AECOM Transportation

May 2011

Rail Baltica
Final Report

Volume II

Appendix A-F

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

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Rail Baltica
Final Report

Rev No	Comments	Checked by	Approved by	Date
1	Final Report v2	AK	PC	31.05.2011

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Job No Reference Date Created May 2011

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1.1 Macro – Economic Data

1.1.1 Population Trends in the Baltic Region

As well as the Baltic States and Poland population trends have also been examined in Germany, the St. Petersburg region and Finland as it is considered that Rail Baltica will create demand in both the freight and passenger sectors within these regions.

1.1.2 Historic data

Most of the countries in Eastern Europe and the former Soviet Union have populations that are aging rapidly. The most striking case is the Russian Federation, where the population has already fallen from 149 million in 1990 to 142 million in 2010.

This aging trend is the consequence of demographic transition, which is when populations progress from pre-modern regimes, where both mortality and fertility are high, to post-modern regimes, where both mortality and fertility are low. The cause of the transition lies in the control of epidemics and contagious diseases, which eventually contribute to lower mortality, and in the processes of modernization, which leads to lower levels of fertility.

The timing of the demographic transition has varied in different regions of the world, but there is a global trend toward higher life expectancy, lower fertility, and the resulting aging of population distributions. As is the case for industrial countries, most countries in Eastern Europe and the former Soviet Union have either completed their demographic transition or are on the path to completion.

In fact, the most rapid aging during the next two decades worldwide will be in Eastern Europe and the former Soviet Union because of unprecedented declines in fertility and the increases in life expectancy of the past decades[1].

The population of the countries related with the Rail Baltica project has fallen from 139.4 million people in 2000 to about 138.6 million in 2009, a decrease of 0.6%. It should be noted however that the population trends in the region have not been homogeneous. For example during this period Finland experienced an average annual growth of 0.33% whilst Latvia's average annual growth was negative -0.58%.

Table 1 - A.1 Population changes over years 2000 to 2009 (thousands)

Population, thousands							
Country / Year	Finland	Estonia	Latvia	Lithuania	St. Petersburg region	Poland	Germany
2000	5 181	1 372	2 382	3 512	6 429	38 254	82 260
2001	5 195	1 367	2 364	3 487	6 395	38 242	82 440
2002	5 206	1 361	2 346	3 476	6 361	38 219	82 537
2003	5 220	1 356	2 331	3 463	6 324	38 191	82 532
2004	5 237	1 351	2 319	3 446	6 284	38 174	82 501
2005	5 256	1 348	2 306	3 425	6 253	38 157	82 438
2006	5 277	1 345	2 295	3 403	6 225	38 125	82 315
2007	5 300	1 343	2 281	3 385	6 209	38 116	82 218
2008	5 326	1 340	2 271	3 366	6 201	38 136	82 002
2009	5 351	1 340	2 261	3 350	6 214	38 167	81 959
CAGR (2000 - 2009)	**0,33%**	**-0,23%**	**-0,51%**	**-0,46%**	**-0,33%**	**-0,02%**	**-0,04%**

Data source: National statistical bureaus

1.1.3 Forecast

The changes in fertility and life expectancy have shaped the current demographic situation in the region, determining population sizes, growth rates, and population structures.

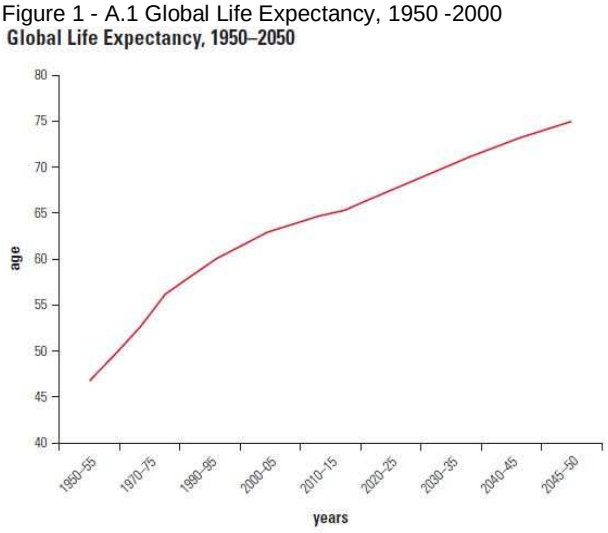
[1] *World Bank Report „The Demographic Transition in Eastern Europe and the Former Soviet Union"*

The rapid declines in fertility even among countries that already had very low levels of fertility, have meant that relatively smaller cohorts were being added to the national populations and because longevity has continuously improved, especially in those countries with already long life expectancies, it has expanded population numbers above all in the upper age groups. The net result of these changes has been a slowdown in the growth rate of populations and an increase in the proportion of the elderly in the total population.

Population in Eastern Europe is aging rapidly. By 2025, the median age will be more than 10 years greater than it is now in about half of the countries in the region. In 18 of the 28 countries in the region, the population will actually shrink by 2025.[2]

The number of elderly people is already high in many countries and will continue to rise during the next two decades. For example, in Poland, the proportion of the population over 65 years old is projected to increase from 13 percent in 2005 to 21 percent in 2025.

Figure 1 - A.1 Global Life Expectancy, 1950 -2000



Source: United Nations 2005.

The aging process has been occurring for many decades in most countries in Eastern Europe and the former Soviet Union and is expected to continue to be the major demographic phenomenon during the next 25 years and beyond. As elsewhere, the two primary contributing factors have been significant declines in fertility and major improvements in longevity, resulting from advances in healthcare. The effect of those changes on both the size and the structure of the population in the region's countries have been substantial.

The forecast of population trend has been undertaken for the following countries and regions:

(1) Finland;

(2) Estonia,

(3) Latvia;

(4) Lithuania;

(5) Poland;

(6) Germany;

(7) The St. Petersburg region.

In order to estimate the population trend we have gathered and revised the forecasts prepared by the National Statistical Bureau of each country, EUROSTAT and the United Nations, and used a simple linear regression model based on the historic data. It should be noted that all forecasts were rather similar, varying by no more than 15%.

[2] *World Bank Report „The Demographic Transition in Eastern Europe and the Former Soviet Union"*

The table below reflects the average forecast population from the various sources mentioned above.

Table 2 - A.2 Population Forecast (thousands)

Year / Country/	2015	2020	2025	2030	2035	2040	2045	2050	CAGR (%)
Finland	5 420	5 470	5 519	5 569	5 619	5 668	5 718	5 768	0.2
Estonia	1 325	1 313	1 301	1 289	1 277	1 265	1 253	1 242	-0.2
Latvia	2 200	2 152	2 104	2 056	2 008	1 960	1 912	1 864	-0.5
Lithuania	3 248	3 164	3 080	2 995	2 911	2 827	2 742	2 658	-0.6
St. Petersburg region	6 059	5 927	5 796	5 665	5 533	5 402	5 270	5 139	-0.5
Poland	37 637	37 118	36 599	36 079	35 560	35 041	34 522	34 003	-0.3
Germany	80 430	78 934	77 438	75 942	74 446	72 950	71 454	69 958	-0.4

Table 3 - A.3 Average Population Density (persons per sq.km)

	Finland	Estonia	Latvia	Lithuania	St. Petersburg region	Poland	Germany
As of 2009	16	30	35	50	74	118	230
As of 2050 (UN forecast)	16	27	29	39	61	99	197

Data source: National statistical bureaus

The table below reflects the forecast of population trend in Estonia, Latvia, and Lithuania at NUTS3 level. It is assumed that negative growth is less negative in and around the largest cities within the Baltic States i.e. existing urbanization trends will continue over the next decades.

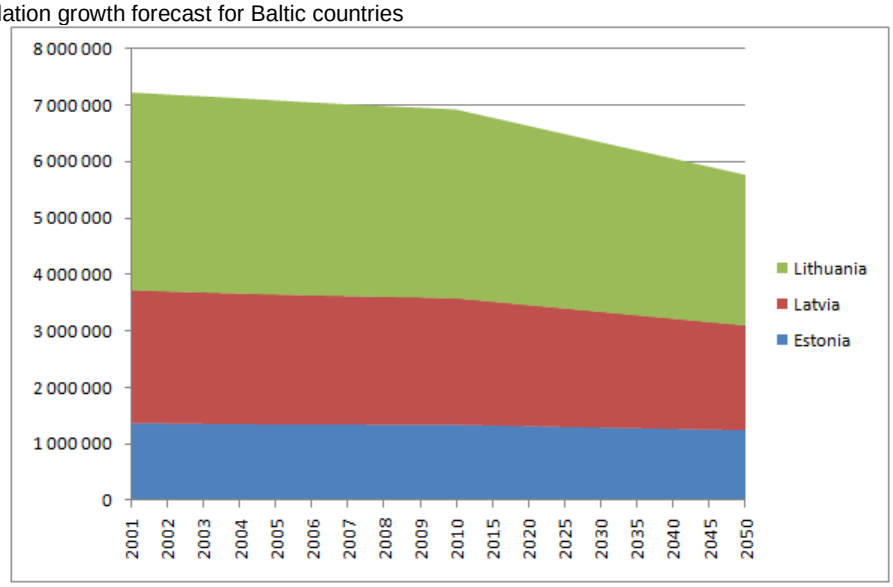
Table 4 - A.4 Population forecast at NUTS3 level for Estonia, Latvia, and Lithuania

Region	2015	2020	2025	2030	2035	2040	2045	2050	CAGR (%)
EE001Põhja-Eesti	524	524	523	522	522	521	521	520	-0,02
EE004Lääne-Eesti	158	155	152	150	147	145	143	141	-0,34
EE006Kesk-Eesti	137	135	133	131	129	127	126	124	-0,31
EE007Kirde-Eesti	166	163	161	158	156	153	151	149	-0,32
EE008Lõuna-Eesti	340	336	331	327	323	319	312	308	-0,28
LV003KurzemeRegion	289	280	270	261	251	241	232	222	-0,74
LV005LatgaleRegion	330	320	309	298	288	277	267	253	-0,74
LV006Riga	706	700	694	688	683	677	671	665	-0,17
LV007RigaRegion	383	381	379	377	375	373	372	370	-0,10
LV008VidzemeRegion	223	213	203	192	182	172	162	155	-1,00
LV009ZemgaleRegion	269	259	249	239	229	219	209	198	-0,85
LT001AlytusCounty	167	160	154	147	140	133	127	119	-0,93
LT002KaunasCounty	650	633	617	600	583	566	549	531	-0,57
LT003KlaipėdaCounty	373	369	365	360	356	352	348	344	-0,23
LT004MarijampolėCounty	173	167	161	155	149	143	136	130	-0,78
LT005PanevėžysCounty	267	255	243	232	220	208	196	187	-0,99
LT006ŠiauliaiCounty	331	318	306	293	280	268	255	240	-0,89

Region	2015	2020	2025	2030	2035	2040	2045	2050	CAGR (%)
LT007TauragėCounty	121	117	113	108	104	100	95	91	-0,78
LT008TelšiaiCounty	165	159	154	148	142	136	129	122	-0,84
LT009UtenaCounty	164	159	154	149	144	139	133	127	-0,72
LT00AVilniusCounty	837	826	815	804	793	782	775	766	-0,25

The overall population growth forecast for the Baltic States is indicated in Figure below:

Figure 2 - A.2 Population growth forecast for Baltic countries



1.1.4 Major Cities in the Baltic States

ESTONIA

There are 7 cities in Estonia with a population in excess of 20,000 inhabitants. These are shown and described in more detail below:

Figure 3 - A.3 Key Cities in Estonia

TALLINN

Tallinn, the capital of Estonia, is located in Northern Europe in the north-eastern part of the Baltic Sea region. Tallinn is the biggest city in Estonia and is of similar size to the capital of Finland – Helsinki.

The population of the city of Tallinn is 406 703 (1 January 2010).

Huge changes have taken place in all spheres of life in Tallinn during the last decade. In general, it is these changes that have established a favourable basis for the further development of Tallinn.

Tallinn has adopted a diversified business structure, which combines advanced service-based enterprise with an industry moving towards high technology. Emotion-based economy (cultural economy, creative economy) including tourism-oriented services and, from other side, entrepreneurship connected with to international logistics and transportation services are central to the field of service.

Industry, including high-tech and knowledge intensive industry, is to be developed to be successful against the stiff international competition. Tallinn has potential, in this regard, due to the availability of resources such as the Tallinn University of Technology, the technology- and industrial parks and business incubators.

TARTU

Tartu, with its population of 102,414 (statistics Estonia, 2008) in an area of 38.8 square kilometres, is the second largest city of Estonia. Situated 186 km southeast of Tallinn, the city is the centre of southern Estonia.

In contrast to capital Tallinn, Tartu is considered as the intellectual and cultural hub, especially since it is home to Estonia's oldest and most renowned university.

Tartu is mostly known as a university town, but it is also a site of heavy industry and its manufacturing represents ~15 per cent of total manufacturing of Estonia.

In the beginning of the 21st century, many ICT enterprises and other high-tech companies have taken a foothold in Tartu. Notable examples include Playtech Estonia, Webmedia, Tarkon, Regio and Raintree Estonia. Also Skype has an office in Tartu. The university is one of the largest employers, which explains the large proportion of highly skilled professionals – researchers, professors, doctors.

Tartu industry is modernised and has been in the phase of a rapid development for the last decade. Large foreign investments have been made into Tartu's traditionally strong sectors – engineering, electronics, and food industry – as well as new ones – information technology, glass industry and biotechnology. Foreign companies have invested also in the public services: city energy, transport and maintenance companies. Machinery and metal industry growth is based mainly on local investments, but the sector is one of the strongest and competitive in Tartu3.

Tartu also holds a strong position in the establishment of high- tech enterprises, notably in the fields of biomedicine, material science and information technology.

PARNU

Parnu is an economic centre located in South-West Estonia on the shores of the Gulf of Parnu with an area of 32 km2. The population of Parnu as of 01.01.2008 was 43 488.

According to the data of the Tax and Customs Board almost 4 thousand businesses were registered in Pärnu as of January 1, 2008.

Pärnu is a health resort of international stature. In addition to guests arriving from around fifty countries, it is also proved by its membership in the European Spas Association (since 2000) and the European Flag that has been flying at the beach of Pärnu since 2000.

Leading industries providing most of GVA created are:

- Tourism, recreation and rehabilitation (Rehabilitation Centre Tervis, SPA Estonia AS, Strand SPA & Conference, Ammende Villa, Art Nouveau style restaurant and hotel etc.);
- Forestry and wood processing (Viisnurk AS, Valmos AS, Tarriks AS etc.);
- Textile and clothing industry;
- Metal processing;

[3] http://business.tartu.ee/index.php?Menu=32

- Peat mining and processing;
- Agriculture and fishery.

VILJANDI

Viljandi is located in South-Estonia. Distance from Viljandi to Tallinn is 161 km, to Tartu - 81 km, to Pärnu - 97 km. Viljandi is the sixth largest town in Estonia which is especially known for its beautiful nature and rich cultural life. Total number of population as of 2010 was 19,963.

There are almost 1 000 businesses in Viljandi, ~50% of them in service, ~45% in trade, and ~5% in production areas. The major industries represented are the construction materials industry, textile industry, and food and bakery industry.

GDP per capita of Viljandi in 2007 was 6.5 thousand EUR what was 56% of nation's average. Total GDP of Viljandi County in 2007 accounted 364 million euro or 2.3% of total GDP of Estonia. Share of total GDP has decreased during last decade since in the middle of 1990's GDP share was fluctuating between 2.8 to 3.1 per cent mark.

IDA – VIRU COUNTY

Ida-Viru County is one of 15 counties of Estonia. It is the most north-eastern part of the country. Biggest cities in the county are Narva and Kohtla-Jarve.

Narva is the third largest city in Estonia. It is located at the eastern extreme point of Estonia, by the Russian border, on the Narva River. Total number of population as of 2010 was 65,881.

The town's economy is currently based on textile industry and power engineering. The largest employers are the two local power stations and Kreenholm Holding. Traditional fields of activity also include clothing manufacture, metal-working and wood-working, as well as the production of furniture, building materials, controlling and measuring apparatuses, and industrial equipment. Besides the large scale industries there are many small and medium size enterprises present in Narva, most of them are engaged in trade, manufacture and public services. The overall number of enterprises in Narva is growing steadily.

Kohtla-Järve is a in north-eastern Estonia, founded in 1924. The city is highly industrial, and both processes oil shales (Approximately 95 per cent of produced energy in Estonia is made by burning oil – shale) and is a large producer of various petroleum products. Total number of population as of 2010 was 44,492.

GDP per capita of Ida – Viru County in 2007 was 7.0 thousand EUR what was 60% of nation's average. Ida-Vitu County GDP in 2007 accounted 1.2 billion euro or 7.7% of total GDP of Estonia. Share of total GDP has decreased during last decade since in the middle of 1990's GDP share was fluctuating between 9 to 10.6 per cent mark.

VALGA/VALKA (LATVIA)

Latvian town Valka and the Estonian town Valga are twin towns, separated by the Estonian/Latvian border but using the slogan "One Town, Two States". With the expansion of the Schengen Agreement and abolition of the Estonian/Latvian border in 2007 all border crossing-points were removed and since then it is possible to talk about joint economic zone.

Total number of Valga/Valka inhabitants is 20 500.

Leading industries that mainly are represented by small companies are:

- Forestry and wood processing;
- Peat mining and processing;
- Agriculture;
- Tourism.

Valga county has the second smallest GDP per capita in Estonia (92 thousands EEK (5.9 thousands EUR) in 2007 compared with nation's average of 183 thousands (50% of average)). GDP per capita of Valka town in 2006 was 3.6 thousand lats (5.1 thousands EUR) what was 73% of nations average.

LATVIA

There are 9 major cities within Latvia and these are shown in the figure and described in more detail below:

Figure 4 - A.4 Major Cities in Latvia

RIGA

Riga is the capital of Latvia, a major industrial, commercial, cultural and financial centre of the Baltics, and an important seaport. With 709,145 inhabitants (2010) (Total Riga Metropolitan area - approximately 1,09 million inhabitants) it is the largest city of the Baltic States and third-largest in the Baltic region, behind Saint Petersburg and Stockholm. Riga's territory covers 307.17 km^2.

The capital of Latvia is a lively transport hub with railway, seaport, and aviation and road networks. Modern technology and some of the world's fastest internet connections are available in Riga, while its numerous logistics parks, business and education centres support the development of new enterprises.

GDP per capita of Riga city in 2007 was 11.1 thousand lats (15.9 thousands EUR) what was 172% of nations average. GDP of Riga city in 2007 accounted 11.43 billion euro or 54.4% of total GDP of Latvia. This ratio has been stable for the last ten years fluctuating between 54 and 58 per cent.

Manufacturing in 2007 accounted only 9 per cent of GVA created in Riga.

DAUGAVPILS

Daugavpils is the second largest city in Latvia. It is located approximately 230 km south-east of the Latvian capital, Riga. As of 1 January 2009, the city had a population of 104, 857. Daugavpils is a big railway junction and industry centre (approximately 20% of all employed in 2007 were engaged in manufacturing).

The city of Daugavpils has enterprises active in the following sectors: metal processing, food processing, civil engineering, chemicals and textile industry. Having regard to the geographical location of Daugavpils, logistics and associated services are recognised as having excellent development potential.

Daugavpils City Municipality is planning to develop City Business and Technology Park by 2011 – 2012 with the required infrastructure for immediate commencement of business operations. Daugavpils plans to provide 50% real estate tax allowance for investment projects.

GDP per capita of Daugavpils city in 2006 was 3.66 thousand lats (5.2 thousands EUR) what was 75% of nations average. GDP of Daugavpils city in 2006 accounted 567 million euro or 3.6% of total GDP of Latvia.

JELGAVA

Jelgava is a town in central Latvia about 41 km southwest of Riga with 65,419 inhabitants (2009).

Jelgava is often called the City of Students as more than 8 thousand students study there. The Latvian University of Agriculture, the third largest university in Latvia is situated there.

The city has always had well-developed industry and infrastructure which undoubtedly was enabled by the city's advantageous geographical location. One of the major strengths of Jelgava is its connectivity to the rest of Europe. Jelgava is located at a major railway junction with routes leading in both east-west and north-south directions. Moreover, the city is located in the middle of the country and is traversed by many transit roads.

The main focuses of industries in Jelgava are metallurgy, woodworking, food production, mineral based production, textiles, and plastics, publishing and polygraphs.

There is currently the largest industrial park in Latvia. It occupies 23 ha and rents over 111 thousand m² of space to companies. The park is located just 2 kilometres from the main road, which runs from Riga to Lithuania and from there to the rest of Western Europe.

GDP per capita of Jelgava town in 2006 was 3.9 thousand lats (5.6 thousands EUR) what was 80% of nations average. GDP of Jelgava town in 2006 accounted 368 million euro or 2.3% of total GDP of Latvia.

VENTSPILS

The city of Ventspils is located in Latvia in the central portion of the Baltic Sea East coast. This is a geographical centre of the Baltic Sea region. Ventspils is the sixth largest city in Latvia and one of the largest ports in the Baltic Sea region. The number of registered inhabitants in Ventspils is 44.1 thousand.

It covers 55 km², of which 47% is a Special Economic Zone (SEZ)[4]. Approximately 1000 companies and their representative offices operate in Ventspils.

Ventspils City Council along with Free Port Authority has designated a territory of more than 1000 ha for realization of the industrial projects, including implementation of the Ventspils Industrial Park project. Several land lots, ranging from 1 to 200 ha, are prepared for construction works, providing expansion possibilities, if required. Two industrial parks – Ventspils High Technology Park and NP Ventspils Business Park are being developed, thus providing companies the necessary premises for rent.

Ventspils industrial sector is growing fast, the city has managed to attract new companies as well as to promote the development of already existing companies in wood processing, metal processing, engineering and automotive industries, light and chemical industry, IT and electronics sector.

GDP per capita of Ventspils city in 2006 was 6.96 thousand lats (9.9 thousands EUR) what was 142% of nations average. GDP of Ventspils city in 2006 accounted 434 million euro or 2.7% of total GDP of Latvia.

VALMIERA

Valmiera is the largest town of the historical Vidzeme region, Latvia, with a total area of 18.1 km². Total number of population in 2008 reached 27,569.

GDP per capita of Valmiera town in 2006 was 3.7 thousand lats (5.3 thousands EUR) what was 76% of nations average. Valmieras GDP in 2006 accounted 308 million euro or 2% of total GDP of Latvia what is growth from 2001 when share of GDP was 1.7 per cent.

Over the years Valmiera has evolved into an industrial centre of Vidzeme; it hosts large and well-known enterprises - "Valmieras stikla šķiedra" (fibre-glass), "Valpro Corporation" (metal processing), food production companies (leading - "Valmieras piens" (dairy), wood-processing enterprises (leading - "Byko-Lat") and many other.

LIEPAJA

Liepāja is a city in western Latvia on the Baltic sea and the administrative center of Liepāja district. It is the largest city in the Kurzeme Region of Latvia, the third largest city in Latvia after Riga and Daugavpils and an important ice-free port. As of 1 January 2010 Liepāja had a population of about 83000.

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[4] *The basic incentive package available for companies establishing within this zone includes the 80% rebate on real estate tax and 66% rebate on corporate income tax, as well as remarkable reductions on value added tax, excise tax and custom duties.*

Liepaja is a city successfully combining manufacturing traditions, an ice-free port, great intellectual potential and rich historical and cultural heritage. The economic development of Liepaja is based on traditional industrial infrastructure, adding the possibilities of port.

GDP per capita of Liepaja city in 2006 was 4.57 thousand lats (6.5 thousands EUR) what was 94% of nations average. Liepajas GDP in 2006 accounted 558 million euro or 3.5% of total GDP of Latvia what is similar to previous 10 years when GDP share was fluctuating between 3.5 and 4.1 per cent.

JEKABPILS

Jēkabpils is a town in Latvia roughly halfway between Riga and Daugavpils. Total number of inhabitnats as of 2010 was 25 900.

GDP per capita of Jekabpils city in 2006 was 2.84 thousand lats (4.1 thousands EUR) what was 58% of nations average. Rezeknes GDP in 2006 accounted 213 million euro or 1.3% of total GDP of Latvia what is similar to previous 10 years when GDP share was fluctuating between 1.2 and 1.4 per cent.

REZEKNE

Rēzekne is a city in the Latgale region of eastern Latvia. Rēzekne is situated 242 km east of Riga, and 63 km west of the Latvian-Russian border, at the intersection of the Moscow – Riga and Warsaw – Saint Petersburg Railways. It has a population of 35,883 (2008).

Since 1997 the “Law on Rezekne Special Economic Zone (RSEZ)” is applied in Rezekne and in compliance with it the tax rebates are applied to the enterprises with the RSEZ status.

Rezekne largest industrial enterprises are producing electrical instruments, milking clusters, wood, meat and corn products.

GDP per capita of Rezekne city in 2006 was 4.87 thousand lats (6.9 thousands EUR) what was 100% of nations average. Rezeknes GDP in 2006 accounted 254 million euro or 1.6% of total GDP of Latvia what is similar to previous 10 years when GDP share was fluctuating between 1.3 and 1.6 per cent.

CESIS

Cēsis is a town in Latvia located in the northern part of the Vidzeme central upland with a total area of 19.3 km². Total number of population in 2008 reached 18,065.

GDP per capita of Cesis town in 2006 was 2.96 thousand lats (4.2 thousands EUR) what was 61% of nations average. Cesis GDP in 2006 accounted 240 million euro or 1.5% of total GDP of Latvia what is similar to previous 10 years when GDP share was fluctuating between 1.4 and 1.5 per cent.

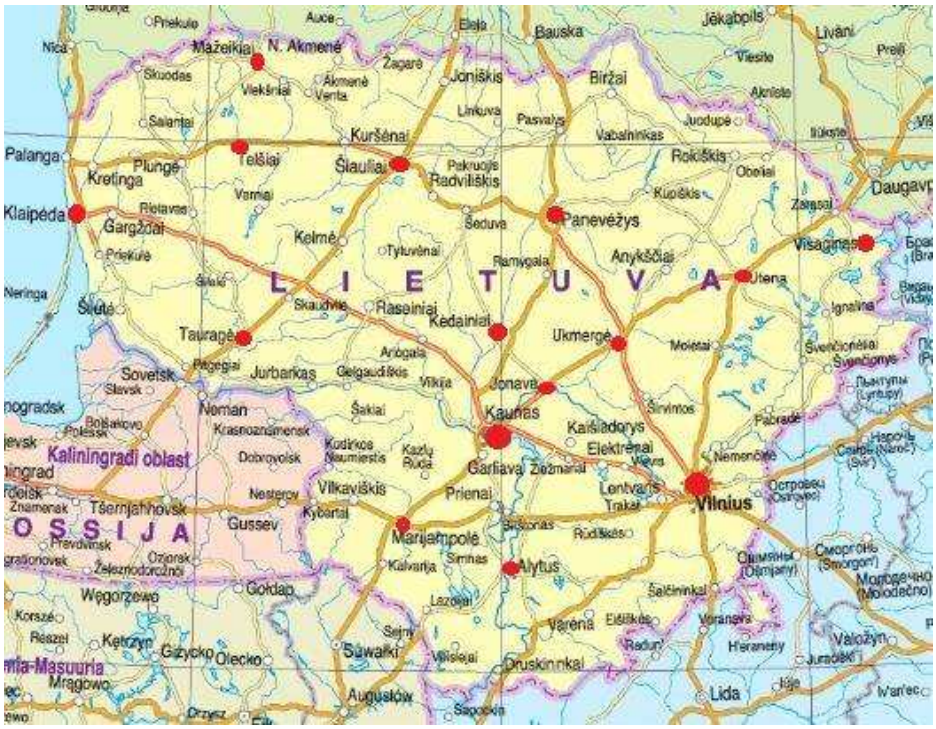
Cēsis could be called the tourism capital city of Vidzeme. Every year Cēsis attracts thousands of visitors that come to enjoy the Baltic Knight Festival, outdoor opera performances staged in the Livonian castle ruins, as well as the national dance festival “Vendene”.

The most typical types of entrepreneurship are: food industry, tourism, information technologies and rendering of services. In accordance with Cesis City development plan, tourism, wood-processing, food-processing and IT will be the priorities of entrepreneurship in the town in the future as well. Currently, the largest enterprises of Cesis city are breweries (Cēsu alus), a honey processing plant, a meat processing plant, bakeries, and a printing house. There are 30 enterprises per 1000 citizens of the Cesis town.

LITHUANIA

There are 15 major cities within Lithuania (defined as having a population greater than 25,000 inhabitants) and these are shown on the figure and described in more detail below:

Figure 5 - A.5 Major Cities in Lithuania



VILNIUS

Vilnius is the capital of Lithuania, and its largest city, with a population of 555,613 (847,954 together with Vilnius County) as of 2008.

The city is home to major companies and key financial institutions. Highly developed infrastructure, high quality services, and increased spending power of inhabitants all attract large foreign investments. Improving quality of life, organized city development, and intensive cultural life all contribute to creation of a welcoming and appealing environment.

In 2007, Vilnius County produced 38.9 % of country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 45 thousand, which is by 54.9 % more than the national average in 2007. The GDP per capita in Vilnius County is twice as high as those of Alytus, Marijampole, Panevežys, Šiauliai, Taurage and Utena Counties.

As compared with the general situation in Lithuania, Vilnius County has a better-developed production and non-production service sector, where 71 % of gross value added (GVA) is generated (national average – 62.7 %). Industry and construction generate 27.6 % (national average – 32.8 %), while agriculture, forestry and fishing – 1.4 % of the county's GVA (national average – 4.5 %).

By the level of entrepreneurship Vilnius County significantly exceeds the national average. In 2007, the national average was 18.8, while in Vilnius county – as much as 27.2 per 1 000 inhabitants. Vilnius County accounts for 17% of extractive industry and manufacturing production in Lithuania. 81 % of the value of production manufactured in the county falls within Vilnius city.

Table 5 - A.5 Main products manufactured in Vilnius, 2001 -2007

Main products manufactured, 2001–2007

	2001	2003	2005	2007
Meat and offal, thousand t	16.0	22.0	26.3	30.5
Sausages and smoked meat products, thousand t	11.7	14.9	19.1	13.1
Prepared or canned vegetable and fruit products, t	718.0	947.0	2188.0	3540.7
Fruit and vegetable juice, thousand t	7348.0	7451.0	10215.0	11821.1
Confectionery, thousand t	14.9	14.0	15.4	14.3
Vinegar, thousand dal	187.4	194.6	319.5	191.9
Vodka and liqueur products, thousand dal 100 % of alcohol	117.4	132.9	291.4	407.2
Carpets and carpet products, thousand m²	35.0	25.6	17.4	3.4
Wood chipboard, million m²	16.0	20.5	21.2	36.8
Polishes, t	296.5	324.1	340.6	489.0
Ceramic bricks and blocks, thousand m³	7.9	7.5	27.6	31.8
Glass insulation elements for walls, thousand m²	182.3	333.6	596.5	840.9
Prefabricated construction elements for construction or civil engineering, thousand t	167.7	233.8	426.6	450.3
Heating boilers	1204	2074	2223	4067
Gear processors	243	195	420	435
Low-capacity electric engines, thousand	57.4	148.4	186.1	121.7
Disposable respiratory equipment, million	29.7	37.9	47.0	54.3
Electricity meters, thousand	237.9	166.3	199.9	143.1
Air intake filters for internal combustion engines, thousand	417.5	856.0	1255.9	1088.2
Wardrobes, thousand	103.5	156.3	173.1	189.9

Data source: Statistics Lithuania

In 2007, about 44 % of production manufactured in Vilnius County was exported. Increasing production volumes in the county's enterprises determined a more rapid growth in exports. In total, goods manufactured in Vilnius county accounted for 15.5 % of exports of Lithuanian goods.

KAUNAS

Kaunas with more than 440 thousand inhabitants (The suburbs of Kaunas (population of 85,100) included) is second biggest city of Lithuania. It is not only a city of old traditions, but also a large centre of business and industry. It can also lay claim to be a city of young people with over 35,000 students studying at one of the seven universities here.

According to the level of economic development, Kaunas County slightly lags behind the national average. Kaunas County produced 19.3 % of country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 28 thousand, which is by 3.7 % less than the national average in 2007.

As compared with the general structure of the national economy, Kaunas County has better developed industry and construction, where 35.9 % of the county's gross value added (GVA) is generated (national average – 32.8 %).

The main industries are construction materials, food processing and textiles.

Table 6 - A.6 Main products manufactured in Kaunas, 2001 -2007

Main products manufactured, 2001–2007

	2001	2003	2005	2007
Synthetic ammonia, thousand t N	449.0	462.0	432.0	936.0
Mineral fertilisers, per 100 % of nutrients, thousand t	551.4	623.7	822.8	929.5
Flour, thousand t	69.4	72.0	82.2	72.2
Compound feeding stuff, thousand t	71.7	99.8	129.0	173.9
Sparkling fermented beverages, thousand dal	433.2	527.0	572.7	487.9
Woollen fabrics, million m²	12.4	10.7	11.4	10.1
Polyhedral insulation elements made of glass, thousand m²	201.0	393.4	650.7	628.5
Prefabricated construction elements, thousand t	107.4	137.1	200.6	219.3
Phosphoric acid, thousand t (P2O5)	159.3	374.2	409.4	430.3
Sulphuric acid monohydrate, thousand t (SO2)	303.8	655.0	713.2	747.5
Diammophos, thousand	312.7	726.4	720.9	821.6

Data source: Statistics Lithuania

By the level of entrepreneurship Kaunas County is outpaced only by Vilnius and Klaipeda counties and exceeds the national average. In 2007, the national average was 18.8, while in Kaunas County – 19 enterprises per 1 000 inhabitants.

46.4 % of production manufactured in Kaunas County is sold on the domestic, 53.6 % – on the export market.

Free Economic Zone and industrial park

Kaunas Free Economic Zone (KFEZ, www.ftez.lt) is 5,000 ha site located just 7 km from Kaunas. It is located on the intersection of Via Baltica, Warsaw - Helsinki road and Vilnius - highway, which also links Klaipeda sea port with Russia and Ukraine. A company, which is operating in Kaunas FEZ, is paying 80% of reduced rate of income tax for the period of 5 years and the 50% reduced rate of income tax for the next 5 years.

KLAIPEDA

As of 2010, the population was of Klaipeda city was 182 752. Business activities in Klaipeda are closely related to port. The Port of Klaipėda is the principal ice-free port on the eastern coast of the Baltic Sea. It is the most important Lithuanian transportation hub, connecting sea, land and railway routes from East to West. The annual port cargo handling capacity is up to 40 Mt.

According to the level of economic development, Klaipeda County is one of the most successfully developing regions in the Lithuania. Klaipeda County produced 11.5 % of the country gross domestic product (GDP). GDP per capita, on average, in the county made LTL 29.8 thousand, which is by 2.6 % more than the national average in 2007.

Table 7 - A.7 Main products manufactured in Klaipeda County, 2001 -2007

	2001	2003	2005	2007
Beer, million dal	5.7	5.9	5.9	6.3
Cheese, thousand t	7.2	7.1	6.1	4.5
Compound feeding stuff, thousand t	53.9	57.9	72.7	86.2
Cat and dog food, thousand t	53.9	73.6	79.6	93.5
Wood chipboard, thousand m^3	90.7	126.9	195.1	195.7
Paper and cardboard, thousand t	46.5	69.4	88.6	99.2
Sets of automotive wiring and cables, thousand t	4.8	8.8	9.5	4.0
Peat mining (relative humidity), thousand t	43.1	67.5	69.4	37.4
Oil extraction, thousand t	470.9	382.4	216.6	154.4
Tables, thousand units	318.4	385.3	298.3	476.2

ŠIAULIAI

Šiauliai is the fourth largest city in Lithuania, with a population of 129,075. It is the capital of Šiauliai County.

According to the level of economic development, Šiauliai County slightly lags behind the national average. Šiauliai produces ~ 7.5 % of country's GDP. Per capita, on average, in Šiauliai made LTL 21 thousand, which is by 27.7 % less than the national average in 2007.

As compared with the general structure of the national economy, Šiauliai has better developed industry and construction; generating 30.8 % of the gross value added (GVA) in the county.

By the level of entrepreneurship Šiauliai county is outpaced by most of the counties of Lithuania. In 2007, the national average was 18.8, while in Šiauliai County – 13.4 enterprises per 1000 inhabitants. County's industry is concentrated in Šiauliai town municipality (65 per cent of the value of total industrial production manufactured in the county), where the well-developed branches are beer production, manufacture of TVs, bicycles, plastic and paper packaging, furniture.

Table 8 - A.8 Main products manufactured in Šiauliai, 2001 -2007

Main products manufactured, 2001–2007

	2001	2003	2005	2007
Peat mining (relative humidity), thousand t	72.7	107.2	120.7	66.7
Cement, thousand t	529.0	596.0	832.0	1105.4
Quicklime, thousand t	54.6	59.8	39.2	55.2
Crushed dolomite, thousand t	725.8	1522.9	2938.7	4308.8
Beer, thousand dal	2100.0	2677.0	3197.0	2430.4
TVs, thousand units	143.2	686.8	1012.8	480.9
Bicycles, thousand units	322.5	351.2	417.8	404.6

Data source: Statistics Lithuania

The largest and better-known county's industrial enterprises – private company Šiaulių tauro televizoriai (TVs), public company Baltik vairas (bicycles), private company Putokšnis (PET containers), public company Neaustinių medžiagų fabrikas (blankets,

nonwovens, furniture), public company Akmenes cementas (cement and quicklime), public company Gubernija (beer), public company Kelmes pieninas (milk and dairy products), public company Naujoji Rūta and private company Rūta (chocolate and sweets), private company Eternit Akmene (manufacture of and trade in roofing), public company Naujasis kalcitas (lime), private company Artilux NMF (lighting equipment).

Increasing production volumes in the county's enterprises determined a more rapid growth in exports. In 2007, about 47.8 % of production manufactured in the county was exported. In total, goods manufactured in the county accounted for 5.4 % of exports of Lithuanian goods. The bulk of exported goods fell within bicycles, plastic products, TV signal receivers.

PANEVEŽYS

Panevėžys, the capital of Aukštaitija Ethnographic Region, has been the fifth largest city in Lithuania for more than a century. It occupies 50 square kilometres with more than 112 thousand inhabitants.

