far they are imported comparatively the rest of model range assembled in Russia. It also has to be noticed that there are no premium brands (like Mercedes, Lexus, Infiniti, Porsche, etc.) included in the chart, because they don't usually form a massive demand on the market. Also their market share is insignificant to influence the common marketing situation seriously.

It can be concluded from the chart 2, that basically it reflects the common trends of the market in the mentioned period. In 2009 there was a significant decline, however already in 2010 the market reached the pre-crisis level, which is shown by Hyundai and Suzuki cases. In KIA and Toyota cases 2010 was even more successful than 2008. Also many companies benefited from successful marketing decisions, such as stimulation of the sales by launching an updated version of the popular model. For example is a rapid growth of Mitsubishi Lancer sales, which was developed on a new base. The similar case is Honda CR-V, which after being presented in a top equipment version with the engine 2,4 L had performed a sales growth of 257% in 2007-2008 (Kvashenkina 2009). The reason

Chart 2.2 Sales dynamics of imported cars for the period 2007-2010 (%). (Green Site SerëGa 2011; Udachin 2011.)
of KIA good performance in challenging economic circumstances of 2009 is also connected with advanced marketing strategy. This South-Korean brand succeeded to launch five new models on Russian market and propose profitable credit programs and the free KIA Road Assistance service (Avtoland – official dealer of KIA in Saint-Petersburg 2010). The Citroen performance is also remarkable. Its sales dynamics growth was not so active compared with the competitors; however Citroen managed to save and even slightly increase its market share.

Considering the main reasons for poor marketing performance of 2009 additionally to the World economic crisis consequences is also to add the protectionists politics of the Russian government. According to web-site of Krasnodar region automotive market r93.ru, this measure is to stimulate the cars assembling in Russia and to give additional price advantage to the cars of Russian make. But in fact, after duties increase car makers have the possibility to raise prices on cars and still remain cheaper than imported cars. (Automotive market of Krasnodar region 2009) As the result of duties increase in 2009 import of foreign cars had risen in price by 20-80%, depending on the engine volume and the age of the car. (Autoutro 2009.) It can be supposed, that until Russian cars manufacturing development will lag behind European trends and Russian cars will remain competitive only in price, the import duties will be constantly increasing. However, according to the chart above, imported cars in 2010 had positive sales dynamics despite the import duties.

At the same time, according to autonews.ru (2011), the analysts of AEB (Association of European Business) organization are positive about the future of Russian automotive market. The market yield at pre-crisis level is expected in 2012. AEB considers that in the presidential elections year in Russia it will be acquired 2.8-2.9 million cars. Moreover these figures, AEB believe in further growth of Russian automotive market. According to the AEB’s forecasts, in 2011 it will rise to 17,9% (to 2.24 million of cars sold). David Tomas remarked especially that the expected sales growth won’t be based on the vehicle recycling program. The market yield at pre-crisis level is expected in 2012. AEB considers that in the presidential elections year in Russia 2.8 - 2.9 million cars will be acquired.
Autonews.ru (2011) also provides with positive outlook by the AEB committee chairman David Tomas. He states sales of passenger and commercial cars for the fiscal year grew for 30% to 1.91 million units. This is an extremely positive figure in comparison with depressive “post crisis” 2009, when sales reached only 1.46 million units. Tomas concluded, that 2010 was very inspiring year, because sales growth exceeded all the market analysts’ expectations.

It is necessary to mention that not all the experts are for such great extent optimistic about Russia. Autonews.ru (2011) published analytical data made by the global consulting company Frost & Sullivan in its research “Central & Eastern European and Russian Automotive & Transportation Research”. According to the research results, the average annual growth rate of automotive market will be about 10% in the period till 2020. Frost & Sullivan branch analyst Vitaly Belskiy predicts Russian automotive market will remain very attractive for many vehicle manufacturers, however Russian customers’ price sensibility may play a crucial role along with the growing demand for cars in cities.

The higher mentioned source also provides opposite expectations of sales growth, expressed by the analytical agency “Avtostat”. According to its director, Sergei Tselikov, there are all prerequisites to reach the sales level of about 2.5 million new passenger and commercial cars, which is 31.5% more than in 2010. Agency experts predict that among car manufacturers in 2011 a confident leadership will save AvtoVAZ, though Lada cars market share will slightly decrease.

Undoubtedly, in many respects the previous demand growth is provided by cars, assembled in Russia. However in that vein it seems interesting the information from initiative by Russian opinion poll VCIOM (All-Russian Public Opinion Research Centre), conducted on 12-13 March 2011 and published in the same article by autonews.ru (2011). According to that statistics information, by 2011 it has appeared the tendency to acquire a new foreign car instead of used foreign car, or new car by Russian make compared with 2006. In percentage statistics of the respondents there are 32% and 19% respectively. At the same time compared with 2010 it became more of those who intend to own a used car – this figure increased from 24% to 30%. It is also getting smaller a number
of those who wish to buy a new domestic car of Russian brands - 15% in 2011 versus 22% in 2009. (Autonews 2011.) These surveys evidence the Russians' propensity to buy either new imported car, or used car, which are also imported through Finland. Consequently, the Finnish transit route will be actively used at least in the near future.

It also has to be added that the route will remain actual also due to the comparatively stable demand for premium segment cars, so as the most part of them is assembled abroad. Besides its sales volumes are considerably lesser than others, in 2010 the premium segment was the only one which had almost reached the pre-crisis sales volumes (Gusev 2010). Exclusions are the BMW model range, Hummer H2 and H3 both assembled in Kaliningrad, Toyota Camry and Nissan Teana, which assembling plants are located near Saint-Petersburg suburbs (Morzharetto 2009).

**2.2 Influence of homeland automotive industries on their national market conjuncture**

In the current paragraph is reviewed such an important factor of automotive market development in Russia as homeland car assembling. As it was mentioned above, Lada cars kept leading position on the Russian market in 2009 and 2010; however, its general strength which attracts Russian customers is lower price than on imported cars. In many other technical characteristics homeland Russian cars are far behind the World leading automotive industrial trends. Russian automotive industrial school does not meet modern marketing needs, and the most Russian assembling plants can be in general evaluated as ineffective. That is the reason why homeland brands can compete with foreign companies in the quality-price ratio only on domestic, the CIS and developing countries’ markets. However, nowadays Russian industries meet the demand for cars, which are rather cheap in price and maintenance, and to a certain ex-
tent potentially there can be even a factor of challenge to the foreign cars, imported through Finland.

The theoretical base for this paragraph is the research by V. Nevelev (2009), published in professional magazine “Avtomobil’naya promyshlennost’” in 2009. There the author analyses the current competitive strongholds and weak points of Russian automotive industries, and gives prospects of its further development. According to Nevelev’s data, despite passenger cars field is rather weak, the situation with LCVs competitiveness is better. In particular, considerable popularity in foreign markets enjoy GAZ-manufactured models “Gazelle” and “Sobol”: these models are being actively bought in Hungary, Iraq, SAR and China. By comparatively low prices, easiness of technical maintenance and possibility to convert them into microbuses or ambulances they attract a lot of consumers from developing countries.

It was gradually built up the KAMAZ export program. In the pre-crisis times a demand for its production was permanently growing, especially in the developing countries. One of reasons for that is the success of the car manufacturer’s rallying team on the “Paris-Dakar-Cairo”, “Optician-2000” etc. rally series.

Alongside with that it should be recognized that export capacity of Russian truck manufacturing still remains quite low. Especially since the pricing stability both on freight and passenger cars have their borders and, according to the managers of leading companies within the industry, considering the reconstruction and reorganization processes realization it is impossible to increase price level on materials and energy resources any more. That’s why the only way to improve the “quality-price” ratio is a growth of the produced vehicles quality and a growth of its technical level.

According to V. Nevelev (2009), many managers of automotive industries plants have already started to follow this way of quality improvement. That is already clear for many managers of automotive industries plants. They implement new marketing, logistics and service strategies; develop dealer network in regions with participation of foreign companies. For example, on the basement of PLC “Automotive plant “GAZ” is created the Russian-American joint venture, which
one of the primary objectives is assistance in promotion of Russian vehicles on the world market through the American business partners’ dealer network.

There are other promising directions also. It can be Russian trolleys. After modernization and switching to the new model generations, that market can become interesting for consumers from India, the CIS and the Baltic countries, Middle and Far East, Southern Europe and Latin America. Still good prospects have “Gazelle”, “Sobol”, "Bychok" (eng. "Bull") and PAZ buses among neighboring countries, Middle and Far East and Latin America. Large and extra-large city buses are for such target markets as the CIS and the Baltic States, Asia and Africa.

But there is no doubt that it is wrong for Russian automotive industries to be oriented only on foreign markets, because Russian brands’ market share there is too small. In other words, it is still the national market the prime Russian vehicles consumer nowadays. At the same time there have been significant changes too: it became an open system, where homeland models have to compete with foreign ones. For example, as strong VAZ competitors nowadays perform such World-known brands as Renault, FIAT, Škoda, Peugeot, Honda and KIA. There are also competitors to other vehicle types. And in due course competition will be much tightened.

So, the increased competitiveness of domestically produced cars is getting really one of the general directions of the national market forming conjuncture. There follows the need to assess an average level of this indicator for a long term.

According to V. Nevelev (2009), there is a possibility of such assessment. For this purpose he recommends using the design equation taking into account the improvements by Sorokina (2005):

\[
\bar{C_P}_i = \frac{\sum_{i=1}^{n} \bar{Q}_i}{\sum_{i=1}^{n} \bar{P}_r} = \frac{\sum_{i=1}^{n} \sum_{k=1}^{k} \bar{Q}_i}{\sum_{i=1}^{n} \sum_{k=1}^{k} \bar{P}_r} (2.1)
\]
There $\bar{CP}_i$ is an average level of cars competitiveness in a country in the i-year in the long term period, U/RUB; $\bar{Q}_i$ - is a conditional mean value of the vehicle quality' integral index in the country in the long-term period; n – the number of automotive parks in the country; k – the number of car quality indicators in the country in the same year of long-term period; $\bar{P}_i$ - the average car price in the country (in the same year of the long-term period.

The level of national market conjuncture in the each i-year of the long-term period can be defined from the equation: $MS_i = D_i / S_i$, where $D_i$ – is the economics and population demand for cars in the i-year of the long-term period, thousands of units; $S_i$ – the offer of cars on the world market in the country in the same year, thousands units.

Based on these equations it is also possible to quantify the influence of the domestic cars’ world market competitiveness on the conjuncture of their national market. Such a possibility gives the formula:

$$F_i (CP_i, MS_i) = \frac{\sum_{i=1}^{n} \sum_{i=1}^{k} Q_i S_i}{\sum_{i=1}^{n} P_r i D_i} \quad (2.2)$$

where $F_i (CP_i, MS_i)$ is a function of evaluation of domestic cars competitiveness influence level on the level of their national market conjuncture in the long-term prospect, U/RUB.

These conceptual proposals were approved by the author in the Russian “State University of Management” during the International Scientific and Practical Conference in October 2008. According to its participants’ opinion, the proposals can be applied in modifying the “Russian automotive industries development strategy” (Nevelev 2009.)

2.3 Schemes and conditions of cars delivery
The goal of the current paragraph is to describe the whole cars delivery process through Finland from the manufacturer’s plant to the Russian dealership or directly to the final customer. Another important topic reviewed there is the influence of economic relationships between Russia and Finland (based on several cases) on the marketing conditions for logistics companies and car carriers.

2.3.1 The delivery route description

In general a traditional car delivery process can be described with a rather simplified scheme, represented in the Appendix 2. “The car delivery route from Japan”. For example, it can be reviewed the experience of such remarkable car manufacturer as Mazda Motor Corporation, which implemented 100% its deliveries to Russia by the route described later (until 2009). As follows the sales marketing plan, a manufacturer organizes loading and shipment of a definite consignment with cars to the Russian market. Subsequently the whole delivery process of new Japanese cars can be divided into six stages, as it is presented in the article “How does a new car go around a half-Earth” on the Internet pages of the magazine “Delovoy Peterburg” (eng. “Business Petersburg”) dp.ru., 26.02.2011:

1. At the factory warehouse in Japan cars are being formed in consignments, intended for European continent. Before loading to the Ro-Ro vessel, cars are handled with a special cover, protecting from salt and wind. Loading is carried out on large ocean-going Ro-Ro vessels (with carrying capacity up to 4 - 6 thousand cars). The ocean way leads through the Indian Ocean, Suez channel, around the Pyrenees peninsula to the Great Britain, Netherlands and German maritime ports. There cars are thoroughly inspected after the sea route: all the received scratches and damages are removed and accessories are installed.

2. From these transshipment points cars are shipped by vessels of lesser ship capacity to the Finnish ports, where there are large storage areas.
3. Then cars are transported on the car carriers to Russia. The majority of cars consigned for St. Petersburg dealerships are firstly sent to Moscow for customs clearing. That process usually takes two days. However, some manufacturers recently launched customs clearance in St. Petersburg.

4. After the customs clearance cars enter the next temporary storage warehouse, where they are divided into new consignments for delivery to the dealership.

5. From the Moscow warehouse (or St. Petersburg customs) a car is delivered to its dealership. From Moscow to St. Petersburg the delivery is carried out in two days.

6. Being delivered to the dealership a car passes a thorough presale inspection in 1 - 3 days.

With that the delivery period takes 40-60 days from the moment of loading in Japan until the arrival of cars in Moscow. The shipping from the Mediterranean Sea to Finland may take up to 20 days because of sequential unloading of ocean-going Ro-Ro vessels in several ports and cars transshipment.