In 2007 there were 3 307 functioning companies. The largest part is covered by wholesale and retail traders (976), industry (394), construction (153), transport and storage (219), real estate and rent (343) sectors. Small and medium business prevails in Panevėžys.

Over 40 000 people work for the companies of Panevėžys. Food industry (beer, milk and meat products, sugar, and flour) accounts the biggest part (29%) in the production of Panevėžys industry.

According to the level of economic development, Panevežys County lags behind the national average. Panevežys County produced 5.9 % of country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 20.4 thousand, which is by 30 % less than the national average in 2007. According to GDP per capita, Panevežys County may be classified under the mediocre ones.

As compared with the general structure of the national economy, Panevežys County has better developed industry and construction, where 35.3 % of the county's gross value added (GVA) is generated (national average – 32.8 %).

Table 9 - A.9 Main products manufactured in Panevežys, 2001 -2007

Main products manufactured, 2001–2007

	2001	2003	2005	2007
Meat and meat products, thousand t	8.1	20.2	17.8	22.6
Beer, thousand dal	5843.0	4720.0	6428.0	9329
Sugar, thousand t	57.9	63.5	47.8	7.3
Flour, thousand t	57.0	80.5	104.8	146.1
High-fat cheese, thousand t	31.5	31.3	40.5	32.1
Peat mining (relative humidity), thousand t	61.6	34.0	152.4	100.5

Data source: Statistics Lithuania

Export is mainly directed to Europe, Asia and CIS. City exports equal 5.9 per cent of the total Lithuanian export.

Industrial Park

On September 3, 2009, after the evaluation of preparatory works, the Minister of National Economy of the Republic of Lithuania allocated the support of 17.5 mln. litas. It will be used for the construction of infrastructure of Industrial Park (local roads, water supply and sewage, electricity networks, etc.). The construction works of infrastructure in the territory of Industrial Park has been started on October 19, 2009. In autumn 2010 a high quality Industrial Park is planned to be proposed for the investors.

TELŠIAI COUNTY

Biggest towns of Telšiai County are:

(1) Telšiai with 30 000 inhabitants;

(2) Mažeikiai with 40 000 inhabitants.

According to the level of economic development, Telšiai County lags behind the national average; however, may be classified under the strongest ones, together with those of Vilnius, Kaunas and Klaipeda. Telšiai County produced 4.3 % of country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 24.3 thousand, which is by 16.5 % less than the national average in 2007.

Table 10 - A.10 Main products manufactured in Telšiai County, 2001 -2007

	2001	2003	2005	2007
Milk, million l	33.5	33.5	27.1	28.6
Butter, thousand t	8.3	7.4	6.7	5.1
High-fat cheese, thousand t	6.2	6.6	9.4	9.3
Prepared or canned fish, thousand t	29.2	27.2	28.8	27.1
Linen, million m³	2.9	3.4	2.8	1.0
Petrol, thousand t	2011.0	2059.0	2643.0	1676.6
Diesel fuel, thousand t	2062.0	2336.0	3002.0	1878.5
Peat mining (relative humidity), thousand t	21.3	25.5	34.8	12.7

UTENA COUNTY

Biggest towns of Utena County are:

(1) Utena with 32 000 inhabitants;

(2) Visaginas with 28 000 inhabitants.

According to the level of economic development, Utena county considerably lags behind the national average. Utena county produced 4 % of the country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 22.7 thousand, which is by 22 % less than the national average in 2007. According GDP per capita, Utena county may be classified under the weakest ones.

Table 11 - A.11 Main products manufactured in Utena County, 2001 -2007

	2001	2003	2005	2007
Quartz sand, thousand t	86.9	49.7	46.5	45.4
Sausages and smoked meat products, thousand t	2.6	3.5	8.3	11.1
Beer, million dal	4.2	5.8	6.6	6.7
Soft drinks, thousand dal	21.0	189.0	218.0	471.5
Fruit and berry wine, thousand dal	470.0	528.0	251.0	288.5
Knitted underwear, million	9.4	4.5	4.0	1.2
Knitted garments, million	2.8	4.4	5.3	3.5
Armour-plated or reinforces safes, thousand	3.8	4.6	5.8	8.2
Internal combustion engine filters, thousand	36.9	45.1	82.7	71.1
Garden furniture, thousand	78.1	143.8	189.8	151.8

TAURAGĖ COUNTY

Tauragė is an industrial city in Lithuania, and the capital of Tauragė County. In 2010, its population was 27,500. Tauragė is situated on the Jūra River, close to the border with the Kaliningrad Oblast, and not far from the Baltic Sea coast.

According to the level of economic development, Tauragė County is classified under the small ones. Tauragė county produced 1.8 % of country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 13.7 thousand, which is 47 % of the national average in 2007. According per capita, Tauragė county is the weakest in Lithuania.

Table 12 - A.12 Main products manufactured in Tauragė County, 2001 -2007

	2001	2003	2005	2007
Sausages and smoked meat products, thousand t	7.6	8.1	8.7	12.4
Prepared or canned vegetable and fruit products, t	548.0	1194.0	1655.0	1561.6
High-fat cheese, thousand t	6.7	6.0	8.4	8.1
Overcoats, thousand units	39.5	22.0	20.9	29.0
Jackets, thousand units	13.9	19.2	28.6	33.9
Ceramic blocks, thousand m³	8.4	10.1	25.6	27.9
Chairs, thousand units	14.6	34.2	41.2	15.7
Peat mining (relative humidity), thousand t	7.6	8.1	8.7	16.0

ALYTUS COUNTY

Alytus is a city with municipal rights in southern Lithuania. It is the capital of Alytus County. Its population in 2010 was 66,841.

According to the level of economic development, Alytus County significantly lags behind the national average. Alytus County produced 3.5 % of country's gross domestic product (GDP). GDP per capita, on average, in the county made LTL 19.1 thousand, which is by 34.5 % less than the national average in 2007. According GDP per capita of Alytus County may be classified under the weakest ones.

Table 13 - A.13 Main products manufactured in Alytus County, 2001 -2007

	2001	2003	2005	2007
Vodka and liqueurs, thousand dal 100 % alc.	147.5	212.6	228.5	206.3
Sparkling wine, thousand dal	240.0	203.0	284.0	367.0
Wooden doors, door frames and thresholds, thousand	3.2	5.5	5.7	10.4
Wooden windows and window frames, thousand units	3.7	8.7	11.2	11.6
Refrigerators and freezers, thousand units	320.4	429.4	443.5	468.0

MARIJAMPOLĖ COUNTY

Marijampolė is an industrial city and the capital of the Marijampolė County in the south of Lithuania, bordering Poland and Russian Kaliningrad oblast. The population of Marijampolė is 46,256 (2010). It is the Lithuanian center of the Suvalkija region.

According to the level of economic development, Marijampolė County considerably lags behind the national average. Marijampolė County produced 3.2 % of county gross domestic product (GDP). GDP per capita, on average, in the county made LTL 17.5 thousand, which is by 39.7 % less than the national average in 2007. According GDP per capita, Marijampolė County may be classified under the weakest ones (a lower indicator was recorded only for Tauragė County).

Table 14 - A.14 Main products manufactured in Marijampolė County, 2001 -2007

	2001	2003	2005	2007
Flour, thousand t	9.6	11.3	9.3	10.2
Preserved milk products, thousand t	6.1	7.7	11.7	21.9
Ice-cream, thousand t	3.8	4.1	3.7	1.9
Sugar, thousand t	20.7	29.4	32.7	27.5
Prepared and preserved vegetable and fruit products , t	193	604	393	965
Flax fibre, t	338	1041	481	-
Knitwear products, million units	2.4	2.5	2.7	4.9
Bulk yarn, thousand t	3.1	3.1	2.2	4.1
Woollen fabric, million m^2	1.7	1.5	1.7	2.1
Wood chipboard, thousand m^3	143.6	186.6	243.5	427.8

1.1.5 Conclusions

The main conclusions with regard to the population levels in the Baltic States and surrounding region are:

(1) It is assumed that the population growth will be negative across the whole of the region for the period under consideration. A fall in population of approximately 0.2% p.a. in Estonia, 0.4% p.a. in Latvia and 0.5% p.a. in Lithuania is expected. The only country within the study area likely to experience a positive growth is Finland where a 0.2% p.a. rise is expected;

(2) Existing urbanization trends will continue over the next decades.

1.1.6 Macroeconomic analysis and forecasts

This section contains short macroeconomic analyses on each of the Rail Baltica project countries indicating its GDP, GVA, and employment issues as well as showing key economic drivers and forecasts for each country.

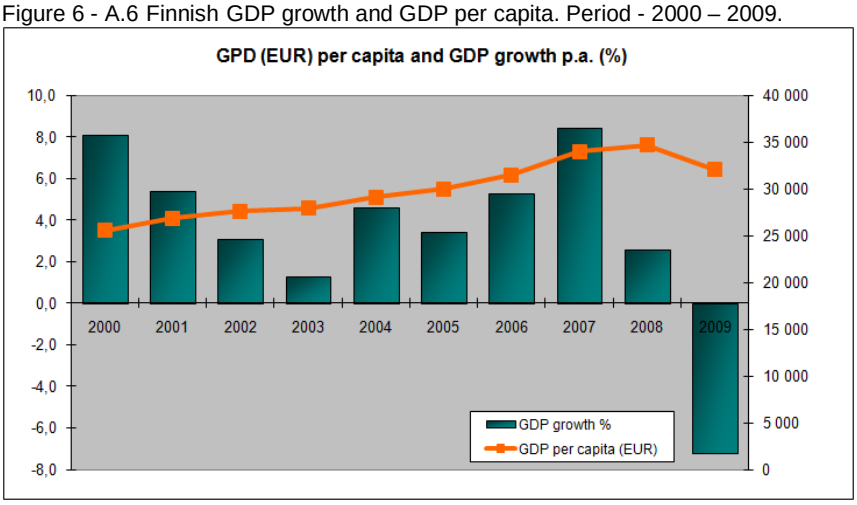
Gross Value Added is a measure of the value of goods and services produced in an economy. GVA is linked as a measurement to GDP. The relationship is defined as: GVA plus taxes on products minus subsidies on products = GDP.

FINLAND

GDP and GVA

During the period 1997-2008, the Finnish economy has grown by an average of 3.6% p. a., compared with an EU average of 2.4% p.a. Government surpluses have helped to reduce the national debt, which reached just over 30% of GDP in 2008. Finland is among the European countries with the strongest public finances.

Figure 6 - A.6 Finnish GDP growth and GDP per capita. Period - 2000 – 2009.



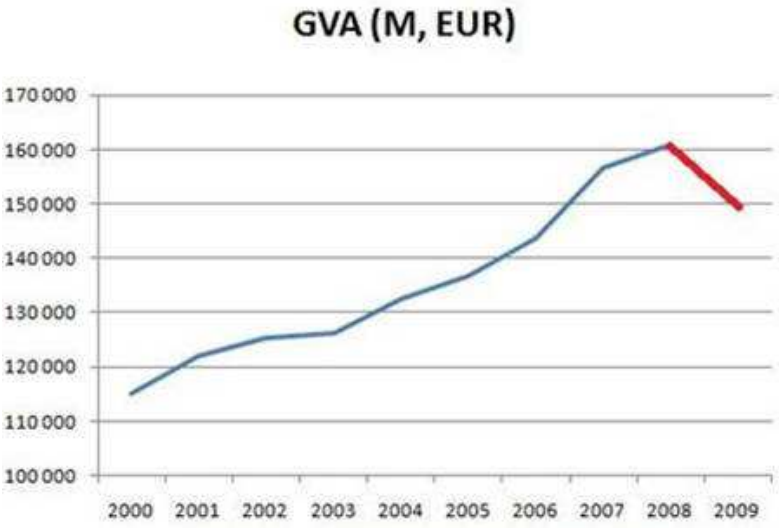
Data source: Statistics Finland

Severe global recession during years 2008 – 2009 has had a dramatic impact on the Finnish economy, and its public finances have suffered. GDP fell by 7.2% in 2009. GDP per capita has fallen to 32 025 EUR in 2009 compared with 34 663 in 2008. Thus, it is still higher than in 2006 when GDP per capita was slightly above 31 000 EUR.

The shrinking GDP was driven by a substantial decline in both domestic demand – consumption and investments – and exports. Consumer spending fell during year 2009 for the first time since the early 1990s, as households instead of consumption decided to increase their savings.

Figures below indicate growth of GVA and GVA by sectors.

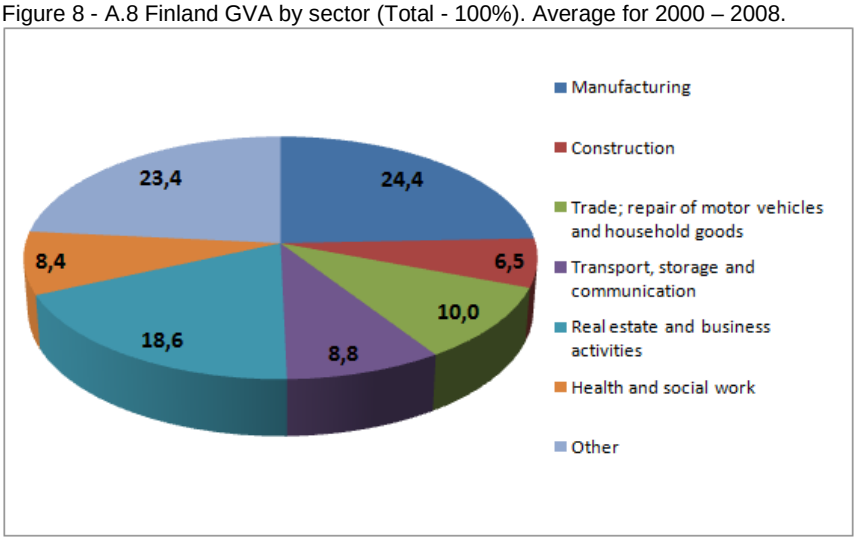
Figure 7 - A.7 Total GVA of Finland (M, EUR, nominal prices)[5]



Data source: Statistics Finland

[5] *Data for 2009 – forecast based on assumption that GVA drop will be similar to drop of GDP*

Figure 8 - A.8 Finland GVA by sector (Total - 100%). Average for 2000 – 2008.



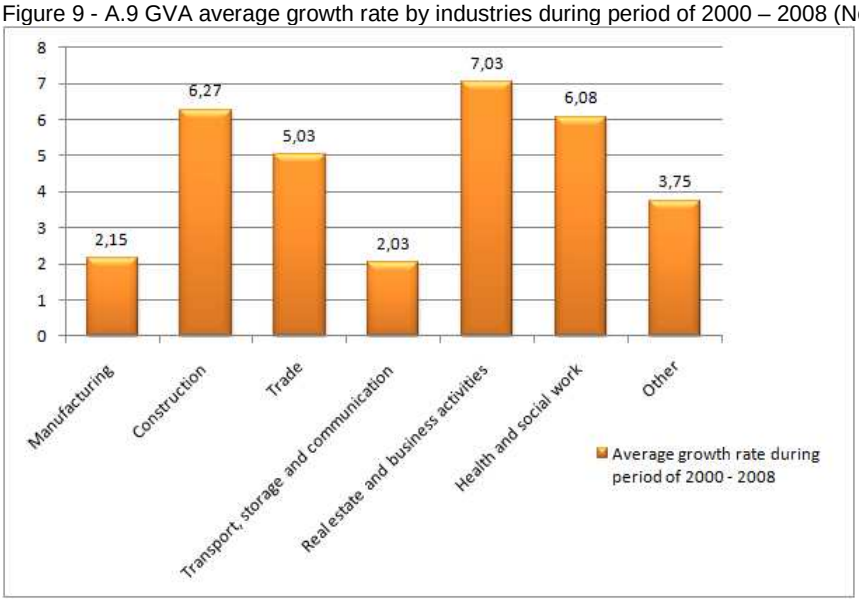
Data source: Statistics Finland

Manufacturing and construction were the sectors that significantly lost its volume in 2009. GVA in manufacturing fell by 25 per cent while construction GVA decreased by 11 per cent. Most suffering manufacturing sectors were Manufacture of basic metals (-54%) and Manufacture of electrical and optical equipment (-44%).

It is expected that those industries will be the one which recovers quickly when global economy steps up. While return to previous levels of 2008 is not expected until 2013 – 2014.

Figure below represents growth rate of each separate sector during the period 2000 – 2008.

Figure 9 - A.9 GVA average growth rate by industries during period of 2000 – 2008 (Nominal prices)



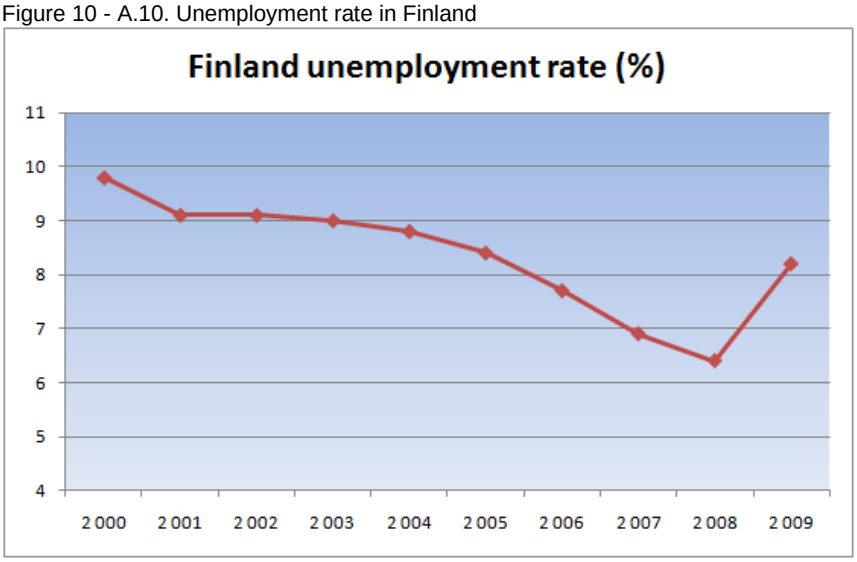
Data source: Statistics Finland

Employment

During last ten years Finland has experienced decrease in unemployment rate from 9.8% in 2000 to 6.4% in 2008. During 2009 sharp increase in unemployment rate was as a consequence of economic recession, although unemployment has risen less than expected, due to a contraction in labour supply. This was partly on account of acceleration in the rate of retirement.

Figure below indicates changes of unemployment rate. Worthwhile to notice that correlation between GDP growth and unemployment rate is -0.96 what suggest that we will see fast drop in unemployment rate when economy recovers.

Figure 10 - A.10. Unemployment rate in Finland



Data source: Statistics Finland

According to Statistics Finland's labour Force Survey, employment and unemployment were in June, 2010 near the level where they were one year earlier. The unemployment rate has reached 8.8%.

Major Areas of Population

HELSINKI

Helsinki is the capital and largest city in Finland. It is in the southern part of Finland, on the shore of the Gulf of Finland, by the Baltic Sea. The population of the city of Helsinki is 584 420 (31 March 2010). Over one million people live in the Helsinki metropolitan area, which includes the city of Helsinki and three other cities.

Helsinki is Finland's major political, educational, financial, cultural and research centre.

The Helsinki metropolitan area generates one third of Finland's GDP and is a dynamic economy with a highly varied industrial structure

One of the strong economic sectors in Helsinki has been information and communication technology (ICT), which drove rapid growth in Helsinki up to the early years of the 21st century. The service sector employs more than 80 per cent of the Helsinki workforce. Helsinki is one of the leading knowledge-based metropolises in Europe. Design-related industries including new media are slated to be some of the new growth areas in Helsinki.

GDP per capita is roughly 1.5 times the national average, making Helsinki one of the wealthiest capitals in Europe. The metropolitan area's gross value-added per capita is 200% of the mean of 27 European metropolitan areas. It equals Stockholm or Paris. The gross value-added annual growth has been around 4%. 83 of the 100 largest Finnish companies are headquartered in Greater Helsinki.

A demographic forecast puts the Helsinki region among the fastest growing regions in Europe. Some areas of the economy may even face shortages of labour.

Helsinki is located some 80 kilometres north of Tallinn, Estonia. Helsinki has close connections with Tallinn.

Tourism

Foreign travellers

In 2009, Finland received 5.7 million foreign visitors what is less by six per cent in comparison with 2008. These data are derived from the Border Interview Survey by Statistics Finland and Finnish Tourist Board.

Table 15 - A.15 Foreigners visiting Finland in 2006-2009, (thousands)

Country of residence	2006	2007	2008	2009	Change 2008-2009, (%)
All visitors , incl.	5 345	5 736	6 072	5 695	-6
Estonia	503	561	522	583	12
Germany	369	350	376	332	-12
Latvia	33	41	59	54	-8
Poland	48	53	40	44	10
Lithuania	30	28	33	16	-51

Data source: Statistics Finland

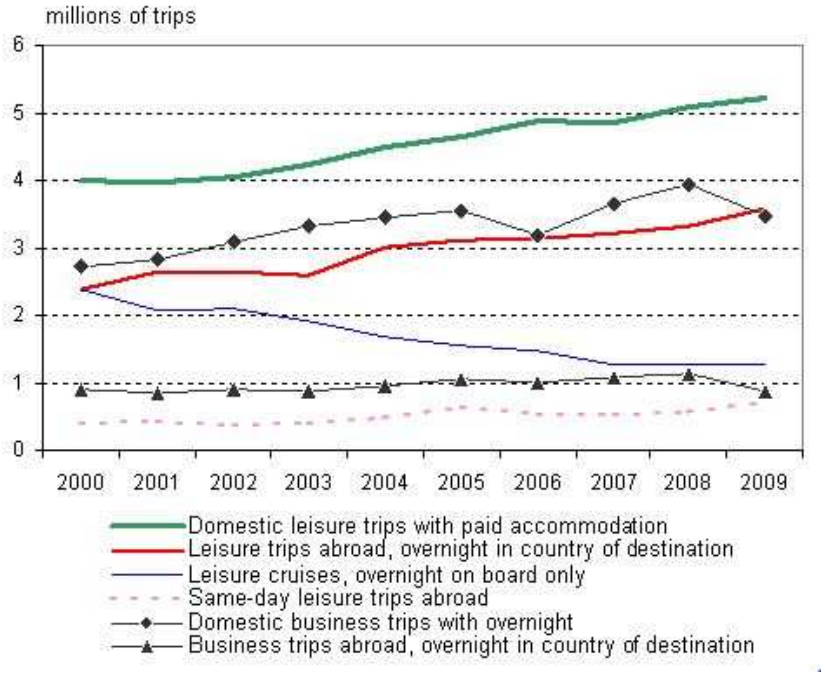
In 2009, 50 per cent of the foreign visitors to Finland were on leisure trips. Twelve per cent of all visitors to Finland came to see friends or relatives. A quarter of all foreign visitors to Finland came on business. Ten per cent of visitors were on a transit trip through Finland.

In 2009, foreigners stayed an average of 3.9 nights in Finland. Visitors from Russia, Estonia, Sweden and Germany spent the highest numbers of nights in Finland.

Finnish travellers

In 2009 Finnish residents' travelling abroad increased more strongly than in the previous years and 8% more leisure trips with overnight stays in the destination country were made than in 2008. More leisure trips with paid accommodation were also made in Finland than the year before and their number rose by three per cent. Business trips abroad declined in all by over one fifth and business trips in Finland by 12 per cent. These data derive from Statistics Finland's Finnish Travel Survey for which 19,038 people aged 15 to 74 permanently resident in Finland were interviewed.

Figure 11 - A.11 Finnish travel



Data source: Statistics Finland

During 2009 Finnish residents aged 15 to 74 made a total of 5.6 million leisure trips abroad. Twenty-nine per cent of them were destined to Estonia, 25 per cent to Sweden and seven per cent to other neighbouring areas (Russia, Norway, Denmark, Latvia and Lithuania). In all, 3.4 million leisure trips were made to the neighbouring areas.

Forty-five per cent of business trips with overnight stays in the destination country, or 390 000 trips, were headed to the neighbouring areas. By far the highest number of business trips was made to Sweden, 167 000 trips, followed by Germany and Estonia, both with around 95 000 business trips.

Forecast

Big drop in exports for 2009 most likely will be followed by a recovery during the next years, as global demand improves. In 2011 exports are expected to rise by 6.5% (average volume of forecasts prepared by commercial banks) in volume.

Middle term market growth in Europe, where the majority of exports are shipped, is expected to be modest, especially in EMU countries, where extensive budget cuts will be made, primarily in 2011.

Growth in the next two years, most likely, will be driven by higher domestic demand. Growing real wages and income tax cuts will be strengthening Finnish households' buying power at the same time that the labour market is stabilising. Unemployment is expected to fall late in the year 2011.

As a whole, commercial banks, EBRD, IMF, Eurostat and local authorities expect GDP on average to grow by around 1.7% in 2010, 2.0% in 2011, and 2.5% in 2012. This means that it will take several years (i.e. 2013 at the earliest) before the economy reaches the year 2008 levels.

Long term forecasts by aforementioned institutions are made rarely. We have found few forecasts that states that in general Finland's average long term growth may exceed EU's growth. Therefore, we have assumed average growth of 1.8% p.a.

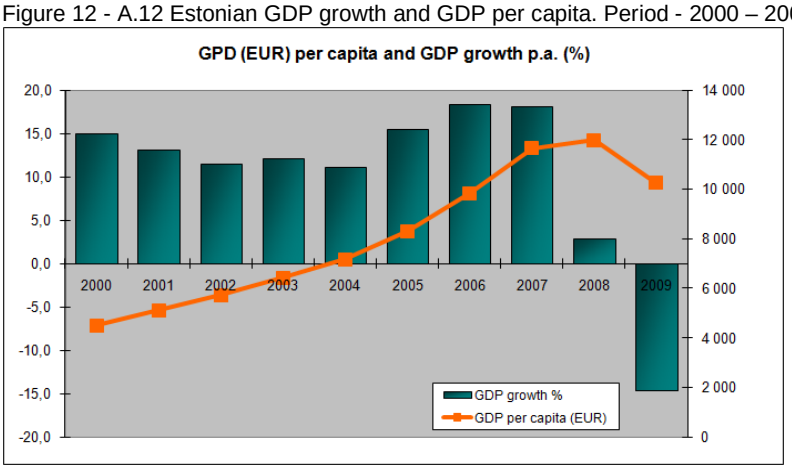
Leisure trips to Estonia from Finland have grown by 0.6% in 2009 reaching new record levels. Business trips accounts ~12% of total trips to Estonia. Most likely that future growth strongly will be correlated with GDP growth.

Estonia

GDP and GVA

During the period 2000-2008, the Estonian economy has grown by an average of 13.1% p. a., compared with an EU average of 2.4% p.a. Government surpluses have helped to reduce the national debt. According to preliminary data of Statistics Estonia, in 2009 the Estonian general government sector deficit was 1.7% and gross debt level was only 7.2% of GDP. Estonia is among the European countries with the strongest public finances.

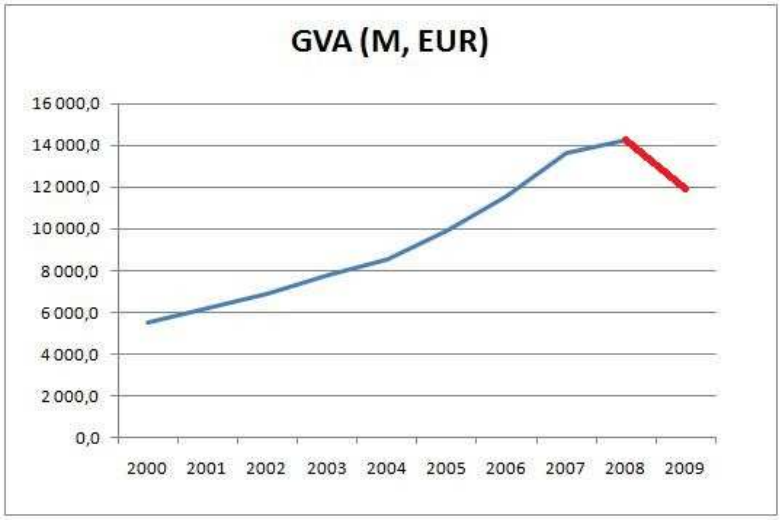
Figure 12 - A.12 Estonian GDP growth and GDP per capita. Period - 2000 – 2009.



Data source: Statistics Estonia

Severe global recession during years 2008 – 2009 has had a dramatic impact on the Estonian economy. GDP fell by 14.6% in 2009. GDP per capita has fallen to 10 243 EUR in 2009 compared with 11 987 in 2008. Thus, it is still higher than in 2006 when GDP per capita was slightly below 10 thousand EUR.

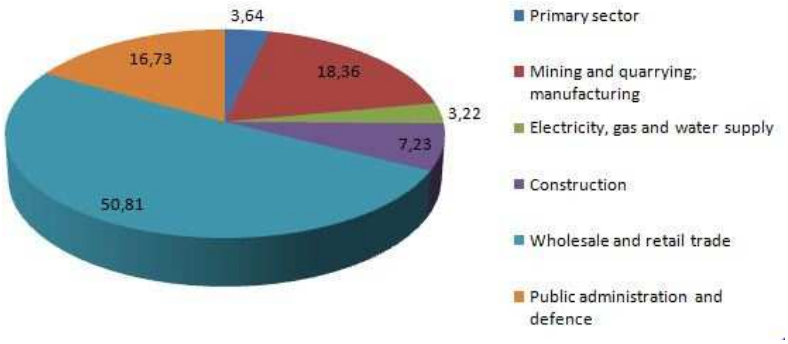
Figure 13 - A.13 Total GVA of Estonia (M, EUR, nominal prices)[6]



Data source: Statistics Estonia

The Estonian economy is very open. Most likely that in 2010, the Estonian economy will grow mostly due to exports and growing investments – supported by EU funds - will also support the upturn. Most likely private consumption will remain weak due to limited lending. It is expected that in 2011, internal demand gradually to contribute more to growth.

Figure 14 - A.14 Estonian GVA by sector (Total - 100%). Average of period 2000 – 2008.



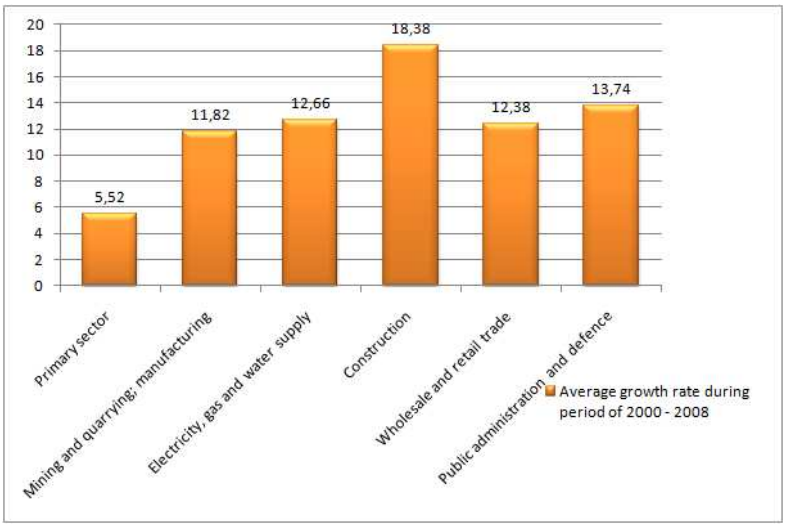
Data source: Statistics Estonia

Worthwhile to notice, that manufacturing has accounted only more than 18% of total GVA during period 2000 – 2008. In comparison, manufacturing in Finland accounted 24.4% of total GVA.

Figure below represents growth rate of each separate sector during the period 2000 – 2008.

[6] *Data for 2009 – forecast based on assumption that GVA drop will be similar to drop of GDP*

Figure 15 - A.15 GVA average growth rate by industries during period of 2000 – 2008 (nominal prices)



Data source: Statistics Estonia

Joining EMU and future perspectives

The most important change in the economy will be the adoption of the euro in 2011. Euro adoption will improve risk estimates and may, therefore, attract additional inflows of foreign investments, which, in turn, will increase economic activity and create jobs.

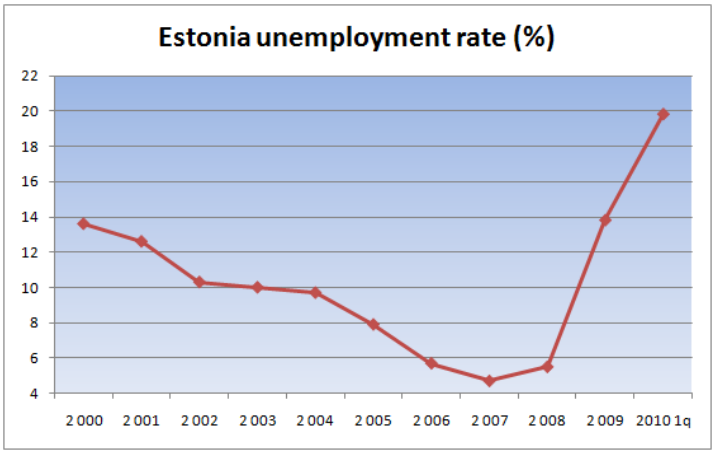
Current government has stated that it will maintain its conservative fiscal policy after joining EMU. In cooperation with different bodies from the public and private sectors, the Ministry of Economic Affairs has developed many programs to encourage and promote entrepreneurship. Some of these have been designed to help start businesses (subsidies for start-ups, loan guarantees, etc). Many of the programs are financed by EU funds and/or the government.

Employment

During last ten years Estonia has experienced decrease in unemployment rate from 13.8% in 2000 to 4.8% in 2007. During 2008 to 2009 period sharp increase in unemployment rate was as a consequence of economic recession.

Even though the Estonian economy has already started to recover, the labour market, most likely, will continue to deteriorate (data for 2010 1Q already indicates it) and will improve only with a lag. This means that unemployment can reach its highest level in the middle of the year 2010 and then diminish as greater foreign demand may increase the need for additional labour input.

Figure 16 - A.16 Unemployment rate in Estonia



Data source: Statistics Estonia

Main Regions along the alternative routes of Rail Baltica

Tables below compare the development within the three regions of Estonia that depending on the selected route option may be directly affected by Rail Baltica:

1. EE001 Põhja-Eesti (Tallinn);
2. EE004 Lääne-Eesti (Pärnu);
3. EE008 Lõuna-Eesti (Tartu).

Table 16 - A.16 Share of GDP created by county, % by administrative territory and year

	2000	2001	2002	2003	2004	2005	2006	2007
Republic of Estonia	100	100	100	100	100	100	100	100
EE001 Põhja-Eesti	55,6	56,7	57,1	57,8	59,3	59,8	58,5	60,5
EE004 Lääne-Eesti	9,6	9,4	9,4	9,1	8,4	8,4	8,8	8,4
EE008 Lõuna-Eesti	17,6	17,3	17,5	17,4	17,3	17,0	18,0	17,1

Data source: Statistics Estonia

An administrative unit that may be crossed by RB project creates 86% of total Estonian economy. It is worthwhile to notice, that GDP of Lõuna-Eesti region is more than two times bigger than GDP of Lääne-Eesti.

Table 17 - A.17 GVA analysis by region and year

	2000	2001	2002	2003	2004	2005	2006	2007	CAGR (%)
Estonia. Value added total, incl.	**5 505**	**6 235**	**6 917**	**7 783**	**8 568**	**9 896**	**11 602**	**13 644**	**13,8**
Mining and quarrying; manufacturing	1 036	1 206	1 325	1 491	1 580	1 797	2 081	2 456	13,1
Construction	306	348	406	448	513	703	965	1 237	22,1
Wholesale and retail trade	2 788	3 162	3 520	3 972	4 420	5 101	5 992	6 855	13,7
Põhja-Eesti (Tallinn)	**3 122**	**3 559**	**3 997**	**4 612**	**5 119**	**5 791**	**7 016**	**8 146**	**14,7**
% of total	**57**	**57**	**58**	**59**	**60**	**59**	**60**	**60**	
Mining and quarrying; manufacturing	480	561	620	717	751	863	1 000	1 156	13,4
% of total	46	46	47	48	48	48	48	47	
Construction	180	205	241	285	314	402	573	732	22,2
% of total	59	59	59	64	61	57	59	59	
Wholesale and retail trade	1 861	2 128	2 376	2 752	3 087	3 461	4 215	4 746	14,3
% of total	67	67	67	69	70	68	70	69	
Lääne-Eesti (Pärnu)	**518**	**591**	**627**	**659**	**724**	**869**	**967**	**1 151**	**12,1**
% of total	**9**	**9**	**9**	**8**	**8**	**9**	**8**	**8**	
Mining and quarrying; manufacturing	115	139	153	156	168	180	207	245	11,4
% of total	11	12	12	10	11	10	10	10	
Construction	34	37	39	45	47	71	96	122	19,9

	2000	2001	2002	2003	2004	2005	2006	2007	CAGR (%)
% of total	11	11	10	10	9	10	10	10	
Wholesale and retail trade	210	237	260	278	310	392	414	476	12,4
% of total	8	7	7	7	7	8	7	7	
Lõuna-Eesti (Tartu)	**955**	**1 091**	**1 204**	**1 351**	**1 462**	**1 779**	**1 994**	**2 392**	**14,0**
% of total	**17**	**18**	**17**	**17**	**17**	**18**	**17**	**18**	
Mining and quarrying; manufacturing	182	218	253	288	297	346	409	462	14,2
% of total	18	18	19	19	19	19	20	19	
Construction	48	49	65	73	86	133	175	234	25,2
% of total	16	14	16	16	17	19	18	19	
Wholesale and retail trade	386	444	491	539	597	749	813	980	14,2
% of total	14	14	14	14	14	15	14	14	

Data source: Statistics Estonia

As it can be noticed from table above Lõuna-Eesti (Tartu) creates added value on average two times more than Lääne-Eesti (Pärnu) region. Moreover, growth rate of Lõuna-Eesti (Tartu) region has been higher than average in Estonia and in manufacturing and construction sectors has even passed Põhja-Eesti (Tallinn) growth rates, while Lääne-Eesti (Pärnu) region growth rates have been less than average.

Table 18 - A.18 GVA per capita by region, year

Region	2000	2001	2002	2003	2004	2005	2006	2007
Põhja-Eesti (Tallinn)	5 947	6 796	7 654	8 846	9 825	11 108	13 419	15 571
Lääne-Eesti (Pärnu)	3 124	3 578	3 819	4 035	4 450	5 356	5 974	7 145
Lõuna-Eesti (Tartu)	2 701	3 101	3 435	3 867	4 198	5 122	5 750	6 924

Data source: Statistics Estonia

Tourism

Foreign travellers

According to Statistics Estonia, in 2009, 2.1 million foreign and domestic tourists stayed in accommodation establishments. Total number of tourists decreased by 10 per cent in 2009.

Economic crisis which inhibited the activity to travel around the world had a significant impact on the activities of accommodation establishments of Estonia. The number of tourists from Sweden decreased by a tenth, the number of tourists from Norway and Germany decreased 13% and 17%, respectively.

Table 19 - A.19 Number of foreign visitors in Estonia (only those who spent at least one night in Estonia)

	2006	2007	2008	2009
Foreign visitors	1 427 583	1 380 323	1 433 346	1 380 540
Nights spent in Estonia	3 020 367	2 915 456	2 932 662	2 740 696

Data source: Statistics Estonia

Significant cultural events which took place in summer attracted tourists from the neighbouring countries to come to Estonia. In 2009 as total, 3% more tourists from Finland and 14% more tourists from Russia stayed in accommodation establishments than in 2008.

Table below reflects Border crossings on leave from Estonia by year and citizenship. Most likely that RB may divert some percentage of Latvian, Lithuanian and EU25 tourists from sea, air and road to rail.

Table 20 - A.20 Border crossings on leave from Estonia by Year and Citizenship (thousands)

	2007	2008	2009
Lithuanian	111	111	100
Latvian	528	512	516
Swedish	278	261	166
Finnish	1 679	2 237	2 298
Russian	1 014	1 117	1 246
EU15	2 224	2 780	2 688
EU25	2 922	3 459	3 368
EU27	2 925	3 463	3 371
Other citizenship	699	824	952

Data source: Statistics Estonia

Estonian travellers

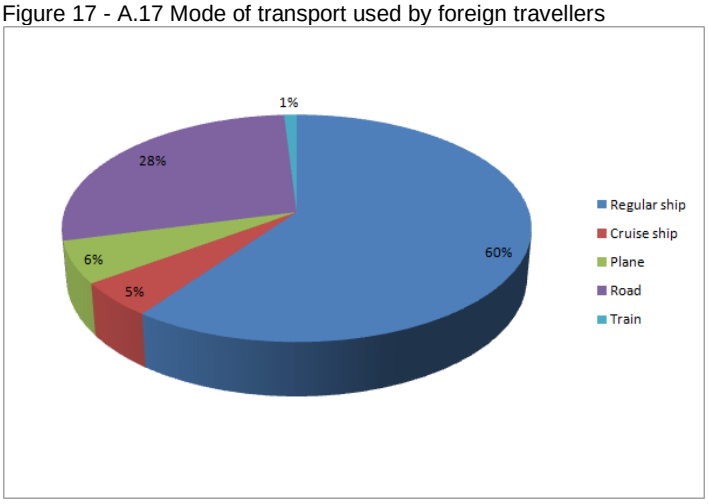
Table 21 - A.21 Outbound overnight trips of Estonian residents by Year, Country (thou.)

	2007	2008	2009
Total	677	691,5	752,1
Lithuania	24,5	31,3	24,4
Latvia	73,1	70,2	62,4
Finland	140,3	121,8	145,4
EU25	497,2	489,2	490,8

Data source: Statistics Estonia

Worthwhile to notice that Estonian Statistics provides data only for overnight trips. Thus, a real number of travellers (including day trips) is considered to be several times higher.

Figure 17 - A.17 Mode of transport used by foreign travellers



Source: Estonian Border Guard, 2003

As it can be noticed from above mentioned figure approximately 65% of foreigners enter Estonia by ship.

Forecasts Summary - Estonia

Big drop in GDP for 2009 most likely will be followed by a slight recovery during the next years, as global demand improves. Growth in the next two years, most likely, will be driven by higher demand in export markets especially as domestic demand is still weak in light of the ongoing internal devaluation (*total wage payments decreased by 14.4% and average wages by 5% in 2009*).

As a whole, commercial banks, EBRD, IMF, Eurostat and local authorities expect GDP on average to grow by around 0.8% in 2010, 2.9% in 2011, and 2.2% in 2012.

Long term forecasts by aforementioned institutions are made rarely. We have found few forecasts that states that in general Estonia's average long term growth may exceed EU's growth. Therefore, we have assumed average growth of 2.4% p.a. that is slightly above the forecasts for Latvia and Lithuania. We believe that joining EMU will improve Estonia's competiveness in comparison with its neighbouring countries.

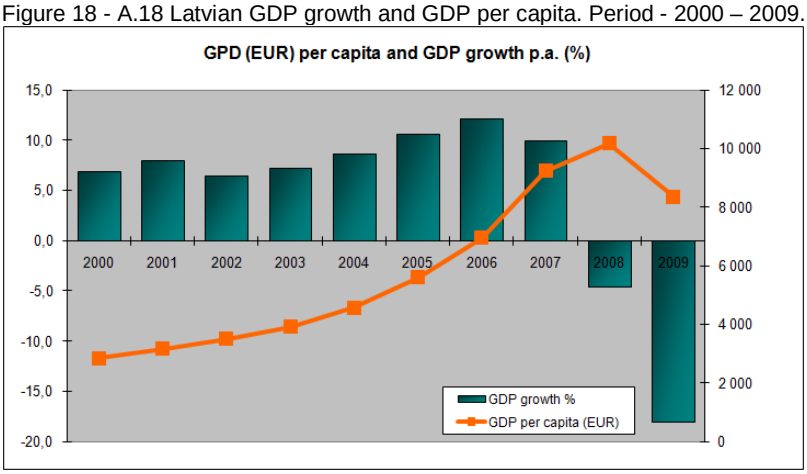
Trips to Estonia from Finland have grown by 0.6% in 2009 reaching new record levels. Both number of leisure and business tourists from Lithuania, Latvia and EU 25 countries has been stable during and last 3 years. Most likely that future growth strongly will be correlated with GDP growth, thus, in a long term period we can expect modest growth.

Latvia

GDP and GVA

During the period 2000-2008, the Latvian economy has grown by an average of 7.3% p. a., compared with an EU average of 2.4% p.a.

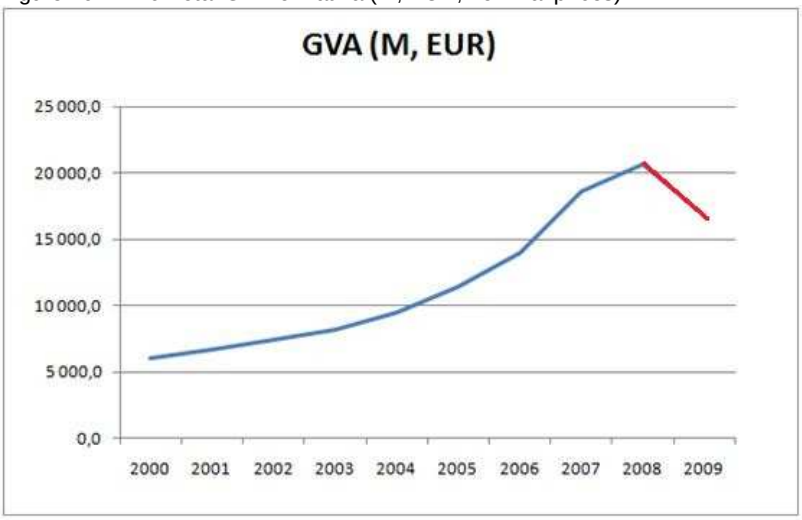
Figure 18 - A.18 Latvian GDP growth and GDP per capita. Period - 2000 – 2009.



Data source: Central Statistical Bureau of Latvia

After the economy contracted by 18% in 2009, quarterly positive growth of seasonally adjusted GDP resumed in the 1st quarter of 2010, mostly owing to growth in exports. This brought modest stabilization to the labour market – the job-seekers' rate seems to have peaked in the 2nd quarter of 2010 (~20%).

Figure 19 - A.19 Total GVA of Latvia (M, EUR, nominal prices)[7]



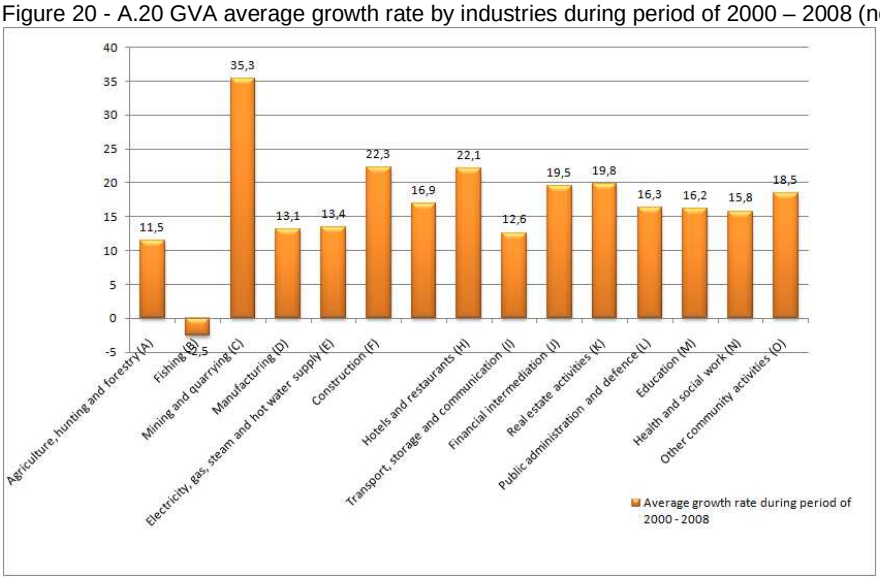
Data source: Central Statistical Bureau of Latvia

[7] *Data for 2009 – forecast based on assumption that GVA drop will be similar to drop of GDP*

The debt burden in domestic trade has increased substantially during the years 2008 - 2009, as did debt servicing for households due to a decline in income (*the wage bill was down by ~25% in 2009*). Thus, the recovery of retail trade will be very slow, especially in non-food segment.

Figure below represents growth rate of each separate sector during the period 2000 – 2008.

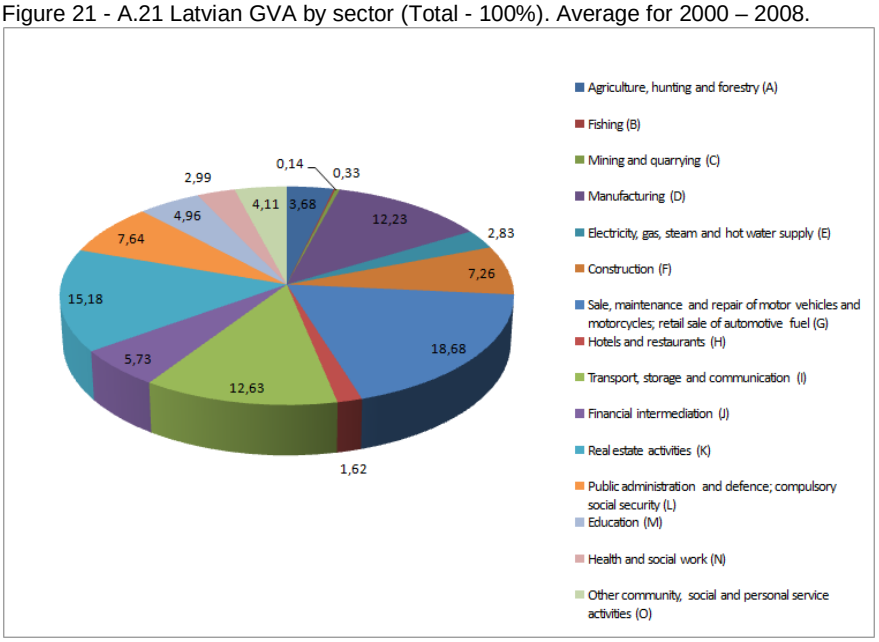
Figure 20 - A.20 GVA average growth rate by industries during period of 2000 – 2008 (nominal prices)



Data source: Central Statistical Bureau of Latvia

Such sectors as manufacturing and tourism, as well as IT, have a better outlook. The leverage is not that high in these sectors, and the debt burden is actually easing in, e.g., manufacturing. These are exporting sectors that are benefiting from recovering demand in trading-partner countries and thus are able to increase production volumes. For instance, capacity utilisation in manufacturing is growing, and in some industries by the middle of 2010 it is already close to pre-crisis levels.

Figure 21 - A.21 Latvian GVA by sector (Total - 100%). Average for 2000 – 2008.



Data source: Central Statistical Bureau of Latvia

Employment

During last ten years Latvia has experienced slight decrease in unemployment rate from 13% in 2000 to 5.4% in 2007. During 2008 to 2009 period sharp increase in unemployment rate was as a consequence of economic recession.

Figure 22 - A.22 Unemployment rate in Latvia

Data source: Central Statistical Bureau of Latvia

Year 2010 and growing exports has brought some stabilization to the labour market –unemployment rate seems to have peaked in the 2nd quarter of 2010 (~20-21%). The labour market, most likely, will remain weak for the next few years, with the unemployment rate still in excess of 15% and cautious wage growth starting only in 2011. Employment, most likely, will begin to grow only in 2011 and, unless job creation is actively supported by the government, its growth, most likely, will be slow.

Main Regions along the alternative routes of Rail Baltica

There are four NUTS3 regions that are along the Rail Baltica alternative routes:

(1) Vidzeme region;

(2) Riga region;

(3) Riga;

(4) Zemgale region.

Table 22 - A.22 Share of GDP created by year and by regions

Region	2001	2003	2005	2007
Latvia total	100	100	100	100
LV006 Riga	54,5	56,1	57,3	54,4
LV007 Riga Region (except Riga)	10,3	10,1	11,1	12,3
LV009 Zemgale Region	7,1	7,2	7	8
LV008 Vidzeme Region	6	6,4	6,2	6,7
LV003 Kurzeme Region	12,6	11,9	10,7	10,3
LV005 Latgale Region	9,4	8,2	7,6	8,2

Data source: Central Statistical Bureau of Latvia

SUMMARY OF LEADING INDUSTRIES BY REGION, 2008

Table 23 - A.23 Summary of leading industries (M, lats), 2008

Region / Industry	Total industry	Food	Wood	Minerals	Iron and steel	Furniture	Electricity, gas, district heating	Other
Riga	3 084	312	331	114	184	66	936	1 142
Riga region	832	220	141	88	72	29	25	258

Region / Industry	Total industry	Food	Wood	Minerals	Iron and steel	Furniture	Electricity, gas, district heating	Other
Vidzeme (Valmiera, Cesis, Valka)	430	100	131	56	5	26	9	103
Zemgale (Jelgava)	484	122	99	17	34	8	23	181

Data source: Central Statistical Bureau of Latvia

Tourism

Foreign travellers

The results of the survey (May 2010) conducted by the Central Statistical Bureau of Latvia show that compared to 2008 in 2009 foreign travellers crossed Latvia's border 4.7 mln times which is less by 14%. From the total number of foreign visitors 72% spent less than 24 hours in Latvia.

Most of the foreign travellers were from neighbouring countries: 37% from Lithuania, 20% - from Estonia, 6% - from Russia, 6% - from Sweden, 5% - from Germany and 4% - from Poland.

Table 24 - A.24 Border crossings on enter to Latvia by citizenship (thousands)

Country	Number of border crossings (thousands)
Lithuania	1 739
Estonia	940
Russia	287
Sweden	277
Germany	240
Poland	183
Others	1 034
Total	4 700

Data source: Central Statistical Bureau of Latvia

Purpose of visit in year 2009 is distributed as following:

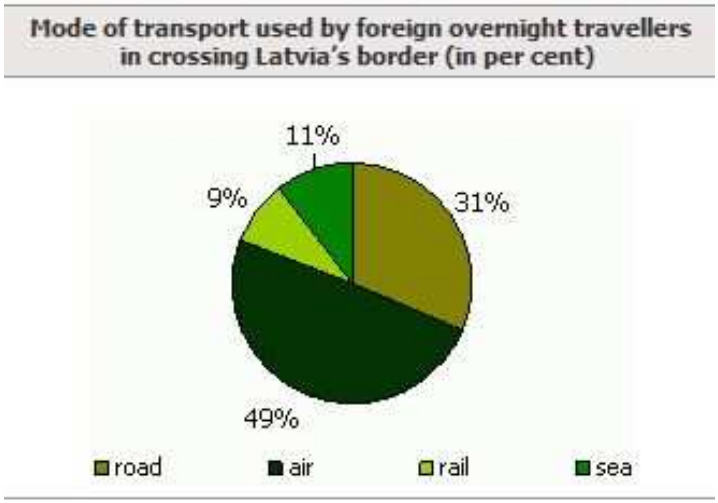
(1) 44% - recreation;

(2) 27% - business;

(3) 20% - visit to friends and relatives;

(4) 9% - other.

Figure 23 - A.23 Mode of transport used by foreign overnight travellers



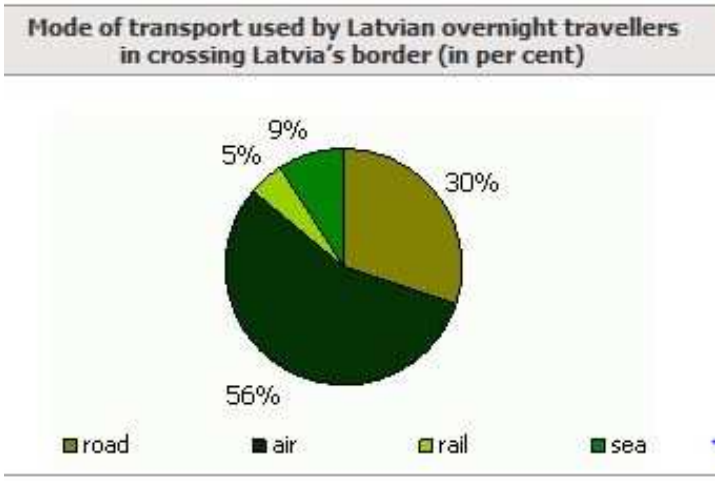
Data source: Central Statistical Bureau of Latvia

As it can be noticed from figure above 31% of travellers enters Latvia by road totalling ~1,457 million persons.

Latvian travellers

In 2009 Latvian residents crossed Latvia's border 3.1 mln times, which is less by 13.2% than in 2008. In 2008 on average Latvian travellers spent 4.7 visitor nights abroad. Similarly as in previous surveys, also this time Latvian travellers visited neighbouring countries the most – Lithuania (30%), Russia (18%), Estonia (11%) and Germany (8%).

Figure 24 - A.24 Mode of transport used by Latvian overnight travellers



Data source: Central Statistical Bureau of Latvia

Forecasts Summary - Latvia

Overall, domestic demand will be weak for the next couple of years due to almost non-existent lending and ongoing de-leveraging. Another factor that will slow the recovery of local demand is fiscal consolidation expected in 2011 and 2012, implying public spending cuts, and redistribution of the tax burden.

The economy during last few years has become polarised. Recovery in demand in such domestic services as construction, real estate, domestic trade, and financial services will be slow; meanwhile, demand in such exporting sectors as manufacturing, tourism, IT, and other commercial services is expected to grow faster and to be key drivers of Latvian economy.

Activity and resources will become more concentrated around main regional centres. The dominance of Riga in the economy will most likely increase (currently, about 55% of the Latvian GDP is produced in Riga).

As a whole, commercial banks, EBRD, IMF, Eurostat and local authorities expect GDP on average to contract ~2.7% in 2010 and to grow by around 1,2% in 2011, 1.9% in 2012, and 2.8% in 2013[8].

Long term forecasts by aforementioned institutions are made rarely. We have found few forecasts that states that in general Latvia's average long term growth may exceed EU's growth. Therefore, we have assumed average growth of 2.2% p.a.

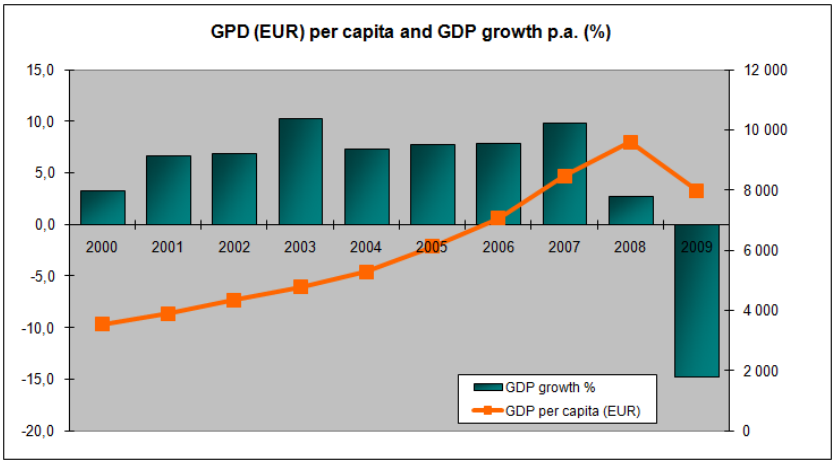
The results of the survey (May 2010) conducted by the Central Statistical Bureau of Latvia show in 2009 foreign travellers crossed Latvia's border 4.7 mln times (less by 14% in comparison with 2008). In 2009 Latvian residents crossed Latvia's border 3.1 mln times (less by 13.2% in comparison with 2008). Travellers has crossed border of Latvia 2.38 million times by road. Both numbers are closely correlated with GDP drop in Baltic States. This leads us to conclusion that future growth strongly will be correlated with GDP growth.

Lithuania

GDP and GVA

During the period 2000-2008, the Lithuanian economy has grown by an average of 7.0% p. a., compared with an EU average of 2.4% p.a.

Figure 25 - A.25 Lithuanian GDP growth and GDP per capita. Period - 2000 – 2009.

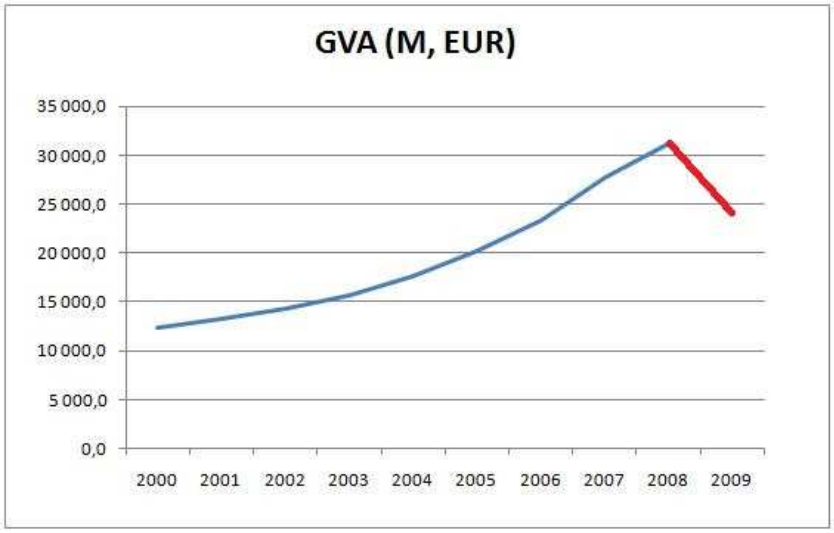


Data source: Statistics Lithuania

After the economy contracted by 14.8% in 2009, quarterly positive growth of seasonally adjusted GDP resumed in the 1st quarter of 2010, mostly owing to growth in exports.

[8] *Detailed GVA forecasts for NUTS3 level are available in Annex ___ of the Report.*

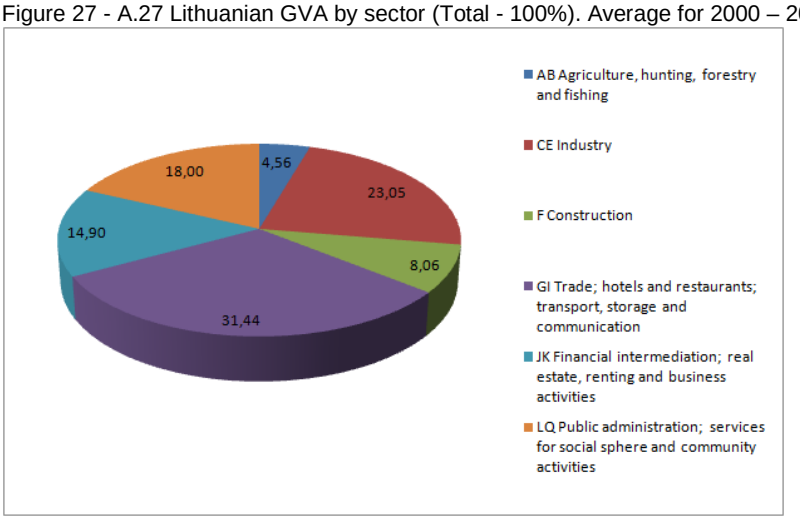
Figure 26 - A.26 Total GVA of Lithuania (M, EUR, nominal prices)[9]



Data source: Statistics Lithuania

The Lithuanian economy is still being affected by the weak global economy and deleveraging. Internal devaluation continues. Years 2010 and 2011 will still be challenging, as domestic demand remains weak, the real estate market continues to stagnate, and the high unemployment rate will put further pressure on household consumption.

Figure 27 - A.27 Lithuanian GVA by sector (Total - 100%). Average for 2000 – 2008.



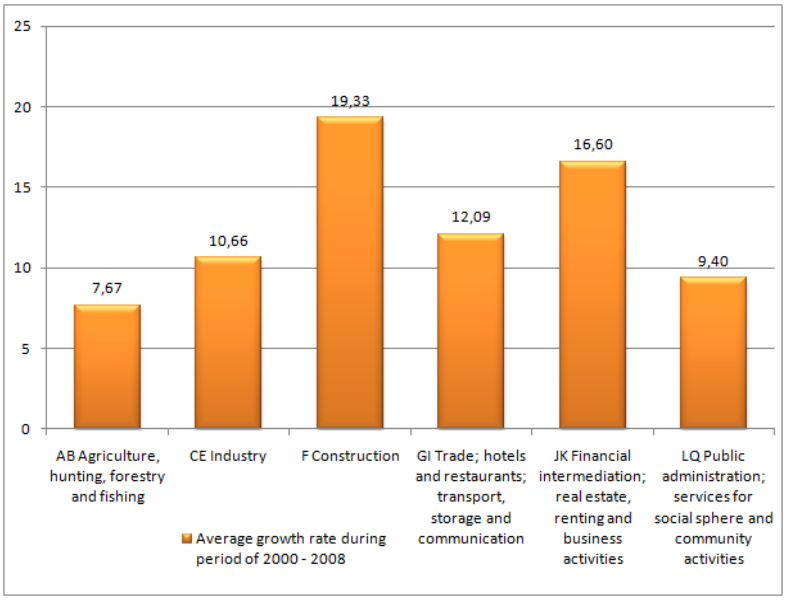
Data source: Statistics Lithuania

The economic recovery, most likely, will initially be driven by Lithuania's exporting manufacturing sector, with the paper, wood, and plastics industries taking the lead.

[9] *Data for 2009 – forecast based on assumption that GVA drop will be similar to drop of GDP*

Figure below represents growth rate of each separate sector during the period 2000 – 2008.

Figure 28 - A.28 GVA average growth rate by industries during period of 2000 – 2008 (nominal prices)



Data source: Statistics Lithuania

According to provisional data of Statistics Lithuania, the general government deficit in 2009 made 8.9 per cent of GDP. At the end of 2009, the general government debt at nominal value amounted 29.3 per cent of GDP. At the end of 2008, the general government debt amounted 15.6 per cent of GDP.

Joining EMU

The government is committed to euro adoption – it has set a goal to achieve all Maastricht criteria requirements by 2012 in order to join in 2014.

Employment

During last ten years Lithuania has experienced slight decrease in unemployment rate from 16.4% in 2000 to 4.3% in 2007. During second half of 2009 and 1 quarter of 2010 there was fierce increase in unemployment rate due to global economic fall down. By the end of 1st quarter of 2010 unemployment rate has reached 18.1 per cent.

Figure 29 - A.29 Unemployment rate in Lithuania

Data source: Statistics Lithuania

Lithuania's high unemployment rate continues to push wages down, while a decline in labour costs is encouraging producers to enter Lithuanian market. At the 2010 productivity starts to recover. Competitiveness is gradually being restored that in a long-term will lead unemployment to diminish.

Of course, high unemployment is putting pressure on public finances and nonperforming loans, and, due to looming emigration problems, will be one of the main challenges in the short and medium terms.

Main Regions along the alternative routes of Rail Baltica

There are five NUTS3 regions that are along the Rail Baltica alternative routes:

(1) Šiauliai region;

(2) Panevežys region;

(3) Kaunas region;

(4) Marijampole region;

(5) Alytus region.

Table 25 - A.25 Share of GDP created by year and by regions

Region	2001	2003	2005	2007
Republic of Lithuania	100,0	100,0	100,0	100,0
LT001 Alytus County	4,3	3,8	3,6	3,4
LT002 Kaunas County	19,4	19,2	19,3	19,3
LT003 Klaipėda County	12,1	11,7	11,7	11,5
LT004 Marijampolė County	3,5	3,6	3,4	3,2
LT005 Panevėžys County	7,5	6,9	6,8	5,9
LT006 Šiauliai County	7,6	7,7	7,7	7,4
LT007 Tauragė County	2,3	2,0	1,8	1,7
LT008 Telšiai County	4,4	4,3	4,4	4,3
LT009 Utena County	4,7	4,7	4,4	4,0
LT00A Vilnius County	34,3	36,1	36,9	39,4

Data source: Statistics Lithuania

Most of the several route alternatives of Rail Baltica main distinction are that either route passes Šiauliai or Panevežys. Therefore table below compares those two regions in more details.

Table 26 - A.26 GVA analysis by region and year

Region / Position/ Year	2000	2001	2002	2003	2004	2005	2006	2007	CAGR (%)
Lithuania GVA total (M, EUR), incl.	**12 349**	**13 261**	**14 258**	**15 751**	**17 638**	**20 186**	**23 349**	**27 791**	**12,3**
Industry	2 885	3 201	3 248	3 760	4 422	4 989	5 473	6 023	**11,1**
Construction	744	787	886	1 104	1 256	1 510	2 021	2 792	**20,8**
Trade; hotels; transport and communication	3 795	4 164	4 707	5 173	5 637	6 436	7 274	8 598	**12,4**
LT005 Panevėžys County, GVA total (M, EUR)	**887**	**940**	**971**	**1 032**	**1 193**	**1 272**	**1 372**	**1 545**	**8,3**
% of total	**7,2**	**7,1**	**6,8**	**6,6**	**6,8**	**6,3**	**5,9**	**5,6**	
Industry	266	297	293	323	400	423	393	365	**4,6**
% of total	9,2	9,3	9,0	8,6	9,0	8,5	7,2	6,1	
Construction	54	56	61	72	83	96	126	175	**18,2**
% of total	7,3	7,1	6,9	6,5	6,6	6,4	6,2	6,3	
Trade; hotels; transport and communication	208	228	251	254	277	306	331	394	**9,6**
% of total	5,5	5,5	5,3	4,9	4,9	4,7	4,5	4,6	
LT006 Šiauliai County, GVA total (M, EUR)	**930**	**967**	**1 020**	**1 144**	**1 333**	**1 456**	**1 659**	**1 948**	**11,1**
% of total	**7,5**	**7,3**	**7,2**	**7,3**	**7,6**	**7,2**	**7,1**	**7,0**	
Industry	188	198	203	240	305	342	378	410	**11,8**
% of total	6,5	6,2	6,2	6,4	6,9	6,9	6,9	6,8	
Construction	45	45	56	78	99	108	136	181	**21,9**
% of total	6,1	5,7	6,4	7,0	7,9	7,2	6,8	6,5	

Region / Position/ Year	2000	2001	2002	2003	2004	2005	2006	2007	CAGR (%)
Trade; hotels; transport and communication	272	290	316	364	403	441	484	567	**11,1**
% of total	7,2	7,0	6,7	7,0	7,2	6,8	6,7	6,6	

Data source: Statistics Lithuania

As it can be noticed from table above Šiauliai creates added value on average 25 per cent more than Panevežys region. Moreover, growth rate of Šiauliai region has been comparable with average growth in Lithuania and in manufacturing and construction sectors has even passed average growth rates, while Panevežys region growth rates have been less than average.

Tourism industry

Foreign travellers

Statistics Lithuania informs that, based on the data of the inbound tourism survey (May 2010), the number of overnight trips of foreigners in 2009, compared to 2008, decreased by 16.8 per cent (from 1.6 million in 2008 to 1.3 million in 2009), that of same-day trips – by 6.6 per cent (from 2.8 million in 2008 to 2.7 million in 2009).

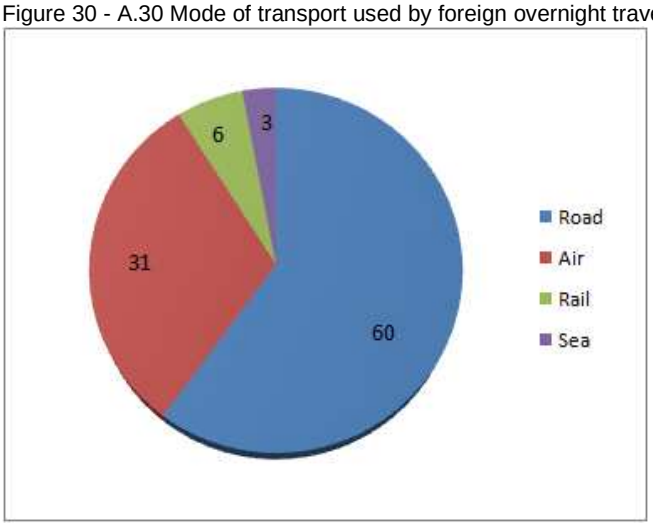
Most foreign visitors with one or more overnight stays arrived in Lithuania for leisure (63.8 per cent), 36.2 per cent – for business purposes.

In 2009, most overnight visitors arrived from Belarus (18%, or 247.3 thous.), Russia (14%, or 189.4 thous.), Latvia (11%, o r 149.4 thous.), Poland (11%, or 141.5 thous.), and Germany (10%, or 135.2 thous.).

In 2009, compared to 2008, the number of overnight trips from Belarus increased by 18.6%. The largest impact on the decrease in the number of trips in 2009, compared to 2008, was made by a decrease in the number of trips from Poland – by 22% , Russia – by 16.7%, and Latvia – by 17.9%..

In 2009, almost half of same-day visitors arrived from Latvia (1119.1 thousand, or 42%), Poland (748.9 thousand, or 28%), Belarus (284.8 thousand, or 11%), Russia (226.9 thousand, or 9%), and Estonia (154.1 thousand, or 6%).

Figure 30 - A.30 Mode of transport used by foreign overnight travellers



Data source: Statistics Lithuania

Lithuanian travellers

In 2009 Lithuanian residents' travelling abroad decreased more strongly than in the previous years. In total 1.3 million trips abroad have been made (included only those with an overnight stay) what is 26.7% less than in 2008 (leisure trips down by 24.4%, business trips down by 35.7%).

In 2009 leading travelling destinations were:

(1) Belarus – 15.1% (194,5 thousands);

(2) Latvia – 12.5% (160,6 thousands, down from 220,2 thousands year before);

(3) Poland – 9.8% (125,9 thousands);

(4) Germany – 8.1% (104,4 thousands);

(5) Russia – 7.6% (98,3 thousands).

The results of the surveys (May 2010) conducted by the Central Statistical Bureau of Lithuania show that travelling in 2009 to and from countries (Poland, Finland, Latvia and Lithuania) that closely related to RB project represent more than 50% of total travellers.

Forecasts Summary - Lithuania

The economy bottomed out in the 1st quarter of 2010, and it is forecasted that GDP will contract by 0.1% in 2010, increase by 2.3% in 2011, and 3.9% in 2012. Long-term forecast is 2.2% p.a.

Overall, domestic demand, most likely, will be weak for the next couple of years due to diminished lending and ongoing de-leveraging. Another factor that will slow the recovery of local demand is fiscal consolidation expected in 2011 and 2012, implying public spending cuts, and redistribution of the tax burden.

Activity and resources will become more concentrated around main regional centres. The dominance of Kaunas and Vilnius in the economy will most likely increase (currently, about 59% of the Lithuanian GDP is produced in Vilnius and Kaunas regions).

As a whole, commercial banks, EBRD, IMF, Eurostat and local authorities expect GDP on average to contract ~0.1% in 2010 and to grow by around 2.3% in 2011, 3.9% in 2012, and 3.5% in 2013[10].

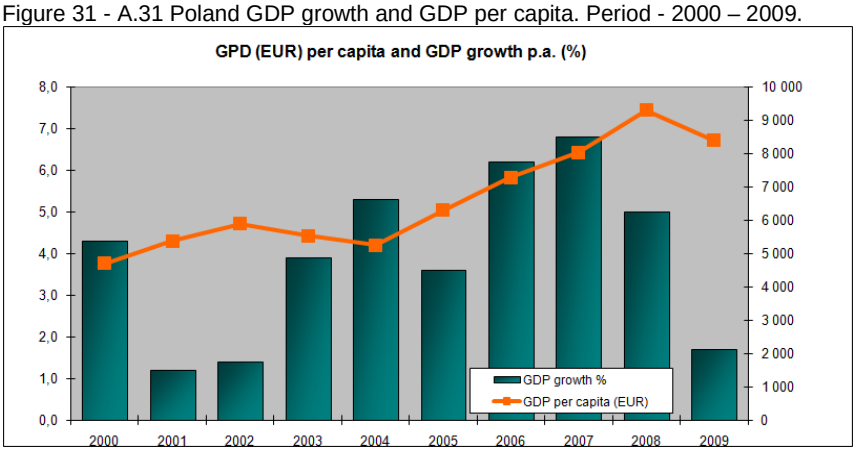
Long term forecasts by aforementioned institutions are made rarely. We have found few forecasts that states that in general Latvia's average long term growth may exceed EU's growth. Therefore, we have assumed average growth of 2.2% p.a.

Poland

GDP and GVA

Poland is one of a few countries has avoided a recession (GDP grew 1.7% in 2009) , and the economy is set to improve during 2010 and 2011. Poland's resilience to the global economic crisis can be explained by its rather small export dependence.

Figure 31 - A.31 Poland GDP growth and GDP per capita. Period - 2000 – 2009.