When reviewing the question about economical expediency it is possible to conclude that the tariff rates on maritime shipping and transportation “by Earth” are rather low. Also trucking companies can quickly change them when responding to the market condition. In overall the transit through Europe is the usual and approved route, which will be used for cars transportation in the nearby future as well. Its weak points are the overload of transport and road infrastructure on the Finnish direction and long delivery time. (Baranov 2008.)

According to “Formula Strahovaniya” (2011), in general, the above scheme is relevant as well for other car producing countries, which send their production through European ports. First of all, these channels use Korean brands KIA and Hyundai, all Japanese brands, and also cars by the “Detroit Big Three” from the US. The delivery time of cars from the US is significantly shorter, and is 3-5 weeks in average (Broker “Formula Strahovaniya” 2011). Some companies implement cars shipping from the US to Europe and Russia only in containers.
So, on the speed of delivery influence such factors as consolidation of containers on the loading stage and if the logistics company is able to meet the standard terms of shipping which are common for all transporting companies. These factors usually depend on the particular logistics company.

The acquired American-made cars usually pass the following delivery route:

1. Bought at an auction or from a car dealer, the vehicle is delivered by car carriers to the New York port (5 days);
2. Then the car is loaded to container, the container is loaded to the ship, which departs to the Finnish maritime port of Kotka (5-7 days);
3. The sea route New-York – Kotka (20-25 days)
4. In Kotka the container is unloaded from the ship, and finally the car is unloaded from the container (2-3 days) (ibidem: Broker “Formula Strahovaniya” 2011.)

It was also studied that numerous Russian logistics companies in the American cars shipping business are ready to propose shortened delivery time to their customers within competitive struggle. E.g., such companies as Dunhill Group LTD., Global Auto USA propose their delivery services in terms of 18-25 days, and if the delivery destination port is Kotka, the unloading of 40-ft container is already included in the car price. So, the evident profit of such proposals is lack of extra payments processing. After getting to Russia the cars are sent to Moscow for customs clearance. Thus, the car, delivered to Saint-Petersburg through Finland, is firstly transported to the customs in Russian capital, and several days later goes back to the “Northern capital of Russia”. (Cars from the US 2011, Global Auto USA 2011.)

After a buyer prepares an application for the car which meets his wishes, a manufacturer puts it in turn to produce. The very production process takes from 3 days to a week, including the body welding, assembling and the running-in. Depending on the body version and the ordered configuration of the car the length of the queue may vary. Since applying to the dealer’s office and till receiving the ordered car from this office customer usually waits for 3 months, but
if the demand is high or quotes on Russia are low - these terms can increase up to 6 months. (Delovoy Peterburg 2011.)

2.3.2 Influence of bilateral economic relationships on transit transportation

The transit delivery itself very often may become dependent on political and economic relations between the governments of two countries. Considering good political and economic relationships, as well as active logistics connections between Russia and Finland it is hardly possible to expect any threats to transit delivery route reliability through Finland to Russia.

However one of those matters of arguments between these two countries, which influenced rather problematic economic conditions for both countries in 2008, is a traditional Russian export of round timber and pulp to Finland. As far as it is a raw material of strategic importance for Finnish wood processing industries, the price increase in round timber and pulp caused heavy economic consequences for many Finnish wood-processing companies, and the reaction of Finnish government was adequate.

Trying to sustain the homeland wood industry, which is in poor condition since the end of Soviet era and by nowadays, the Russian government decided to set the export duties on raw timber, and it was implemented in 2007. The goal declared was the stimulation of wood processing and promotion of investments in Russian forest industry. In the trade between the Russian Federation and Finland the share of transactions in the forest sector is about 25%. About 50% of the € 2 billion of Finnish investments in Russia in 2007 are investments in wood processing projects. Finland receives more than a third of export revenues from the sale of paper, paperboard, pulp and Russian timber processing. So it is seriously concerned about the increase in export taxes and had to increase the export of timber from European countries. According to the decision of the Russian Federation Government, export taxes increased steadily - from 1 July 2007 to 1 January 2011. In April 2008 the rate was raised to € 15 per cubic meter of
timber. Two years later, taxes amounted to € 50 per cubic meter. Originally birch was expelled from raising rates, but in 2011 the duty on it raised to € 50 per cubic meter also.

In fact, the duties will put an end to Finnish imports of Russian timber: now the cost of round wood in Finland is € 52 per cubic meter, the price of wood for pulp production varies between € 13 and € 24 per cubic meter. Annual export of Russian timber in Finland is about 8 million cubic meters a year. Thus, the maximum losses of Finnish industry because of the increased Russian export duty on timber from € 15 to € 50 in 2011 amount about € 280 million a year. (Interregional Centre of Business Partnerships 2011.)

After these duties were imposed, Finnish Foreign Trade Minister Paavo Väyrynen had officially announced that Finland may set the transit fee for Russian trucks in autumn 2008. After this announcement was formally extended, Russian mass-media didn’t hesitate to whip up the public negative attitude to the Finnish project. For example, in the article “Finland will charge car carriers” by “Baltfor” transport company (2008), were interviewed official representatives of Russian trucking companies, who were concerned about such fees. Also the announced theoretical possibility of setting road fees has been even presented there as already implemented event: “However, in 2008 the fee was charged. For every twenty-four hours on the Finnish territory trucks’ owners have to pay 11 euro, and some highways from ports to the Russian border were closed for trailers.”

Meanwhile Shapovalov (2008) provides with more objective information. In the Finnish government there is no agreement about the prospects of the of transit fees imposing for Russian trucking companies. Finnish Prime Minister Matti Vanhanen and Minister of Finance Jyrki Katainen (governmental positions valid by 2008) were sceptic about the proposal - they believed that such economic measures are contrary to the EU law. According to the head of Finnish Ministry of Transport office Harri Pursiainen, the issue was discussed in 2007, and even then it was clear that the EU rules do not allow the retention of special transit payment. (Shapovalov 2008).
As Finland belongs to the EU, it can’t impose such fees unilaterally. In this case the reaction of Russian government to these discussions in Finnish Parliament is remarkable. According to the article “Russia Road Freight Toll” (2011), without long disputes in the Duma Russia had started charging all European trucks over 3.5 tonnes RUR 385 per day, 1154 roubles per week, for a month - 5,000 roubles and per year - 60 thousand roubles. Fee must be made not later than 24 hours after the Russian entry, and the transaction can be accomplished through a bank or other credit institution. As it was explained in the Ministry of Transport, the money will be spent on repairs, construction and road maintenance. Russian authorities say that the tolls were set taking into account the fact that the same requirements are imposed on the fare to the Russian carriers in the EU.” (RW Freight 2011.)

Such a strict measure influenced a reasonable concern about possible negative economic consequences from the Finnish Ports Association and Russian AS-MAP sides. According to Makeycheva (2011), the letter was sent to Prime Minister Vladimir Putin proposed to exclude Finland from the list of EU countries obliged by the road tax. Meanwhile two weeks later, on 15-th February 2009 Finland started charging Russian trucks which gross weight exceeds 38 tons. According to the article “Finland may cancel charging Russian heavy trucks” (Voditel Peterburga 2009), now there is negotiation process on the abolition of fees imposed by both countries. Finland is prepared to cancel the charge for the extra weight as soon as Russia cancels its road fee for Finnish trucks. It is also mentioned in the article that the abolition of fees for the extra weight needed both for Russian trucks and Finland itself. Back in February, the Association of Finnish ports feared that the introduction of user fees will cause the Russian carrier to change the supply chain, which will exacerbate the fall of transit cargo.

During the research it hadn’t been found any information about the present state of these negotiations. Anyway, these charges don’t affect the volumes of cars hauling to Russia by Finnish transit route. The point is that most often used car carriers loaded with cars weight less 38 tons. This conclusion has been made after the following calculations.
For example, can be reviewed the models of three different car carriers: Scania P340 LA4X2HLB, Renault Premium 380.19 DXI 4X2 and Volvo FM9 340. All of them are used by Russian car carriers. The entry charge is calculated on the basis of trucks’ weight. According to the specifications, the Gross Volume Weight (fully loaded with cars) of Scania P340 LA4X2HLB is 19 tons, of Renault Premium 380.19 DXI 4X2 is 18 tons and for Volvo FM9 340 this figure is 20 500 kg (Lipetskcomtrans 2011; Trucktradex 2011). Consequently, the charged fees can’t be imposed on car carriers, as far as they don’t reach the weight limitations. So the threatening factor of new road fees in transit transportation of cars still remains only as a potential one.

According to Stupachenko (2006), there is also such an important factor in Russian-Finnish economical relationships, as the SKAL (Suomen Kuljetus ja Logistiikka) organization. In fact it is similar to Russian ASMAP, and its mission is to defend interests of Finnish logistics and trucking companies. So, according to Stupachenko (2006), it was the SKAL which initiated political debates on setting road fees for Russian trucks. At the same time it has to be considered that the article reflects the Russian-oriented point of view, and can’t be estimated as totally unbiased.

As follows from Stupachenko (2006), by nowadays the largest market share of car transit hauling market have companies of Russian origin (about 75% as in 2011), wherever their Finnish rivals experience rather tough competition there. The differences of marketing conditions are evident: Russian trucking companies are not obliged with Finnish taxes which are much higher than in Russia. They can purchase Russian fuel which is much cheaper than in Finland, at least according to the nearest several years. Also they have a large fleet of car hauling trucks and trailers – considering such remarkable market leaders as Rolf Logistics, GEMA-Trans, Taisu, Inter-auto or Midas.

These are the reasons of some Finnish trucking companies dissatisfying with the situation on the logistics market, and applying to SKAL organization for its influence on the Finnish Government. The marketing disproportion inspired the president of SKAL on preparing series of proposals to the Ministry of Transport and Communication. One of the last ones was in 2006, when Seppo Vainio
came up to the Minister Susanna Huovinen with the idea to set the road charge for Russian trucks. (Stupachenko 2006.)

His proposal was based on the fact, that free using of Finnish highways and roads by Russian trucks just weakens its surface resources, but there are no incomes from Russian trucking companies to the Finnish economy. In 2006 the proposal was rejected, based on the idea that Finnish transport sector handles a large volume of goods coming both to and out of Russia, and the government is not going to spoil its relations with the neighbouring country, through which a respectable part of the budget is earned (in average incomes to the state treasury from Russian transit is € 500 million (Virtual Customs 2007).

However, despite all these kinds of economic and political difficulties in bilateral relations, the Finnish route will remain in the present and future schemes of cars delivery as stable and well-proven logistics solution. Surely, a high demand for cars in Russia had dropped almost in a half during the peak of world financial crisis in 2008 - 2009.

But according to the sales dynamics of 2010 and the first half of 2011 the Russian automotive market in the near future will grow, and, as many market researchers and analysts affirm, already by 2015 the sales volumes will repeat the pre-crisis period. Consequently, until Russian automotive industries won’t provide the country with all highly demanded cars and Russian maritime port system, as well as the nearby road infrastructure, won’t be developed as well as the Finnish one is developed nowadays, at least large Russian logistics trucking companies will actively use Finnish transit route for car hauling.

2.4 SWOT-analysis of the car delivery route through Finland

To make one of the key terms in the current research – Finnish transit route of cars delivery - more summarized, there a SWOT-analysis can be carried out. In
many aspects of this task there were found as very useful the publications from the centre for maritime studies by the University of Turku.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>• Geographical proximity and a long border, common historical roots;</td>
<td>• High costs (including wages, bus costs, fuel, transportation tariffs,</td>
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<td>• Long-standing traditions of cooperation between the both countries’</td>
<td>storage and freight cargo handling;</td>
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<tr>
<td>authorities;</td>
<td>• Precedents of port workers strikes;</td>
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<td>• Competitive infrastructure;</td>
<td>• Excessive homeland and regional competition;</td>
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<tr>
<td>• Frequent transport links;</td>
<td>• Automotive deliveries through the Russian-Finnish border overload its</td>
</tr>
<tr>
<td>• The route is a continuation of the Trans-Siberian railway and the</td>
<td>infrastructure;</td>
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<tr>
<td>Russian transportation corridor “North-South”</td>
<td>• Geographically the Finnish route between the Western Europe and Moscow</td>
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<td>• A possibility of day and night export of cars to economic zones of</td>
<td>is longer</td>
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<tr>
<td>Saint-Petersburg and Moscow;</td>
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<tr>
<td>• Developed port infrastructure, professional logisticians and skilled</td>
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<td>workforce;</td>
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<td>• Competitive quality-price correlation of logistics services;</td>
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<td>• Safe and cheap storage of cars on compound areas;</td>
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<td>• Powerful icebreaker fleet;</td>
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<td>• Joint Russian-Finnish logistics projects;</td>
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<td>• Wide range of services with added value</td>
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<tr>
<th>Opportunities</th>
<th>Threats</th>
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<tr>
<td>• A growth of Russian economy and foreign trade;</td>
<td>• Growth of Russian ports competitiveness and reputation;</td>
</tr>
<tr>
<td>• Decrease of port services price levels to the competitors’ level;</td>
<td>• Unpredictable dynamics of Russian economy;</td>
</tr>
<tr>
<td>• Normalisation of Russian legislation and trade;</td>
<td>• Growth of the Baltic States ports competitiveness, their reliability</td>
</tr>
<tr>
<td>• Increase of Western investments in Russia;</td>
<td>and low prices on port services;</td>
</tr>
<tr>
<td>• Increase of Finnish transshipment role in mediation of Chinese goods</td>
<td>• Deterioration of relations between the EU and Russia;</td>
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<tr>
<td>in Europe</td>
<td>• Finnish Government initiatives for protection of domestic car hauler</td>
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<td></td>
<td>trucking companies;</td>
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<td></td>
<td>• Such ecological risk factors as nuclear power plants, oil transport-</td>
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<td>portation by the “Nord Stream”</td>
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Table 2.1. SWOT-analysis of Finnish maritime ports efficiency for cars delivery to Russia (Sundberg, Räsänen, Posti, Pönttynen 2010).