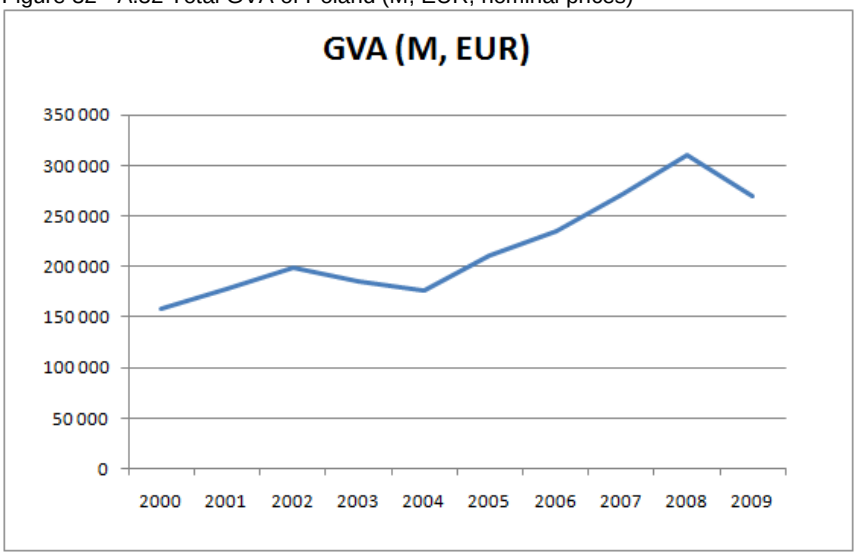


Data source: Central Statistical Office of Poland

Importantly, the country also had relatively sound financial sector developments (lending was by far less extensive than in Baltic countries) and small macroeconomic imbalances before the crisis. Worthwhile to notice, Poland has been affected positively by its flexible exchange rate since zloty devaluation by third had a positive effect on trading balance.

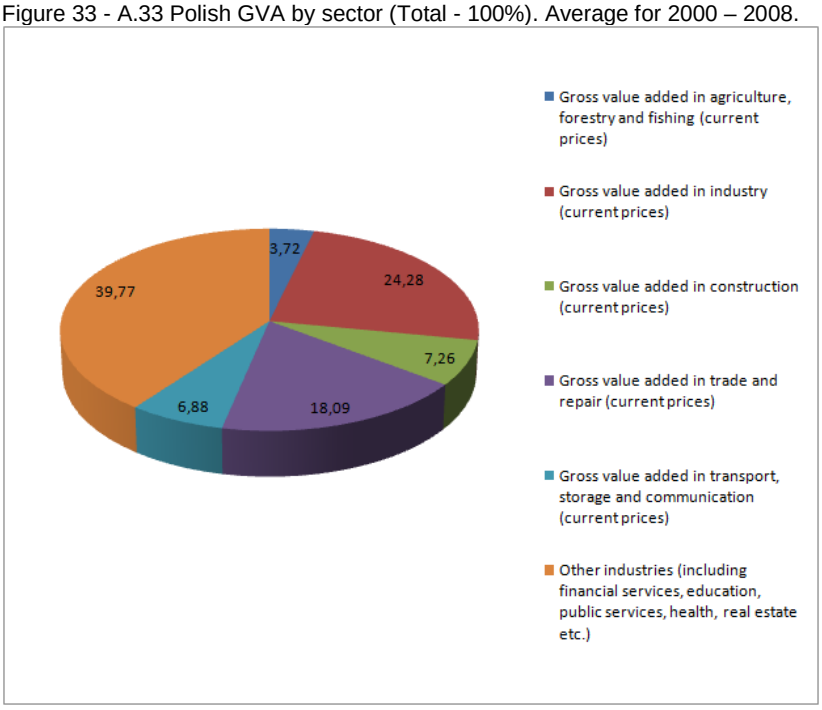
[10] *Detailed GVA forecasts for NUTS3 level are available in Annex ___ of the Report.*

Figure 32 - A.32 Total GVA of Poland (M, EUR, nominal prices)[11]



Data source: Central Statistical Office of Poland

Figure 33 - A.33 Polish GVA by sector (Total - 100%). Average for 2000 – 2008.



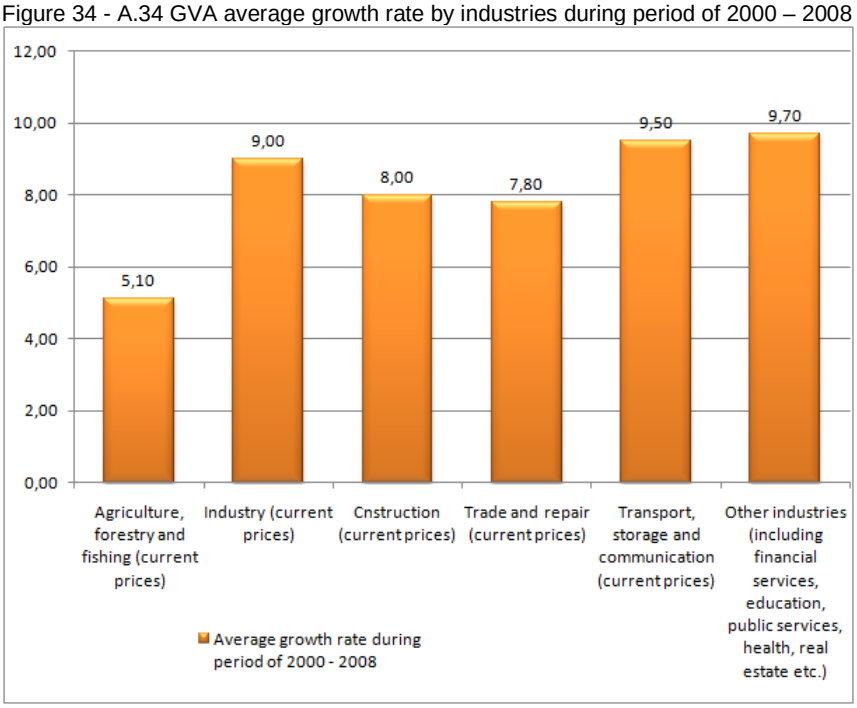
Data source: Central Statistical Office of Poland

As it can be noticed from above mentioned figure production, mining and quarrying accounts 24.3% of total GVA.

[11] *Data for 2009 – forecast based on assumption that GVA increase is similar to GDP growth. GVA drop in 2009 (in EUR) is related with a devaluation of zloty value of which in 2009 fell from 3,6 to 4,1 zloty per EUR. In terms of national currency (zloty) GVA experienced growth of 1.7%.*

Figure below represents growth rate of each separate sector during the period 2000 – 2008.

Figure 34 - A.34 GVA average growth rate by industries during period of 2000 – 2008 (nominal prices)



Data source: Central Statistical Office of Poland

Joining EMU

Because Poland's public finances are deteriorating and the budget deficit reached over 7% last year, the ratio of debt to GDP, which stands at ~ 50% mark, is also rising.

The goal of joining EMU in 2012 recently has been altered, and a new goal for 2015 was set. It will give more time to bring the fiscal deficit down to 3% and ensure that the debt ratio stays below 60%.

Populated places along the alternative routes of Rail Baltica

WARSAW

Warsaw is the capital and largest city of Poland. Its population as of June 2009 was estimated at 1,711,466 and the Warsaw metropolitan area at approximately 2,785,000.

Warsaw is home to many domestic and international companies. In 2006, 304,016 companies were registered in the city. Ever-growing business community has been noticed globally, regionally, and nationally. MasterCard Emerging Market Index has noted Warsaw's economic strength and commercial centre. Moreover, Warsaw was ranked as the 7th greatest emerging market.

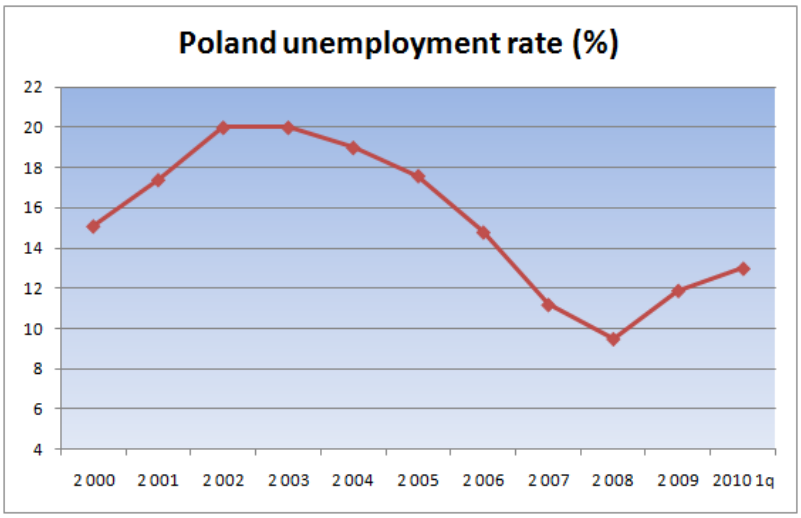
The GDP per capita in Warsaw was more than EUR 15 000 in 2008.

Employment

During last ten years Poland has experienced slight decrease in unemployment rate from 20% in 2003 to 9.5% in 2008. Most likely that fall in unemployment rate was not as fast as in Baltics due to more moderate lending.

During second half of 2009 and 1 quarter of 2010 unemployment rate has risen to 13 percent reaching levels unprecedented since 2006.

Figure 35 - A.35 Unemployment rate in Poland



Source: Central Statistical Office of Poland

Tourism industry

Foreign travellers

Table 27 - A.27 Foreign tourists accommodated from Baltic States and Finland

Country	2005	2006	2007	2008	2009
Estonia	40 268	49 677	54 413	41 789	34 592
Finland	41 514	47 190	42 949	46 101	47 492
Lithuania	76 000	88 740	108 189	111 383	101 950
Latvia	31 620	36 702	59 175	55 895	38 112

Source: Central Statistical Office of Poland

Forecasts Summary - Poland

In 2009, GDP grew by 1.7%, and it is expected that growth will increase to 2.6% in 2010, 3.2% in 2011, and 3.6% in 2012. It is likely that domestic demand will grow (especially public investments), but household consumption is expected to stay weak due to a deteriorating labour market.

Long-term forecast is 2.0% p.a.

Exports may also strengthen due to weak zloty and economic recovery in Eurozone. Risks include growing unemployment and deteriorating fiscal balances (in addition, financial sector expects the zloty to appreciate somewhat against the euro.

Thus Poland's outlook seems optimistic as GDP per capita converges with the rest of the EU's and the population grows somewhat.

1.1.7 Disposable income

Table below indicates disposable income per household member.

Table 28 - A.28 International disposable income in Finland, Baltic States and Poland

Years / Country	Annual disposable income per person, EUR				
	Finland	Estonia	Latvia	Lithuania	Poland
2000	20 865	1 674		1 444	1 682
2001	21 042	1 755		1 425	1 934
2002	21 603	1 917		1 467	2 128
2003	22 373	2 139		1 590	2 049

Years / Country	Annual disposable income per person, EUR				
	Finland	Estonia	Latvia	Lithuania	Poland
2004	23 360	2 323	2 586	1 723	1 803
2005	23 860	2 666	3 200	2 015	2 142
2006	24 322	3 331	4 049	2 366	2 534
2007	25 087	4 054	5 919	2 987	2 752
2008	24 807		6 624	3 430	3 355

Data source: National Statistical Offices

1.1.8 Summary

Tables below reflect summary of most important data of each country. Table has been supplemented with data of other countries that to some extent may influence results of RB project (mainly due to freight diverted from road and sea to rail).

GDP forecasts have been compiled from several sources (as of July, 2010):

(1) EBRD;

(2) IMF;

(3) Eurostat;

(4) Local authorities (Ministry of Finance, Central bank);

(5) Credit rating agencies.

Forecasts reflected in the table below represent average values of gathered forecasts.

Table 29 - A.29 GDP forecast for countries influenced by RB

Country, Year	Forecast (%)						
	2008	2009	2010	2011	2012	2013	Average long term growth
FINLAND							
GDP, M EUR	184 179	170 971					
GDP growth %	2,6	-7,2	1,7	2,0	2,5	2,9	1,8
GDP per capita, EUR	34 663	32 025					
ESTONIA							
GDP, M EUR	16 073	13 730					
GDP growth %	2,9	-14,6	0,8	2,9	2,2	3,8	2,4
GDP per capita	11 987	10 243					
LATVIA							
GDP, M EUR	23 157	18 845					
GDP growth %	-4,6	-18,0	-2,7	1,2	1,9	2,8	2,2
GDP per capita	10 174	8 358					
LITHUANIA							
GDP, M EUR	32 203	26 650					
GDP growth %	2,8	-14,8	-0,1	2,3	3,9	3,5	2,2
GDP per capita	9 590	7 980					

Country, Year	Forecast (%)						
	2008	2009	2010	2011	2012	2013	Average long term growth
POLAND							
GDP, M EUR	354 287	320 009					
GDP growth %	5,0	1,7	2,6	3,2	3,6	4,3	2,0
GDP per capita	9 290	8 384					
RUSSIA (TOTAL)							
GDP, B RUR	34 320	n/a					
GDP growth %	5,6	-7,9	4,1	4,1	4,5	4,6	3,5
GDP per capita, RUR	291 864	n/a					
incl. St. Petersburg region							
GDP (% of total Russia's GDP)	5,3	n/a					
GDP, B RUR	1 805	n/a					
GDP per capita, RUR	291 019	n/a					
GERMANY							
GDP, M EUR	2 495 800	2 409 100					
GDP growth %	1,3	-4,9	1,6	1,5	1,8	1,7	1,5
GDP per capita	30 392	29 424					
AUSTRIA							
GDP, M EUR	281 867	276 892					
GDP growth %	4,1	-1,8	1,2	1,3	1,8	1,7	1,5
GDP per capita	33 810	33 090					
HUNGARY							
GDP, M EUR	98 309	96 647					
GDP growth %	0,6	-1,7	0,6	2,5	3,7	3,4	2,0
GDP per capita	9 786	9 635					
CZECH REPUBLIC							
GDP, M EUR	141 885	139 508					
GDP growth %	2,5	-4,2	1,9	2,5	3,8	3,7	2,2
GDP per capita	13 604	13 297					
ITALY							
GDP, M EUR	1 567 851	1 520 870					
GDP growth %	-1,0	-5,0	0,7	1,3	1,3	1,0	1,0
GDP per capita	26 204	25 237					
UKRAINE							

Country, Year	Forecast (%)						
	2008	2009	2010	2011	2012	2013	Average long term growth
GDP, M UAH	948 056	N/A					
GDP growth %	2,3	N/A	3,3	3,6	4,8	4,2	3,5
GDP per capita, UAH	20 495	N/A					
BELARUS							
GDP, B BYR	129 791	136 790					
GDP growth %	10,2	0,2	2,6	4,3	5,0	5,0	3,5
GDP per capita, thou. BYR	13 407	14 153					

Table below clearly indicates that proportion of manufacturing and mining in Latvia and Estonia is lower than in other RB countries. Although this fact could be considered as a potential for higher growth in future that may raise demand also in transport area, we would avoid doing this since current trend has been negative for these countries and factors encouraging or hindering manufacturing are of unpredictable and volatile nature (for example, taxing).

Table 30 - A.30 GVA and its structure for RB route countries

	Country/Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total GVA (B, EUR)	Finland	115,1	121,9	125,3	126,2	132,5	136,7	143,7	156,8	161,0
	Estonia	5,5	6,2	6,9	7,8	8,6	9,9	11,6	13,6	14,3
	Latvia	6,1	6,7	7,4	8,1	9,5	11,4	14,0	18,6	20,7
	Lithuania	12,3	13,3	14,3	15,8	17,6	20,2	23,3	27,8	31,1
	Poland	157,7	180,6	198,6	186,1	174,8	211,3	245,0	264,0	310,1
Manufacturing, mining (%)	Finland	26,7	26,3	25,4	24,7	24,0	23,7	24,5	24,7	22,8
	Estonia	**18,8**	**19,3**	**19,2**	**19,2**	**18,4**	**18,2**	**17,9**	**18,0**	**17,7**
	Latvia	**13,9**	**14,1**	**13,9**	**13,6**	**13,4**	**12,9**	**12,1**	**11,8**	**11,2**
	Lithuania	23,4	24,1	22,8	23,9	25,1	24,7	23,4	21,7	20,9
	Poland	20,9	19,0	18,6	19,8	21,6	21,0	21,2	21,2	21,0
Construction (%)	Finland	6,2	6,0	5,7	5,9	6,2	6,7	6,8	6,9	7,3
	Estonia	5,6	5,6	5,9	5,8	6,0	7,1	8,3	9,1	8,3
	Latvia	6,2	5,6	5,5	5,6	5,8	6,1	7,4	9,0	9,0
	Lithuania	6,0	5,9	6,2	7,0	7,1	7,5	8,7	10,0	9,8
	Poland	7,7	7,0	6,3	5,8	5,5	6,0	6,4	7,1	7,3
Wholesale, trade, services (%)	Finland	41,2	41,8	42,4	42,0	42,6	42,3	41,9	41,7	42,6
	Estonia	50,7	50,7	50,9	51,0	51,6	51,5	51,7	50,2	49,7
	Latvia	50,9	52,4	53,0	53,3	54,2	55,6	55,9	54,1	52,9
	Lithuania	43,6	44,2	46,0	45,7	44,8	46,4	46,8	48,0	47,9
	Poland	43,3	45,2	45,0	45,4	46,8	46,9	47,4	46,4	47,2

Table below reflects GVA forecast for all three Baltic countries.

GVA has been forecasted using trend extrapolation method applying existing economic conditions (expected changes in demography and tax or monetary policies, for example) and consensus methods by gathering list of expert opinions thus creating synthesis of factors affecting GVA changes in the future.

Table 31 - A.31 GVA forecast for Baltic countries

EE00 Estonia	2009	2010	2011	2012	2013	2015	2020	2025	2030	2035	2040	2045
Value added total (Estonia), incl.	**11 875,1**	**11 932,2**	**12 325,0**	**12 682,8**	**13 185,1**	**13 948,2**	**15 712,4**	**17 749,5**	**20 105,0**	**22 832,6**	**25 994,9**	**29 666,1**
EE001 Põhja-Eesti	7 079,9	7 186,0	7 454,6	7 715,6	8 075,1	8 597,5	9 830,2	11 267,1	12 942,9	14 898,4	17 181,6	19 848,8
EE004 Lääne-Eesti	1 019,5	990,3	1 009,7	1 023,1	1 042,7	1 073,8	1 153,2	1 239,4	1 332,9	1 434,5	1 544,8	1 664,6
EE007 Kirde-Eesti	894,3	879,6	901,6	913,6	936,2	964,9	1 037,1	1 115,5	1 200,6	1 293,0	1 393,2	1 502,2
EE006 Kesk-Eesti	797,6	787,0	808,0	819,5	838,4	865,8	934,5	1 009,2	1 090,4	1 178,5	1 274,4	1 378,6
EE008 Lõuna-Eesti	2 083,8	2 089,3	2 151,0	2 211,0	2 292,6	2 446,4	2 757,3	3 118,3	3 538,3	4 028,2	4 600,9	5 271,9
Value added total (Latvia) incl.	**17 118,8**	**16 297,5**	**16 325,3**	**16 707,5**	**17 053,0**	**17 740,6**	**19 786,4**	**22 156,8**	**24 913,3**	**28 130,6**	**31 899,5**	**36 330,7**
RIGA (LV006)	9 208,4	8 798,2	8 787,0	8 973,6	9 165,5	9 540,0	10 963,6	12 643,4	14 630,8	16 988,2	19 791,3	23 132,3
LV007 Riga Region (except Riga)	2 096,1	1 978,9	1 973,5	2 012,7	2 052,8	2 135,4	2 406,3	2 718,6	3 080,0	3 500,0	3 990,6	4 566,8
LV008 Vidzeme Region	1 249,1	1 187,0	1 197,3	1 231,6	1 254,6	1 301,8	1 366,9	1 436,3	1 510,2	1 589,0	1 673,1	1 762,8
LV003 Kurzeme Region	1 794,9	1 697,1	1 710,5	1 758,8	1 795,7	1 869,4	1 973,7	2 085,6	2 205,7	2 334,8	2 473,8	2 623,9
LV009 Zemgale Region	1 460,4	1 386,3	1 400,0	1 443,4	1 471,2	1 528,2	1 630,5	1 741,6	1 862,3	1 993,5	2 136,2	2 291,5
LV005 Latgale Region	1 309,9	1 249,9	1 256,9	1 287,5	1 313,1	1 365,8	1 445,3	1 531,2	1 624,2	1 725,0	1 834,4	1 953,5
Value added total Lithuania incl.	**23 893,2**	**23 843,1**	**24 322,2**	**25 234,8**	**26 097,6**	**27 247,5**	**30 367,5**	**33 874,9**	**37 821,6**	**42 266,4**	**47 276,9**	**52 930,1**
LT001 Alytus County	2 494,0	2 480,6	2 525,9	2 608,6	2 694,1	2 790,1	3 045,8	3 325,6	3 631,8	3 967,0	4 334,1	4 736,2
LT002 Kaunas County	4 302,3	4 281,2	4 371,3	4 523,9	4 682,1	4 910,5	5 534,3	6 241,9	7 045,1	7 957,5	8 994,9	10 175,3
LT003 Klaipėda County	2 509,8	2 502,3	2 556,5	2 646,6	2 740,1	2 875,2	3 243,6	3 660,7	4 133,0	4 668,1	5 274,5	5 962,0
LT004 Marijampolė County	709,9	705,0	717,4	743,4	766,6	794,4	868,7	950,2	1 039,6	1 137,7	1 245,5	1 363,8
LT005 Panevėžys County	1 318,0	1 312,4	1 332,9	1 379,8	1 420,8	1 473,2	1 613,1	1 766,8	1 935,6	2 121,1	2 325,0	2 549,2
LT006 Šiauliai County	1 648,6	1 645,1	1 672,4	1 732,0	1 784,7	1 848,1	2 017,1	2 202,0	2 404,5	2 626,3	2 869,3	3 135,6
LT007 Tauragė County	379,9	378,8	384,4	397,6	409,3	424,0	463,5	506,8	554,3	606,5	663,8	726,8
LT008 Telšiai County	934,5	927,1	941,2	974,4	1 002,8	1 039,0	1 135,5	1 241,4	1 357,5	1 484,9	1 624,7	1 778,3
LT009 Utena County	926,6	920,7	934,6	967,6	995,3	1 030,9	1 125,6	1 229,7	1 343,9	1 469,5	1 607,5	1 759,3
LT00A Vilnius County	8 669,5	8 690,0	8 885,7	9 260,9	9 601,9	10 062,1	11 320,3	12 750,0	14 376,3	16 227,7	18 337,5	20 43,7

1.1.9 International trade

International trade is the exchange of goods and services between countries and in most countries it represents a significant share of GDP. In connection with RB project it is important to demonstrate international trade in north – south direction indicating most important linkages among countries that to some extent may use services provided by RB.

Table below describes flows and linkages of international trade among those countries.

As it can be noticed from table below:

(1) Although international trade data between Russia and Germany is indicated as a total value, it cannot be used for further appraisals since most of the exports and imports are east – west oriented. What may be useful for RB project in a long – term is the international trade between Germany and Sankt-Petersburg region which is located in north-west part of Russia and accounts 5,3% of Russia's total GDP (Population (~6,2 M) of Sankt-Petersburg region represent 4,4% of total population);

(2) The value of international trade among Baltic States and Poland in 2008 has been only 12.2 B EUR. In comparison trade amount between Germany and Baltic States has reached 7,5 B EUR, but trade amount between Finland and Germany totalled 15,3 B EUR.

Table 32 - A.32 International trade

Year 2008		TOTAL FIGURES											
		Imports M, EUR											
Exports, M, EUR	**Country**	Finland	Estonia	Latvia	Lithuania	Poland	Germany	Russia	Austria	Hungary	Czech Rep.	Ukraine	Belarus
	Finland		1 438	471	442	2 115	6 560	7 618	420	352	351	628	129
	Estonia	1 380		762	613	160	429	880	38	17	46	141	54
	Latvia	195	885		1 053	236	510	629	27	20	40	92	139
	Lithuania	220	918	1 766		929	1 151	2 582	48	53	116	523	723
	Poland	1 074	497	769	2 112								
	Germany	8 787	1 456	1 397	2 505			32 212					
	Russia	10 174	832	1 140	6 330		37 087						
	Austria	562	85	183	186								
	Hungary	383	71	124	175								
	Czech Rep.	629	136	161	315								
	Ukraine	65	117	100	295								
	Belarus	157	318	356	361								

Data source: National Statistical Offices

Table below indicates main commodity flows among countries along RB route.

Table 33 - A.33 Main commodity flows [12]

O-D	Commodity	Thousand metric tons (Year 2008)
Finland - Germany	Paper	2 549
Latvia - Finland	Wood products	1 257
Finland - Poland	Mineral fuels and Oils	1 149
Finland - Germany	Wood products	1 084
Lithuania - Latvia	Mineral fuels and Oils	825
Lithuania - Estonia	Mineral fuels and Oils	599
Lithuania - Finland	Wood products	411
Finland - Poland	Paper	404
Germany - Finland	Iron and steel	404
Finalnd- Germany	Mineral fuels and Oils	347
Latvia - Germany	Wood products	325
Poland - Lithuania	Food	305

Data source: National Statistical Offices

1.1.10 Motorisation rate

Eurostat provides motorisation data only up to year 2006 but table below contains estimation for year 2010 that is based on data gathered either from local statistical bureaus or state agencies responsible for vehicle registration.

Table 34 - A.34 Existing level of motorisation

Country	2000	2001	2002	2003	2004	2005	2006	2010 est.	Correlation with GDP per capita
Estonia	339	299	295	321	350	367	413	407	0,89
Finland	412	416	422	436	448	462	475	548	0,90
Lithuania	336	326	341	365	384	428	470	515	0,99
Latvia	236	250	266	280	297	324	360	373	0,98
Poland	261	275	289	294	314	323	351	383[13]	0,94
EU27 countries	422	431	438	443	446	457	466	n/a	0,89

Data source: Eurostat, for 2010 National Statistical Offices

Usually the level of motorisation (number of passenger cars per 1000 inhabitants) is forecasted by applying a regression approach, which usually links motorisation with GDP per capita. As it can be noticed from table correlation level is very high.

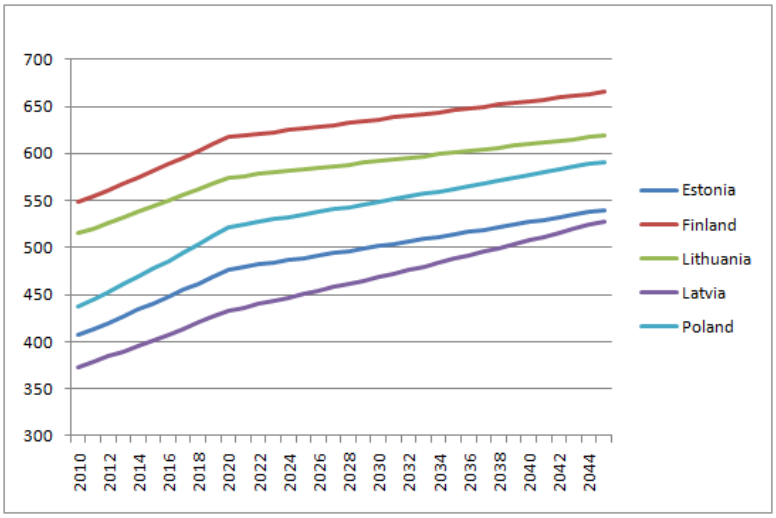
[12] *It should be noticed that data (it terms of metric tons) only for Finland and Germany is obtained from reliable sources. For other countries data has been obtained with an assumption that commodity prices are similar in all countries.*

[13] *Year 2007*

Table 35 - A.35 Average annual GDP per capita growth rates for the forecast horizon

Country	2010 - 2020	2020 - forward
Finland	1,6	0,5
Estonia	1,2	0,3
Latvia	1,1	0,3
Lithuania	1,5	0,8
Poland	1,8	0,5

Figure 36 - A.36 Forecast of motorisation level (passenger cars per 1000 inhabitants)



Appendix B – Analysis of Supply of Transport Services

Appendix B – Analysis of Supply of Transport Services

1.2 Overview

This section discusses the supply of transport in relation to the existing level of service for each mode of transport on the corridor. This section presents an overview of the supply of current transport services for both freight and passenger traffic. The section also presents an indication of current volumes in order to put these services into context.

1.3 Passenger Services

Section 1.3.1 outlines a number of Passenger Metrics which have been established to enable the existing supply of transport services for the various modes to be scored in relation to quality, service and price, thereby providing a simple framework for comparing existing transport service provision on the corridor.

The report moves on to discuss the existing Rail, Coach, Road and Air transport services within each of the Baltic States and for key cross border movements, including an assessment of quality against the Passenger Metrics framework.

1.3.1 Definition of Passenger Metrics

For each transport alternative, quality, service and pricing metrics have been applied to the identified key journeys. This section gives details of the approach taken to evaluate the transport services for each of these modes.

The assessment has been quantitative where possible, but each metric has also been related to a five point scoring system to permit comparison between modes and journeys and for ease of presentation in the final summary table. The scoring system is as shown in the following, with a detailed explanation of the methods applied following in this section.

Table 36 - B.36 - Passenger Metric Scale

Excellent	5
Good	4
Fair	3
Poor	2
Very Poor	1

Quality

The quality of a service has been related to the quality of the travelling environment, whether travel is by private car, rail, coach, air or sea and the quality of the infrastructure supporting the journey (e.g. rail stations, service stations). The scoring for this metric is qualitative and averaged from the scores of two elements: comfort and facilities:

Table 37 - B.37 - Scoring of Comfort

Score		Example specification (Rail, Coach, Air, Sea)	Example specification (Car)
Excellent	5	Modern fleet, with high quality waiting facilities at the stations	Car travel on well-maintained, TEN-T highway routes.
Good	4	Modern fleet,	Car travel on other highway routes.
Fair	3	Older fleet, but well maintained.	
Poor	2	Older fleet, requiring maintenance, or with some overcrowding.	
Very Poor	1	Older fleet, requiring maintenance and with significant overcrowding.	

Table 38 - B.38 - Scoring of Facilities

Score		Example specification (Rail, Coach, Air, Sea)	Example specification (Car)
Excellent	5	Modern fleet with onboard amenities.	
Good	4	Modern fleet without amenities.	Car travel on main routes with good service station facilities.
Fair	3	Older fleet, but well maintained.	Car travel on other highway routes with less service station facilities.
Poor	2	Older fleet, requiring maintenance, or with some overcrowding.	
Very Poor	1	Older fleet, requiring maintenance and with significant overcrowding.	

Service

The service provision has been related to the frequency, reliability and speed of the journey, whether travel is by private car, rail, coach, air or sea. The scoring for this metric is principally quantitative and averaged from the scores of the three elements.

Table 39 - B.39 Scoring of Frequency

Score		Example specification (Rail, Coach, Air, Sea)	Example specification (Car)
Excellent	5	Half-hourly service or better throughout the day	Assume car travel can be made at any time.
Good	4	Half-hourly service or better in peak times, hourly rest of day. Service extends outside working hours.	
Fair	3	Hourly service or better in peak times.	
Poor	2	At least five services per day.	
Very Poor	1	Less than five services per day.	

Table 40 - B.40 - Scoring of Reliability

Score		Example specification (Rail, Coach, Air, Sea)	Example specification (Car)
Excellent	5	More than 90% of services on time (within 5 minutes).	No congestion on route.
Good	4	More than 70% of services on time.	Some congestion on route.
Fair	3	More than 50% of services on time.	Significant congestion on some sections of route.
Poor	2	More than 30% of services on time.	Congestion, on large sections of route.
Very Poor	1	Less than 30% of services on time.	Route heavily congested.

Table 41 - B.41 - Scoring of Speed

Score		Example specification (Rail, Coach, Air, Sea)	Example specification (Car)
Excellent	5	Average journey speed > 150kph	
Good	4	Average journey speed > 120kph	
Fair	3	Average journey speed > 90kph	
Poor	2	Average journey speed > 60kph	
Very Poor	1	Average journey speed < 60kph	

For air travel an assumed 2 hour processing time (for check-in, security, baggage collection etc has been added to each journey time).

Pricing

The pricing provision has been related to the fare costs for public transport, with an assumption that the cost of car journeys is central within the range of prices.

Table 42 - B.42 - Scoring of Pricing

Score		Example specification (Rail, Coach, Air, Sea)	Example specification (Car)
Excellent	5	Cost less than €2 per 100 km	
Good	4	Cost greater than €2 per 100 km	
Fair	3	Cost greater than €5 per 100 km	Assumed relative cost of car travel.
Poor	2	Cost greater than €10 per 100 km	
Very Poor	1	Cost greater than €20 per 100 km	

Mode Share

A metric has also produced based upon the observed / estimated mode share of the service in the base year, 2009. The scoring system is retained as a 1 -5 numerical scale; however the descriptions have been changed.

Table 43 - B.43 - Scoring of Mode Share

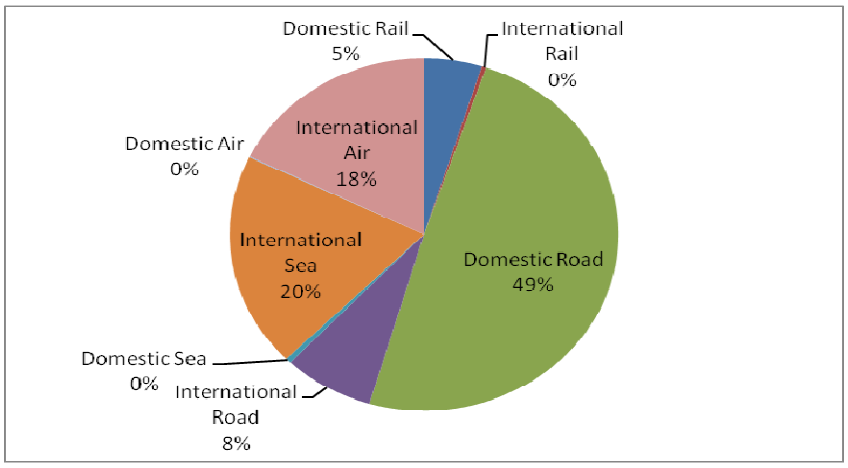
Score		Example specification (Rail, Coach, Air, Sea)
Very High	5	> 50%
High	4	> 25%
Moderate	3	> 10%
Low	2	> 5%
Very Low	1	< 5%

1.3.2 Estonia

Current Modal Split – Passenger Traffic

In the North-South corridor over half of current passenger kms are carried out by road transport (car or coach). Rail transport makes up only a very small proportion of current passenger traffic. For international traffic sea (to Finland and Sweden) and air make up the majority of international transport, road traffic makes up 17% of current international journeys and rail makes up less than 1% as there are currently no rail services across the Latvian border. Road transport makes up 90% of current domestic traffic, with rail making up 9%.

Figure 37 - B.37 - Current Modal Split of Passenger Traffic, % of passenger kms, 2009

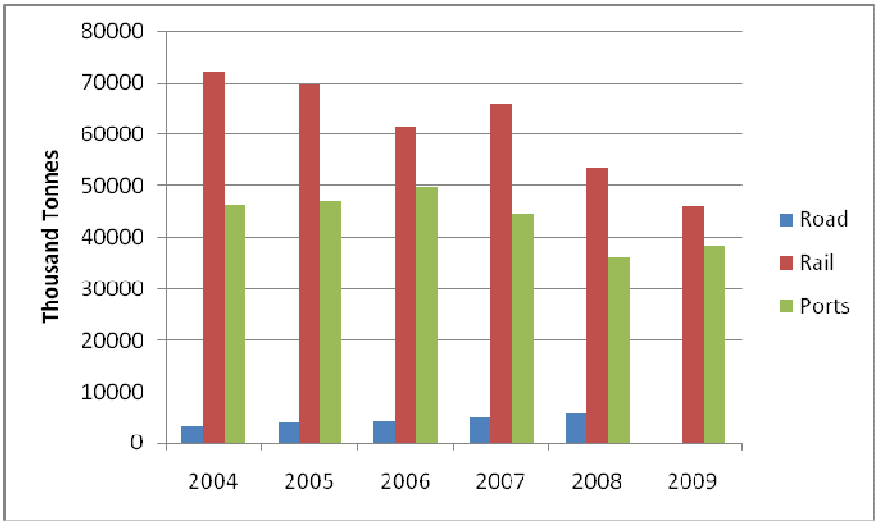


Note: Tallinn – Tartu air service only introduced in early 2011. Ddata shown is for model base year of 2009 therefore air share of internal trips in corridor in 2009 shown as zero.

Current Modal Split – Freight Traffic

The majority of freight to/from Estonia is carried by either rail or sea. The graph below shows the modal split of freight within Estonia for goods carried. In 2008, the model base year, 58% of goods to/from and within the country were carried by rail, 38% by sea and 6% by road. Taken from Statistics Estonia. The rail trend over the last 3 years has been downwards, 2007-68m, 2008-53m, 2009-46m. Of the latter 39m is made up of petroleum and oil shale movement.

Figure 38 - B.38 - Current Modal Split of Freight Traffic



It can be seen that from 2007 to 2009 a major decline in both rail and sea freight traffic has been seen. Eesti Raudtee have, however, stated that rail freight volumes have increased substantially in 2010 compared to 2009 (the first eight months show a 15.5% increase on the same period last year) indicating that volumes are returning to rail.

Routes which travel in a North – South direction to/from Estonia with an annual tonnage of over 15,000 tonnes per annum have been considered as routes which may be viable for Rail Baltica as this equates to an approximately fortnightly service for non bulk traffics. Routes with lower volumes may provide some traffic; however, they will not form the core service for Rail Baltica.

In terms of traffic types relevant cargo has been taken as either dry bulk, general cargo or non bulk traffics such as containers, ro ro or food products.

The following Baltic freight movements have been considered as part of this study:

1. Lõuna-Eesti to Põhja-Eesti and Kesk-Eesti and vice versa
2. Riga City and Region, Zemgale and Vidzeme to Põhja-Eesti, Kesk-Eesti and Lõuna-Eesti and vice versa
3. All Lithuania regions to Põhja-Eesti, Kesk-Eesti and Lõuna-Eesti

These movements are deemed to be the only movements likely to have sufficient length of haul and proximity to the proposed line to be of relevance to the project. More information on how Baltics traffic has been split and the levels of accuracy and detail available can be found in the modelling report.

The table below shows the current volumes on each of the routes for bulk / general cargo and non bulk traffics and the modal split of these volumes.

Table 44 - B.44 - 2008 Tonnages for Major Estonian North – South Freight Routes

Origin	Destination	Non Bulk	Dry Bulk / General Cargo	Modal Split Dry Bulk / General Cargo			Modal Split Non Bulk		
		Current Volumes (000 Tonnes pa)	Current Volumes (000 Tonnes pa)	Road	Rail	Sea	Road	Rail	Sea
Estonia (N)	Estonia	815	1318	86%	14%	0%	94%	6%	0%
Estonia (S)	Estonia	668	1101	83%	17%	0%	93%	7%	0%
Estonia	Finland	328	3177	5%	1%	95%	66%	1%	33%
Estonia	Germany	308	738	8%	0%	92%	19%	0%	81%
Estonia	Latvia	177	371	78%	15%	7%	90%	8%	2%
Estonia	Lithuania	83	92	100%	0%	0%	78%	0%	22%
Estonia	Russia – Gulf of Finland	202	323	100%	0%	0%	100%	0%	0%
Estonia	Poland	62	0	0%	0%	0%	100%	0%	0%
Finland	Estonia	316	2361	9%	0%	91%	54%	0%	46%
Germany	Estonia	608	314	33%	0%	67%	14%	0%	86%
Latvia	Estonia	62	439	48%	36%	17%	37%	63%	0%
Lithuania	Estonia	55	67	99%	0%	1%	91%	0%	9%
Russia – Gulf of Finland	Estonia	120	189	100%	0%	0%	100%	0%	0%
Poland	Estonia	18	24	75%	0%	25%	66%	0%	34%

Sources: Eurostat for road and sea freight data, rail freight data from Eesti Raudtree Annual Report 2008, detailed information provided by the Lithuanian government and detailed rail freight data provided by LDZ

The key flows which Rail Baltica may compete with are:

- Germany – Estonia and Estonia - Germany: predominantly sea freight currently, both bulk and non bulk traffics
- Estonia – Latvia and Latvia – Estonia: primarily road freight currently, majority bulk traffic

Some competition may also be possible for longer internal flows and some flows to/from Finland if these are with companies based in the south of the country.

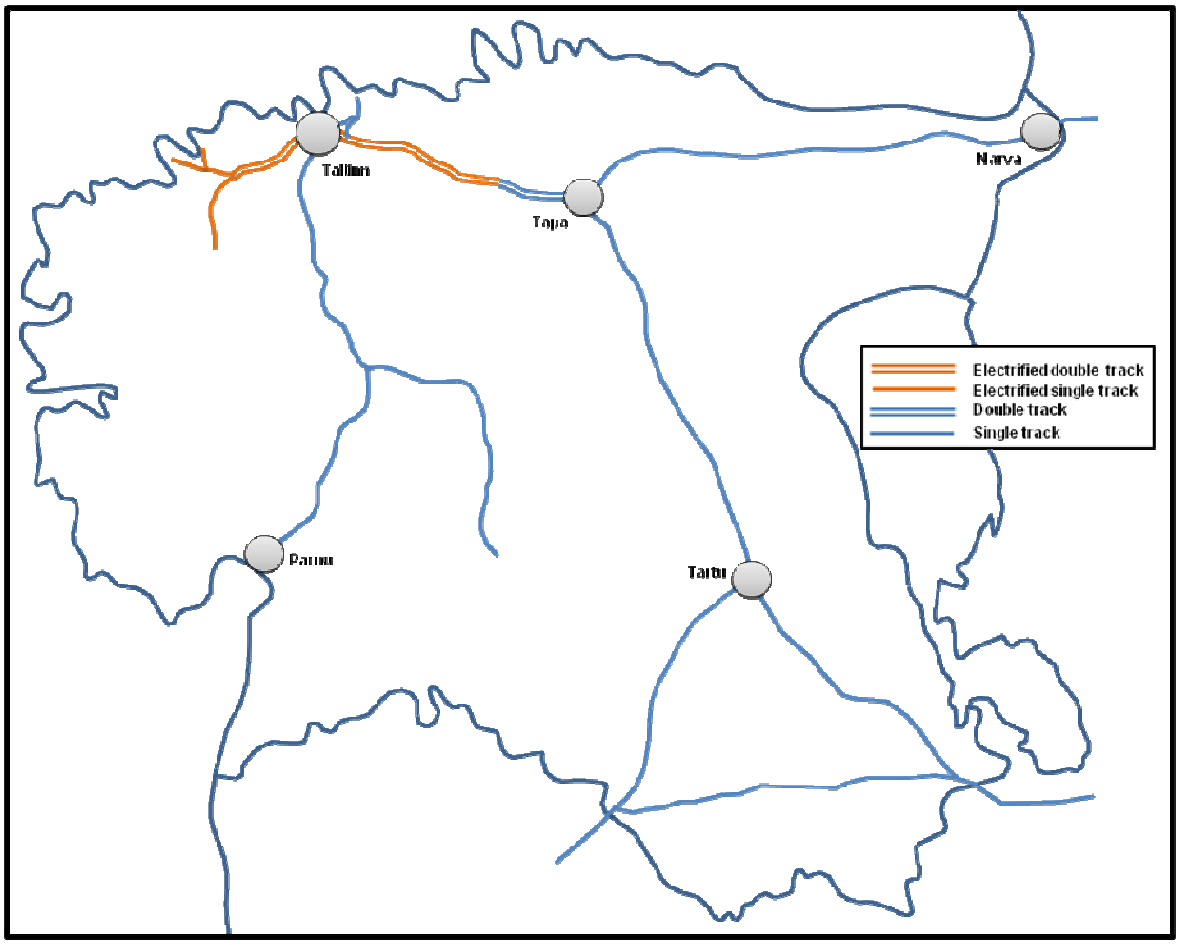
Rail Network

The Estonian railway network is principally a single track network linking the capital city, Tallinn, with the other major towns of Narva, Tartu, Parnu and Viljandi. In the vicinity of Tallinn the network is double-tracked and electrified. Additional sections of network link Tartu to the border of Latvia and the Russian Federation, with a further section of track linking up these two borders. It should be noted, however, that in 2009 there were no international rail services across the Latvian Border.

Although there are rail services on the key corridors from Tallinn to Parnu and Tallinn to Tartu these are infrequent and suffer from slow average journey speeds, reducing the competitiveness of rail compared to coach and car. The state of the rolling stock can at best be described as satisfactory but does vary significantly depending upon the route. Some routes operate different classes of travel allowing passengers to choose their desired quality. In overall terms punctuality and safety are good.

The following Figure represents the Estonian rail network in 2009.

Figure 39 - B.39 - Estonian Rail Network



Passenger Rail Development Plans

In January 2009 a positive funding decision from the European Committee for the TEN-T project “Reconstruction of the cross-border section of Tartu-Valga railway line was received. The implementation deadline of the project is 31 December 2010.

Freight Rail Development Plans

Within the Estonian Transport Development Plan a variety of measures are detailed to increase freight traffic and diversify the assortment of goods passing through Estonia in transit and the geography of goods transportation. A 71% growth in container transport by 2013 is noted as an especially important objective.

To achieve this objective the plan states that the legislative environment will be simplified and supervision over the competition situation will be improved and that cargo handling at the border will be reduced, along with acceleration of visa procedures (compared to Finland who is the main competitor in the transport sector).

Passenger Rail Characteristics

For the purposes of the study, the following key passenger movements have been identified: Tallinn – Tartu and Tallinn – Parnu.

Table 45 - B.45 - Estonian Rail Quality Metrics – Passengers, Detailed Information

	Line description	Approx-imate Distance (Km)	Weekday Service Frequency (trains per day)	2-way Service Volume passengers per day	Average Journey Time (hh:mm)	Average Journey Speed (kph)	Economy Single Fare (Euros)
Tallinn – Tartu	Electrified from Tallinn – Aegviidu, double-track from Tallinn - Tapa	190	6	299	02:44	70	6.71
Tartu – Tallinn			6		02:34	74	
Tallinn – Parnu	Single track	130	2	56	02:43	48	5.43
Parnu - Tallinn			2		02:39	49	

Table 46 - B.46- Estonian Rail Quality Metrics – Passengers, Routing Scoring

	Quality		**Service**			**Mode Share**	**Price per 100 km**
	Comfort	Facilities	Frequency	Reliability	Speed (kph)		
E S T O N I A							
Tallinn-Tartu	Average	Average	6 trains per day (weekdays)	Average	70	6%	3.53
Score	3	3	2	3	2	2	4
Tallinn-Parnu	Average	Average	2 trains per day (weekdays)	Average	49	2%	4.18
Score	3	3	1	3	1	1	4

Rail Freight Characteristics

There are 45 rail freight stations listed within Estonian Railways tariff and infrastructure information. According to the Estonian Investment and Trade Agency the rail freight market in 2008 was divided as follows:

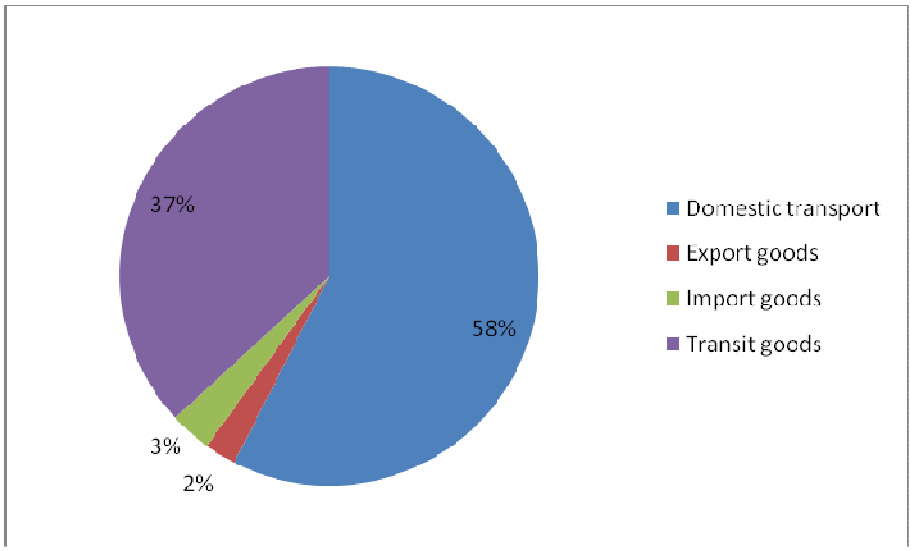
- Estonian Railway 51% (Eesti Raudtee),
- Westgate Transport OÜ 31%,
- E.R.S. AS 13%,
- Spacecom AS 5%.

Westgate, E.R.S. and Spacecom appear to only offer liquid bulk services and therefore are of less interest with regards to Rail Baltica. Eesti Raudtee provide services for freight tracking by rail.

However, following a dispute concerning business operations Estonia Railways have withdrawn the right to use the country's rail infrastructure from Spacecom AS and Westgate Transport OÜ. Their volumes have been taken over by AS E.R.S. There are currently two main Railways Undertakings operating on the TEN-T network (AS ECR Cargo and AS E.R.S.). In the years to come it is very likely that additional operators will apply for licences to run freight trains, setting up in competition with the existing companies. Some of these operators will have bases in other countries.

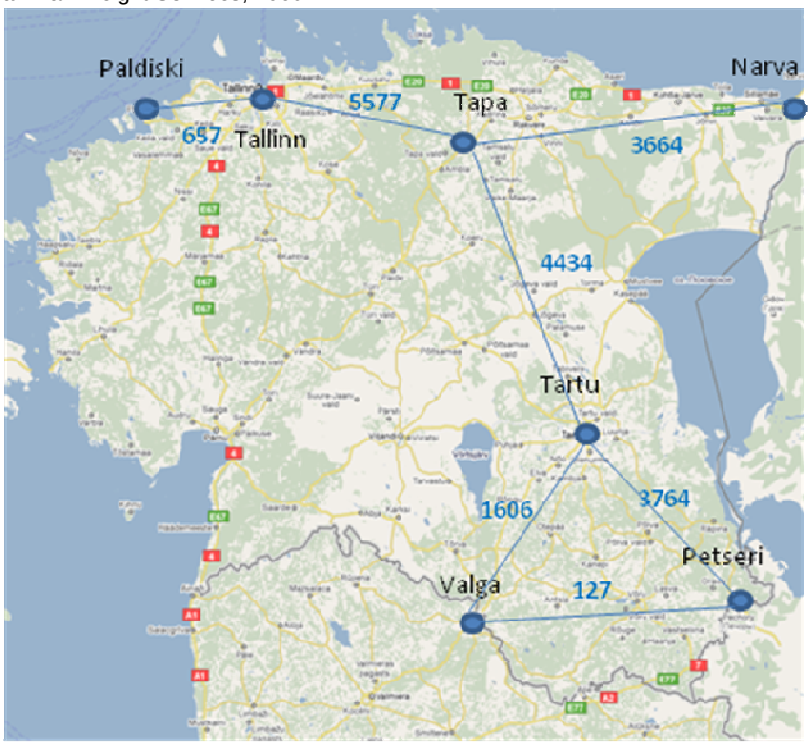
Over half of current rail freight traffic is domestic transport (primarily oil shale, petroleum products and building materials), with the majority of the remainder being transit traffic. The key markets for export goods are building materials, chemicals and food, for imports chemical products, metal products and wood and cork and for transit food, fuel, ores and chemicals.

Figure 40 - B.40 - Estonian Rail Freight Traffic in 2008, Proportional Split of Tonnes



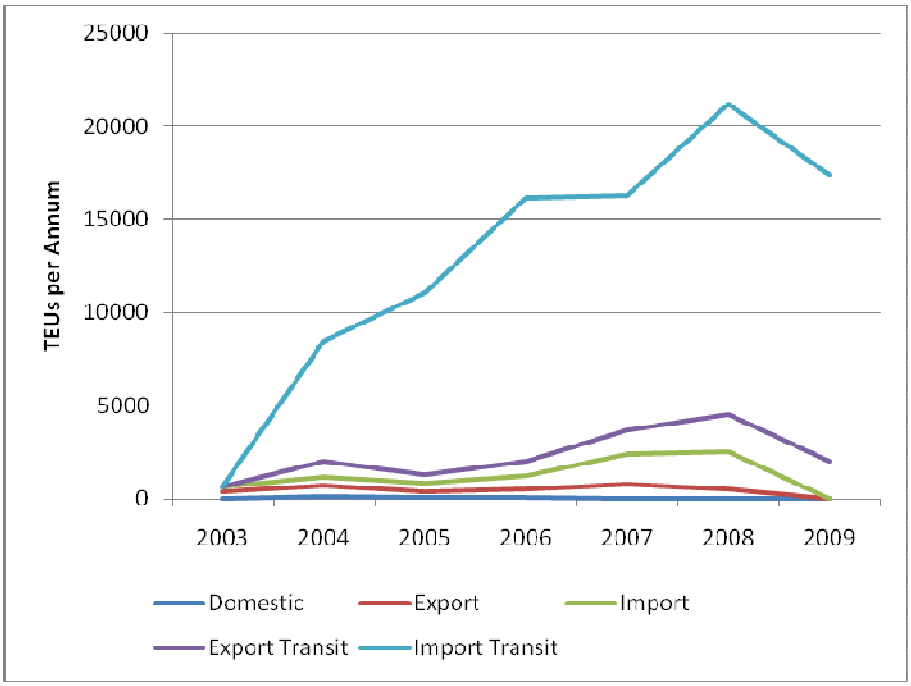
In 2009 rail freight services ran as can be seen on the map below. The majority of the services travelled to Russia via either Petseri or Narva, around 1600 services travelled in Latvia via Valga (a decrease of 36% on the previous year and just over half of pre-recession volumes).

Figure 41 - B.41- Estonian Rail Freight Services, 2009



Rail container transport is currently dominated by imported transit containers. Volumes of all types of container traffic increasing sharply from 2003 until 2008 followed by a dip in 2009.

Figure 42 - B.42 - Estonian Rail Freight Container Volumes, 2003 - 2009



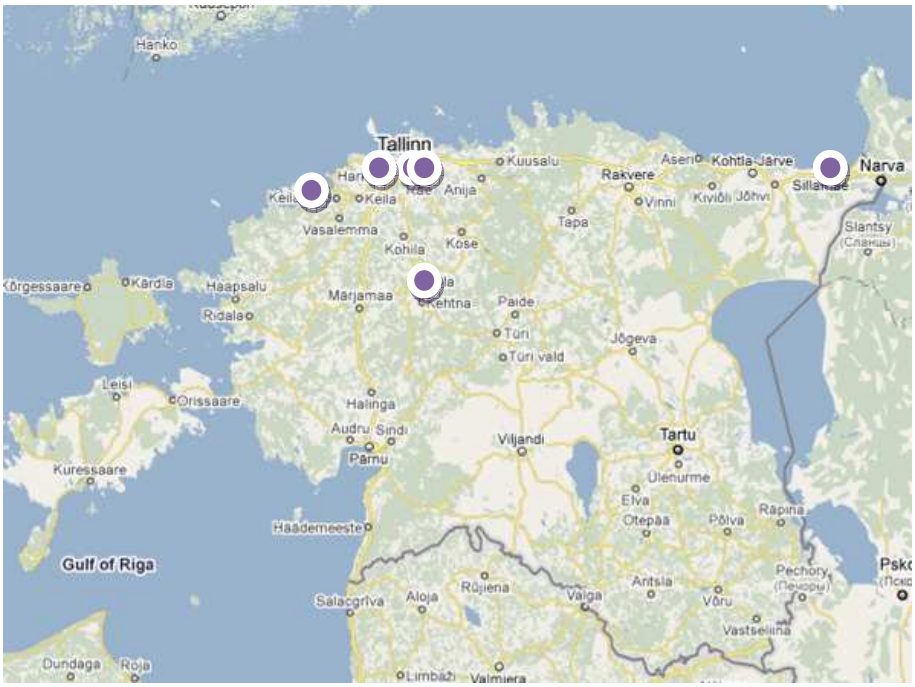
Intermodal Facilities

There are 6 rail stations in Estonia which are capable of handling containers:

- Sillamäe
- Ülemiste
- Rapla
- Paldiski
- Muuga
- Maardu

These can be seen on the map below. Four of the terminals are related to Tallinn and Tallinn port. The remaining two include one at the border with Russia and one on the north-south line through the country heading to Parnu.

None of these terminals would appear to be classed as official intermodal terminals. Providing rail access to the Industrial Park of Muuga Harbour is part of the ports long term development plans.



Rail Freight Prices

For rail freight the tariffs for carriage of cargo are determined by cargo train operators. These tariffs are not regulated, except general restrictions arising from the competition law (prohibition to charge excessive prices, discriminate or cross-subsidise). The cargo operators calculate the price for carriage of particular shipment on basis of type of cargo, distance, volume etc. The tariff policy for EVR Cargo, the largest Estonian freight operator, is publicly available.

Simplified tariffs are as follows:

Table 47 - B.47- Rail Freight Prices in Estonia: Large-capacity container (except refrigerated and tank-container) – Price in Euros

Distance	Laden				Empty			
км	20'	30'	40'	45'	20'	30'	40'	45'
0 - 50	37	49	74	107	18	24	37	54
51 - 100	69	96	137	199	34	48	69	99
101 - 200	137	192	274	398	69	96	137	199
201 - 300	208	288	415	602	104	144	208	301
301 - 400	274	384	548	795	137	192	274	398
401 - 500	343	480	685	994	171	240	343	497

Table 48 - B.48- Rail Freight Prices in Estonia: Bulk Traffic – Price in Euros

Distance km	Hoppers, Gondolas, Platforms	Covered Wagons, Car Carriers and Tanks	Machinery, equipment and spare parts, Industrial and Cultural Goods and Mixed consignments	Refrigerated Wagons	Tobacco, Explosives, Arms and Ammunition	Especially dangerous goods
Up to 110	**4**	**5**	**6**	**7**	**8**	**12**
151-160	**6**	**7**	**8**	**9**	**11**	**17**
201-210	**7**	**9**	**10**	**12**	**15**	**22**
251-260	**9**	**11**	**12**	**14**	**18**	**27**
301-310	**11**	**13**	**15**	**17**	**21**	**32**
351-360	**12**	**15**	**17**	**20**	**24**	**36**
401-410	**14**	**16**	**19**	**22**	**28**	**41**
451-460	**15**	**18**	**21**	**24**	**30**	**46**
491-500	**16**	**20**	**23**	**26**	**33**	**49**

It should be noted that tariffs are not provided for journeys over 500km (which form a substantial proportion of proposed Rail Baltica traffic).

EVR Cargo has a separate container traffic division who were asked to quote for two typical north-south rail freight journeys. They provided the following quotes:

1. Tallinn Muuga - St Peterburg Avtovo FOR/FOR
20` 350USD
40´ 540USD

2. Tallinn Muuga - Riga Krasta (import) FOR/FOR
20` 300USD
40´ 390USD

These quotes are substantially cheaper than the publically available tariffs suggest (15% cheaper for a 20' container to Riga) and the pricing structure between 20' and 40' containers is different – within the tariffs rates for a 40' container are exactly double those for a 20', whereas the prices quoted have an increase of between 30 and 50% for a 40' over a 20'.

The table below presents the standard tariff prices per km compared to the quotes received. The journey lengths have been selected to represent likely journeys: the import/export flow is the distance from Tallinn to Riga.

Table 49 - B.49- Price in Euros: Quoted Rail Freight Rate Compared to Published Tariff for an Average Lorry Load

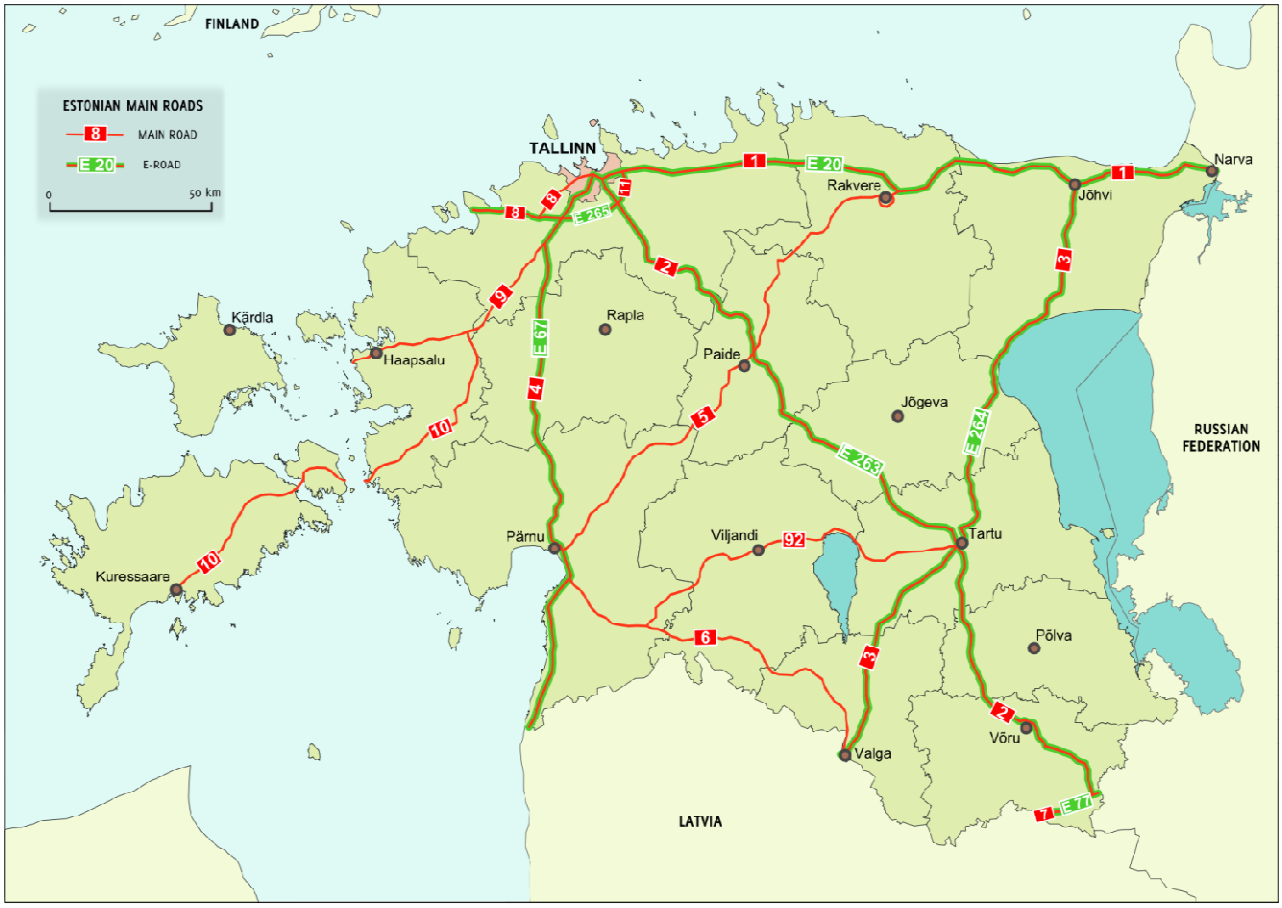
	Standard Tariff		**Quoted Rate**	
Journey Type	**Domestic**	**Import / Export**	**Tallinn - Riga**	**Tallinn – St Petersburg**
Distance Assumed	91km	351km	351km	323km
Bulk (hopper, gondola, platform)	0.81	0.69		
40' Container	1.5	1.56	0.86	1.3
20' Container	0.75	0.78	0.66	0.84

Road Network

Estonia has a number of E-Roads linking cities with neighbouring countries. Of particular interest to the study are the E67 linking Tallinn with Parnu and the Latvian border, the E263 linking Tallinn with Valga on the Latvian border via Tartu. Other key routes include the E20 east-west route from Tallinn through to Narva on the border of the Russian Federation. In general, the quality of the roads can be considered good. The busiest highways (for example Tallinn-Tartu) are considered to be over capacity and for this reason a little unsafe. Some of the busiest highways have received criticism due to the low number of driving lanes and what are arguably low speed limits compared to elsewhere in Europe.

The following Figure displays all the routes classified as E-Roads within Estonia together with the other main highway routes.

Figure 43 - B.43 - E-Roads and Other Main Highways in Estonia



New Highway Development Plans

The following planned highway schemes are relevant to the Rail Baltica project.

- Reconstruction of Tallinn – Tartu road. E263 Tallinn-Tartu-Võru-Luhamaa road (hereafter Tartu road) is the longest road that crosses Estonia diagonally being a connecting link between Northern area and South-East area of the state. The total length of Tartu road is 288.5 km (17.8% of the main road network). This project may have a negative impact on Rail Baltica since it may lead to lower demand for passenger services between Tartu and Tallinn if the road is maintained well;
- Tallinn – Paldiski road (There are regular ferries between Paldiski's harbour and Kapellskar, Sweden/ Hanko, Finland /Lübeck, Germany);
- Consideration is being given in the long term to reconstructing the Via Baltica section Ikla – Tallinn into a 4 lane road, but no specific decisions have been made and implementation years are currently unclear.

Key Routes for Car Passenger Traffic

Table 50 - B.50- Estonian Road Quality Metrics (Cars) – Passengers, Detailed Information

	Highway description	Approximate Distance (Km)	Traffic volume 2-way (AADT)	Average Journey Time (hh:mm)	Average Speed (kph)
Tallinn – Tartu	E-263: dual-carriageway for 29 km out of Tallinn, otherwise single-carriageway	190	3,305	02:40	71
Tallinn – Parnu	E67: dual-carriageway for 14 km out of Tallinn, otherwise single-carriageway	130	2,872	01:55	68

Table 51 - B.51 - Estonian Road Quality Metrics (Cars) – Passengers, Route Scoring

	Quality		**Service**			**Mode Share**	**Price per 100 km**
	Comfort	Facilities	Frequency	Reliability	Speed (kph)		
E S T O N I A							
Tallinn-Tartu	Fair	Fair	Anytime	Fair	71	70%	8.55
Score	3	3	5	3	2	5	3
Tallinn-Parnu	Fair	Fair	Anytime	Fair	68	80%	8.55
Score	3	3	5	3	2	5	3

Coach Network

An extensive network of inter city coach services has developed in Estonia operated by modern coaches with high levels of customer service, particularly on the busier routes such as Tallinn – Tartu and Tallinn – Parnu. Tallinn is linked to Tartu at least every 30 minutes and approximately every hour to Parnu. All in all, the perceived quality of coach transport is different depending on the destinations but on average can be estimated as good.

New Coach Development Plans

The coach operators should benefit from the planned enhancements to the road network outlined above for Estonia. This should enable faster journey times to be achieved than currently on key corridors such as Tallinn to Tartu.

Key Routes for Coach Traffic

Table 52 - B.52 - Estonian Road Quality Metrics (Coaches) – Passengers, Detailed Information

	Approximate Distance (Km)	Service Frequency (coaches per day)	Service Volume (2-way) passengers per day	Average Journey Time (hh:mm)	Economy Single Fare (Euros)
Tallinn – Tartu	190	38	1,119	02:33	9.59
Tallinn – Parnu	130	12	662	02:02	7.67

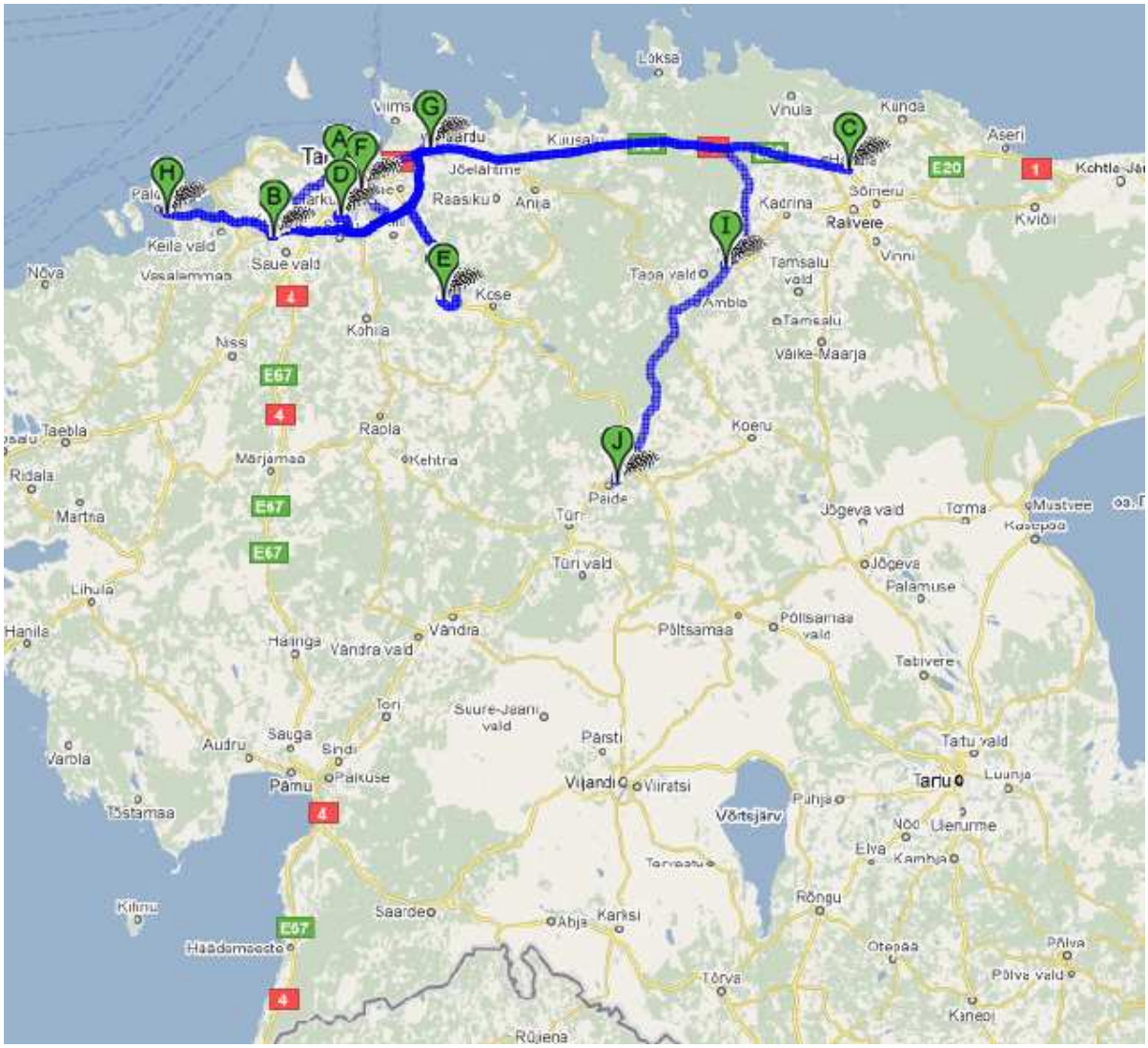
Table 53 - B.53- Estonian Road Quality Metrics (Coaches) – Passengers, Route Scoring

	Quality		Service			Mode Share	Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed (kph)		
E S T O N I A							
Tallinn-Tartu	Good	Good	38 coaches per day	Fair	75	24%	5.05
Score	4	4	4	3	2	3	3
Tallinn-Parnu	Good	Good	12 coaches per day	Fair	64	18%	5.90
Score	4	4	3	3	2	3	3

Current Logistics Facilities

The following Figure shows the location of key Estonian logistics facilities. The major logistics centres are mainly based around Tallinn so there is real merit in providing the most direct route from here to other major European cities. The green line picks up the logistics centres furthest east not only serving Tartu, put also the logistics park at Tapa and may offer the opportunity for interchange for freight to Russia, which would give a geographical advantage over other routes going to Russia but it is the longest route round for goods going to Tallinn and Finland. In addition this would require the provision of additional gauge change facilities outside of Tallinn in order to gain any distance advantage.

Figure 44 - B.44 - Location of Key Estonian Logistics Facilities



Road Freight Charging

The Euro Vignette system has not yet been implemented in Estonia, the Ministry of Economic Affairs and Communications in its web site states:

“Concerning electronic road toll system applications we believe that the implementation specifics are important for us in connection with our carriers abroad, but at the moment we do not see the need to implement the system in Estonia. It is possible that in the future heavy goods vehicles vignette will be implemented. In that case we would be interested in eVignette development”.

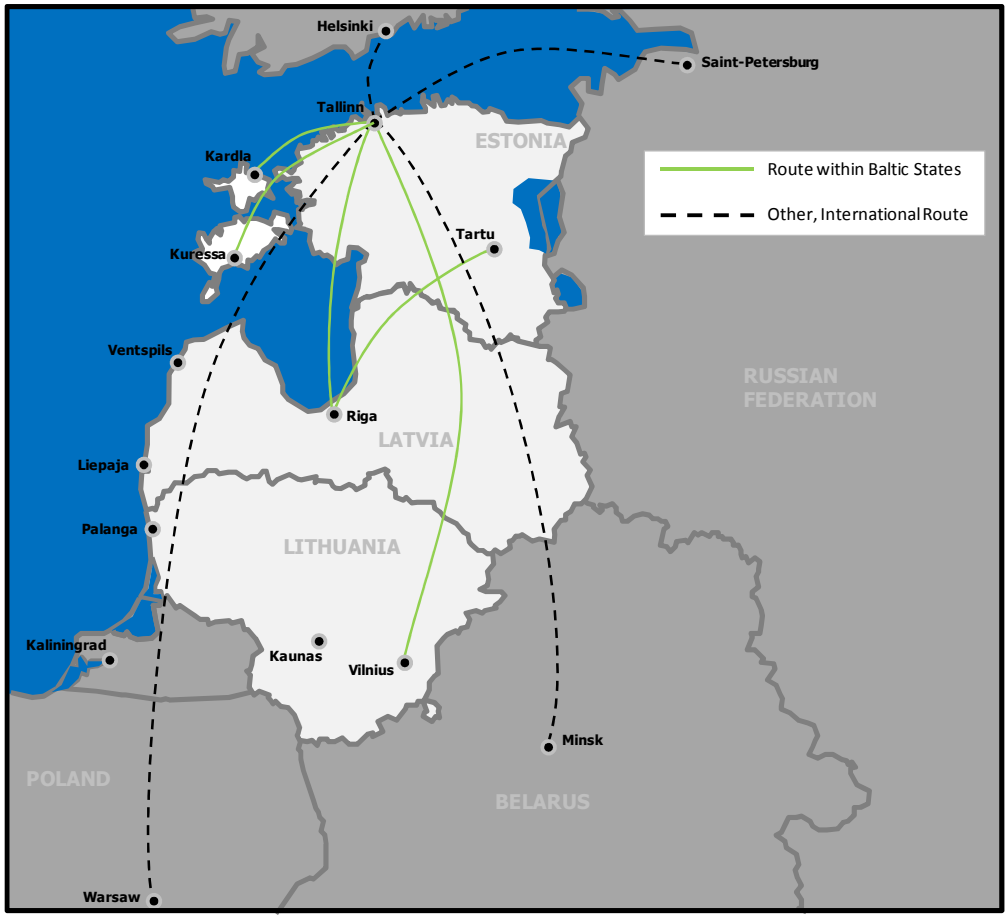
Road Freight Prices

For road freight traffic quotes were sought from a variety of Eastern European hauliers which provided an average freight fee of between €0.9 and €1.15 per km. It can be seen that the rail freight price is generally lower than this with the exception of the quoted tariff for 40’ containers and the quoted rate for 40’ containers to St Petersburg.

Air Network

There are a number of airports in Estonia providing commercial civil aviation including international flights these include, Kardla airport, Kuressaare airport, Parnu airport, Lennart Meri Tallinn airport and Tartu-Ulenurme. Tallinn airport is the biggest of these facilities. During the first quarter of 2010 it handled a total of 304,700 passengers, which is 8% less than the same period the previous year. There are a number of commercial internal flights; however, these principally cater for travel from the mainland to the islands to the north of the Gulf of Riga, the two largest of which are Saaremaa and Hiiumaa. Figure below illustrates the principal air routes available from Estonian airports for the Baltic region.

Figure 45 - B.45- Current Air Passenger Network



New Air Development Plans

Tallinn airport was reconstructed during 2006 – 2008. There was an expansion of the passenger terminal and reconstruction of the air traffic area. As a result of the renovation and extension project, approximately 14,000 square metres of usable area was added to the passenger terminal of the airport.