So, it is possible to conclude from the table 2.1 that cars delivery route through Finnish ports nowadays is the most optimal one. It is adjusted by the 10 years of trucking companies’ experience, which operate on the Russian automotive market. However the complex of the risk factors listed below create the need of alternative routes development.

Finnish transit route risk factors:

- the lack of developed alternative routes;

- high demand level on cars;

- limited facilities of Finnish maritime ports and territories for temporary storage of cars, which wait for dispatching by car carriers to Russia;

- by the present day archaic customs system of freight declaration and control of transported cargo in Russia

The projects and proposals on improving the current Finnish route delivery system are reviewed in the fourth chapter.

3 PROBLEMS OF PRESENT CARS DELIVERY SCHEMES TO RUSSIA

3.1 Problems of HaminaKotka, Hanko and Ust-Luga ports facilities

In this section it was planned to separately review the performance of Kotka and Hamina ports car terminals, however while writing the chapter these two ports
merged, and since 1 May 2011 it was formed a new HaminaKotka LTD. However, in fact, the changes have taken place only on administration level, whereas port facilities are still formed by car terminals Hietanen of Kotka port, and Hamina. So, the information used belongs to the earlier period, but remains actual even nowadays.

### 3.1.1 Analysis of HaminaKotka port facilities

In many sources on this subject one of key problems of the field is indicated a limited port area for cars storage. In some cases even in their expansion it cannot be capable to accommodate the whole arriving vehicles. Despite that, the most part of such publications belong to the period from 2003 till 2007, when the management of such leading transshipment centres as Hanko and Kotka started to search for a problem solution in expanding of car terminals areas for accepting and temporary storage of cars.

In general it is possible to track the dynamics of leading Finnish ports capacity. According to the article “By sea and rolling” (2006), which reflects the situation in 2005, a considerably increased demand for cars in Russia in the beginning of 2000s, which can be explained as a result of successful economic and political reforms of Russian president Vladimir Putin, and comparatively weak conjuncture of Russian cars delivery market caused the problem of lack of space in car terminals' areas in Finnish ports. In the current example were reviewed the dynamics of Kotka port, which is a leader in the segment of cars transshipment in Finland by 2011. It is necessary to mention, that the port administration adequately responded to increasing cars supplies to Russia, and consistently expanded territories for storage of cars, which are steadily arrived but unstably delivered to Russia. This is shown by the following dynamics:

- 2004 – 38 000 cars were imported through the port (Port of Kotka 2004);
- 2005 – Hietanen terminal is opened (90 hectares) (Port of Kotka 2005);
2006 – Hietanen terminal is expanded to 30 hectares (which is 50 hectares more than in 2004). The cars flow is increased to 169% compared to last year, 205 000 cars were passed through the port (Port of Kotka 2006);

2007 – by the end of the year car terminal areas were 100 hectares (Port of Kotka 2009);

2008 – port of Kotka became a major player in the Finnish market of cars transshipment. The growth of car handling volumes in Hietanen terminal of Kotka port reached 27,3% (96000 units) compared with 2007. In addition, it was organized a sea delivery from port of Kotka to Saint-Petersburg port. At the same time the report mentioned that for 5 years of cars transshipment volumes growth a quantity of cars transporting companies remained on the approximately same level. Also the Finnish party for the first time mentions a possibility of cars delivery by railway. (Port of Kotka 2011.)

2009 – Hietanen harbour had got additional 115 hectares, on which were placed car terminals for storage up to 800 000 cars a year. (Port of Kotka 2011)

2010 – According to the official information of Kotka port, municipal assemblies of Kotka and Hamina had taken the decision about fusion of Kotka and Hamina port companies. The new joint-stock company “HaminaKotka satama OY” will start its activities on 1 May 2011. As the fusion result in Kymenlaakso region will be formed the largest in Finland universal and export port. Among 250 ports of the Baltic Sea “HaminaKotka satama” will get to the 15-th place, and as a container port the 3-rd place (Laptenok 2010.)

Thus, the Finnish port system wasn’t ready to changes in the Russian automotive market and as the demand grew successively expanded territories of Kotka port for transshipment and storage operations with imported transit cars. However with analysis of that cars delivery route efficiency it has to be mentioned that despite all the taken measures on expanding and optimization the port territories it constantly remained a threat of free storage areas insufficiency. Upon further studying the problems of cars transit to Russia it seems quite objective the conclusion about the nature of the problem described above; the lack of port storage spaces can be not the consequence of
erroneous scheme of the very cars shipping, transshipment and by-road delivery processes, but the result of other more complicated reasons’ influence. It is possible to allocate the most important ones as follows:

- High loading of the cross-border infrastructure, which causes the threat of long traffic jams on the border checkpoints (in general, in Vaalimaa-Torfyanovka and Nuijamaa-Brusnichnoe);

- Complicated and by the present day outdated system of border control on the territory of Russian border checkpoints as the factor creating traffic jams on the Russian-Finnish border. Even despite the allocation of special lane for car-carrying trailers, traffic jams of trucks still grow constantly and can reach several dozens of kilometres, and the downtime up to two days (Informational agency Au 92 2006);

- Difficulties in purchasing car carriers for Russian companies;

- Insufficient number of car carrying companies with the truck fleet meeting the high volumes of cars to be delivered;

- High rental costs of cars storage areas in Russian dealers. Due to that reason Russian dealers do not tend to deliver cars from Finnish ports in time. By arriving to Russia a car will stall in a warehouse, which costs for a car place may be way higher than in Finnish ports. So, in some cases it is more profitable for a Russian dealership to keep cars in Finnish ports’ storage as long as possible.

Further on these factors will be reviewed separately. However, based on the current research progress it is possible to conclude that Finnish ports undertake all the necessary efforts for maintaining their leading market share in cars transshipment to Russia. There are objective reasons that encourage the management of Finnish ports to enhance port facilities and develop port services. Revenues of Finnish ports from cars transshipment account for about $18 million per annually (Temkin 2011). This sum is calculated from average servicing costs of handling one car in a sea port is about $20, plus $10 carriers have to pay for its storage (Skirtach 2011), which is undoubtedly an important revenue item to the state budget.
According to Gopkalo & Semenov (2011), leading Finnish ports have plans on optimization and expanding port areas, as well as on increasing the inbound traffic efficiency. This will be accompanied by the side events. As follows from the strategy of Helsinki port development, by 2010 freight traffic was almost taken outside the city from cargo districts in the Central part of the city (Eastern and Western harbours) to the new Vuossaari port, except Ro-Ro cargo on cargo ferries. Transshipment of coal and oil products for local power plants and export of wood industries’ products are saved on the berths, distanced from the city centre.

The basis of the new port cargo turnover consists of container and Ro-Ro cargoes, 15% of which takes the transshipment of bulk cargoes.

According to the HaminaKotka port handbook 2011, after the fairway has been deepened and straightened from 10.0 m to 12.0 the Hamina port is capable to receive vessels which weight exceeds 40000 dtw. This allows for the ships width to be increased to 10 m, and length to 30 m, which equals a 50 per cent increase in cargo capacity (Port of HaminaKotka 2011.)

As follows from the research by Gopkalo & Semenov (2011), the construction of new terminals in the port of Kotka is not planned, but expanding of the present bulk cargoes capacity is possible.

In the Hanko port, which specializes on Ro-Ro cargoes, the construction or modernization of port capacities is not planned.

A review of the announced projects for maritime infrastructure development leads to the conclusion that Russian Gulf of Finland will remain a zone of intensive port construction. In prospects after 2015, when a majority of the announced projects will be realized is possible to expect a considerable cargo turnover in the current region.

The main driving force of the port development in the region remains Russian cargo turnover and transit cargo turnovers of other CIS countries (e.g., Kazakhstan), which handling will be provided by port facilities currently under construction in Russia and the Baltic States (Estonia). (Gopkalo & Semenov 2011.)
3.1.2 Analysis of Hanko port facilities

It has to be mentioned that while searching for material the detailed information about Hanko port facilities and about the number of handled cars before 2008 couldn't be found, though it was a leader in car transshipment volumes in Finland. Despite that the data obtained by 2011 let us to suppose that the Hanko port figures follow the common development dynamics with other Finnish ports.

From the beginning of active cars deliveries to Russia port of Hanko enjoyed the highest cargo traffic volume, and many suppliers preferred this very port for their cars transshipment. In the beginning of 2000s the port stood out with developed infrastructure, which was appropriate for Ro-Ro cargo transshipment. It is also important that Hanko port had big experience in cars handling for Finnish domestic market, the chart 3.1 evidences the highest cars transshipment volumes of Hanko port till 2007.

Undoubtedly, the level of demand for cars in Finland is still considerably lower than in Russia. It can be explained at least by the difference in the number of population in two countries. Consequently, for meeting the domestic demand for cars just only Hanko port facilities were enough. However, with the beginning of logistics supplies scheme functioning for delivering transit cars through Finland to Russia Finnish port administration realized the profit from that field of port activities. Already in 2005 it was the port of Kotka, which actively joined that lucrative transshipment business.

In 2006 the Russian market received 300 000 cars through Hanko port, and in 2008 almost 500 000 cars (Hanko port handbook 2009 - 11, 2011). Nowadays the port is the second one in volumes of cars transshipment, and enjoys the deserved reputation of trustworthy partner among partnering companies in maritime cars shipping companies. Currently its cars storage terminals take 150 hectares and only time will show whether that space will be enough for annually increasing volumes of cars imports in Russia. However according to the information from the trade and informational portal “Transmap.ru” in the article “Kotka and Hanko ports are full of cars” published on 31 October 2008 – the extended area since 2006 is expected to be rather limited for the current flow of
imported cars. In present there is almost no space in Kotka and Hanko ports, where it would be possible to unload new cars (Transmap 2008).

### 3.1.3 Overview of the Finnish ports facilities’ prospects

Large amounts of vehicles were collected because Russian importers in recent time took out cars more rarely. Supplies are going on with the same pace, but cars are not delivered further because Russian importing companies and automotive shops have all their storage facilities overfilled and there are no free spaces yet. With the economic crisis beginning and credit taps closing customers buy less, or even doesn’t buy cars at all. In such conditions the Finnish side supposes that a part of currently stored cars won’t be ever withdrawn from the port and will be initiated the proceedings between the supplier and recipient. As a result Finnish ports may suffer when received less money for services rendered from the bankrupt companies.

According to SeaNews (Transmap 2008), the same situation with vehicles idling in ports can be seen also in other European maritime ports, such as Zeebrugge and Malmö. Companies that specialize in car logistics are actively seeking new sites for storage. In fact, sales were not stopped, but didn’t grow. And as far as car manufacturing is inertial, it kept car supplying of Russian market which eventually became the cause of ports congestion. (Transmap 2008.)

The criticality of the situation in Finland is also confirmed with the fact that the sea line “Wallenius Wilhelmsen Logistics Finland (WWLF)”, implementing transshipment and transportation of cars to Finnish ports is searching for new ways of cars shipping avoiding Finland (TransMap 2008).

When resuming the above given information about the two largest ports of Finland it has to be mentioned the lack of common vision of the situation as in the publications on logistics in the Internet, as from representatives of car carriers and from representatives of ports administrations. Undoubtedly, for the correct analysis of ports facilities adequacy to the Russian automotive market realities it is necessary to take into account a number of factors. Their complex
consideration could explain the reasons of different situations on the territories of Finnish ports.

For example, the port can suffer unexpected losses because of fluctuations in the currency exchange rates, e.g. if customer orders a car from the U.S. and the dollar rate has considerably exceeded the initial price of the car and its delivery. In such cases customers often refuse from such a purchase increased in price, and a port administration have to organise dispatch of this car back to the country where the Ro-Ro vessel loading had initially taken place. However before that dispatch the car will be on storage in port, and vehicles congestion will gradually increase.

Another important factor of cars irregular export from the port storage terminals in 2008 - 2009 was the World Financial Crisis. According to the materials of the "Alliance-leasing" Ltd official web-site the volumes of car vehicles realization in leasing schemes dropped in Russia to 50-90% depending on car brand (Bessonova 2010).

However already in 2010 according to the rating agency “Expert RA” data, a leasing market had grown in 2,3 times ("Alliance-leasing" Ltd 2011). Despite the economic analysts' forecasts about the possibility of new, even more powerful economic crisis, inspired by record-high state debt of the US (by April, 20th it had reached more than $ 14,5 trillion (U.S. National Debt Clock 2011), is rather high, it is still early to talk about insufficient Finnish ports’ facilities.

The consequences of the new crisis are rather difficult to forecast, however it seems quite possible that the default in the US' economy will affect a Russian customer in the automotive market to a significant extent. Probably he won't be capable to buy cars imported through Finland so actively as in 2011, and, consequently, the problem of mass idling of cars in Finnish ports will disappear itself.

At the same time is convincing also contrary point of view concerning the danger of the US debt for the World economy, which expresses Andrey Chernyavsky, a consultant of the company “2K Audit – Business Consultations”/Morrison International. His thoughts can be found in the article
“The US inflate the next bubble” by Kulikov (2011). So, according to Chernyavsky, the US today is still the most powerful economy in the World, and American state bonds still enjoy a demand and are considered as one of the most reliable. In fact this is an instrument of saving money; they constitute a significant proportion of national reserves of many countries. The probability that all the creditors at the same time will submit bonds for redemption is very low. That's why the growth of the US debt doesn't threat the World economy. (Kulikov 2011.)