Key Air Passenger Routes

There are no internal flights between Tallinn and Tartu or Tallinn and Parnu. However it is possible to fly from Tallinn and Tartu into the other Baltic States and further into Europe and Russian Federation.

Air Freight

Air Freight Tonnages are very low for both Latvia and Lithuania and within Estonia the majority of air freight volumes are for countries outside of the EU. In addition air freight has very different characteristics to rail freight (generally high value urgent goods) and no single north south route has tonnages in excess of 2,000 tonnes per annum. Based upon this it is considered highly unlikely that Rail Baltica would be in competition with air freight within the 3 countries and air freight is therefore not analysed later on within the model or the report.

Table 54 - B.54 - Air Freight Tonnages to/from the Baltic States, 2007 - 2009

		2007	2008	2009
Estonia	**Total transport**	22,634	41,744	20,526
	National transport	0	0	0
	International transport Inter EU	5,906	7,104	4,587
	International transport Extra EU	16,728	34,640	15,939
Latvia	**Total transport**	7,197	6,884	8,646
	National transport	0	0	0
	International transport Inter EU	4,652	4,765	5,917
	International transport Extra EU	2,545	2,119	2,729
Lithuania	**Total transport**	12,804	9,056	6,465
	National transport	0	8	0
	International transport Inter EU	6,858	6,500	5,467
	International transport Extra EU	5,946	2,548	998

Sea Traffic

Passenger transport by sea is at very low levels for origins and destinations relevant to Rail Baltica therefore this has not been taken into account within this report or the passenger demand modelling. There are no north – south services in the corridor except very long distance services from Germany – Estonia which would be expected to be used for leisure purposes.

The main port in Estonia is the port of Tallinn which accounted for 82% of sea freight tonnage in 2009 (31.6 million tonnes). SILPORT (Port of Sillamäe) is very close to the Russian border (25km) and has expanded since opening in 2006. The port handles oil products, chemicals, general cargo (timber, scrap, and metal constructions) gravel, shale oil, cars and ro-ro cargo. Other ports include Kunda, Miiduranna, Pärnu and Vene Balti, however, these ports do not have annual tonnages which would make them of relevance to this project.

The graphs below show the main non oil traffic through Tallinn. Container volumes peaked at around 180,000 TEUs per annum prior to the recession and vehicle movements have continued to increase hitting around 1,100,000 units per annum in 2009. Other bulk movements have been severely hit by the recession with a drop to less than half of pre-recession volumes seen. The main movements are fertilizers, coal and metals. Liquid bulk volumes average around 22 million tonnes per annum.

The majority of transport through the port is transit traffic (83%) with imports and exports relatively evenly balanced at around 2.5 million tonnes each in 2009.

Figure 46 - B.46 - Sea Freight Transport in Estonia, Container and Vehicle Volumes through Tallinn, 2001 - 2009

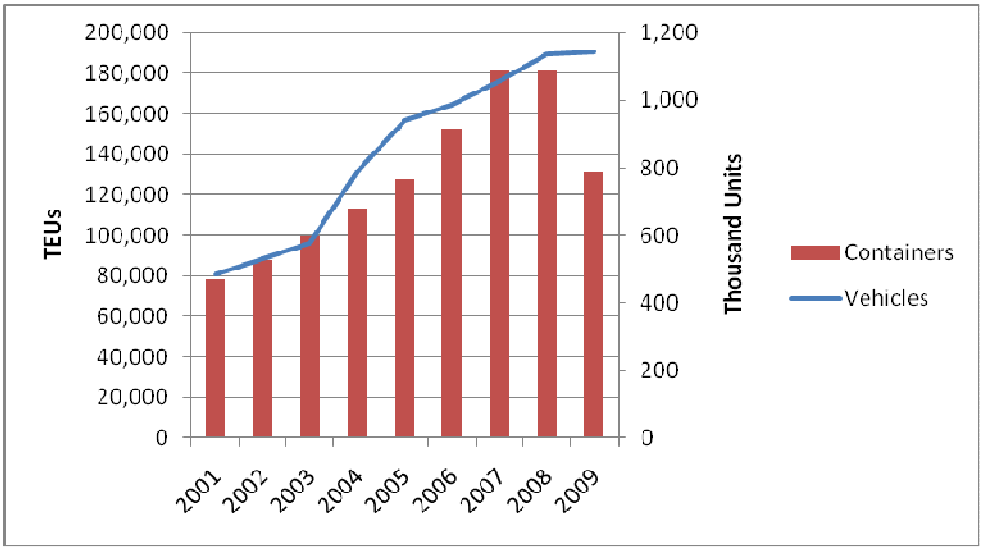
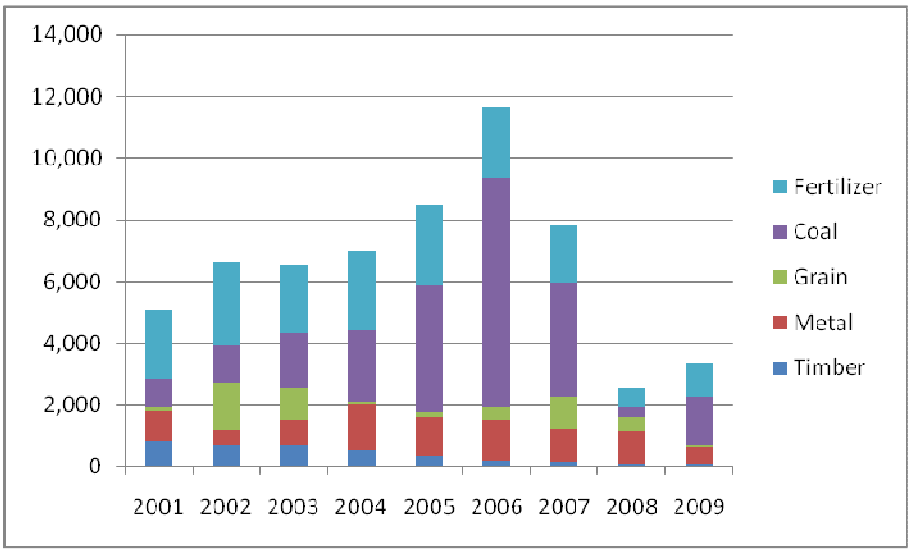


Figure 47 - B.47 - Sea Freight Transport in Estonia Other Non Oil Volumes through Tallinn, 2001 - 2009



The port of Tallinn is split into 5 harbours.

	Old City Harbour	Muuga Harbour	Paljassaare Harbour	Paldiski South Harbour	Saaremaa Harbour
Harbour territory (ha)	52,9	524,2	43,6	141,1	13,6
No. of quays	23	28	11	10	3
Max. depth (m)	10,7	18,0	9,0	13,5	10,0

Muuga Harbour is specialized in handling transit origin goods. It is the main cargo harbour for Port of Tallinn and locates ca 17 km east of Tallinn. The cargo volume handled accounts for around 80% of the total cargo volume of Port of Tallinn and approximately 90% of the transit cargo volume passing through Estonia. Nearly 3/4 of cargo loaded in Muuga Harbour includes crude oil and oil products, but the harbour also serves dry bulk (mostly fertilizers, grain and coal) and other types of cargo. Muuga Harbour is among the deepest (up to 18 m) and most modern port in the Baltic Sea region.

Muuga Harbour has 151 000 m² of warehousing and the following terminals:

- 6 liquid bulk terminals
- 2 multipurpose terminals (one of them with a reefer complex)
- container terminal and ro-ro terminal
- dry bulk terminal
- grain terminal
- steel terminal
- coal terminal

An extensive free zone in Muuga Harbour grants more flexible customs procedures for companies rendering transit and distribution services. Simplified customs procedures, easy transfer of ownership rights and value-added operations allowed in the zone are designed to foster the development of distribution centres. No import VAT is applied to goods imported temporarily to be processed and exported in due time from Estonia.

In terms of land availability for extension, Muuga Harbour possesses the greatest development potential in the whole region.

Paldiski South Harbour is the Port of Tallinn´s second cargo harbour, located 45 km west of Tallinn. The core activity of the harbour is focused on the handling of Estonian export and import cargo and transit cargo: mainly ro-ro cargo, scrap metal, timber, peat and oil products. Developing fields of activity include transit of new cars for neighboring markets and pre-sale service. Current terminals include:

- Passenger terminal
- Ro-ro & general cargo terminal
- Timber terminal
- Metal terminal
- Biodiesel terminal (under construction)
- 2 car terminals

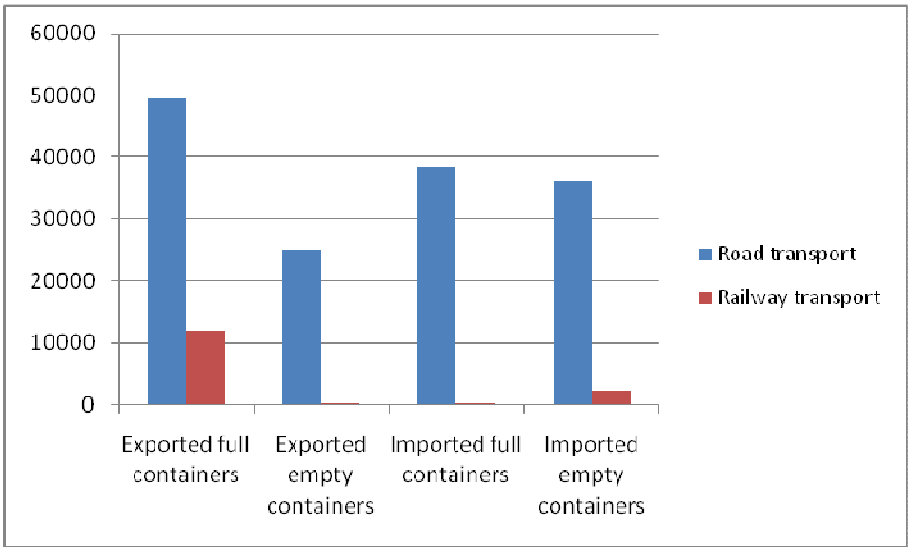
The Old City Harbour is predominantly a passenger harbour. The functions of a traditional cargo port have been gradually moved away from the city centre, and relocated into the other harbours. At present the Old City Harbour processes mainly Ro-Ro cargo carried by passenger liners and Ro-Ro vessels.

The strategic goals of Tallinn Port are stated as:

1. Increasing the handling capacity of containers and developing an attractive port environment that allows significant increase of container transit flows;
2. Increasing the handling capacity of new cars up to 300 000 units per year;
3. Entering into LNG and/or LPG logistics market by creating an environment for construction of gas terminals in the port and at the same time creating preconditions for increasing the energetic independence of the Republic of Estonia;
4. Increasing the competitiveness of the storage services for oil and oil products and if necessary re-profiling from railway terminal-vessel principle to vessel-terminal-vessel principle;
5. Searching for new utilization possibilities and points of origin for maximum use of existing port infrastructure.

The majority of Estonian non-bulk traffic is transported onwards by road. The graph below shows the levels of onward transportation by mode in 2009.

Figure 48 - B.48 - TEUs of Estonian Sea Freight Containers by Onward Mode of Transport in 2009



Sea Freight Prices

For sea freight prices were requested from a variety of lines listed as operating from Tallinn, Riga and Klaipeda ports. Responses for journeys to/from Estonia were as follows:

Shipping Line	Routes of Interest	Type of Traffic	Journey Time	Cost EUR	Frequency of Service
APL	Hamburg - Muuga	40' Container	3-4 days	893	Weekly
	Muuga - St Petersburg	40' Container		closed route	
	Bremerhaven - Muuga	40' Container	3-4 days	785	Weekly
MSC	Muuga - Helsinki	40' Container	4 days	550	Weekly
	Bremerhaven - Muuga	40' Container	8 days	656	Weekly
	Riga - Tallinn	40' Container		closed route	
Team Lines	Muuga - Riga	40' Container		closed route	
	Bremerhaven - Muuga	40' Container	3-4 days	730	2 x Weekly
UAB „Limarko jūrų agentūra" (K Line European Sea Highway Services GmbH)	Bremerhaven - Paldiski	Ro Ro – 40T articulated lorry		closed route	
	Klaipeda - Paldiski			closed route	
UAB "Tschudi Logistics"	Klaipeda - Muuga	40' Container		closed route	

	Muuga - Helsinki	40’ Container	1 day	427	Daily
CMA - CGM	Riga - Muuga	40’ Container	2 days	300	Weekly
Unifeeder Container Service	Muuga - Bremerhaven	40’ Container		closed route	
Eckerö Line Freightlink	Tallinn - Helsinki	Ro Ro – 40T articulated lorry	2 hours	521	1 – 3 x Weekly
Navirail emailed	Muuga - Helsinki	Ro Ro – 40T articulated lorry	4 hours	180-195	2 – 3 x Daily
Tallink	Tallinn - Helsinki	Ro Ro – 40T articulated lorry	2-4 hours	419 - 755	6 x Daily
Transferrica emailed	Paldiski - Lubeck	Ro Ro – 40T articulated lorry	40 hours	680-800	3 x Weekly
Freightlink	Tallinn - Helsinki	40’ Container	2 hours	521	1 – 3 x Weekly

The majority of sea freight services to/from Estonia are through Tallinn (Muuga) with some services through Tallinn (Paldiski). Services are provided to/from Finland (Helsinki), Latvia (Riga) or Germany (Bremerhaven, Lubeck and Hamburg). Operators contacted for services advertised to Lithuania stated that the routes had been closed; some operators had also closed routes to Germany and Latvia.

Rates per km are roughly as follows:

- Estonia to Germany: €0.44 to €0.88 per km, average €0.59
- Latvia to Estonia: €0.7 per km
- Estonia to Finland: €2.67 to €8.36 per km, average €6.63

It can be seen that the sea rates for the longest journeys (to Germany) are generally lower than the rail freight rates, however, rates for shorter journeys such as Tallinn – Riga are higher than the rail freight rates.

Freight Journey Times and Service Frequencies Summary

A comparison of current road and rail freight journey times for key routes to/from Estonia can be seen below:

Table 55 - B.55 - Rail Freight Journey Times and Service Frequencies to/from Estonia

From	To	Road Distance	Rail Distance	Sea	Road	Current Rail
Estonia	Latvia	307	360	2 days	6.3 hours	3 - 4 days
Estonia	Lithuania	570	645		10.1 hours	4 - 5 days
Estonia	Germany	1337	1769	40 hours - 8 days, generally 3 - 4 days	1 day 15 hours	
Estonia	Poland	961	1119		18 hours	9 - 10 days
Estonia	St Petersburg	323	323		3 - 4 hours	
Viljandi	Tallinn	159	159		3 hours	

Road freight times have been taken from route planning software with drivers hours legislation taken into account in calculating the journey times. Sea freight times have been taken from the quotes provided. As rail freight services are not regularly available for the routes shown they have been calculated using formulas of the agreement on the international railway carriage of freight

(SMGS), and therefore these times are somewhat "theoretic". Generally road is the fastest mode currently (with the exception of the express sea freight service to Germany). Currently rail is substantially slower than both sea and road.

The speed limit for HGVs is 50km/h in a built up area and 90km/h elsewhere. EU Drivers Hours legislation applies meaning that a 45 minute break is required every 4.5 hours with a maximum daily driving limit of 9 hours, which can be extended to 10 hours twice a week. For longer journeys multi-manning is possible to increase the hours the vehicle can be driven (although drivers hours rules still apply to each of the drivers). The Estonian Logistics & Freight Forwarding Association (ELEA) states that the rules are enforced very strictly and that sometimes Estonian trucks are forced to take a break on the Latvia – Estonia border because of this.

The majority of current rail freight is liquid mineral fuels travelling to/from Russia (69% for first eight months of 2010). Transit traffic makes up 84% of total rail freight. Container transport for the first eight months of 2010 was 13,616 TEU – up 24% on 2010, three routes are offered by Eesti Raudtee:

- Baltika transit – open since 2003 this is an Estonian, Latvian, Lithuanian, Russian, Kazakh and Uzbek railways joint project providing a regular service to Central Asia. The train operation is based on the three Baltic railways aggregating containers into one single shipment. The train is operated by FIT (Fesco Integrated Transport). The shuttle offers a daily service.

- Moscow Express – started in 2007 this is a regular service to Moscow from Muuga. The train is a joint project between EVR Cargo, Ocean shipping line APL, Estonia and the Russian Logistics MTF forwarders providing a full door to door service for containers. The train leaves twice a week.

- ZUBR – started in 2009 the course of the route is Tallinn - Riga - Minsk - Iljitšovsk / Odessa and back. The possibility of extending the route over the Caucasus, Black Sea and Turkey is currently being investigated. The train offers the option to send containers daily. The train takes four days to travel from Muuga to Iljitšovsk.

E.R.S AS, Spacecom and Westgate Transport provide solely oil and LPG services (which are unlikely to use Rail Baltica).

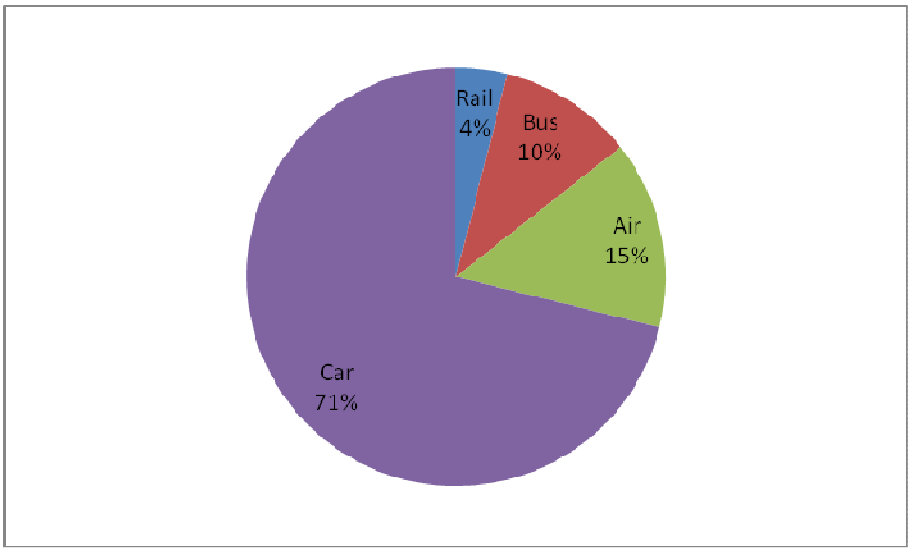
By sea the following approximate service frequencies are available:
- Hamburg - Muuga Weekly
- Bremerhaven - Muuga 4 x Weekly
- Paldiski - Lubeck 3 x Weekly
- Riga - Muuga Weekly
- Muuga - Helsinki 9 - 10 x daily

1.3.3 Latvia

Current Modal Split – Passenger Traffic

Figure below shows the current modal split of traffic to/from and within Latvia. The majority of current passenger kms are carried out by car with current rail services having a share of 4% (similar to the proportional share in Estonia). Bus traffic has a share 2 and a half times greater than current rail services.

Figure 49 - B.49 - Modal Split of Latvian Passenger Traffic, passenger km, 2008

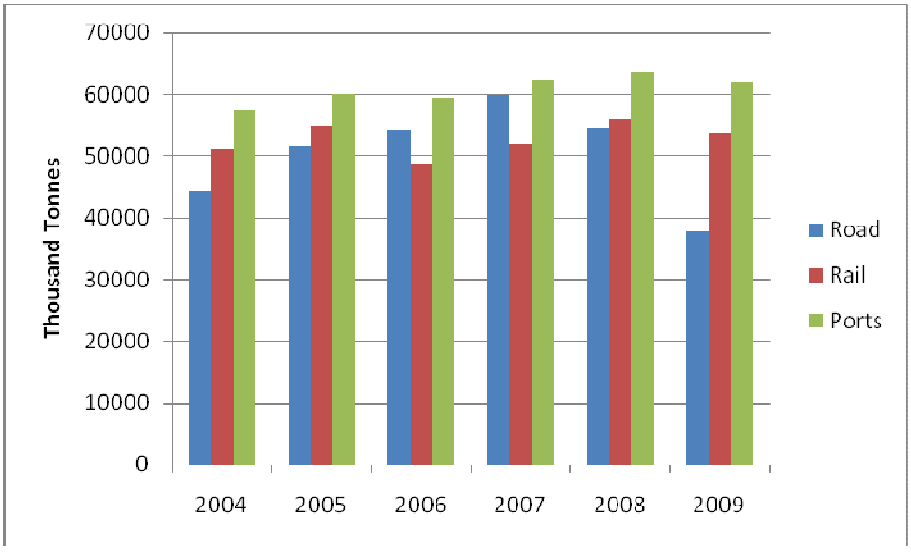


Source: Latvia Statistics Institute for rail, bus and air. Eurostat for car.

Current Modal Split – Freight Traffic

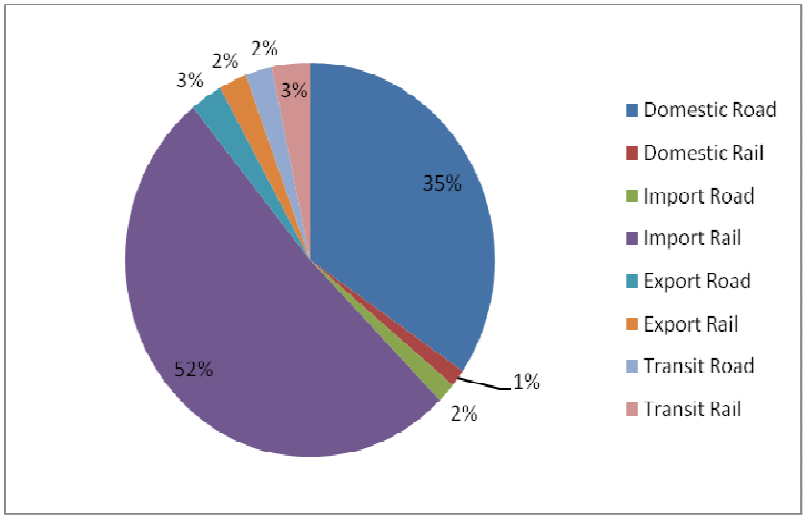
Freight to/from Latvia is split relatively evenly between the 3 modes. The graph below shows the modal split of freight within Estonia for goods carried. In 2008, the model base year, 32% of goods to/from and within the country were carried by rail, 37% by sea and 31% by road. It can be seen that from 2007 to 2009 there has been a major decline in road traffic.

Figure 50 - B.50 - Current Modal Split Latvian Freight Traffic, 2004 - 2009



For land based traffic the graph below shows the proportional split of tonnages for road and rail between domestic, import, export and transit traffic. For domestic traffic road freight takes the majority of tonnage, whereas for import traffic rail freight carries the vast majority of volumes (the majority of this travels to Latvia's ports and then onwards). Export traffic is slightly biased towards road transport but only makes up a very small proportion of tonnages. Land based transit traffic is slightly biased towards rail but again only makes up a very small proportion of tonnages.

Figure 51 - B.51 - Current Modal Split Land Based Latvian Freight Traffic, Import/Export/Domestic and Transit, 2009



Routes which travel in a North – South direction to/from Latvia with an annual tonnage of over 15,000 tonnes per annum have been considered as routes which may be viable for Rail Baltica as this equates to an approximately fortnightly service for non bulk traffics. Routes with lower volumes may provide some traffic; however, they will not form the core service for Rail Baltica.

In terms of traffic types relevant cargo has been taken as either dry bulk, general cargo or non bulk traffics such as containers, ro ro or food products.

Baltics traffics have only been considered for the following routes, which are deemed to be of sufficient proximity to the line and long enough distance to compete with road traffic:

- Vidzeme to Zemgale and vice versa
- Vilnius, Kaunas, Panevėžys, Klaipeda sea port and Alytus to Riga City & Region, Zemgale and Vidzeme and vice versa
- Põhja-Eesti, Kesk-Eesti and Lõuna-Eesti to Riga City & Region, Zemgale and Vidzeme and vice versa

More information on how Baltics traffic has been split and the levels of accuracy and detail available can be found in the modelling report.

The table below shows the current volumes on each of the routes for bulk / general cargo and non bulk traffics and the modal split of these volumes.

Table 56 - B.56 - 2008 Tonnages for Major North – South Freight Routes

Origin	Destination	Non Bulk	Dry Bulk / General Cargo	Modal Split Dry Bulk / General Cargo			Modal Split Non Bulk		
		Current Volumes ('000 Tonnes pa)		Road	Rail	Sea	Road	Rail	Sea
Estonia	Latvia	177	371	78%	15%	7%	90%	8%	2%
Finland	Latvia	96	233	11%	0%	89%	18%	0%	82%
Germany	Latvia	1320	345	70%	0%	30%	12%	0%	88%
Latvia	Estonia	62	439	48%	36%	17%	37%	63%	0%
Latvia	Germany	1168	4052	5%	0%	95%	12%	0%	88%
Latvia (N)	Latvia	297	790	98%	2%	0%	99%	1%	0%
Latvia (S)	Latvia	259	690	98%	2%	0%	99%	1%	0%
Latvia	Lithuania	183	499	14%	85%	1%	42%	58%	0%
Latvia	Finland	82	2415	1%	0%	99%	26%	0%	74%
Latvia	Russia – Gulf of Finland Only	225	521	99%	0%	1%	100%	0%	0%
Lithuania	Latvia	293	707	22%	65%	14%	56%	39%	4%
Russia – Gulf of Finland Only	Latvia	62	204	52%	0%	48%	87%	0%	13%
Poland	Latvia	52	93	89%	0%	11%	81%	0%	19%

Sources: Eurostat for road and sea freight data, rail freight data from Eesti Raudtree Annual Report 2008, detailed information provided by the Lithuanian government and detailed rail freight data provided by LDZ.

The main traffics which Rail Baltica can look to compete with are:

- although there is substantial road freight transport of non bulks from Germany to Latvia.
- Latvia – Finland, bulk traffics currently carried by sea, some returning flows
- Latvia – St Petersburg area, predominantly bulk traffics currently carried by road
- Lithuania – Latvia, competition with existing rail and road freight services for bulk and non bulk traffics, some returning flows
- Latvia – Estonia, predominantly bulk traffics, competition with road and current rail services

Some competition with long distance domestic traffic may also be possible, particularly within non bulk markets.

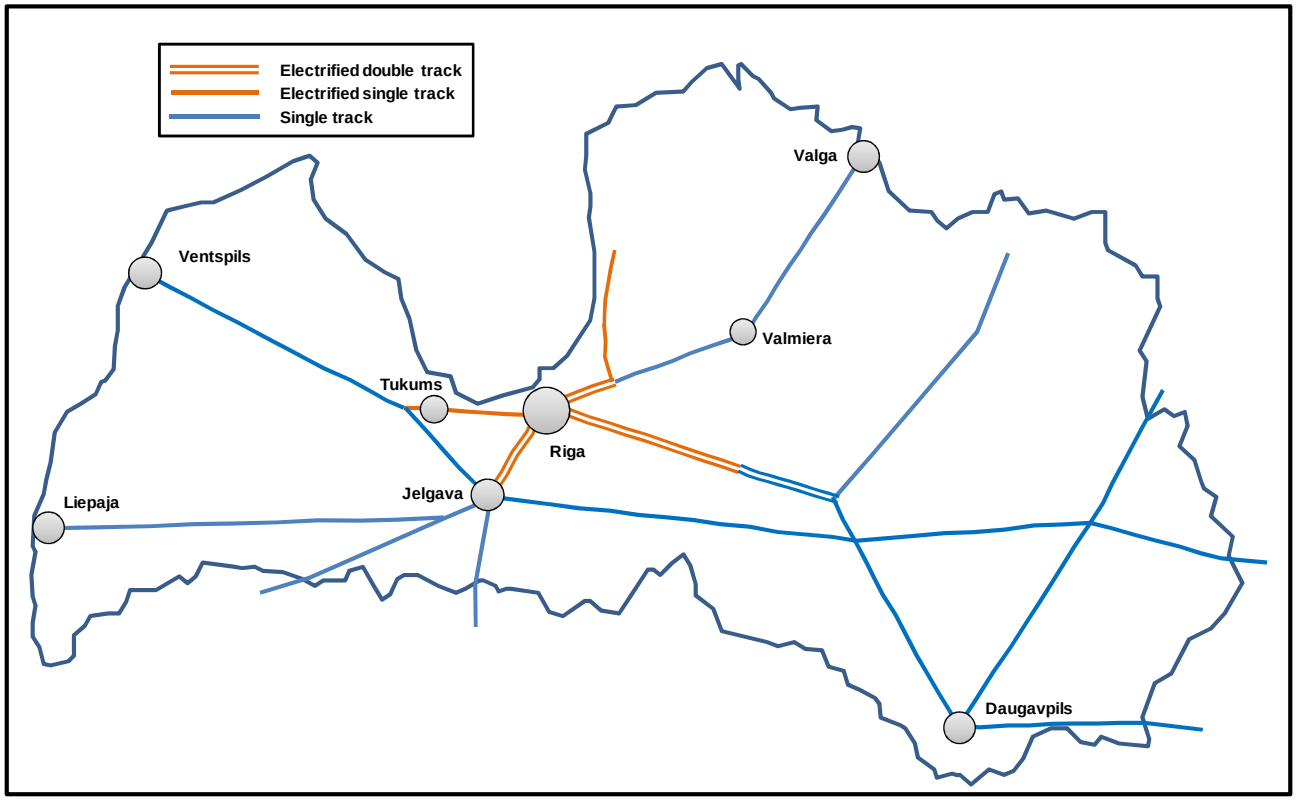
Rail Network

The Latvian rail network is comprised of Russian gauge (1,520 mm) lines, with a small proportion of electrified track, principally around Riga with the longest section covering the 82km route from Riga to Aizkraukte. A smaller proportion of railway lines into Riga are also double-track. Figure 4.53 shows a map of the national railway network. There are regular services on the local rail network radiating from Riga; however, services are less frequent on longer distance routes.

Generally speaking, the railway stations have not been renovated for a long period of time. Therefore they require investment both in the infrastructure by improving the functionality of the stations, as well as in design by, for example, simply renovating them.

The same is true for the rolling stock, which have in many cases not been modernized since the 1990s. In general terms the punctuality of the railway is satisfactory.

Figure 52 - B.52- Latvian Rail Network



New Rail Development Plans

Long-term development goal of JSC Latvian Railways is to increase infrastructure capacity to 85 mln t per year instead of current 62 million tonnes.

During next years there are several projects which will be implemented:

(1) Building of the Second Track in Riga – Krustpils Section;

(2) Reconstruction of Station Bolderaja I and Station Bolderaja II and Building of Connective Tracks in Krievusala (Port of Riga development);

(3) Modernisation of Riga Railway Junction.

Key Rail Passenger Routes

For the purposes of the study, the following key routes in Latvia have been identified: Riga – Jelgava, and Riga – Daugavpils, Riga – Tukums, Riga – Valmiera. Table B.22 summarises the details of the routes and table B.23 scores each route according to the passenger metrics.

Table 57 - B.57 Latvian Rail Quality Metrics – Passengers, Detailed Information

	Line description	Approximate Distance (Km)	Service Frequency (trains per day)	Service Volume (2-way passengers per day	Average Journey Time (hh:mm)	Economy Single Fare (Euros)
Riga – Jelgava	Electrified double track from Riga – Jelgava	45	23	3,166	00:48	1.91
Jelgava – Riga			24		00:48	
Riga – Daugavpils	Electrified double track from Riga – Aizkraukle, diesel from Aizkraukle – Daugavpils	232	3	185	03:26	6.64
Daugavpils – Riga			3		03:26	
Riga – Tukums	Electrified double track from Riga – Tornakalns, electrified single track from Tornakalns – Tukums	66	13	758	01:18	2.47
Tukums – Riga			13		01:19	
Riga – Valmiera	Electrified double track from Riga – Zemitani, diesel from Zemitani – Valmiera	109	4	72	02:22	3.95
Valmiera – Riga			4		02:24	

Table 58 - B.58 - Latvian Rail Quality Metrics – Passengers, Route Scoring

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed (kph(	Mode Share	
L A T V I A							
Riga-Jelgava	Fair	Fair	24 trains per day	Excellent	56	27%	4.24
Score	3	3	4	5	1	4	4
Riga-Daugavpils	Fair	Fair	3 trains per day	Excellent	68	4%	2.86
Score	3	3	1	5	2	3	4
Riga-Tukums	Fair	Fair	13 trains per day	Excellent	51	19%	3.74
Score	3	3	3	5	1	3	4
Riga-Valmiera	Fair	Fair	4 trains per day	Excellent	46	2%	3.62
Score	3	3	1	5	1	1	4

Rail Freight Quality

Government statistics state that there are 70 stations with rail freight operations as of 2009 (down from 124 in 1985), of these 33 are dedicated cargo stations. There are 78 rail freight terminals within LDz Cargos terminals list (LDz Principal Service Policy).

The majority of rail freight is carried by LDz Cargo, with 20% carried by private operators Baltijas Ekspresis and Baltijas Tranzita Serviss . LDz offer the following services:

- international export - import and transit traffic through the Baltic and CIS railways;
- freight documentation;
- cargo customs formalities;
- information about customer freight movement;
- transportation charges calculations;
- OAO TransContainer's fitting platform for invoicing and container security;

- circular route management;
- cargo storage and other services in port areas;
- combined intermodal service - door to door

The punctuality of the freight trains in the year 2009 comprised 91.2% of trains on time according to LDZ.

Rail Freight Pricing

For rail freight tariffs for carrying of cargos are not regulated by governmental institutions. Information about the tariff methodology for LDz Cargo reveals that “LDz Cargo” calculates its tariff on the basis of cargo (according to the Harmonised Cargo Nomenclature), distance, type of carriage, speed, weight, type and ownership of the rolling stock, category and ownership of the container and services to be provided. An extremely detailed algorithm for calculating the tariff is available in the tariff lists. LDz provide substantial discounts for customers with large volumes (from 5% for 25 containers or wagons per month to 65% for 4000). Tariffs are provided in lats for import, export and domestic traffic and in Euros for transit traffic.

Simplified tariffs are as follows (taking into account the various parts of the formula and assuming 55 tonne wagons for bulk and 40 tonne for containers, including VAT and using the latest coefficients) :

Table 59 - B.59 - Latvian Rail Freight Pricing: Bulk Traffic: Import/Export and Domestic – Price in Lats, July 2010

Distance, km	**Type of Transport**					
from - to	**Universal Rolling Stock: Covered Wagon, Half Wagon & Platform**	**Dedicated Rolling Stock**	**Oil**	**Gas and Most Chemicals Tankers**	**Other Tankers**	**Refrigerated**
51 - 60	162	165	181	356	225	622
101 - 110	183	191	206	384	252	665
151 - 160	205	214	229	411	280	709
201 - 210	225	239	255	439	307	752
251 - 260	246	263	280	466	335	795
301 - 310	268	288	305	494	362	838
351 - 360	288	311	328	521	390	881
401 - 410	310	336	353	549	417	924
451 - 460	331	361	378	576	445	966
501 - 510	353	385	403	604	472	1009
551 - 560	373	410	427	631	500	1052
601 - 610	394	434	452	659	527	1095
651 - 660	416	459	477	686	555	1138
691 - 700	433	477	496	708	576	1173

Table 60 - B.60 - Latvian Rail Freight Pricing: Container Traffic: Import/Export and Domestic – Price in Lats, July 2010

Distance, km	**Container Size**				
from - to	**3 tonne**	**5 tonne**	**10 feet**	**20 feet**	**30, 40 feet**
51 - 60	26	42	55	82	160
101 - 110	29	47	62	91	179
151 - 160	32	52	68	101	198
201 - 210	35	56	75	111	217
251 - 260	38	62	82	120	237
301 - 310	41	67	88	130	255
351 - 360	44	72	94	139	273
401 - 410	47	78	102	148	293
451 - 460	50	82	108	159	312
501 - 510	53	87	114	168	332
551 - 560	56	93	122	177	350
601 - 610	59	98	128	186	370
651 - 660	62	102	134	195	388
691 - 700	64	107	140	203	403

Table 61 - B.61 - Latvian Rail Freight Pricing: Container Traffic: Transit Traffic via the Ports – Price in Euros per Container, July 2010

Route		**Container Type**		
Border station	**Port station**	**10'**	**20'**	**30 and 40'**
Meitene (Lithuania)	Riga	67	93	180
Lugaži (Estonia)	Riga	87	122	238
Meitene (Lithuania)	Ventspils	93	129	252
Lugaži (Estonia)	Ventspils	124	174	340

Table 62 - B.62 - Latvian Rail Freight Pricing: Container Traffic: Transit Traffic by Land – Price in Euros per Container, July 2010

Route		**Container category**				
Border station	**Border station**	**3 t**	**5 t**	**10 feet**	**20 feet**	**30, 40 feet**
Traffic Estonia – Lithuania						
Lugaži	Meitene	35	64	104	146	285

The key route for Rail Baltic is from Lugaži to Meitene which currently costs €146 for a 20' container and €285 for a 40'. This is equivalent to €0.64 per km for a 20' and €1.25 for a 40'.

Table 63 - B.63 - Latvian Rail Freight Pricing: Costs for Bulk Transit Traffic – Euros, July 2010

Route		Cargo in universal and dedicated wagons and oil	
Border station	**Port station**	**Euros per Tonne**	**Euros per Tonne km (Apprx)**
Meitene	Riga	3.1	0.044
Lugaži	Riga	4	0.025
Meitene	Ventspils & Liepāja	4.2	0.021
Lugaži	Ventspils & Liepāja	5.65	0.017

LDZ provided the following quotes to us for an import/export journey and a transit journey at the beginning of July 2010:

Table 64 - B.64 - Latvian Rail Freight Pricing: Quotes Provided

Type of goods	Mode of transportation	Price – Transit of 302km	Price – Import/Export Journey of 91km	Transit Price per tonne km or container km	Domestic Price per tonne km or container km
Coal	Wagon	6,43 EUR/tonne	253,68 EUR/wagon	0.02	0.05
Steel	Wagon	6,43 EUR/tonne	253,68 EUR /wagon	0.02	0.05
Automobiles	40 Feet container	286,20 EUR/container	125,54 EUR/container	0.95	1.38
Various goods (containers)	20 Feet container	143,95 EUR/container	125,74 EUR/container	0.48	1.38

These quotes are consistent with the publically available tariffs suggest it is assumed that a mistake was made regarding the pricing structure between 20’ and 40’ containers for the domestic journey (quoted 40’ prices for both).