Meanwhile, Finnish incomes from port operations with cars for Russia and its transit through the Finnish territory are anyway dependent on the level of demand for imported cars in Russia. The chart 3.1 reflects the leading Finnish ports performance in the period 2004-2009.

![Chart 3.1 Passenger cars’ transshipment volumes of leading Finnish ports since 2004 till 2009 (Sundberg, Räsänen, Posti, Pöntynen 2010).](image)

As follows from the chart 3.1, in the period of Russian economics’ growth, when world oil prices exceeded $ 120 per barrel (RBK Ukraine 2008) the Finnish ports transshipment volumes were constantly increasing. However since 2008 these figures significantly dropped in approximately 5 times.

With that high supply dynamics and current problems in Russian logistics and customs systems contribute to ports facilities insufficiency for handling and storage of transit cars. Thus, even considering expanded car storage grounds, there are the factors which contribute to the searching for alternative cars import
routes. These problems will be reviewed in the following parts of the current research.

### 3.1.4 Analysis of Russian maritime port system on the Baltic Sea

Many logistics analytics see the prospects of cars delivery route move to Russian ports basically considering the newly built ports in the last decade. In the current paragraph is reviewed their transshipment capacity, as well as prospects for enlarging. On the basis of these data it is possible to make certain predictions about these car terminals competitiveness.

In Saint-Petersburg sea port are currently being realized two projects of car terminals. In 2006 the group of companies “Oslo Marin” jointly with “RTL” opened “Onega” transshipment complex in Sea Fishing Port. The transshipment complex is designed to handle 60-80 thousand cars per year. In practice the load is much lesser: according to the “Baltic Go-ahead Elephants" Analytical Group (2008), “Onega” terminal handled slightly more than 20 000 cars. In July 2007 “Morskoy rybniy port” LTD. (eng. “Sea Fishing Port") together with “Rossiyskie transportnye Linii” LTD. (eng. “Russian Transport Lines”) and “Inflot Worldwide Inc.” company launched a new car terminal, designed on handling 75 000 cars per year. In April 2008 it was handled one hundred thousandth car by “Rossiyskie transportnye linii” (beginning from December 2006). Both car terminals operate on one berth. (Baltic Go-ahead Elephants" Analytical Group 2008.)

Besides these terminals “Rossiyskie transportnye linii” is developing its own two terminals. One of them will be situated in Kronstadt, the second one “Novaya Gavan’” in Vistino village of Leningrad region. “Oslo Marin” group of companies supposes to change the Vyborg port specialization after reconstruction, and make containers and cars the main cargoes. Car terminals are also included in development plans of some ports in the Bronk-Lomonosov district. (Baltic Go-ahead Elephants" Analytical Group 2008.)
In 2008 it was unknown the exact date of these terminals operation start. The first predictions were that by the end of 2010 they would be capable to handle 600-900 thousands cars. Another wrong expectation was the increase of import to 2 million cars per year. (Baltic Go-ahead Elephants" Analytical Group 2008.)

However, as informational and analytical agency Portnews evidences, the group of companies RTL opens its maritime terminal "Novaya Gavan’" in Ust-Luga port on 11 November 2011. Also it is considered by the Russian Federation Government Resolution of 20.05.2009 № 698-r as a separate cargo area within the port.

At present the terminal occupies a total area of 64.87 hectares, in prospect is planned the extension to 193.12 hectares. It possesses of one berth for accepting sea Ro-Ro vessels with side and rear ramps. Its elevation of the bottom area is 8.05 m, and the length of a quay wall is 150 m. In 2013 it is planned to launch the second berth.

A remarkable feature of Novaya Gavan’ is a lucrative geographical position close to basic customs offices and highways. There are two highways A-121 and M-11, which connect the port with Saint-Petersburg and with the highway Saint-Petersburg-Tallinn. (Portnews 2011.)

The port facilities of Novaya Gavan’ is also remarkable – it amounts up to 250 000 cars per annually (Leningrad Chamber of Trade and Industry 2011).

These volumes are not so high as in HaminaKotka and Hanko, however, there’s a second Ro-Ro terminal in the Ust-Luga port Youg-2. Its project capacity is 360 000 cars. In 2011 it can handle 100 000 cars, however in prospects that number can increase up to 450 000 cars. Since opening of customs clearance office on 25 February 2011 in Ust-Luga port, the Youg-2 terminal in prospects can compete with Finnish transshipment services. (Kuvareva 2011.) In fact, the joint transshipment facilities of Novaya Gavan’ and Youg-2 terminals will amount 700 000 cars per annually, which is comparable with peak cars transshipment volumes of all Finnish ports in 2007 (chart 3.1).

It is also to notice that the customs clearance department was opened in the framework of conception of customs clearance move to the state borders round
of Saint-Petersburg after the road construction from Ust-Luga to the Tallinn highway.

At present time through the Ust-Luga port is delivered more cars to Russia than through the Sea port of Saint-Petersburg. In 2010 through Ust-Luga it was imported 66 000 cars, whereas through the Baltic customs, servicing the port of Saint-Petersburg only 50 000.

According to the article by Skirtach (2011), the general director of the Ust-Luga port Maxim Shirokov mentioned the cargo turnover increase became one of the reasons for appearing that post. He said Russia was the largest market for car manufacturers in the region of the Baltic Sea. Port of Ust-Luga can remarkably change directions of car imports to Russia. Currently a remarkable part of automotive industries production is supplied to the region by land after unloading in ports of Finland and Estonia. He emphasized that from now they would be redirected to the Ust-Luga port. According to him, in 2011 170 000 cars will be imported; these supplies are already contracted. Shirokov also noticed, that the appearing of customs clearing department become “a great advantage” for the port, because it will allow them to create warehouses for storage excise goods. (Skirtach 2011.)

About reality of such forecasts evidences the present dynamics of Russian and Finnish ports development on the Baltic Sea. They are presented in the part “Appendix 3. Charts 1,2 “Industrial capacities and squares of car terminals of leading transshipment ports in the Baltic Sea: “Sea port Saint-Petersburg”, Ust-Luga port (car terminal “Youg-2”), Vistino, the joint port HaminaKotka and the port of Hanko.”

Simultaneously with unloading of the Finnish route and border check points, these two car terminals on the Baltic Sea will impulse the development of the whole port infrastructure and the Kingisepp district in a large scale. For example, one of the utmost problems to solve by municipal authorities of the district is a very poor quality of road surface, which requires a wise approach to construction with contribution to active traffic of heavy trucks. Also the developing port will become a mean state of incomes to the municipal budget that will reflect on the dynamics of the district infrastructure development. (Skirtach 2011.)
It is necessary to mention that before world car carriers will begin to reorient their supplies from trustworthy ports of Finland to the new Russian car terminal “Youg-2”, the terminal administration will have to carry out the broad developments. The port, road and storage infrastructure should be adequate to big volumes of supplies and ready to servicing Ro-Ro vessels, to customs clearance of shipped cars, to their storage and actual trucking from the port territory. However when the port will become well-known and reach maximum of its project capacity (450,000 cars per annually), then Ust-Luga port will become an influencing player on the regional market of Ro-Ro cargoes. In the future it will be capable to compete with traditionally high level of Finnish ports services. For example, the competition can be in price segment. Ust-Luga can offer low customs taxes instead of Finnish ports’ attractive feature – the status of customs portal zones, which are not obliged with taxes on storage depending on the cars storage period.

2.2.3 Problem of car carriers’ deficit

As a rather significant problem in organization of cars deliveries can be reviewed the car carriers insufficiency. In previous chapters it have been written about the increased demand for cars of foreign production in Russia, so it was necessary to include the part about sufficiency and capacity of car carriers in transport parks of Russian car carriers.

Transit automotive business brings the Finnish treasury millions of euro. These are charges for vessels entry, terminal operations and the very transportation process. As follows from the TRAMA research, Finnish ports had suffered from decline in the Russian demand from the second part of 2008 till 2011 rather seriously. In 2008 the private incomes from cars transshipment, storage and transporting amounted to approximately € 274 million, whereas in 2011 only about € 245 million (Ministry of Transport and Communications of Finland 2011).
At the same time, the largest market share belongs to Russian logistics companies, which are focused on cars deliveries. According to Ryzhkin (2006), altogether in Russian cars hauling business, not including private entrepreneurs, are engaged about hundred companies. Huge parks of car carriers, which usually consist of 50 trucks with trailers, on international directions are operating companies ГЕМА-Транс (GEMA-Trans), Taisu, Rolf-Logistic, Автологистика (Avtologistika), Интер-авто (Inter-avto), Major, Ятис (Yatis), ТК “Эксис” (TK “Exis”). So-called “second echelon” is represented by carriers from Kaliningrad, Lithuania, Latvia and Poland. (Ryzhkin 2006.)

The problem of car carriers’ deficit was studied for 2006 and 2011. Based on the obtained data it could be emphasized the problem actuality is saved by nowadays. In the article “By sea and rolling” by S. Ryzhkin (2006) is conducted the survey of car transportation market participants. According to the results, approximately 3-4 thousands car carriers worked on the Finnish direction in 2006, but it was insufficient, and the deficit was 25%. However from the official materials of “Automotive Logistics Russia conference 2011” follows that the situation hadn’t been improved. The purchasing and supply chain manager of General Motors Peter Leyer noticed that the transport park of car carriers in Russia currently has a deficit of approximately 2000 vehicles (Automotive Logistics Russia 2011).

Hence, the key question of the current paragraph is “What are the reasons of car carriers insufficiency in the cars delivery field?” A detailed answer can be taken from K. Zakurdaev (2006).

The first reason that Zakurdaev gives is the limited production of these trailers. There are no domestic manufacturers which production completely meets the requirements of International carriers. European manufacturers are not intended to increase the production volumes only for Russian market, which currently experiences a boom in the car transporters. It can be only predicted if the high demand for these vehicles will remain for a long time. However European companies may incur losses after the extra staff will be recruited and the extra production facilities will be procured by the period of the demand decline in Russian market. Thus Russian transportation companies have to wait for the or-
ordered car carriers for a long time, especially if the order is large. In addition, because of high prices on these vehicles the vast procurements for creating a large truck fleet are possible only for the largest companies in this market.

Second, it is the undeveloped infrastructure, to which are related road, bridges and warehouses inhibits the transportation volumes increase and poses a threat to the whole business itself. According to the data by Zakurdaev (2006), a car hauler trailer can recoup the leasing charges only if it will commit a minimum of six trips per month. Because of regular difficulties in border crossings, unloading in ports and traffics jams it is not always possible to sustain this pace. That’s why many representatives of car carrying companies preferred to possess of certain financial reserves, which could be transferred from the adjacent business or from other car carriers’ operations. The car carrier should be a multisectoral one for that, or to possess of significant transport park, whose number of vehicles at least two times exceeds the number of leased cars. At the same time it is possible to procure used car transporters. But without repair facilities they will probably bankrupt their owner because of frequent breakdowns caused by transportation schedule breakages. Also these trailers’ repairing is usually rather expensive in the branded service stations.

Third, financial reserves will be also required in case of damaging of the transported car and a company must be ready for this. But which is even worse, some of the surveyed carriers by Zakurdaev (2006) told they experienced not just financial compensation if the delivered car had been somehow damaged. The suffered client may require suspending the “guilty” driver from work, to demand extra discounts or completely break off the cooperation.

Fourth, the car transporters drivers in many logistics companies have much higher salaries than other truck drivers have. If the company is not ready to pay car transporting drivers much employing of skilled professionals will become a challenging task. And the lack of these professionals is likely to cause increased losses because of a “human factor”.

Cars delivery volumes are usually dependent on the demand level in the car market. If a transportation company actively procures car transporters to meet
the most favorable spring and autumn seasons, in winter time a considerable part of cars will be idle. As far as car carriers are usually expensive, it is necessary to thoroughly calculate the period of their pay off before the procurement, taking into account idle winter and summer seasons. That’s why lots of transportation companies can’t afford the necessary number of car carriers so that to maximize the profitability of such procurements. (Zakurdaev 2006.)

The higher mentioned list of car carriers’ deficit can be extended by the factor of high prices on these vehicles. A truck costs in average €60 000, and a trailer - €80-100 000. Large companies can afford such investments as these are quickly and not bad paid back investments. One way from Finland to Moscow costs about $3500 – 3800, carrier’s marge is 25-30%. (Ryzhkin 2006.)

During the research it has been found lots of materials concerning the crisis on the cars delivery market in 2006, when rapidly growing market required lots of transportation facilities. Five years ago the specific reasons caused that crisis, which haven’t been included in the current thesis. Nowadays the market conditions are different, whereas the most common factors of possible car transporters insufficiency are already listed.

3.3 Mismatch of cross-border infrastructure capacity to the needs of Russian automotive market

3.3.1 Problems in car hauling optimization

One of main reserves of drivers’ labour and rolling stock productivity is a reduction of trucks idle time under load-unload operations and registration of transport documents. The common time of truck duty is distributed approximately as follows: driving 50%, under load-unload 30%, other idling (technical malfunction, expectation of official documents registration, impassability, etc.) 20%. Reduction of the specified idle times and mechanisation of load-unload processes can increase the truck productivity. (Bychkov 2006.) If the mechanisms of reducing delivery and load-unload time
are maximally optimized, then the category “other idling” has a potential to reduction. In many respects this time is spent on crossing the Russian-Finnish border, with that the longest queues are built to Russian international automobile check points.

However, before analyzing the reasons of Russian customs system’ low productivity the scheme of calculations of automobile cargo transportation profitability has to be reviewed. It is necessary to highlight the importance of operative passing the customs and border control for car carriers, because when considering the profitability of road transportation for the automotive enterprise the definite system of expenses is reviewed. This issue is thoroughly considered by Bychkov (2006), whose conclusions can be relevant both for cars and any other cargoes, which condition would remain invariable regardless to the delivery time.

The common sum of expenses:

\[ E_{\text{com.}} = S_{\text{const.}} \times T + S_{\text{var.}} \times L, \]  

Where \( S_{\text{const.}} \) - the cost price of 1 hour on constant expenses;

\( T \) – the quantity of hours in work;

\( S_{\text{var.}} \) - The cost price of 1 km on variable expenses;

\( L \) – the total mileage.

The general cost price of 1 km of mileage on constant and variable costs \((E_{1\ km})\) will be calculated by the formula:

\[ E_{1\ km} = S_{\text{var.}} + S_{\text{const.}} / V_{\text{exp.}}, \]  

where \( V_{\text{exp.}} \) – an operational speed, km/h

The general cost price of 1 hour of mileage on constant and variable costs is calculated by the formula:

\[ E_{1\ h} = S_{\text{var.}} \times V_{\text{exp.}} + S_{\text{const.}}. \]  

Structure of the transportations cost price depends on the price level on consumed petroleum products and repair materials, spare parts, rolling stock,
tariff rates and the official salaries of workers of motor transportation enterprise and other factors. (Bychkov 2006, p. 237)

Besides, it is possible to carry out a rather simple calculation of time expenses for customers, which have to wait for their cars in cases when a car haulier trailer gets into multikilometer traffic jams on the border. The length of a trailer is about 20 meters, truck’s length is 7 meters, plus distance, in total to 50 meters for a wagon. Per kilometer there are 20 wagons, accordingly, if the traffic jam is stretched to 40 kilometres, it accumulates about 800 cars, in each of which there are 10 cars. With that are taken into account the terms of crossing the border only for those wagons which had already leaved ports, considering 40 wagons a day. In a result it turns out that 8000 customers in Russia will languish in the expectation of the ordered foreign cars for superfluous 20 days. (Informational consultation system “Virtual customs” 2007.)

Thus, the profit from complex reformation of Russian customs is evident as for homeland car carriers as for foreign companies delivering cars within the territory of Russia. Shortening of idling on the Russian border will reduce the delivery time. That will positively reflect both on dealership centre reputation (especially concerning models, enjoying the raised demand in Russia) and on profits of the very motor transport enterprise. For one day of idling car carriers loose to $1.2 million (Informational agency Au 92, 2006).

The alternative projects of cars delivery have been actively initialized after the problem of long traffic jams on the Russian-Finnish border systematically appeared. Cars delivery directly on the Russian territory bypassing Finland provides a future car owner not just with shorter delivery terms, but also with cheaper prices. Average economy is $300 - $500 per one car (“Baltic Go-ahead Elephants" Analytical Group 2008).

So, the actuality of frontier traffic jams problem solution is evident, because otherwise the majority of car dealers will gradually reorient their supplies to Russian port system, which currently is constantly developed. But based on the present situation it is still mostly optimal to use Finnish ports’ service, that’s why the Russian customs system improvement is a key factor in the Finnish cars
transit route development, and, consequently, for Russian logistics car hauling companies as well.

When the cargo transportation increases, the enterprise will gain dynamics to expanding and with the incomes increase there will appear a possibility to purchase new car carriers and renew its vehicle park as required. However, which factors of archaic customs control system organization in Russia are the utmost for weighed and attentive approach from the governmental side? The problem of discrepancy of Russian customs control system to the volumes of cargo transporting between Russia and Finland is reviewed in the following paragraph.

3.3.2 Complex problem of Russian customs system

Before thorough description of the present problems in the customs control system the general analysis of the current problem is to be made. Based on Aromaa (2009), website “Virtual Customs”, and professional logistics magazine “Tamozhennoe Regulirovanie i Tamozhenny Kontrol’”, the whole problem can be divided to three logical parts: approaches to the trucks idling problem solving, corruption problems and prospects and weaknesses of electronic declaring system.

According to the professional magazine of Russian customs service “Tamozhennoe regulirovanie i Tamozhenny Kontrol’ ” № 10 for 2010, in the capital region is concentrated 70% of customs business. Daily in Moscow arrive to 5000 trucks, from 40 to 60% of cargo flows are moving to the Moscow region, then unload and load again, and distributing all over the country. With that 80% of temporary storage warehouses don’t meet the modern requirements; there are also infringements of the customs legislation. But the foreign trade turnover still keeps growing, which was the reason for passing the new conception of customs reformation, where was proposed to move customs clearance and control from large cities to the borders. The magazine states that conception had been approved by the board of the Federal customs service, and then was supported by the Russian government chairman – V. Putin. Moreover that, the
The proposal of developing Russian frontier objects’ infrastructure became the basement of the Federal customs system development strategy till 2020.

One of major work directions on automotive transport competitiveness increase in international routes is a perfection of international check points’ activity. First of all, it is necessary to shorten idling – it takes from 30 to 40% of the general terms of cargoes delivery, which often take place on the border. Transport delays increase expenses on cargoes delivery and in a result interfere with international trade development. Mid-annual run of Russian cars in 2-2,5 times lower than European ones, for which there are no any frontier problems and the customs operating is more perfect.

The general reasons of idle time above permitted standard are insufficiently developed infrastructure of check points, their low technical equipment and imperfection of customs registration.

According to the governmental order there were done certifications of check points. And their real work showed that from 146 only 25 work in intensive regime, others are not loaded or work ineffectively. That’s why in 2007 the department of state policy in the field of road economy, automobile and city passenger transport, geodesy and cartography of the Russian Federation ministry of transport prepared a proposal on efficiency increase and territorial expanding of the most loaded check points with the most intensive traffic flow.

A visa problem also seriously influence the competitiveness as Russian as foreign car carriers. In searching for solution it has been spent a big work – the situation was reviewed in ILO, it were made the definite decisions. And the most effective variant there could be the introducing of the international driver’s passport, by analogy to the seaman’s passport. Such a document could let to implement the normal traffic on the territory of the definite community of foreign countries without visas.

Meanwhile an intermediary decision has been found. With EU states has been signed the agreement, allowing to get visas for the period longer than 5 years after its ratification.
Concerning the competitiveness in the field of transport services’ cost-effectiveness it is developed the provision on setting zero tax rate on the VAT in export-import operations. But international car carriers have practical difficulties connected with realization of this law and first of all with control and tax authorities. (Customs regulation & Customs control 2010.)

The reasons of long trucks queues on the border mentioned above in many respects are the same which are listed by the Head of the Eastern Customs District Tommi Kivilaakso. In the publication of Kymenlaakso Trade Chamber “Elpyminen orastaa itärajaliikenteessä” (eng. “Recovery of the burgeoning eastern border traffic”) (2010) he named the factors influencing the long queues of trucks on the border. It is also remarkable that the publication is by 2010. So, the both compared Russian and Finnish visions of the problem reflect the situation by the common period of 2010, which is important in its current actuality.

According to Kivilaakso, the first factor is the strong increase in freight volume. A depth of the economic crisis creates a high demand level for the Russian market. Cargo traffic volumes are predicted to grow in the both directions: because of Russian industrial development and because of transit transportations increase from East to West.

The second factor is a complicated procedure of customs clearance because of difference in customs systems of Russia and Finland. Russian customs clearance hadn’t been changed for more than twenty years, and currently in 2010 the advanced customs technologies widely used in the EU are just being experimentally introduced in Russian customs offices. For example, there are the preliminary informing of customs office about the delivered cargo, or accepting electronic declarations. At least these two measures could significantly decrease the customs clearance time. In the EU the electronic customs clearance was much improved, however on the Finnish-Russian border these improvements (ELEX, Arex systems) perform inefficiently when dealing with Russian trucking companies using primarily paper invoices.

The third one is Russian customs legislation and customs policy of protectionism. During the past decade, Russia has introduced, often temporarily, an im-
measurable number of different customs regulations and directions, which has been estimated in the West as technical obstacles. Different customs bodies are harnessed to the Customs by technical means to curb imports, to close the market, to promote domestic industrial interests, etc. Typical have been the customs office transportation regulations (e.g., Torfyanovka relate to car delivery option and for meat clearance slots), which is regulated by the strategic exports of goods, such as wood and metal scrap. The rejected proposal to forbid the road transportation of containers and stick this cargo segment to railroad and maritime transportation is another example of the Russian faith in the administrative obstacles to traffic.

The fourth reason of low customs capacity is cross-border traffic bottlenecks on both sides of the border: for the decade Russia responded to the beginning of traffic growth by developing the crossings border infrastructure. There were built many modern customs and border stations; also were separated the trucks’ and passenger lanes. In recent years the physical enlarging of the border has slowed, although was improved the road surface of leading highways leading to Torfyanovka and the road commuting Svetogorsk and Vyborg. The Finnish side of the border was also improved. Truck lanes and road widening were made, but an actual improvement of border infrastructure was connected with the opening of the new Nuijamaa crossing point in 2006. After the decision was made to suspend construction works in Vaalimaa crossing border because of customs officials’ strike, the Russian customs officials became not so willing and confident to invest in the construction of their part of the border in Torfyanovka. Also Russia will monitor the truck parking project in Vaalimaa and the national highway-7’s back-end construction of a motorway. So, all these frontier infrastructure extensions and improvements will contribute to increase of two-way freight and passenger traffic growth. And, consequently, to the new challenges on the eastern border (Kivilaakso 2010.)

Based on the studied data it is possible to suppose that as alternative approach to the traditional border traffic jams problem solving could be the development of Russian port infrastructure. The ports development on the Baltic Sea to the competitive level could solve a number of problems in the cars delivery sector.
First, it could be solved the problem of cars storage space organization for HaminaKotka and Hanko ports, as far as these ports’ management face a problem of storing slowly delivered cars to Russia from time to time. Second, ports growth can inspire the development of the whole regional infrastructure. Third, the new ports would provide the local and federal budgets with big incomes. Finally, that measure could promote the border traffic jams problem solution, which brings considerable losses as for motor transport enterprises, as for transported cargoes’ dealers.

1) Corruption

“If electronic declaration worked, all the data about cargoes and their prices could be automatically sent from Finland to Russia – the whole process would be transparent. Because the importer wants to avoid taxes in Russia, he changes Finnish invoices on the same papers with another data, intended for Russian officials. Customs and importer basically agree with each other about such a deceit of the state” (Aromaa 2009).

A rather complex problem nowadays is a Russian customs officials’ corruption, which manifests itself with regard to both the Russian and Finnish carriers. With that is worth to mention rather low degree of corruption cases publicity, because both for Russian and Finnish carriers the primary importance has the result – a minimization of time losses on the border and cargo delivery in possible deadlines. In many respects due to that reason private companies prefer not to delve into Russian customs legislation intricacies and simply pay a bribery, mediated by the name as “penalty” or “additional customs charges”. The bribery can be rather small, however considering active cargo flow through the border it can be made such a conclusion, that in total Russian customs officials have rather high incomes from the bribes.

While studying that aspect of common customs problematic it has been used the materials of European Institute for Crime Prevention and Control, affiliated with the United Nations (HEUNI) (2009). In particular highly informative was the research “Corruption on Russian-Finnish border. Experience and supervision of Finnish and Russian customs officials and entrepreneurs in corruption on the
Russian-Finnish border through perception of Russian and Finnish entrepreneurs”.

Finnish entrepreneurs much more often face the problem of corruption on the Russian-Finnish border comparing with Finnish state officials. Representatives of enterprise society more openly described situations and problems connected with corruption. Among the described corruption cases were Russian officials’ behaviour and situations, in which someone tried to bribe a Russian state official. Usually these cases of corruption related to insignificant situations, in which someone agreed to pay in addition a certain illegal charge or pseudo legal license, service or penalty on request of Russian authorities. Even if in every case the bribe sum to Russian customs officials was small, the total sums are significant because of their systematic character. Additionally to direct expenses, connected with corruption, the criminalization of that sphere also leaded to significant indirect losses. They emerged after trucks’ idling, creation of obstacles in competition and activities, extra charges on processing of documents and legal costs, and also caused the feeling of vulnerability. Road transport agencies require money for excessive weight, using the specially adjusted scales or other weighting standards, not corresponding the EU standards.

Most often the problems of corruption on the border face Finnish transport companies. During the field researches they told they are charged with extra charge as a so-called “excessive weight”, and after crossing the border they have to pay again to officials in inspection transport points. In highly competitive market all the expenses, connected with such unexpected charges, are rather significant for companies. In other branches corruption on the border mainly face companies, importing wood to Finland.

In those kinds of activities, in which is not necessary to contact with border authorities, Finnish entrepreneurs make systematic efforts to avoid corruption, they prefer to delegate the problem solving to Russian intermediary or to the local staff. Nobody wants to think about the way these intermediaries or employees solve these problems; it is just important these problems can be solved.
According to Aromaa (2009), Finnish state officials working on the border noticed that the partnership between Finnish and Russian customs authorities goes well in general and that corruption doesn’t influence that. However not all state officials wanted to discuss the problem in cooperation with authorities. Most likely this meant there are no any serious problems in cooperation at all.

One more reason could be that for further cooperation it was necessary to avoid negative comments about their partners. Business representatives approached more critically to the problem of cross-border cooperation between both countries’ authorities. Especially often they criticized the Finnish government for inability to protect and promote interests of Finnish business in that cooperation. Entrepreneurs noticed that the Finnish authorities cannot influence the corruption problem. The majority of them realize that authorities have too little possibilities to solve the problem; however they consider that Finnish authorities don’t use all the instruments of influence completely. For example, they could create equal conditions both for Finnish and Russian entrepreneurs in transport sector, but that doesn’t happen because Finnish authorities wish to save good relationships with their Russian colleagues.