The table below presents the standard tariff prices per km compared to the quotes received. The journey lengths have been selected to represent likely journeys: the import/export flow is the distance from Tallinn to Riga.

Table 65 - B.65 - Latvian Rail Freight Pricing: Price in Euros: Quoted Rate Compared to Published Tariff for an Average Lorry Load

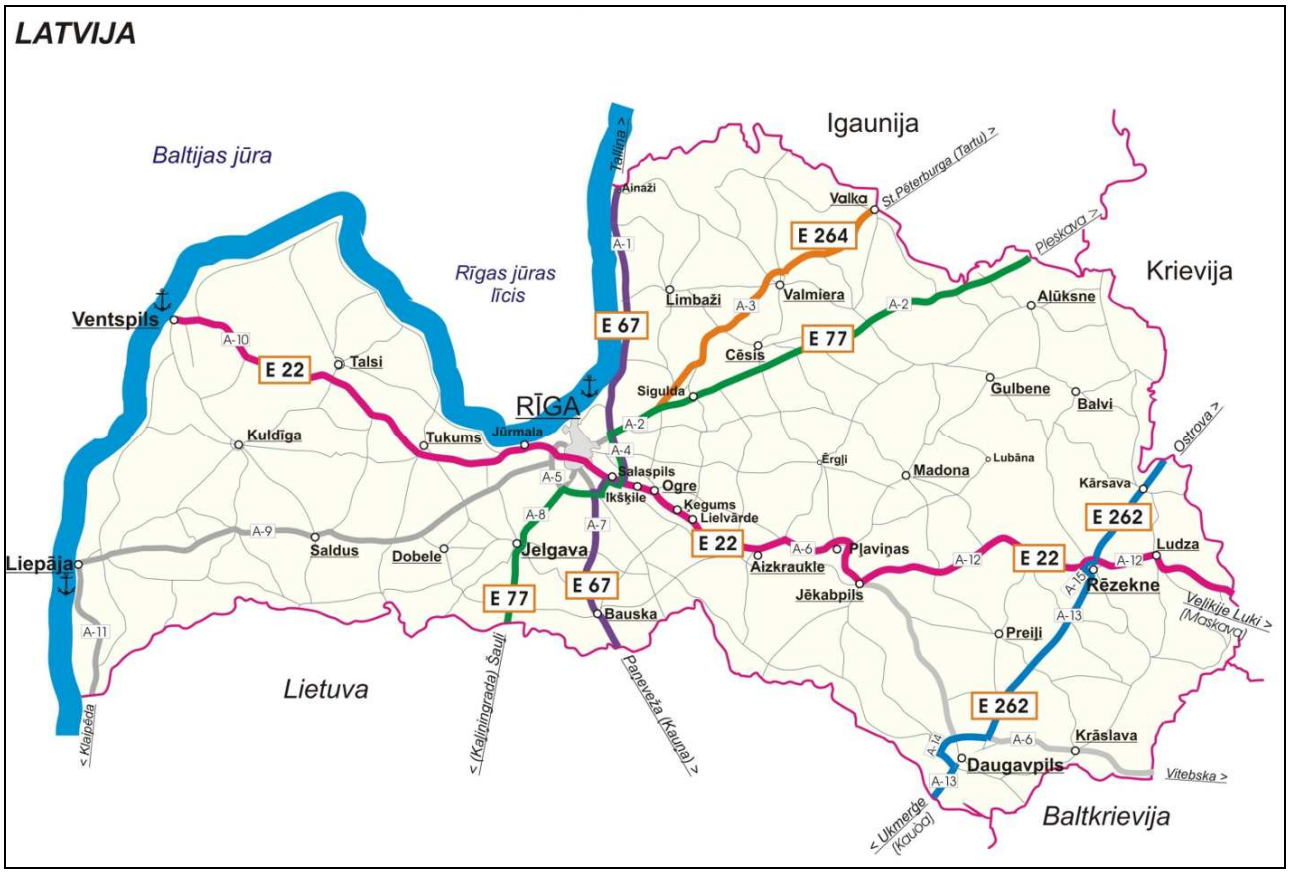
	Standard Tariff			Quoted Price	
Journey Type	**Domestic**	**Import / Export**	**Transit**	**Domestic**	**Transit**
Distance Assumed	91km	351km	342km	91km	351km
Bulk (universal rolling stock)	1.08	0.90	0.43	0.90	0.38
40' Container	1.37	0.56	0.98	1.38	0.95
20' Container	0.7	0.29	0.50	0.69	0.48

The domestic journey works out at roughly the same rate as Estonia rail. It can easily be seen, however, that increasing journey length substantially reduces costs per km for import/export and domestic traffic therefore longer distance journeys are much more likely to be competitive with road.

Road Network

Latvia has a number of E-Roads linking with Estonia and Lithuania. The E67 is the principal road route from Riga to Tallinn and the E264 is the most direct route from Riga to Tartu. The E77 also links Riga with Estonia; however, it crosses the border very close to the Estonian / Russian Federation border providing a route from Latvia to St Petersburg. The principal links between Riga and Lithuania are the E77 to Siauliai (and also on to Kaliningrad) and the E67 to Panevezys. The following Figure displays all the routes classified as E-Roads within Latvia together with the other main highway routes.

Figure 53 - B.53- Latvian Road Network



(Source: Latvian State Roads)

New Development Plans

The following future highway schemes are relevant to the Rail Baltica proposals.

- Extension of Riga ring road by building new Daugava river crossing and connecting Salaspils with Iecava (connection from A4 to A7 road (E67 route)) by a “straight line” which is predicted to lead to time savings of approximately 9-12 minutes for a passenger car;

- Kekava ring road. Will improve exit from Riga to south direction saving 3 to 5 minutes of driving time and improving driving comfort and safety. Implementation dates are not known at present.

Key Road Passenger Routes (Car)

Table 66 - B.66- Latvian Road Quality Metrics (Cars) – Passengers, Detailed Information

	Highway description	Approximate Distance (Km)	Traffic volume 2-way (AADT)	Average Journey Time (hh:mm)	Average Speed (kph)
Riga – Jelgava Jelgava – Riga	A8: dual carriageway out of Riga for 45km to Jelgava	45	7,234	00:44	61
Riga – Daugavpils Daugavpils – Riga	A6: dual carriageway out of Riga 140 km to Jekabpils, single carriageway 56 km to P64, dual carriageway then to Daugavpils	232	3,239	03:25	68
Riga - Tukums Tukums – Riga	A10: dual carriageway out of Riga 24km to Jurmala, otherwise single carriageway	66	2,828	01:02	64
Riga – Valmiera Valmiera – Riga	A2: dual carriageway out of Riga 55km to Sigulda, otherwise single carriageway	109	2,909	01:49	60

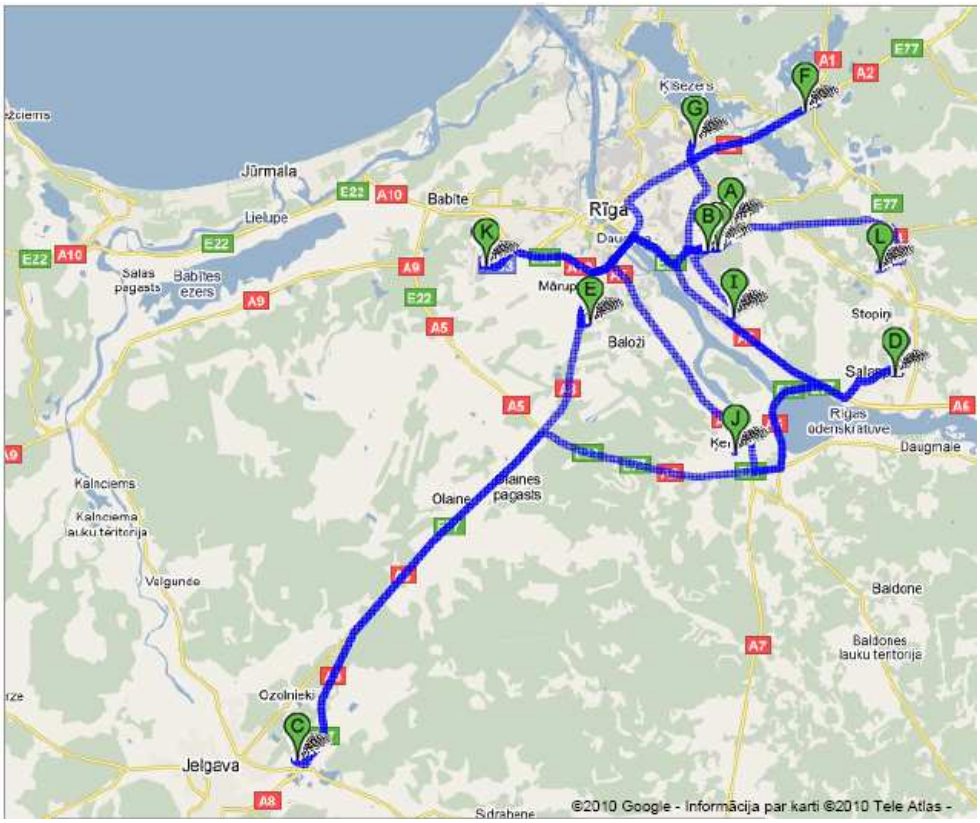
Table 67 - B.67- Latvian Road Quality Metrics (Cars) – Passengers, Detailed Information

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed (kph)	Mode Share	
L A T V I A							
Riga-Jelgava	Fair	Fair	Anytime	Fair	61	62%	8.55
Score	3	3	5	3	2	5	3
Riga-Daugavpils	Fair	Fair	Anytime	Fair	68	67%	8.55
Score	3	3	5	3	2	5	3
Riga-Tukums	Fair	Fair	Anytime	Fair	64	71%	8.55
Score	3	3	5	3	2	5	3
Riga-Valmiera	Fair	Fair	Anytime	Fair	60	79%	8.55
Score	3	3	5	3	2	5	3

Current Logistics Centres

The following Figure shows the location of current key Latvian logistics centres. All of the current Latvian logistics centres are within easy reach of the proposed line, however, red and yellow routing options travel closest to the existing logistics centre bases which are primarily east of Riga. The only terminals which might be better served by the green/orange line combination is DHL's facility in Jelgava (C) and Riga Airport Business Park (K) the latter of which is unlikely to generate much rail freight traffic. A site near to or at the A, B and H cluster could be a good site for an intermodal terminal as this includes current Schenker facility, RIMI logistics operation and Atlas warehousing and is only a short distance from the majority of the other facilities.

Figure 54 - B.54 - Location of Key Latvian Logistics Centres



Road Freight Charging

The introduction of road charges in Latvia is delayed due to the overall economic situation and proposals of representatives of road transport agencies. Originally Road user charges law stipulated that the Euro vignette in Latvia be introduced on 1 July 2009, however, given the economic situation in the country and road transport industry's request, and currently this duty is postponed to January 1, 2011. The new date of introduction of road charges (01.01.2012) amounts and mechanism how fees will be collected will be developed by government after approval of all necessary legislation projects.

Current Road Freight Prices

As noted previously for road freight traffic quotes were sought from a variety of Eastern European hauliers which provided an average freight fee of between €0.9 and €1.15 per km. It can be seen that the rail freight price is lower than this for 20’ containers and transit bulks, similar for import/export and domestic bulks and higher for 40’ containers for shorter journeys.

Coach Network

Similar to the other Baltic States an extensive inter-city coach network has been established in Latvia operated by modern fleet of coaches and competes with existing rail services internal to Latvia. On the core route from Riga to Jelgava, there are high frequency mini bus services (approx 80 per day), providing strong competition to the rail service on this corridor.

New Development Plans

Coach operators will benefit from planned road improvement schemes in Latvia.

Key Coach Routes

Table 68 - B.68 - Latvian Road Quality Metrics (Coaches) – Passengers, Detailed Information

	Approximate Distance (Km)	Service Frequency (coaches per day)	Service Volume (2-way) passengers per day	Average Journey Time (hh:mm)	Economy Single Fare (Euros)
Riga – Jelgava	45	79	1,191	00:55	2.12
Riga - Daugavpils	232	29	1,384	03:30	7.90
Riga – Tukums	66	21	394	01:22	2.96
Riga – Valmiera	109	18	713	02:10	4.24

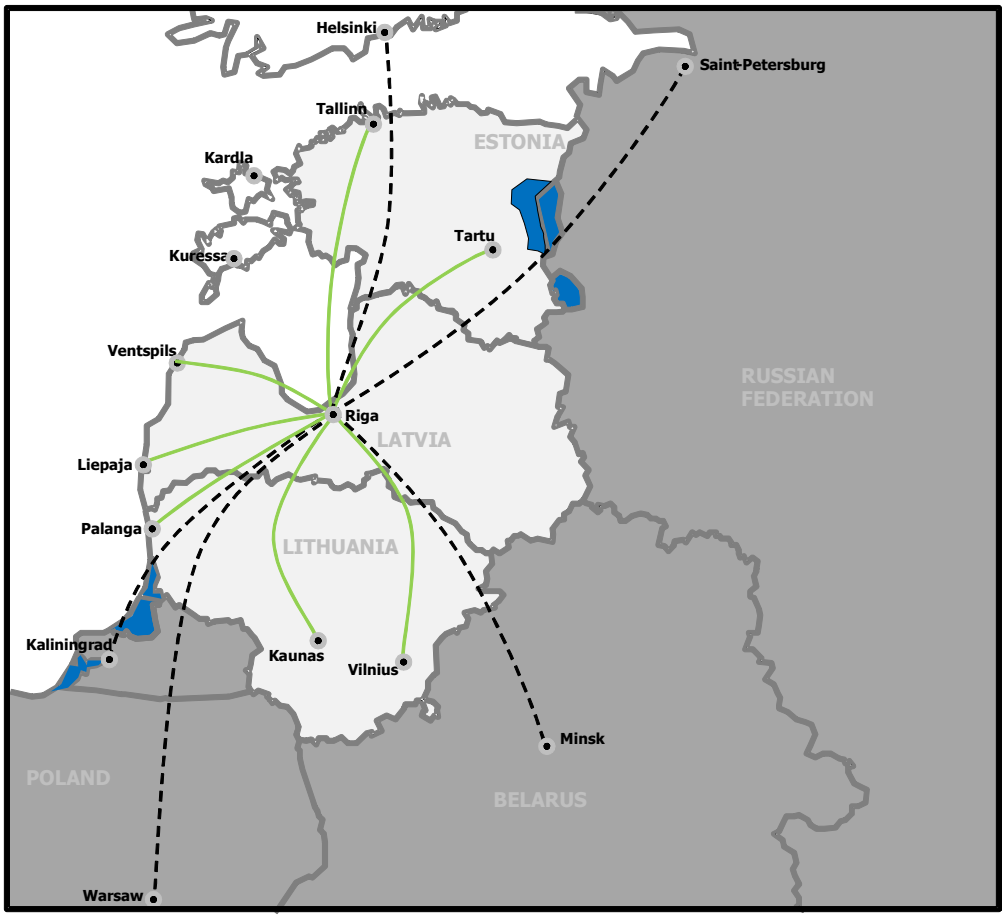
Table 69 - B.69 - Latvian Road Quality Metrics (Coaches) – Passengers, Route Scoring

	Quality		Service			Mode Share	Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed (kph)		
L A T V I A							
Riga-Jelgava	Fair	Fair	79 coaches per day	Fair	49	10%	4.71
Score	3	3	4	3	1	2	4
Riga-Daugavpils	Fair	Fair	29 coaches per day	Fair	66	29%	3.41
Score	3	3	4	3	2	3	4
Riga-Tukums	Fair	Fair	21 coaches per day	Fair	48	10%	4.48
Score	3	3	3	3	1	2	4
Riga-Valmiera	Fair	Fair	18 coaches per day	Fair	50	19%	3.89
Score	3	3	3	3	1	3	4

Air Passenger Network

There are a number of civil airports in Latvia providing commercial aviation including international flights, these include Riga International Airport, Liepaja International Airport and Ventspils International Airport. There are domestic flights in Latvia between Riga and Ventspils and between Riga and Liepaja, but none that link the key routes described above. During the period from January - May 2010, Riga airport handled a total of 2.1 million passengers, which was 15.1% more than the same period the previous year. The following Figure illustrates the principal air routes available from Latvian airports for the Baltic region.

Figure 55 - B.55 - Latvian Air Passenger Network



New Development Plans

The Latvian national airline, Air Baltic, has announced (August, 2010) an international design contest in which architects are invited to submit their ideas or concepts for the new terminal at North Hub Riga. Architects are invited to create their concepts for a terminal with capacity of around 7-8 million annual passengers (14 million eventually) on a designated vacant site at Riga airport.

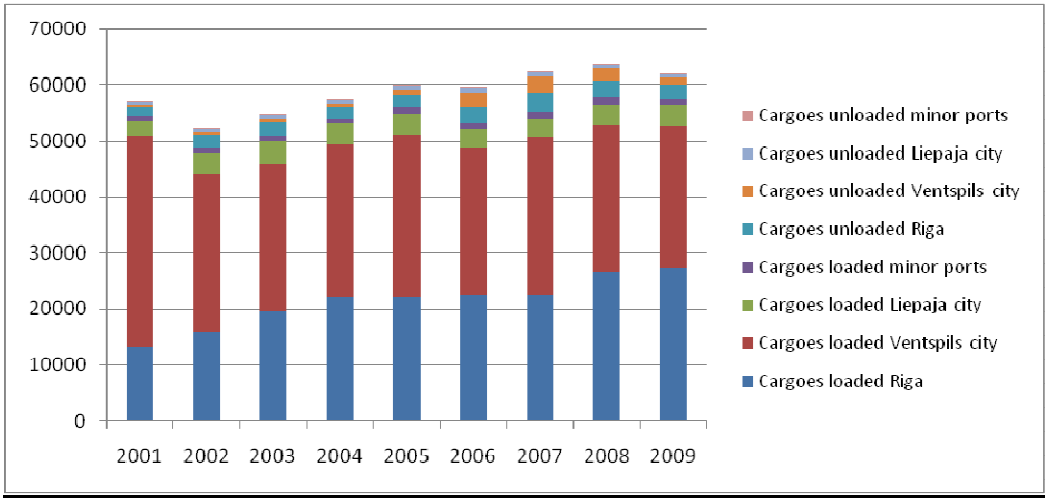
Key Air Passenger Routes

There are no internal flights between the identified key routes for Latvia.

Sea Freight Volumes and Facilities

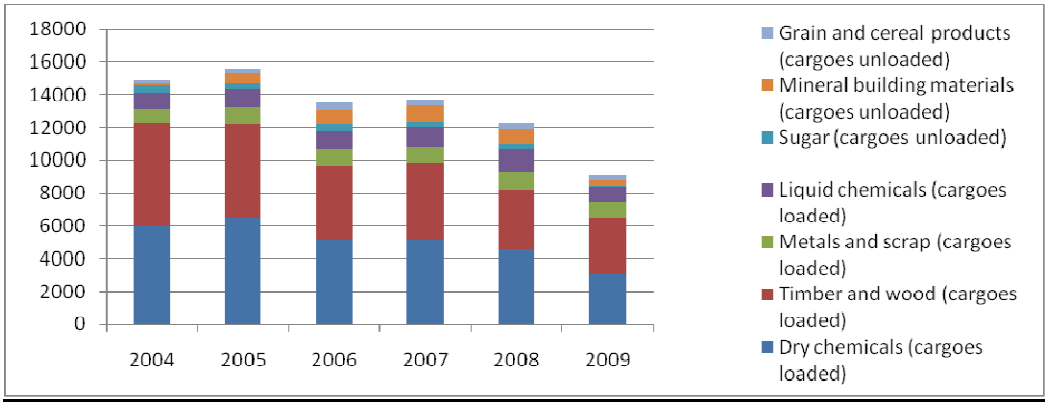
Sea transport accounted for 62 million tonnes in 2009, a slight decrease on 2008. The majority of freight by sea is loaded at Riga or Ventspils. With a very large imbalance being present between cargoes loaded and unloaded (cargoes unloaded only represent 7% of the total).

Figure 56 - B.56 - Sea Freight Cargoes by Port within Latvia, 2003 – 2009, Thousands of Tonnes



Oil products represent 38% of port traffic. The other main commodity groups are shown below with chemicals and timber representing a large proportion of this traffic. Containers represented 3% of the tonnage through Latvian ports in 2009.

Figure 57 - B.57 - Sea Freight Cargoes by Commodity (Non-Oil Traffic), 2004 - 2009, Thousands of Tonnes



Riga port represents the main port handling commodities which are travelling in a north-south direction. Ventspils handles much lower volumes and Liepaja lower volumes again. The outbound: inbound traffic imbalance is also present for north-south traffics but not to as great an extent as for total sea freight within the country.

Table 70 - B.70- Thousand Tonnes by Latvian Port and Commodity in North-South Direction, 2008, not including liquid bulk

	Riga	Ventspils	Liepaya
Inward Containers	880		9
Outward Containers	594	4	6
Inward Dry Bulk	95	132	175
Outward Dry Bulk	4736	1407	248
Inward RoRo	141	294	
Outward RoRo	249	384	8
Inward Other	75	10	14
Outward Other	454	98	332
Total Inward	**1191**	**436**	**198**
Total Outward	**6033**	**1893**	**594**

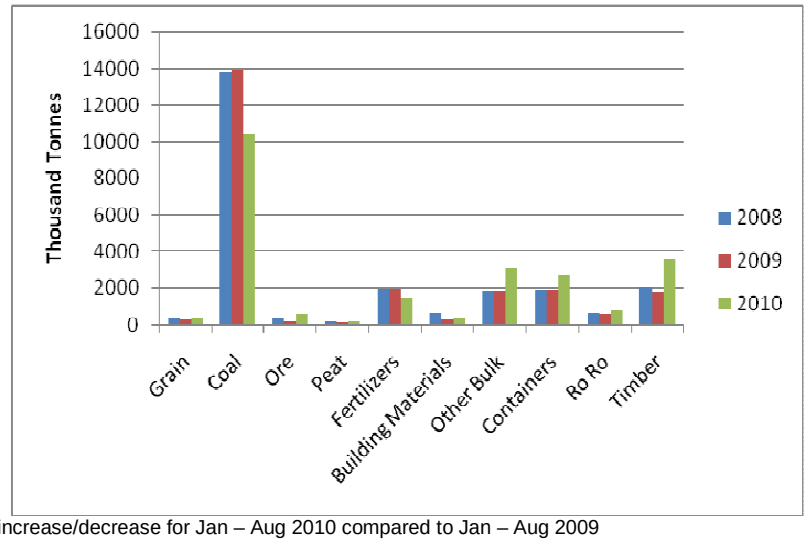
Given the relatively low volumes of traffic and the positions of Ventspils and Liepaja away from the proposed route for Rail Baltica only Riga port is examined in detail here.

Figure 58 - B.58 - Location of Key Latvian Sea Freight Facilities

Riga has traditionally been considered as the Western end of the Trans-Siberian Railway. Loading capacity at the terminals of the Freeport of Riga accounts for 45 million tons per annum. The port has an important role in ensuring the functioning of multimodal West-East and North-South transport corridors. In 2009 the volume of the transshipped cargoes reached 29.7 million tons –the highest index during all the 805 years of Riga port activities.

The main types of cargo handled at the Freeport of Riga are containers, various metals, timber, coal, mineral fertilizers, chemical cargoes, oil and food products. The graph below shows dry bulk and general cargo traffic from 2008 to 2009.

Figure 59 - B.59 - Dry Bulk and General Cargo Tonnages, Port of Riga, 2008 to 2009



*2010 figures based on % increase/decrease for Jan – Aug 2010 compared to Jan – Aug 2009

From Jan 2010 – Aug 2010 a 13.9% decline in bulk cargos has been seen compared to the same period from the previous year (due to a 25% decrease in both coal and fertilizer traffic), whereas general cargos have increased 64.5% with large increases in container and timber traffic. Largest turnover of the total amount is provided by companies “Unifeeder” (34%) and “MSC” (24%).

Cargo mostly comes from the Far East, China, India, Korea and Japan. At present the cargo at the Freeport of Riga is assembled for dispatch to the Far East regions, comprising mainly containers with timber, raw materials, construction materials, mineral fertilizers, spare details and other cargo. Up to 80% of the Freeport of Riga cargo turnover is made up of transit cargoes forwarded to or received from the CIS.

The container terminal, Baltic Container Terminal, was built in Riga in the 1980’s and handles the majority of Riga’s container traffic. Baltic Container Terminal Limited (BCT) is a privately owned container terminal operating within the Free Zone of Riga Freeport. BCT is positioning itself as the Gateway via Latvia to act as a main distribution centre in the Baltic Region and the CIS. Baltic Container Terminal Ltd is equipped with an advanced terminal computerisation control system – the NAVIS SPARCS System – to guarantee improved quality services. The Infrastructure available includes much more than a normal feeder port would normally require and BCT has a capacity of handling in excess of 350,000 TEU per annum in its present state (in 2008 it handled 207,000 TEU and it handled 183,000 TEU in 2009). A total of 13,500 m^2 of covered storage space is available. The terminal has a draft of 11.7m and a 25 meter ro-ro ramp is available at the west end of the quay making a ro-ro, lo-lo operation possible simultaneously. The terminal is directly linked to the main rail routes with access from the terminal in place at quay side, at the warehouses and container freight station facilities.

The port of Riga is looking to develop its container transhipment capability and is involved in preparatory activities for a container terminal construction Kunzdinsala to be called the National Container Terminal and is to have a draft of 13.5m and its own rail infrastructure. An investment of 350 million euros is to be made by Latvian and Russian partners. Services are not being provided as yet, NKT quotes that plans are as follows:

Table 71 - B.71- Development Plans at the Port of Riga

Development Round	Year of implementation	Cargo turnover	
		Containers (TEU)	Automotive
1st round, stage 1	2010	130000	-
1st round, stage 2	2010	190000	200000
1st round, stage 3	2012	300000	400000
2nd round	2016	550000	500000

3rd round	2018	700000	500000
4th round	2021	850000	500000

The second major project of Riga port is construction of a new multifunctional cargo terminal on Krievu Sala, that will cost approximately 100 million EUR, and 85 million EUR have already been allotted to this Project by the European Union.

Elaboration of the draft design for the ship access channel reconstruction has begun. The project aims at deepening and widening of the Port of Riga harbour entrance access channels, in order to provide secure services to vessels with maximum length of 260 m, beam up to 48 m, and draft up to 15 m (only the vessels with draft up to 15 m can enter the Baltic Sea due to depth restrictions in the Danish Straits). Multifunctional terminal center of Krievu Island will be able to process 15 million tons of cargo, besides; it will be possible to ensure handling of relevant cargo types in compliance with the actual market situation.

Sea Freight Prices

For sea freight prices were requested from a variety of lines listed as operating from Tallinn, Riga and Klaipeda ports. Responses for journeys to/from Latvia were as follows:

Table 72 - B.72- Latvian Sea Freight Prices

Shipping Line	Routes of Interest	Type of Traffic	Journey Time	Cost EUR	Frequency of Service
MSC	Riga - Helsinki	40' container	2 weeks	1355	1 time week
	Riga - Tallinn	40' container		Closed route	
UAB Containership	Hamburg - Riga	40' container	5 days	1350	1 time week
UAB „Limarko jūrų agentūra“ (Team Lines Deutschland GmbH & Co)	Hamburg - Riga	40' container		Closed route	
	Bremerhaven - Riga	40' container		Closed route	
Team Lines	Muuga - Riga	40' container		Closed route	
Team Lines Latvia SIA	Riga - Hamburg	40' container	3-4 days	585	2 times in week
CMA - CGM	Gdynia - Riga	40' container	2-12 days (in mid August due to service changes shipment will be effected via Hamburg)	1050	1 time in week
	Hamburg - Riga	40' container	3 days	500	1 time in week
	Riga - Muuga	40' container	2 days	300	1 time in week
	Riga - St Petersburg	40' container	14 days (shipment via Hamburg)	1150	1 time in week
Unifeeder Container Service Ahlers Agencies	Hamburg - Riga	40' container	4-5 days	840	1 time in week
	Riga - Klaipeda	40' container		Closed route	
	Riga - Rauma	40' container		1205	
Ave Line	Riga - Travemunde (Germany)	Ro Ro - 40T articulated lorry	29 hours	680	2 times in week

All services researched are through Riga. Services are provided to/from Finland (Helsinki), Estonia (Tallinn: Muuga), St Petersburg, Poland (Gydnia) or Germany (Hamburg, Travemunde). Operators contacted for services advertised to Lithuania stated that the routes had been closed; some operators had also closed routes to Germany and Estonia.

Rates per km are roughly as follows:

- Latvia to Finland: €2.28 to €2.93
- Latvia to Estonia: €0.7 per km
- Latvia to Germany and vice versa: €0.35 to €0.94 per km, average €0.63
- Poland to Latvia: €2.19
- Latvia to St Petersburg: €1.72

It can be seen that the sea rates for trips to Germany are considerable lower than sea rates to all other countries.

Freight Journey Times and Service Frequencies

A comparison of current road and rail freight journey times for key routes to/from Latvia can be seen below:

Table 73 - B.73- Journey Times and Service Frequencies for Journeys to/from Latvia

From	To	Road Distance	Rail Distance	Sea	Road	Current Rail
Latvia	Estonia	307	360	2 days	6 – 7 hours	3 - 4 days
Latvia	Finland	316 + sea leg	360 + sea leg	2 weeks – long route	9 – 10 hours + 4 hours sea	6 – 7 days + handling time + + 4 hours sea
Latvia	Lithuania	263	285		5 – 6 hours	2 – 3 days
Latvia	Germany	1010	1409	29 hours – 5 days, usually 3 days	18 – 19 hours	
Latvia	Poland	653	759	2 – 12 days	12 – 13 hours	7 – 8 days
Latvia	St Petersburg	567	683	14 days via Hamburg	10 – 11 hours	
Latvia	Italy	2096	2096		43 hours	
Jelgava	Valmiera	153	153		3 – 4 hours	

By sea the following approximate service frequencies are advertised by Baltic Container Terminal at Riga port:

Route	***Line***	***Agent***	***Frequency***
Riga-Bremerhaven-Hamburg-Rotterdam-Antwerpen-Arhus-Goteborg-Gdynia/Gdansk-Stockholm-Gavle-Rauma-Riga	Unifeeder	Ahlers	2 x Weekly
Riga-Bremerhaven-Hamburg-Gdansk/Gdynia-Klaipeda-Galve-Tallin-Riga	Team Line	Nurminen	2 x Weekly
Riga-Norrkoping-Antwerpen-Bremerhaven-Kaliningrad-Riga	MSC	MSC Latvia	Weekly
Riga-Bremerhaven-Hamburg-Gdansk/Gdynia-Klaipeda-Riga	CMA-CGM	Nurminen	Weekly
Riga-Bremerhaven-Hamburg-Gdansk/Gdynia-Klaipeda-Riga	ESF	Rinella	Weekly

In addition it is known that there are the following services:

- Riga – Helsinki Weekly
- Hamburg – Riga Weekly
- Riga – Travemunde 2 x Weekly Ro Ro Service

As mentioned previously road freight times have been taken from route planning software with drivers hours legislation taken into account in calculating the journey times. Sea freight times have been taken from the quotes provided. As rail freight services are not regularly available for the routes shown they have been calculated using formulas of the agreement on the international railway carriage of freight (SMGS), and therefore these times are somewhat "theoretic". Generally road is the fastest mode currently (with the exception of the express sea freight service to Germany). Currently rail is substantially slower than both sea and road. As for Estonia the speed limit for HGVs is 50km/h in a built up area and 90km/h elsewhere.

As with Estonia a large proportion of current rail freight is travelling to/from the ports for onward distribution (78% of 2008 traffic according the LDZ yearbook), the majority of this is likely to be transport from Russia and Belarus. Of the terrestrial transit the main countries LDZ carries to/from are Russia (30%), Estonia (23%), Belarus (9%), Kazakhstan (9%) and Lithuania (8%).

Current export volumes north south are largest to Estonia (664,000 tonnes in 2009), Lithuania (51,000 tonnes) and Finland (49,000 tonnes). Current import volumes north south are largest to Lithuania (819,000 tonnes in 2009) and Estonia (125,000 tonnes).

For transit transport the main origins and destinations are:

From	Thousand Tonnes, 2009	To	Thousand Tonnes, 2009
Belarus	1122	Netherlands	883
Lithuania	732	Estonia	749
Russia	653	Lithuania	479

Currently there are two regular container trains provided by LDZ: Baltica-Transit and ZUBR.

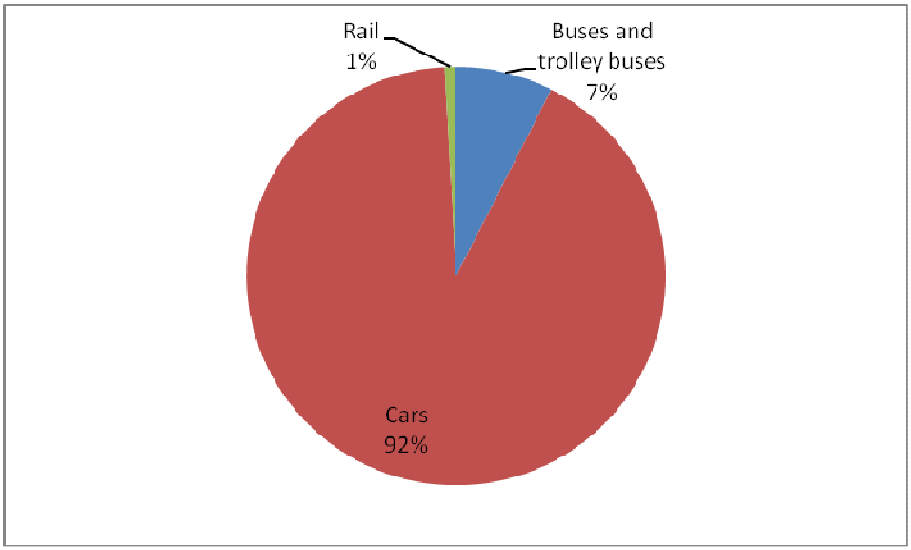
- Baltica-Transit – as mentioned previously. The final formation of the wagon groups into the train takes place in Latvia, at Rezekne station. Around 80% of the freight comes from Latvian seaports, 10% from Lithuanian and 10% from Estonian ports.
- ZUBR – as mentioned previously. LDZ have stated that the container train currently runs only on the route from Latvia to Belarus.

1.3.4 Lithuania

Current Modal Choice – Passengers

The following Figure shows the current modal split of Lithuanian land-based passenger traffic. Passenger kms were not available for air or sea. Rail forms only a very small proportion of passenger kms, with the private car being by far the dominant mode.

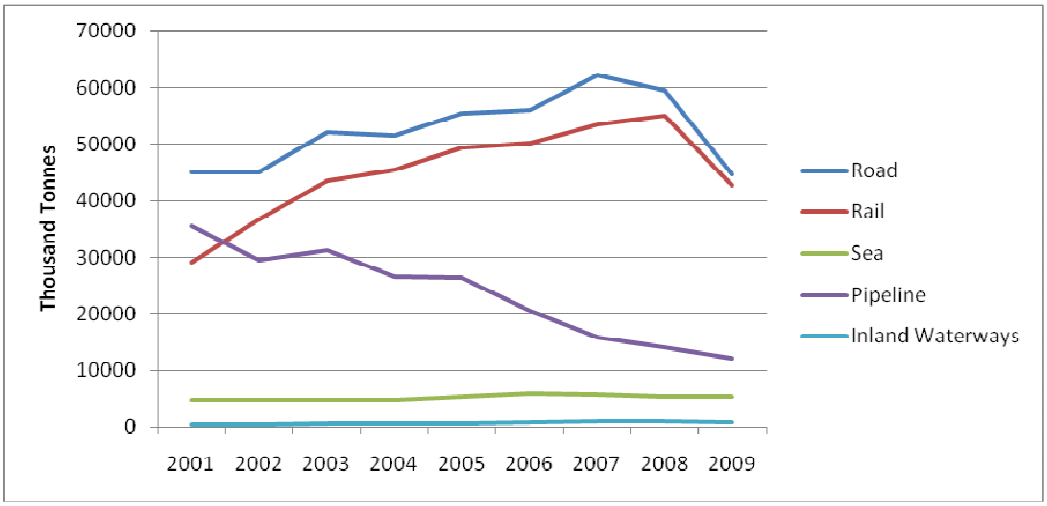
Figure 60 - B.60 - Lithuanian Passenger Traffic by Mode, 2008 Passenger-kms



Current Modal Choice – Freight

The majority of freight to/from Lithuania is carried by either road or rail. The graph below shows the modal split of freight within Lithuania for goods carried. In 2008, the model base year, 41% of goods to/from and within the country were carried by rail, 44% by road and 4% by sea.

Figure 61 - B.61 - Lithuanian Freight Traffic by Mode, 2001 - 2009



Pipeline volumes have consistently decreased since 2001, whereas both road and rail volumes had seen significant growth between 2001 and 2008, followed by a drop in 2009, however, monthly statistics show that rail freight volumes have increased substantially in 2010 compared to 2009 (the first eight months show a 15% increase on the same period last year) indicating that volumes are returning to rail.

Routes which travel in a North – South direction to/from Lithuania with an annual tonnage of over 15,000 tonnes per annum have been considered as routes which may be viable for Rail Baltica as this equates to an approximately fortnightly service for non bulk traffics. Routes with lower volumes may provide some traffic; however, they will not form the core service for Rail Baltica.

In terms of traffic types relevant cargo has been taken as either dry bulk, general cargo or non bulk traffics such as containers, ro ro or food products.

Baltics traffic has only been taken into account for the following movements:

1. Panevėžys, Šiauliai and Alytus to Kaunas
2. Alytus and Kaunas to Panevėžys and Šiauliai
3. Vilnius, Kaunas, Klaipeda sea port, Panevėžys and Alytus to Riga City & Region, Zemgale and Vidzeme and vice versa
4. All Lithuania regions to Põhja-Eesti, Kesk-Eesti and Lõuna-Eesti

These movements are deemed to be the only movements likely to have sufficient length of haul and proximity to the proposed line to be of relevance to the project. More information on how Baltics traffic has been split and the levels of accuracy and detail available can be found in the modelling report.

The table below shows the current volumes on each of the routes for bulk / general cargo and non bulk traffics and the modal split of these volumes.