Another reason is simple laziness: it’s easier not to mention unpleasant effects than to take measures to solve the problems. The criticism has been also directed on those situations, when the authorities are familiar with existence of a certain problem, but hold it back. In worst cases they even try to make those business representatives who speaks openly about this problem to keep silence. Openness and critical relation of businessmen to success in cooperation with the authorities is also explained that they don’t have to soften the level of criticism and choose expressions. Lacks of cooperation in this sphere also lead to negative consequences for businessmen, who have to pay for failures in this policy.

For solving the corruption problems on the border it is needed more open and active cooperation, as well as informational exchange between the Finnish authorities and entrepreneurs. Partnership in that sphere could increase business confidence in governmental support of their country and could help to get a new point of view on the problem and to realize new ways of solving
current problems. The separate issue is organization of partnership in practice. Finnish authorities have only rather limited influence on situation with corruption on the Russian territory. However it is not necessary to ignore the existing criticism completely. Finnish companies operating in Russia and daily contacting with border officials in detail can talk about their experiences of behavior in these situations, and know also local circumstances, problems and ways of their solving. This information can become a valuable source, and state officials should do more, than what they currently do in that field. (Aromaa 2009, p. 46 - 48.)

2) Prospects and weaknesses of electronic declaring system

When studying the higher mentioned problem it was found that many researchers until 2011 saw the solution in wide introducing of electronic declaring system. For example, Viktor Tsuker in his article “Crisis from the borders” in magazine “Expert” for 2007 states that such a progressive course of customs structural development has taken a new chief of North-Western customs office Michael Prokofiev. In September of this year he took the position instead of Igor Vlasenko, and in the end of previous month on his first conference told about the problems he faces.

Zucker (2007) gives definition to and description of such an important customs technology as preliminary informing. Preliminary informing is a preliminary representation of the electronic information of the goods on a check point. This allows customs officials to check the information completeness by means of program software. As consequence, time of border crossing is reduced twice, till 15 minutes. Actual laws don’t oblige business to conduct preliminary informing. Customs can only influence this procedure spreading. Currently on Brusnichnoe and Svetogorsk international automotive check points it is used in checking car carriers, because passenger cars are easy to identify. For them there are allocated separate lanes and workplaces for customs clearance. (Informational and consulting system Virtual customs 2007.)

Nevertheless, initially conceived as effective problem solution of accompanying documents long processing, the system has appeared to be not deprived of considerable restrictions (Tamozhennoe regulirovanie i Tamozhenny kontrol’
2010). As follows from the magazine, in practice electronic declaration is implemented with complete doubling and presenting documents in paper form. It hasn’t still been noticed any progress in introducing electric declaration from 2004. According to the article “More problems than advantages” in the magazine Tamozhennoe Regulirovanie I Tamozhenny Kontrol’ (2010), leading specialists in customs clearance technologies mention definite obstacles in introducing Internet version of electronic declaration. For example, it is not clear how to handle electronic declaring in such days, as Saturday, Sunday, or on official holidays. But at the same time it is impossible to make remote passing using paper version of documents. So there appear bottlenecks in modern technological decisions not having an answer yet. (Tamozhennoe Regulirovanie I Tamozhenny Kontrol’ 2010.)

There are also other problems in distribution of electronic declaring through the Internet.

- Lack of round-the-clock technical support of the GSICC (General Scientific and Informational Calculation Centre) from the Russian Federal Customs System. By 2010 such working mode is not considered, and during that period it is necessary to solve problems of the “ED-2” technology by means of round-the-clock support "Alta-Soft".

- Absence of some not very popular modes, but which are still not less important in import and export. So, not all the modes are translated into electronic form and, consequently, are not used in electronic declaring of the ED-2 technology.

- It is impossible to transfer not formalized documents (schemes and drawings). So, in technology ED-2 it was necessary to cut completely all graphic files so that not to destroy departmental networks, and not to admit considerable delay of electronic declaring processes in commercial objectives. In some cases transmitting of graphical files can take several hours.

- The need to print declarations for bank, state, police, etc. Without these paper documents truck drivers can be arrested by police, transport procurator and other law enforcement agencies patrolling roads.
• After the Electronic Digital Signature reemission, which validity period is one year, it happens the compelled break in work of the customs applicant. What the applicant has to do if according to the GSICC’ regulations the emission of Electronic Digital Signature takes one month? Another difficulty is that the applicant won’t have any document instead of the EDS after it is overdue. Before receiving the new EDS firstly he has to pass the old one to the GSICC, and only afterwards to start using a new EDS. (Customs regulations & Customs Control 2010.)

So, it is getting evident, that the theoretical scheme of electronic declaring functioning is prospective and is capable to decrease the time of cargo passing the border. However in practice it had not paid off completely and has a considerable potential to development and perfection. Despite its successful and universal using in the EU, there still were unsuccessful attempts to copy and apply that system in Russia. The usage of the electronic declaration system is a prior direction in the customs system development, however is not thought over completely. The higher listed problems in electronic declaring system make a threat to effective development of its advantages, from which the most important one is a significant time economy. Also it evidences about the need of further works on perfection of electronic declaring system.

Summing up the problems of Russian customs system organization is to mention that the problem of heavy transport queues on the border is a consequence of systematic problems. With that if the frontier infrastructure is already well-developed, then to eliminate the ground of abusing both from entrepreneurs’ and customs sides is much more challenging task. Not without reason all the positive changes occur with great difficulty, whereas nobody started to decide some principle questions.

The present situation also promotes an unfair competition in a cargo transportation market. There wins not the entrepreneur, who managed to create an optimal supply chain, but who succeeded to carry out import customs clearance on “preferential” conditions. In such case it won’t be modern logistics in Russia for a long time. And that fact means that after accession to WTO
Russian trucking companies will not sustain a competition and will be forced out even from the Russian market, at least - from the most profitable niches.

4 SUGGESTIONS FOR CAR TRANSIT TRANSPORTATION PROBLEM SOLVING

In the final chapter are reviewed the prospects of present cars supply scheme development. Given the multiplicity of problems in this logistics sector, it should be noted that their solution requires a separate study. In frameworks of the current thesis work it have been used the most prospective variants, among which, first of all, is the development of alternative car delivery routes for car manufacturers, prospects of Russian transport system and domestic car industries development. Thus, the presented material leaves space for further research and practical activities in this field.

4.1 Alternative routes of cars delivery

During the research of the cars transportation market in the chapter 2 was established that its many participants see the prospects of this logistics area improvement in development of new cars transportation routes. The entirety of other logistics schemes could unload Finnish port infrastructure and to solve problems of car carriers queues on the Russian-Finnish border. In frameworks of the current paragraph are reviewed different directions of possible cars transportation. Firstly it is the Central European one - the traditional route of cars supply directly from European plants and German ports, which was used during 90-ths. Also there are reviewed the route through the Baltic States and trans-Russian one, which is connected with the megaproject of Russian complex transport infrastructure development, developed in 2009.
4.1.1 Supplies through Central and Eastern European countries

The Central European route was one of the first routes which were used for car deliveries to Russia. Till nowadays it is considered to be one of the shortest logistics routes from Europe to Russia and the CIS countries, however in fact only geographically. Both railroad and car carriers experience a number of definite problems there, and that was the reason of growing popularity of maritime transit route through Finland. Advantages and disadvantages of the by-land transportation through Central and Eastern European countries are thoroughly described in the research by Sundberg P., Räsänen O., Posti A. and Pöntynen R. "Suomen Transitoliikenne Nyt Ja Tulevaisuudessa" of University of Turku.

Central European route of land transportations leads through Berlin, Warsaw and Minsk. The route connects trans-European road network and Russian Eurasian transport network and is a continuation of the Trans-Siberian highway. The route through Germany and Poland is a part of northern transnational transport network. It goes from Berlin till Nizhniy Novgorod, connecting Russia and Central Europe by railroad and highways. The route map is presented below in the Figure 4.1:

![Figure 4.1 Cars delivery route through Germany and Poland (Lautso, K., Venäläinen, P., Lehto, H., Hietala, K., Jaakkola, E., Miettinen, M. & Segercrantz W., 2005, p. 54).](image-url)
As the Figure 4.1 illustrates, the advantage of the route through Germany and Poland is that it connects four countries’ capitals both by highways and railroads. From Berlin – western point of the way – goes the connection with other European regions. From Eastern point – Nizhny Novgorod – goes the connection with the Russian basic points of energy and industries, and also with Ural, Siberia, Caucasus, Middle and Eastern Asia. Also geographically it is the shortest way between European and Russian regions, though the cargo delivery time is not in all cases the shortest. The quality of road and railroad surface is constantly improved in framework of different programs aimed at route development. Railroads are electrified, with weighted rails, which provide high delivery speed. (Lautso et al. 2005, p. 53–55.)

The route in the future can become an alternative railroad delivery route between China and Europe. German logistics company Schenker uses it for supplies Fujitsu Siemens Computers’ products by container train from China to Hamburg. Railroad passes through Mongolia and Irkutsk by Trans-Siberian highway and further through Belorussia and Poland to Hamburg. In the Future Schenker plans to develop that route. (SeaNews 2008.)

A considerable disadvantage is the difference in of railroad track width, because of which the further transportation continues only after cargo transfer, or after changing of wheel carts of the whole train.

A situation on the Polish-Belarusian border has partly improved when it have been used the trains with automatic change of wheel tracks. In many respects because of difference in the railroad track width the cargo traffic volumes concede to other variants, for example, to a sea route. (Märkälä & Jumpponen 2007.)

Also the overloaded Polish highways became a large problem, especially in Warsaw. Last years the transport number has even more increased because of increase in transfer of cargoes and increase in number of private transport. Also the complex process of crossing the border seriously inhibits the speed of cargo transfer on this route. Trucks’ idling on the Polish-Belorussian border can be from 12 till 48 hours. The overloaded road system and continuing process of
crossing border bring uncertainty in the time calculation of cargo delivery on the Central European route.

Other disadvantages of the route through Germany and Poland are considered to be the deliveries’ safety and relative backwardness of the transit infrastructure of the region in general. Route unreliability also is evident, for example, in cases of European transporters’ discrimination and arrest of trailers passing through Belorussia. (Märkälä & Jumpponen 2007.)

Considering the prospects of the route it can be supposed, that it will be used as an auxiliary one. Even in 2011 a major part of cars deliveries is implemented by sea, using transit through Finland. But in the future it is necessary to take into consideration an increased competition from Russian and to a certain extent, from the Baltic States’ maritime ports in the Baltic Sea. That by-land route can be competitive only after certain changes in the European road and transport infrastructure will be made. For example, for car hauling can be made special “green corridors”, which use will considerably decrease the customs clearance time. Also car carriers determined to Russia can cross Poland round of Warsaw and large cities and use highways more-or-less free of traffic. These measures could at least make the by-land delivery process predictable and appropriate for time calculations, or even competitive to the currently used maritime one.

4.1.2 Supplies through the Baltic States

When considering alternative routes of cars supply to Russia the prospects of the route through the Baltic States has to be reviewed.

Estonian, Latvian and Lithuanian ports have successful geographical position near Russia. The Baltic States’ ports are connected with the Northern triangle, Polish and largest Western-European ports, also with the Eastern European countries and other parts of the World by the network of highways. These ports have good highway and railway connection with Russia. (Lautso K. et al. 2010.) The Baltic States’ ports are powerful. Built generally in times of the USSR, their
infrastructure and by nowadays fits good for cargo supplies to Russia. Port operators are rather professional, and their staffs speak Russian well. Port workers have flexible working schedule and low salary level. The last year Russia has directed considerable investments into port infrastructure and terminals’ work that will provide prospects of that route use also in the future. (Lautso K. et al. 2010.)

The problem of Baltic ports became insufficiency of technical means and equipment. The level of technical equipment on the points of the boundary admission of the Baltic States countries is rather low, which slows border crossing. In winter period lack of icebreakers creates problems for arriving sea transport, especially in severe winters. Railroads are heavily loaded, that’s why to the list of weak points of the Baltic direction has to be added risks of cargoes’ sending reliability by railroad transport.

Ecological risks are also high, whereas the fire-prevention equipment has become outdate, or it is simply not enough of it (Posti, Ruutikainen, Haapakangas & Tapaninen 2009).

Besides, prospects of transit transportation development through the Baltic States’ ports undermine aspirations of Russia to redirect goods traffic from Baltic ports to its own ports on the Baltic Sea, which is put in transport strategy of Russia till 2030 from 22’ November, 2008. (Russian Federation Ministry of transport 2008). Influence of Ventspils and Butinge ports, which until recent time implemented transit of Russian oil in 2007 has been stopped.

In 2012 is planned to complete the Baltic Pipeline System, when two oil pipelines will come out of territorial waters of Baltic States and will pass through the Ust-Luga port. Currently the Baltic ports actively seek for new container cargo transfers from Russia and Asian countries, also alongside with that actively aspire to take its niche in cars transshipment, going to Russia and to the CIS. However in that logistics sector they inevitably face leaders in that segment – Finnish largest car transshipment centres HaminaKotka and Hanko. (Ehrstedt & Vahtra 2008.)
Based on the studied material it is possible to conclude that the Baltic States’ ports are hardly capable to be competitive to well-developed Finnish maritime ports system, and the general weakness of the Baltic States’ ports is a gap in technical and infrastructural development.

4.1.3 Project of Russian transport infrastructure complex development through Eurasian transport corridors

In framework of the current research has to be described a totally new approach to the cars’ transportation problem solution, which is connected to the new program of Russian transport infrastructure development.

According to Krinitsky (2009), unique geographic position of Russia can and must be really working competitive advantage of the country, which is especially important nowadays, when the whole world experiences deep economic crisis. For that purpose it was principally important to provide construction of common all-Russian transport system, which is difficult to name the one organism. To have it working in full capacity it is necessary to solve the problems existing by nowadays: territorial and structural disproportions in transport infrastructure development; poor quality of transport services; ineffective use of transport potential; weak mobility of a manpower labour resources; insufficient level of transport safety; negative influence of transport on ecology. These factors of Russian transport network weak development were taken into consideration by the Centre of social and conservative policy when the complex civil-engineering design of the Eurasian transport corridors has been working out. This project is called to use the transit potential of Russia to the whole capacity and to create it as a link in integration of European and Asian economies.

As follows from Krinitsky’s (2009) description of the megaproject, it includes 16 volumes, and grows out of long-term work, in which basement were put the ideas of such outstanding scientists as of academic N. Moiseev. It is developed by the Fund of development of Russia with participation of experts from the Institute of fibre-optical communication systems and information processing, scien-
tific research institute of a transport infrastructure territorial development with expert participation of scientists of the Russian Academy of Sciences.

One of the project ideas is the union of all kinds of transport: automotive, railway, air, river and maritime, oil and gas pipeline, information and electric power transport. The project realization will help to form unprecedented potential in scales of socio-economic development of countries participating the project, to create new centres of market regulation and protection from crisis situations and stabilisation of monetary and financial systems, to form new unique system of international integration, trade and economic exchange, qualitatively new system of the international safety and political stability. The delivery time and cargo handling by forecasts will decrease in 5-6 times, barter goods exchange will increase in 60-70 times, volumes of informational exchange - in 10-14 times. As a result of the megaproject realization Russia can get an enormous profit, create 20 million extra work places in Siberia and in the Far East.

Transport corridors solve important tasks. First of all, it is coverage of the basic production centres, concentration, dispatch and delivery of cargoes, passengers, information, energy and energy carriers. It is complementarity of all kinds of transport, optimization of a parity of reliability, ecological compatibility, safety, quality, delivery time and price. It is necessary to provide high technology, progressiveness of decisions, reaching average speed of railroad transport at 250-300 km/h. And, finally, aspire to the shift in aviation to the speeds 2000 km/h and higher. Already nowadays those transport solutions which exist in the world, allow reaching these speeds. But infrastructure doesn’t meet these opportunities.

The key of communication corridors are integral transport “hubs”. The solutions put in them allow uniting from 6 to 8 kinds of transport, including the river and maritime ones. Here are provided integral dispatching logistical centres, universal and specialized stock exchange, which allow to form hubs of the unite transport and economic space with the whole necessary financial and another infrastructure. In other words, they are reviewed in general as hubs of economic, socio-economic infrastructure, and not only transport.
No doubt, the Megaproject, which implementation is designed on 15-18 years, will be implemented stage by stage. Vertical breakdown on stages is provided. This is international political competition, the forming of integral legislative basis, norms, standards and regulations, creation of infrastructural, financial, insurance, engineering and another support, etc. (Krinitsky 2009.)

Despite universal character of the presented project it is necessary to mention that in the process of the project development is seen the possibility of integration of cars delivery logistics sector in it. Besides traditional direction of deliveries in the form of import, the developing transport and logistics network in Russia can be effectively used for transit purposes. For example, European car manufacturers can considerably decrease transport costs of their cars in the Asian part of Russia, or in the Chinese market. The analogic profit can experience also Japanese manufacturers when organizing export of their production to European market.

However, despite the project innovativeness, a considerable hurdle on the way of its realization can perform the problem of Russian corruption. Taking into account its current level it can be supposed that the federal investments into stage-by-stage development of the transport network of the country may not reach the target object of financing.

At the same time the successful project implementation can bring contrary consequences for currently used logistics system. On the one hand, it will solve such actual problems as Finnish cars transshipment ports overloading and long truck queues on the Russian border. On the other hand, it is possible to await the decrease of transit transfer through Finland as far as the traffic of Japanese and Korean cars can considerably drop. So it may even appear a problem of searching for new clients. Anyhow, the presented project of the Russian transport infrastructure complex development is still far from realization, and only time will show its possible prospects for Russian economics.

4.2 Prospects of Russian domestic car manufacturing development
Many market analysts consider current Russian automotive industries’ development dynamics as a threat to the Finnish transit route of cars. For example, such an opinion is shared by director of HaminaKotka OY Kimmo Naski: “While the port certainly has the facilities and the expertise to handle large volumes of vehicles once again, the future is unclear. Car manufacturing in Russia in the future can dent this lucrative sector”. (HaminaKotka port handbook 2011.) At the same time he remains hopeful about Russian car manufacturing development because the transit transportation can be redirected vice versa – to Finnish and other EU countries’ markets (Naski 2011).

However by nowadays Russian market still faces demand for imported cars, and all the logistics weak points of Finnish transit route still exist. The problem of cars storage space insufficiency in Kotka, Hanko and Hamina ports in many respects depends on the demand level for cars in Russia, which may vary from year to year. But taking into account current positive sales dynamics and overall Russian automotive market growth amounted 30% in 2010 it can be expected the same long queues of car carrying trucks on the Russian-Finnish border as in 2006-2007. That is the reason why Russian automotive market’ self-sufficiency can be considered contradictorily. On the one hand, if Russian market won’t be as dependent on imported cars as it is in 2011, Finnish ports and logistics companies can lose a lucrative state of incomes. But on the other hand, if Russian dealers will succeed to optimize the exporting program through Finland “backwards”, these incomes from transit of cars will remain. There are significant improvements to be made, for example, in Russian customs legislation, in development of railroad cars deliveries, in searching for optimal car carriers’ suppliers, etc.

At the same time there is a strong political will required to carry out these exporting actions. However, it can be provided in framework of the “Program of Russian automotive industries development until 2020”, which was presented by the 10 of November 2011 to Igor Shuvalov, the First Deputy Prime Minister. According to Kondratiev (2010), this program foresees four scenarios of that development.
The first scenario is an inertial one. Everything will remain without changing of basic tendencies. For 10 years this will transform Russia to a platform of SKD cars assembling and to a final collapse of spare parts production. This scenario will cost just about €12 billion. There will remain several small manufacturers on the market which don’t have their own intellectual base and models, whereas R&D will be limited only by engineering maintenance. The share of import will amount 50% and only 5% for export.

Second scenario is oriented on partnership with foreign manufacturers and is limited by creation of joint industries. Russian manufacturers are integrated into global groups. Cars manufacturing in Russia is targeted on meeting domestic demand. Imports share decreases to 20% and export remains at the level of 8%. The cost of this scenario increases up to €25 billion.

Third scenario supposes a market closed from foreign competition. It was considered as unrealistic and no economical calculations were carried out.

As the most prospective one was considered an ambitious fourth scenario, according to which Russia becomes a large cars exporter. With that there exists one Russian large consolidated independent cars manufacturer and several niche players. A majority of largest producers of spare parts set their plants in Russia, and emphasis is made on Russian cars manufacturers. In the automotive industry are carried out advanced R&D of Russian manufacturers, oriented on development of new models and platforms, including those for the World market. The cost of this scenario is 40 billion euro. Most of the funds will be directed to creation of new system of car components manufacturing, as well as to manufacturing of the very cars. This scenario is targeted on transformation of Russian automotive industries to a motor of Russian economics’ modernization: a share of automotive industries in GDP will rise from current 0.98% to 3.3% with a constant number of employees. (Kondratiev 2010.)

Later by Kondratiev (2010), prior to 2016 is expected to maintain high import duties on foreign cars and spare parts so that to support their production in Russia. The state will dictate the conditions of setting joint ventures: an additional argument here will become infusion of budget funds by €30 billion. But only cash infusions and obtaining intellectual property from foreign partners is
not enough. Authors of the Program propose to take a number of measures on supporting domestic market, regardless of the chosen development conception. For instance, they include further development of the old vehicles utilization program and increase of the basic transport tax rate depending on the age of the car. Since 2012 is planned to forbid using of passenger cars older 25, LCVs older 20 for carrying cargoes and older 15 for passenger transportations. (Kondratiev 2010.)

Alongside with the common program, it was prepared by AvtoVAZ JSC. its own development program to 2020. According to the AvtoVAZ program, prior to 2013 as projects of high priority will be considered the project “Budget car” and face-lifting with better assembling quality of LADA Priora. Since 2014 it will be started assembling of six new cars, which will renew the LADA model range. Since 2018 it will be started a new phase - creation of a new generation of vehicles.

By 2013 is planned to reach production volumes to 600 000 cars per year, and maximum capacity is expected to amount not less than 25%. From the technical development aspect the company plans to increase investments in R&D from current 1,5% of sales profits to 2,8%. The growth of expenses will be compensated by increase of assembling processes’ efficiency and delegation of R&D (on automotive parts) to suppliers.

The most important factor of success is increase in labour productivity. AvtoVAZ’ purpose is reaching the World average level of labour productivity to 2020. Of course, it is impossible to reach without serious investments into replacement of machinery and modernization of technologies, into better labour conditions. The company’s investment program supposes financing that with 16 billion rubles in 3 years, since 2013. Total 10 years business plan of AvtoVAZ, approved by the Government, involves investments of 183 billion rubles (from which 127,5 billion are the company’s finances, 42,5 billion – loaned finances, 13,5 billion – investments from Renault). This document provides increase of sales to 1,2 million cars per annually by 2020, as well as launching 9 new models’ manufacturing, which will be presented in three automotive segments. (Kondratiev, 2011.)
So, from the higher reviewed Program of Russian automotive industries’ development follows, that the Government is most inclined to realize the most prospective scenario, which is planned to make Russia a large cars exporting country. At the same time the realization of that Program can encounter a problem of corruption, and if the Government won’t take strict measures against it, the results may be much poorer than announced. There’s to be mentioned that by the end of 2011 Russian Government still haven’t achieved considerable results in fighting corruption. According to the Bertelsmann Foundation 2010, there is nearly a complete lack of functioning integrity mechanisms in Russia. Moreover, rules to hold politicians or bureaucrats accountable are underdeveloped and not enforced in practice.

Nonetheless, the vast amount of public councils, committees and advisory bodies, and legislation that deal with corruption indicate that corruption is considered by the Russian leadership to be a significant problem. Russia’s ratification of the UNCAC and GRECO membership provide some hope for furthering the development a comprehensive Russian anti-corruption framework. Critics from Transparency International Russia have expressed doubts concerning whether President Medvedev’s anti-corruption legislation will prove more successful than those of his predecessors, and the President has himself been critical of the results so far. (Business anti-corruption portal. 2011.)

Quite the same positive dynamics of Russian automotive industries development also expect Stanley Root (2011). Stanley Root is a Head of practice in providing services to Automotive Industry, PwC.

It follows from his research that Russian automotive industries will follow the world trends and its share on the global scale will amount 7% since 2010 to 2017. In the near future Root predicts a burgeoning car manufacturing growth on emerging markets of Asia-Pacific region. At the same time, their growth potential is limited and this region will hardly remain a leading one for a long period. The basement of this growth there will be a tremendous success of China, which in many respects will be provided by Governmental support.
Based on a number of factors reviewed later the PwC agency made the following chart (Chart 4.1):

![Chart 4.1 Long-term forecast of Russian automotive market development (Root S. January 2011)](image)

Chart 4.1 reflects hypothetic dynamics of Russian automotive market development, which will be based on two scenarios – the basic and optimistic ones. They are described below.

The basic scenario depends on the factors, which may inhibit market growth:

- Instability of global economics, which adversely affect the confidence of the Russian consumers (because Russian economics is not isolated from the Global economics, and since projected accession to the WTO in 2012 it will be much more integrated in the Global economics);
- Insufficient development of road infrastructure;
- Care in planning the future of automotive production properties, due to a sharp fall in demand in Russia during the crisis.

The optimistic scenario includes factors, which contribute to the market growth:

- Extension of public recycling programs and subsidies;
- Additional incentive programs funded by automakers and some regions;
- More affordable car loans;
• Increasing the share of foreign brands manufactured in Russia;
• World crisis negatively influenced automotive market in Russia, where initial reasons for fall had been mostly external.

The model of long term market development based on four main factors:

- Level of market saturation. The correlation of 400 cars per 1000 people will remain actual for a long period;
- The GDP level providing the market saturation. It will remain unchanged;
- The year, when the current level of GDP will be reached. The crisis delayed it to 5 years;
- Indicator of the total recycling of cars - has changed.

The PwC agency expects that annual utilization level will be lower, as customers will act more cautiously. It is also remarkable to mention that the pre-crisis period will take 4-5 years before returning to pre-crisis figures. Then comes a slowdown due to market saturation. (Root 2011.)

In framework of the current chapter has to be reviewed an ambitious project of Russian automotive industry – new car brand Ё-mobile (en. “Yo-mobile”). Its novation basically consists in new type of engine, which had never been installed on cars. The engine is of a rotary vane type, with the pistons moving in a circle, rather than linearly. Ё-mobile’s another specialty is in usage of a generator set. Instead of charging a battery, as in the hybrid Toyota Prius, the generator in the Ё-mobile either powers the motors directly or fills a bank of capacitors that can hold only a small charge. (Kramer 2010.) The new car will be produced in three body versions: hatchback, crossover and delivery truck. Producing of hatchback body will be launched after crossover and delivery truck. So, the car is planned to become a breakthrough in the automotive world, and its price is going to be remarkable too. Cross-over, which will be launched in producing first, will cost about €11 720 (490 000 rubles), delivery truck (original name – “ё-fourgon”) €10 760 (450 000 rubles), and hatchback – €7 177 (300 000 rubles). With all that company ё-auto promises a rich equipment set. And even taking into consideration that the sales start is planned for the first decade of 2013, all the information about the ё-mobile project gives grounds for assuming its poten-
tial popularity as in Russia, as abroad. At least, by 2011 there are no such analogues in the World.

In general it is possible to conclude that despite Russian automotive market still demands imported cars in rather considerable volumes, Russian domestic car manufacturing and car assembling plants of world leading manufacturers in Russia increase their production capacity per annually. These dynamics are presented in the following chart (Chart 4.2):

![Production of passenger cars in Russia, thousand units](chart)

**Chart 4.2 Production of passenger cars in Russia, thousand units** (ASM Holding, Goskomstat, data by PwC, according to S. Root, January 2011)

It follows from the chart that Russian automotive industry has started its revival after the crisis peak of 2009. Since the second quarter of 2010 it performs a steady growth to the maximum of pre-crisis level which was 403 000 passenger cars. This growth for 2010 amounted about 100% compared with 2009. There is to mention that for the first 11 months a growth of foreign brands’ production capacity (116%) was higher than of traditional Russian brands (82%), even despite the main effect of the vehicle recycling program takes on domestic brands. (Root, January 2011). Nevertheless, the presented chart reflects the common trend, which is expected to be continued in framework of the higher mentioned “Program of Russian automotive industries development until 2020”. If the Program realization will be successful Russian automotive market doesn’t depend on imports to such an extent as it is today, and can implement its exporting pro-
gram. If so, a considerable part of logistics resources currently involved in cars transporting can be readjusted to cars exporting. In that case Finland will remain a leading logistics partner for transit deliveries of Russian-made cars to the Western Europe and other parts of the world.

**SUMMARY**

Transit transportation of cars to Russia through Finland from the beginning of XXI century and by 2011 has been the main route for delivering foreign cars. Compared with the previously used Central and Eastern European route Russian importers enjoy shorter delivery time, alongside with well-developed logistics infrastructure, high level of Finnish port services and professionalism of its workers. Other advantages are efficiency of Finnish customs system, preferable conditions of cars storage in the ports areas, good quality of road surface. And which is more they are confident in reliability of sea transportation as cars couldn’t be damaged or spoilt to such an extent as by road transportation.

During the last decade, transit traffic has been growing steadily. Its maximum was recorded in the 3rd quarter of 2008 and amounted 403 000 cars. Finnish infrastructure was constantly improved for growing demand on cars in Russia – the depth of seabed in leading transshipment ports and areas for cars storage were enlarged for accepting large Ro-Ro vessels. The business of passenger cars transit to Russia brings a good profit of € 245 million to the Finnish treasury.

The purpose of this study was to carry out a research of those problems which the participants of cars transit hauling experience. Based on the obtained data it can be concluded that many of them depend on the current conjuncture of Russian automotive market.

In the period of increased demand on cars Finnish ports have to operate in urgent regime, whereas the Finnish-Russian border territories are overfilled with
car transporters. A thorough analysis of Russian customs system has revealed a set of complex and systematic problems there. The most important and challenging one is corruption, which is a considerable inhibitor in development of Russian-Finnish economical relationships. Since the significant increase in cargo turnover after the Soviet Union collapse there haven’t been still worked out effective measures for preventing it, and even by 2011 there are no effective mechanisms fighting corruption in this sphere. Another threat is undeveloped system of electronic declaration and preliminary informing, which causes long registration proceedings. As for 2011 it is being improved; however all the changes are being introduced slowly.

Increased demand requires the presence of technical facilities for transporting cars. Its insufficiency also became a serious hurdle for many Russian car carrying logistics companies. Accordingly with the growth of import volumes these companies had to response these market challenges with an increased fleet of car carriers. However for many players on this logistics market a procurement of new car carriers was impossible because of low production capacity of several European manufacturers, and high prices for the vehicles. Moreover that, supplies of car carriers to the Russian market were carried out as a residual.

At the same time, even such large companies like Rolf logistics, Taisu, GEMA-Trans, Inter-Auto and Midas which were capable to procure new car carriers a few years later suffered losses when the World financial crisis of 2008-2009 happened. Their enlarged technical parks used in full capacity for the period of 2005-2007 stayed idle as far as demand on cars in Russia had dropped in a half in 2009. Consequently, the considerable expenses on trucks and trailers were not paid off for 2009. By 2011 - 2012 the volumes of transit deliveries are rising again, although in long term prospect they may slow down or decrease taking into consideration the pace of Russian passenger cars’ manufacturing development.

The whole scope of higher mentioned problems in transit transportation of cars through Finland inspired the market participants on searching for alternative logistics solutions. As far as a maritime route is considered to be the most advantageous one (e.g., compared with the by-land transportation through Germany,
Poland and Belarus), many logistics companies expect the newly built Russian ports on the Baltic Sea to take out a part of imported cars from Finnish ports. It was studied, that the joint car handling capacity of the largest car transshipment terminals - Novaya Gavan and Youg-2 of the Ust-Luga port amount 700 000 cars. This is comparable with the peak cars transshipment volumes of all Finnish ports in 2007. In general, it can be supposed that the future of transit transportation through Finland will be determined both by marketing needs and the pace of Russian automotive industrial development. But compared with currently used Finnish ports this route is more preferable for Russian dealers due to the shorter delivery distance and lack of truck queues before passing customs clearance.

In the final the prospects of present cars supply scheme development have been reviewed. One of possible solutions which could unload Finnish ports and road infrastructure could be alternative routes of cars delivery. It has been reviewed the traditional cars delivery route passing through the Central and Eastern Europe, supplies through the Baltic States and through Eurasian transport corridors. The last one was considered as the most prospective one, as far as it will significantly decrease delivery time for Japanese and Korean manufacturers, as well as for European cars’ exporting to Asian market through Russian territory. The traditional trans-European routes can be used as well, but basically as auxiliary ones because of administrative and technical obstacles both in the transportation process and customs clearance procedures.

Probably the most effective measure on decreasing high overload of Finnish transshipment ports is a development of automotive industries on the Russian territory. During the first decade of 2000-s appeared 18 cars assembling plants of foreign manufacturers, however the demand on imported cars still remained. Active penetration of foreign car manufacturers’ plants on the Russian market is supported by the regime of industrial assembling, introduced in 2005. In its framework automotive companies got preferable conditions from the Russian government for launching assembling plants which attracts many players of the World automotive market. However such a practice leads to Russian domestic brands’ gradual fadeout because of their inability to withstand competition with foreign cars unless the price-quality ratio won’t be changed.
That scenario was foreseen in the “Program of Russian automotive industries development until 2020”, and as its alternative was proposed the plan on supporting domestic automotive industries. It considers active imports only on initial stage, whereas the demand decrease on imported cars will be proportional to appearing of domestic cars of same class and corresponding technical characteristics in Russia. It can be supposed that there will be imported basically cars of highest price segment and luxury cars, as far as most popular models will be already assembled. Especial prerequisites for future leadership on the World automotive market are connected with implementation of the innovative project of “ё-mobile” car by 2013.

During the current thesis work has been studied a number of Russian and Finnish specialized printed and media sources with the emphasis made on reliability and recency of information. At the same time the problem faced has been a variability of the research object. For example, it wasn’t reviewed the Russian automotive market dynamics for 2011, as far as the figures have constantly changed; on the First of May Kotka and Hamina ports merged into one enterprise; on 10th of November 2011 was approved the “Program of Russian automotive industries development until 2020” which will in many respects determine a conjuncture of Russian automotive market. Another difficulty was in reviewing different aspects of the thesis topic which is a broad one, and to determine the main trends and future dynamics of a variety of the processes.

Nevertheless, the presented thesis work can be found interesting for Russian and Finnish logistics companies engaged in car transportation business. The studied topic is also actual for the entrepreneurs just going to set up a company in this logistics field. The main reason which makes the thesis material useful for these groups is that there is conducted an analysis of comprehensive Russian automotive and logistics market conjunctures. And which is more, based on the current market conditions there are eliminated possible tendencies and trends, which consideration may minimize possible losses in the future.

The Russian-Finnish Chamber of Commerce may represent another interested side. This organization may go ahead with the thesis’ developments and use all the Chamber’s resources and social value for influencing Russian customs offi-
cials, or facilitate the establishment of joint Russian-Finnish professional organization of car carriers. In framework of such a union could be effectively tackled the problems of technical support and provision (e.g., procurements of car transporters from European manufacturers for further distribution both in Finland and Russia), monitoring over corruption cases on the border, promoting faster customs clearance procedures, optimize the transportation processes to make them fast, safe and more ecological friendly and many others. Despite the existence of the European Car-transport Group of interest in the EU, an establishment of the bilateral Russian-Finnish organization of car carriers is reasonable. Its members could focus on the specific problems of cars deliveries in the region of South Karelia and the North-West of Russia for more effective performance on a local scale.
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Leningrad Chamber of Trade and Industry. New sea terminal “Novaya Gavan” was opened in Ust-Luga port.  


Diagram “Demand growth on the top sold cars in 2009 and 2010”

<table>
<thead>
<tr>
<th>Car Brand</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>LADA</td>
<td>32,504</td>
<td>2,182</td>
<td>2,666</td>
</tr>
<tr>
<td>CHEVROLET</td>
<td>5341</td>
<td>20,120</td>
<td>20,077</td>
</tr>
<tr>
<td>KIA</td>
<td>14,295</td>
<td>1,367</td>
<td>1,793</td>
</tr>
<tr>
<td>RENAULT</td>
<td>12,699</td>
<td>1,977</td>
<td>2,192</td>
</tr>
<tr>
<td>FORD</td>
<td>4,470</td>
<td>1,41</td>
<td>372</td>
</tr>
<tr>
<td>HYUNDAI</td>
<td>30,885</td>
<td>6,065</td>
<td>7,719</td>
</tr>
<tr>
<td>TOYOTA</td>
<td>21,192</td>
<td>1,809</td>
<td>1,955</td>
</tr>
<tr>
<td>NISSAN</td>
<td>7,901</td>
<td>6,081</td>
<td>7,227</td>
</tr>
<tr>
<td>MAZDA</td>
<td>5,892</td>
<td>4,563</td>
<td>5,630</td>
</tr>
<tr>
<td>SKODA</td>
<td>4,904</td>
<td>3,637</td>
<td>3,768</td>
</tr>
<tr>
<td>SUBARU</td>
<td>4,563</td>
<td>3,637</td>
<td>3,768</td>
</tr>
<tr>
<td>CHEVROLET (LCVs)</td>
<td>146,574</td>
<td>19,105</td>
<td>34,949</td>
</tr>
<tr>
<td>FORD (LCVs)</td>
<td>10,682</td>
<td>8,208</td>
<td>9,871</td>
</tr>
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<td>LAND ROVER</td>
<td>1,245</td>
<td>1,473</td>
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<tr>
<td>VOLKSWAGEN</td>
<td>891,52</td>
<td>232,22</td>
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<tr>
<td>TOYOTA (LCVs)</td>
<td>73,271</td>
<td>30,643</td>
<td>25,345</td>
</tr>
<tr>
<td>RENAULT (LCVs)</td>
<td>38,314</td>
<td>29,746</td>
<td>35,734</td>
</tr>
<tr>
<td>BMW</td>
<td>16,674</td>
<td>12,050</td>
<td>19,722</td>
</tr>
<tr>
<td>MERCEDES-BENZ (LCVs)</td>
<td>11,157</td>
<td>4,135</td>
<td>4,087</td>
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<tr>
<td>SKODA (LCVs)</td>
<td>20,433</td>
<td>9,275</td>
<td>2,224</td>
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<tr>
<td>CHEVROLET (LCVs)</td>
<td>21,041</td>
<td>6,894</td>
<td>10,100</td>
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<tr>
<td>CHEVROLET (LCVs)</td>
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<tr>
<td>LIFAN</td>
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<td>SUBARU</td>
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<td>CHRYSLER</td>
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<td>CHEVROLET (LCVs)</td>
<td>2,793</td>
<td>272</td>
<td>272</td>
</tr>
</tbody>
</table>

Legend:
- 2008
- 2009
- 2010
## The cars delivery route from Japan

<table>
<thead>
<tr>
<th>Description</th>
<th>Route Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional route of cars delivery</td>
<td>65-70 days of shipping</td>
</tr>
<tr>
<td>New route of Mazda cars delivery by Trans-Siberian railway</td>
<td>15-20 days of shipping</td>
</tr>
<tr>
<td>Transportation by car haulier trailers from Finnish ports to Russian destination points</td>
<td>3-4 days</td>
</tr>
<tr>
<td>Japanese ports, implementing cars loading on Ro-Ro oceanic vessels</td>
<td></td>
</tr>
<tr>
<td>European transshipment ports. Implement cars sorting for shipping to different markets and tranship consignments for Russia on Ro-Ro vessels of smaller tonnage</td>
<td></td>
</tr>
<tr>
<td>The destination point in European cars delivery route - Unloading cars from vessels and loading on car haulier trailers, which depart to Russia</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3

1 (1)

Diagrams 1,2 "Industrial capacities and squares of car terminals of leading transshipment ports in the Baltic sea: “Sea port Saint-Petersburg”, Ust-Luga port ( car terminal “Youg-2”), Vistino, the joint port HaminaKotka and the port of Hanko."

Diagram 1. Industrial capacities of car terminals

Diagram 2. Squares of car terminals