Table 74 - B.74 - 2008 Tonnages for Major North – South Freight Routes to/from Lithuania

Origin	Destination	Non Bulk	Dry Bulk / General Cargo	Modal Split Dry Bulk / General Cargo			Modal Split Non Bulk		
		Current Volumes (000 Tonnes pa)	Current Volumes (000 Tonnes pa)	Road	Rail	Sea	Road	Rail	Sea
Estonia	Lithuania	83	92	100%	0%	0%	90%	8%	2%
Finland	Lithuania	111	80	20%	0%	80%	12%	0%	88%
Germany	Lithuania	1,265	461	69%	0%	31%	21%	0%	79%
Latvia	Lithuania	183	499	14%	85%	1%	42%	58%	0%
Lithuania	Estonia	55	67	99%	0%	1%	91%	0%	9%
Lithuania	Finland	367	580	41%	0%	59%	100%	0%	0%
Lithuania	Germany	849	955	36%	0%	64%	44%	0%	56%
Lithuania	Latvia	293	707	22%	65%	14%	56%	39%	4%
Lithuania (N)	Lithuania	2083	2904	87%	13%	0%	95%	5%	0%
Lithuania (S)	Lithuania	444	570	98%	2%	0%	99%	1%	0%
Lithuania	Russia – Gulf of Finland	417	627	96%	0%	4%	100%	0%	0%
Lithuania	Poland	373	727	39%	49%	12%	53%	24%	23%
Russia – Gulf of Finland	Lithuania	54	104	72%	0%	28%	91%	0%	9%
Poland	Lithuania	366	525	51%	17%	32%	48%	6%	45%

Sources: Eurostat for road and sea freight data, rail freight data from Eesti Raudtree Annual Report 2008, detailed information provided by the Lithuanian government and detailed rail freight data provided by LDZ

The key flows which Rail Baltica may compete with are:

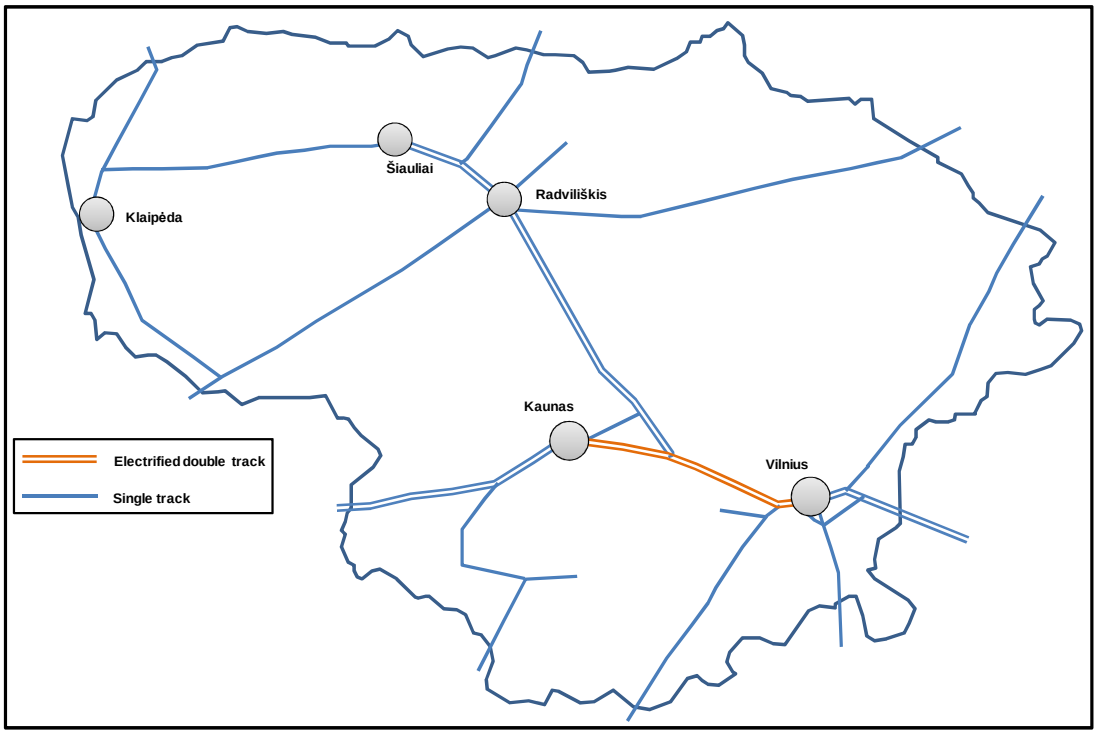
- Germany – Lithuania and Lithuania - Germany: combination of sea and road freight, both bulk and non bulk traffics
- Lithuania – Poland and Poland – Lithuania: primarily bulk freight some of which currently split between road, rail and sea

Some competition may also be possible for longer internal flows and some flows to/from Latvia if Rail Baltica can provide improved service levels over the current rail option.

Rail Network

The Lithuanian rail network is formed of Russian gauge (1,520mm) lines and is entirely operated by Lithuanian Railways, the National, State-owned railway company. 122 km of the route (about 7%) is electrified, with a significant proportion of the network linking Vilnius, Kaunas, Radviliskis and Siauliai comprised of double track. The following Figure contains a map of the Lithuanian rail network. The punctuality of the network is good however the rolling stock could do with modernisation

Figure 62 - B.62 - Lithuanian Rail Network



New Development Plans

In 2009, AB Lietuvos Geležinkeliai was implementing 107 infrastructure investment projects. The reconstruction of railway bridges and overpasses on International Corridor IX and the renovation of Kaunas railway tunnel were completed, and the modernisation of marshalling yards on International Corridor IX was completed.

In 2009, significant project that was started to be implemented is the development of Klaipėda railway junction.

Following projects are set as priorities of AB Lietuvos Geležinkeliai:

(1) modernisation of the line Vilnius–Kaunas to increase the speed to 160 km/h;

(2) Construction of second tracks on the lines Telšiai–Lieplaukė, Kūlupėnai–Kretinga, Pavenčiai–Raudėnai, Plungė–Šateikiai, and Telšiai–Dūseikiai.

Key Passenger Rail Routes

The routes between Kaunas and Vilnius and Kaunas and Siauliai have been selected as the key internal movements within Lithuania which are likely to be impacted by Rail Baltica.

Table 75 - B.75 Lithuanian Rail Quality Metrics – Passengers, Detailed Information

	Line description	Approximate Distance (Km)	Service Frequency (trains per day)	Service Volume (2-way) passengers per day	Average Journey Time (hh:mm)	Economy Single Fare (Euros)
Kaunas – Vilnius	Electrified double track from Kaunas – Vilnius	104	17	2,740	01:26	4.63
Vilnius – Kaunas			17		01:26	
Kaunas – Šiauliai	Double track from Kaunas – Šiauliai	158	1	112	02:33	6.43
Šiauliai – Kaunas			1		02:33	

Table 76 - B.76- Lithuanian Rail Quality Metrics – Passengers, Route Scoring

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed (kph)	Mode Share	
L I T H U A N I A							
Kaunas-Vilnius	Fair	Fair	17 per day	Fair	73	14%	4.45
Score	3	3	3	3	2	3	4
Kaunas-Siauliai	Fair	Fair	1 per day	Fair	62	3%	4.07
Score	3	3	1	3	2	1	4

Rail Freight Quality

Lithuanian Railways is the operator of all rail freight services in Lithuania. The company also provides freight forwarding and warehousing services, wagon tracking and tracing and is responsible for passenger rail.

There are 109 rail freight stations in Lithuania which are shown in the map below:

Figure 63 - B.63 - Lithuanian Rail Freight Stations

The key stations are marked in red and are Kaunas, Vilnius, Klaipeda and Siauliai. The following terminals handle containers:

Table 77 - B.77- Lithuanian Container Handling Facilities

20’ and 30’ Containers Only	Including 40’ Containers
Alytus Klaipeda Rimkai	Draugystė (adjacent to Klaipeda) Kaunas Paneriai Šeštokai

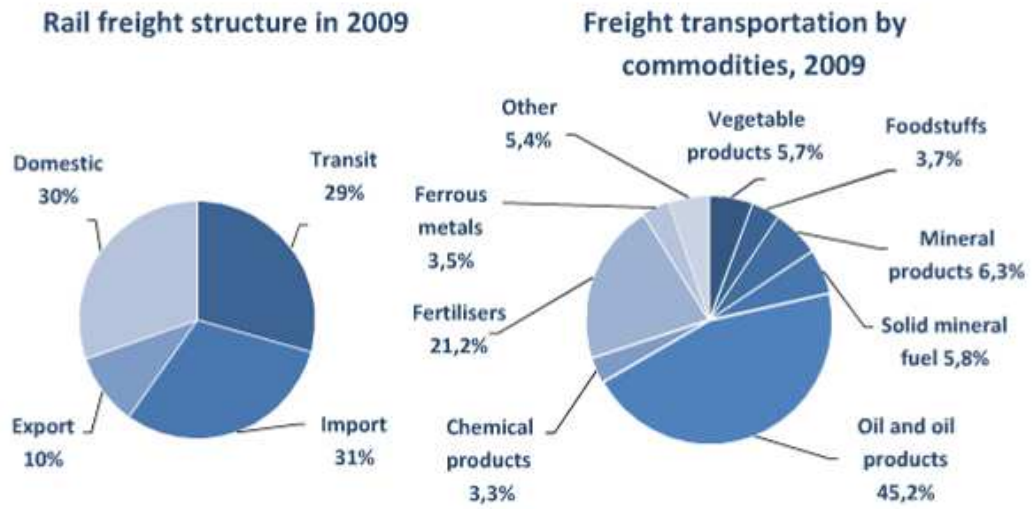
Of these stations Kaunas and Šeštokai are likely to be most relevant to the proposed Rail Baltica line.

Information systems STOKIS, AGAT and OPKIS have been installed in commerce stations. These systems give a full view of the location of rolling stock and operations performed. Information system KROVINYS (Cargo) is in operation for handling shipping documents for freight transported on Lithuanian railways, as well as for accounting control.

In order to develop intermodal freight transport in Lithuania, public logistics centres are being founded in Vilnius (nearby Vaidotai Marshalling Yard) and Kaunas. The EU financial assistance of the Cohesion Fund will be used for creating modern overland intermodal terminals, at these locations.

The graphs below, taken from Latvian Railways, show the makeup of current rail freight traffic:

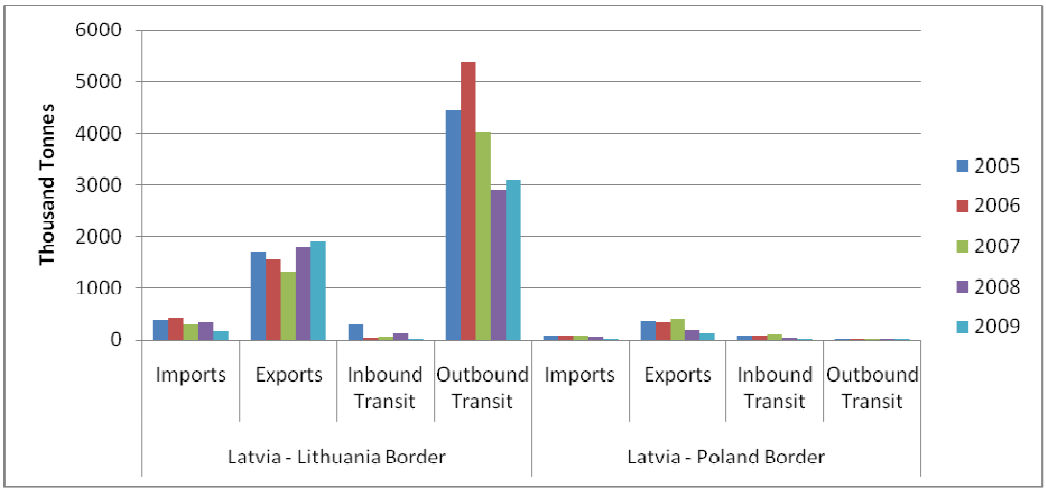
Figure 64 - B.64 - Lithuanian Rail Freight Traffic Makeup, 2009



It can be seen that, compared to the other countries imports and exports play a much greater role in rail freight traffic.

In terms of traffic through the north – south borders currently the main large flows are outbound transit and exports via the Latvia border. Through flows north – south currently equate to 12,000 tonnes from Poland to Latvia in 2009, down from 41,000 tonnes in 2008 with very little in the return direction.

Figure 65 - B.65- Current Cross Border Flows, Detailed Information Provided by Lithuanian Railways, 2005 - 2009



A large proportion of current Lithuanian rail freight is dominated by 6 major customers. These companies make up more than half of imports, exports and local traffic. It is expected that most will remain using existing lines; however, Rail Baltica could open up new destinations for the products of these companies.

Table 78 - B.78- Key Current Rail Freight Customers in Lithuania

	% Share of Tonnage		
	Local	Exports	Imports
Mazeikiu Nafta	17.2	69.8	26.6
Akmenes Cementas	5.4	2.8	-
Achema	25.1	0.7	1.3
Milsa	5.5	1.5	8.2
Lifosa	6.1	-	17.2
Dolomitas	7.2	1.2	-

Rail Freight Punctuality
Rail freight punctuality levels were provided by Lithuanian Railways for September 2009 – August 2010. On average a punctuality of 97.1% was achieved with a range between 96.2% and 98.3%. It is unclear, however, exactly how it is determined whether or not a train is 'to schedule'.

Rail Freight Pricing
Tariffs for carrying of freight are not regulated by governmental institutions and are set by Lithuanian Railways. The tariff book for import, export and local transportation of freight is publically available in Lithuanian. According to the aforementioned tariff book, the calculation of the tariff is mainly based on the distance, weight and type of carriage. Tarriffs are provided in Euros and in Lithuanian Litas.

Table 79 - B.79- Lithuanian Rail Freight Pricing: Container Tariffs in Euros, Updated March 2010

Distance km	20' Container	40' Container	45' Container
51 - 60	120	241	349
101 - 110	141	282	409
151 - 160	161	322	467
201 - 210	182	362	525
251 - 260	202	403	584
301 - 310	222	444	644
351 - 360	242	485	703
401 - 410	262	525	762
451 - 460	283	566	820
501 - 510	303	606	879
551 - 560	324	647	939
591 - 600	340	680	985

Table 80 - B.80- Lithuanian Rail Freight Pricing: Bulk Freight: Multipurpose Wagon Tariffs in Euros, Updated March 2010

	Weight in Tonnes					
Distance km	11 - 15	21 - 25	31 - 35	41 - 45	51 - 55	61 - 65
51 - 60	85	108	131	145	150	155
101 - 110	115	139	163	178	186	192
151 - 160	145	171	196	212	221	230
201 - 210	175	202	229	247	257	266
251 - 260	206	233	261	281	292	303
301 - 310	235	265	294	315	328	341
351 - 360	265	295	327	350	363	377
401 - 410	295	327	359	383	399	414
451 - 460	325	358	392	417	434	452
501 - 510	354	390	425	451	470	489
551 - 560	384	420	458	485	505	525
591 - 600	408	446	484	513	534	555

For a typical journey prices per km are as follows:

Table 81 - B.81- Lithuanian Rail Freight Pricing: Price in Euros: Published Tariff for an Average Lorry Load

	Standard Tariff	
Journey Type	**Domestic**	**Import / Export**
Distance Assumed	91km	351km
Bulk (universal rolling stock, 18 tonne lorry load carried in 1/2 wagon)	0.92	0.49
40' Container	3.00	1.38
20' Container	1.51	0.69

These prices are more expensive for short distance journeys than tariffs in Latvia and Estonia, however long distance journeys are cheaper than the published tariff for Estonia (although more expensive for 40' containers than the quoted price for Estonia), bulk tariffs are cheaper than Latvia for long distance journeys, however, container tariffs are more expensive.

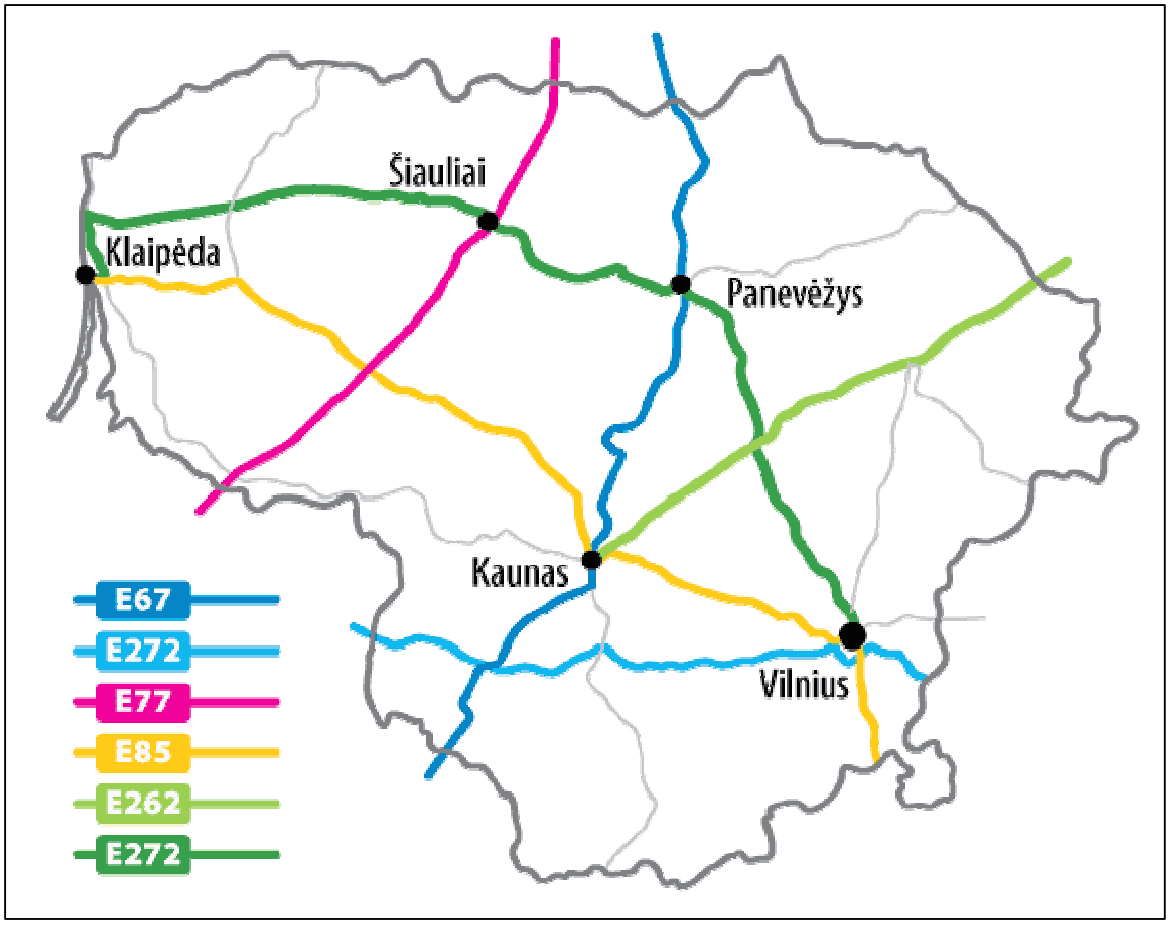
Special rates are applied for container transport by the "Viking" train along the Draugystė (Klaipėda) – Koliadichi (Minsk) – Iljichiovsk (Odessa) route and back. The cost was 500USD for a 20' container in 2009 and 840 for a 40' according to Klaipeda port information. This is approximately €0.42 per km for a 40' and €0.25 for a 20', which is significantly cheaper than rates per km for the longest journeys on Latvian and Estonian railways for 40' containers and is similar to Latvian rates for 20' containers travelling long distance and is also significantly cheaper than current tariffs.

Lithuania Railways were asked to quote for representative journeys, however, they failed to supply a quote to us therefore this information cannot be presented.

Road Network

Lithuania has two key E-Roads linking with Latvia: the E77 from Siauliai to Riga and the E67 from Panevezys to Riga. Figure below displays all the routes classified as E-Roads within Lithuania together with the other main highway routes.

Figure 66 - B.66 - Lithuanian Road Network



New Development Plans

There are planned reconstruction works on the road Riga–Šiauliai–Tauragė–Kaliningrad (road E77) which will improve transport conditions for local and transit transport travelling from Latvia to Poland and Western Europe. Although this is north – South direction its influence to Rail Baltica is not significant, since most of the road users use the E67 road to get to Poland.

Key Road Passenger Routes (Car)

Table 82 - B.82- Lithuanian Road Quality Metrics (Car) – Passengers, Detailed Information

	Highway description	Approximate Distance (Km)	Traffic volume 2-way (AADT)	Average Journey Time (hh:mm)	Average Speed (kph)
Kaunas – Vilnius Vilnius – Kaunas	A1: dual carriageway out of Kaunas for 102km to Vilnius	102	14,586	01:07	90
Kaunas – Šiauliai Šiauliai – Kaunas	A1: dual carriageway out of Kaunas 111km to A12, then A12 to Šiauliai is single carriageway	176	2,936	02:04	85

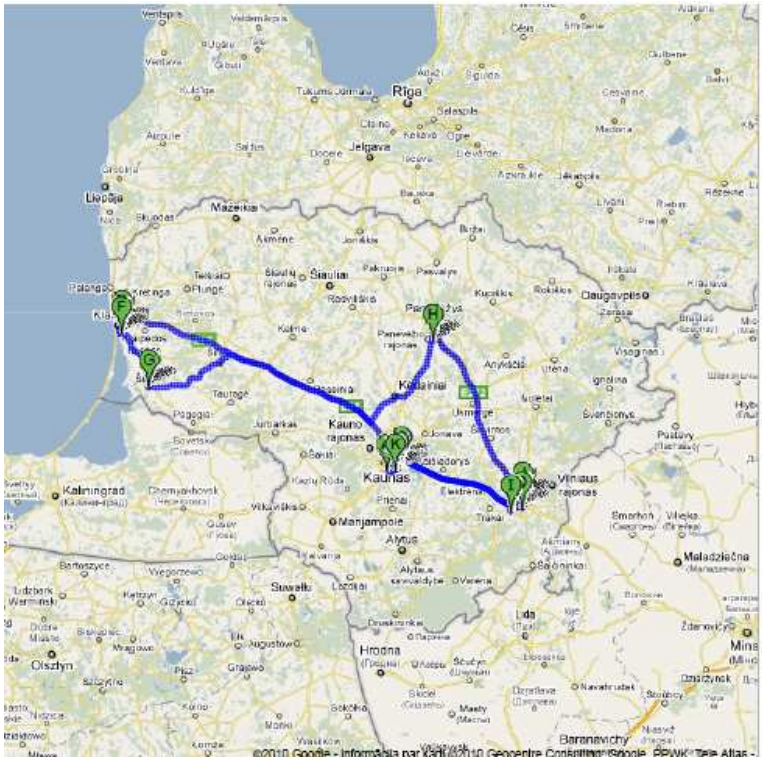
Table 83 - B.83- Lithuanian Road Quality Metrics (Car) – Passengers, Route Scoring

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed (kph(	Mode Share	
L I T H U A N I A							
Kaunas-Vilnius	Good	Fair	Anytime	Fair	90	73%	8.55
Score	4	3	5	3	3	5	3
Kaunas-Siauliai	Fair	Fair	Anytime	Fair	85	81%	8.55
Score	3	3	5	3	3	5	3

Current Logistics Facilities

The following Figure shows the location of key Lithuanian logistics facilities. The red and yellow routing options are likely to be more effective in picking up local traffic (potential for some from the Panevezys logistics terminal). The green / orange lines are likely to be more convenient for any potential transhipment of freight from Klaipeda, however, this transhipment is unlikely as gauge change would be required. There is a good sized cluster of facilities at Kaunas indicating that this is indeed the ideal site for an intermodal terminal in Lithuania and is likely to pick up a good amount of traffic. At approximately 100km away traffic from Vilnius would only be likely to use the line for very long distance journeys (i.e. potentially to Germany).

Figure 67 - B.67 - Location of Key Lithuanian Logistics Facilities



Road Freight Charging

The Euro vignette system is already implemented in Lithuania with charges as follows on all main roads:

Table 84 - B.84- Lithuanian Road Charges

	Amount of charge (LTL)			
Vehicle	**Daily rate**	**Weekly (7-day) rate**	**Monthly (30-day) rate**	**Annual rate**
12 – 40T	20	90	180	1600
Over 40T	20	90	250	1900

The proportion of articulated HGVs registered out of total HGVs has risen from 10% in 2000 to 14% in 2009 as Lithuanian fleets adopt more modern technology.

Road Freight Prices

As noted previously for road freight traffic quotes were sought from a variety of Eastern European hauliers which provided an average freight fee of between €0.9 and €1.15 per km. It can be seen that the rail freight price is lower than this for bulk traffics but higher for the majority of container journeys.

Coach Network

Like Estonia and Latvia there is an extensive intercity coach network in Lithuania competing with existing rail services.

Key Coach Routes

Table 85 - B.85- Lithuanian Road Quality Metrics (Coach) – Passengers, Detailed Information

	Approximate Distance (Km)	Service Frequency (coaches per day)	Service Volume (2-way) passengers per day	Average Journey Time (hh:mm)	Economy Single Fare (Euros)	Price per 100 Km (Euros)
Kaunas – Vilnius	102	59	2,784	01:37	5.23	5.13
Kaunas – Šiauliai	176	23	579	03:03	9.63	5.47

Table 86 - B.86- Lithuanian Road Quality Metrics (Car) – Passengers, Route Scoring

	Quality		**Service**			**Mode Share**	**Price per 100 km**
	Comfort	Facilities	Frequency	Reliability	Speed (kph(		
L I T H U A N I A							
Kaunas-Vilnius	Fair	Fair	59 per day	Fair	63	14%	5.13
Score	3	3	4	3	2	3	3
Kaunas-Siauliai	Fair	Fair	23 per day	Fair	58	16%	5.47
Score	3	3	3	3	1	3	3

Air Passenger Network

There are four international airports in Lithuania at: Vilnius, Kaunas, Palanga and Siauliai. Vilnius is the largest of these in terms of air passenger traffic, handling 1.3 million passengers in 2009. Over the first seven months of 2010, Lithuanian airports served 1.3 million passengers, an increase of 22.6 percent year-on-year. Following Figure illustrates the principal air routes available from Lithuanian airports for the Baltic region.

Figure 68 - B.68 - Lithuanian Air Passenger Network

New Air Development Plans

On February, 2010 Irish low-cost airline Ryanair decided to invest 140 million dollars in a new hub in the country's second-largest city, Kaunas. Riga airport also had been hoping to attract Ryanair to Latvia, but the company has announced that Kaunas is their preferred location for a regional hub. Having offered new routes to European cities from Kaunas airport, Ryanair already has attracted more passengers to Kaunas airport. In H1 2010, the airport services 314,041 passengers, an increase of 57.5% compared with the respective period last year, when the figure reached 199,386 passengers. In June 2010 compared with June 2009, the number of passengers increased from 38,712 to 80,808.

Key Air Passenger Routes

There are no internal flights along the Rail Baltica Corridor within Lithuania

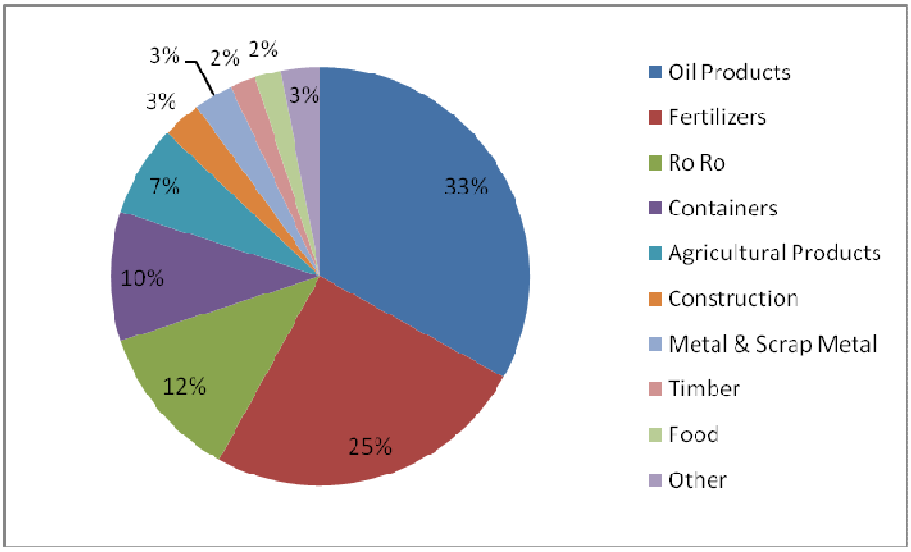
Sea Freight Volumes and Facilities

There are two major ports in Lithuania – Klaipeda and Butinge. Klaipeda accounted for 77% of freight tonnage in 2009 or 28 million tonnes. The vast majority of freight handled at Butinge is liquid bulk from Russia (95% in 2008), therefore this port has not been analysed in further detail.

As with the other Baltic ports Klaipeda port is situated in a Free Economic Zone (412 ha). The port has 26 terminals currently in operation including 2 terminals for containers and 2 for ro ro. The depth of the entrance channel is 15 meters. The depth of the port navigation channel is between 13 and 14.5 meters. Therefore, the port can accept large-tonnage vessels: dry-cargo vessels up to 80,000 DWT, and tankers up to 150,000 DWT.

Oil products, fertilizers, Ro Ro and containers form the main traffics through Klaipeda port. Between 2008 and 2009 increases were seen in fertilizer traffic (2%), whilst decreases were seen in both containers and ro ro traffic (-11% and -19%).

Figure 69 - B.69 - Cargo Structure in Klaipeda Port, 2009 (% of Tonnes)



In terms of port hinterland the majority of traffic through the ports comes in by land transport from either Lithuania (61.8%), Belarus or Russia. In the year 2009 transit cargo flow via Klaipėda port decreased by 11% and Lithuanian cargo decreased by 4% compared to 2008.

Table 87 - B.87- Klaipeda Port Hinterland, 2009

	Thousand Tonnes in 2009	% of Total
Lithuanian Cargo	17,213	61.8%
Transit Cargo including:	10,653	38.2%
Belarus	6,618	23.7%
Russia	3,305	11.9%
Kazakhstan	165	0.6%
Ukraine	244	0.9%
Latvia	197	0.7%
Estonia	17	0.1%
Other countries	108	0.4%

Onward transport by sea is carried out to a wide variety of journeys with the key destinations of interest being Germany (14.1% of all sea freight tonnage) and Poland (4.8% of all sea freight tonnage).

Table 88 - B.88 - Klaipeda Port Main Countries for Trading by Sea, 2009

	Country	Thousand Tonnes in 2009	% Of Tonnage
1	Germany	3,932.8	14.1
2	Holland	3,531.3	12.7
3	Poland	1,330.2	4.8
4	Russia	1,231.9	4.4
5	Belgium	1,121.6	4.0
6	France	983.8	3.5
7	Latvia	929.9	3.3
8	Denmark	919.0	3.3
9	Great Britain	806.5	2.9
10	Estonia	731.4	2.6
11	Norway	626.1	2.2
12	Spain	604.0	2.2
13	Finland	311.0	1.1
14	Turkey	234.4	0.8

In the year 2009 Klaipėda port handled 247,977 TEU containers, 34% less than in the year 2008. Handling was split 60:40 between Klaipėda container terminal Ltd and Joint-Stock Stevedoring Company Klaipėdos Smeltė. Klaipeda Container Terminal has a capacity of 450,000 TEU per year Railway and is rail connected with 2 lines in the Ro-Ro terminal and 4 lines in the Container Terminal. Klaipėdos Smeltė Container Terminal is capable of handling 200,000 TEUs per year. Volumes of both containers and Ro Ro have picked up in 2010 with Klaipeda Container Terminal (KCT) seeing an increase of 28% in container volumes for Jan – Aug 2010 compared to Jan – Aug 2009 and Ro Ro volumes at the terminal have doubled with the opening of the KESS ro-ro service in April 2010 which transports vehicles and other cargo from Western Europe.

The port of Klaipeda was second only to Saint Petersburg in terms of container volumes in 2009 / 2010 within the Eastern Baltic region.

Table 89 - B.89- Klaipeda Port Container Volumes Compared to Other Ports in the Region, 2009 and 2010

Port	Container TEUs	
	2009 01-05	2010 01-05
Saint Petersburg	493,288	719,370
Klaipėda	**105,029**	**114,801**
Riga	73,772	94,157
Tallinn	57,829	61,576
Ventspils	60	0
Liepaja	300	241

The key overseas destinations for containers to/from Klaipeda are Germany (35% of TEUs) and Poland (17% of TEUs).

In 2010 – 2011 both KCT terminals will be further developed. A new stage of dredging the water territory in Malku Bay will start in the near future. The terminal quay will be extended. After completion of works the quay length in the container terminal will be 850 m, draft - 11.5 m. After completion of these development plans terminal capacity will be extended to 600 000 TEU per year.

In the first half-year of 2010 the bulk cargo facility will be reconstructed to increase its productivity and a new warehouse for storage of bulk cargo will be constructed in the vicinity.

1.3.5 Cross-Border Passenger Travel

The tables below provide a summary of current transport provision for key cross border passenger movements.

Table 90 - B.90- Cross Border Rail Current Passenger Transport Provision Summary

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed	Mode Share	
E S T O N I A							
Tallinn-Riga	-	-	-	-	-	-	-
Tallinn – Kaunas	-	-	-	-	-	-	-
Tallinn – Vilnius	-	-	-	-	-	-	-
Tallinn - Warsaw	-	-	-	-	-	-	-
L A T V I A							
Riga-Tallinn	-	-	-	-	-	-	-
Riga-Vilnius	-	-	-	-	-	-	-
Riga-Kaunas	-	-	-	-	-	-	-
Riga – Warsaw	-	-	-	-	-	-	-
L I T H U A N I A							
Vilnius-Riga	-	-	-	-	-	-	-
Vilnius-Warsaw	Average	Average	1 day train and 1 night train	Unknown	58 kph	5%	€5.00
Vilnius – Tallinn	-	-	-	-	-	-	-
Kaunas-Riga	-	-	-	-	-	-	-
Kaunas-Warsaw	Average	Average	1 day train and 1 night train	Unknown	61 kph	2%	€5.76
Kaunas - Tallinn	-	-	-	-	-	-	-

Table 91 - B.91- Cross Border Road (Car) Current Passenger Transport Provision Summary

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed	Mode Share	
E S T O N I A							
Tallinn-Riga	E67	Average	n/a	Through Parnu	70 kph	63%	€8.55
Tallinn – Kaunas	E67	Average	n/a	Through Parnu, Riga and Panevezys ring roads	74 kph	86%	€8.55
Tallinn – Vilnius	E67/E272	Average	n/a	Through Parnu Riga, Panevezys and Kaunas ring roads	78 kph	43%	€8.55
Tallinn - Warsaw	E67	Few	n/a	Through Parnu Riga, Panevezys and Kaunas ring roads	71 kph	19%	€8.55
L A T V I A							
Riga-Tallinn	E67	Average	n/a	Through Parnu	70 kph	63%	€8.55
Riga-Vilnius	E67/E272	Few	n/a	Through Panevezys and Kaunas ring roads	82 kph	40%	€8.55
Riga-Kaunas	E67	Few	n/a	Through Panevezys ring road	72 kph	61%	€8.55
Riga – Warsaw	E67	Few	n/a	Through Panevezys and Kaunas ring roads	70 kph	27%	€8.55
L I T H U A N I A							
Vilnius-Riga	E67/E272	Few	n/a	Through Panevezys and Kaunas ring roads	82 kph	40%	€8.55
Vilnius-Warsaw	A4/132/16/E67	Few	n/a	Through a few small townsin Lithuania and towns in Poland	67 kph	24%	€8.55
Vilnius – Tallinn	E67/E272	Few	n/a	Through Parnu Riga, Panevezys and Kaunas ring roads	78 kph	43%	€8.55
Kaunas-Riga	E67	Few	n/a	Through Panevezys ring road	72 kph	61%	€8.55
Kaunas-Warsaw	E67	Few	n/a	Through towns in Poland	65 kph	89%	€8.55
Kaunas – Tallinn	E67	Average	n/a	Through Parnu, Šiauliai	74 kph	86%	€8.55

Table 92 - B.92- Cross Border Road (Coach) Current Passenger Transport Provision Summary

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed	Mode Share	
E S T O N I A							
Tallinn-Riga	Average	Average	16 per day	Through Parnu	70 kph	16%	€4.99
Tallinn – Kaunas	Average	Average	1 per day	Through Parnu, Riga and Panevezys	61 kph	14%	€4.83
Tallinn – Vilnius	-	-	-	-	-	-	-
Tallinn - Warsaw	-	-	-	-	-	-	-
L A T V I A							
Riga-Tallinn	Average	Average	16 per day	Through Parnu	70 kph	16%	€4.99
Riga-Vilnius	Average	Average	7 per day	Through Panevezys and Kaunas	66 kph	25%	€5.75
Riga-Kaunas	Average	Average	2 per day	Through Panevezys	61 kph	25%	€9.12
Riga - Warsaw	Average	Average	2 per day	Through Panevezys and Kaunas	51 kph	4%	€7.10
L I T H U A N I A							
Vilnius-Riga	Average	Average	7 per day	Through Panevezys and Kaunas	66 kph	23%	€5.75
Vilnius-Warsaw	Average	Average	1 or 2 every 2 days	Through a few small towns in Lithuania and towns in Poland	53 kph	22%	€8.02
Vilnius - Tallinn	-	-	-	-	-	-	-
Kaunas-Riga	Average	Average	1 per day	Through Panevezys	61 kph	23%	€6.01
Kaunas-Warsaw	Average	Average	1 or 2 every 2 days	Through towns in Poland	57 kph	9%	€9.22
Kaunas - Tallinn	Average	Average	1 per day	Through Parnu, Riga and Panevezys	61 kph	12%	€5.03

Table 93 - B.93- Cross Border Air Current Passenger Transport Provision Summary

	Quality		Service				Price per 100 km
	Comfort	Facilities	Frequency	Reliability	Speed	Mode Share	
E S T O N I A							
Tallinn-Riga	Good	Good	7 per day	Assumed reliable	107 kph	21%	€30.20
Tallinn – Kaunas	-	-	-	-	-	-	-
Tallinn – Vilnius	Good	Good	2 per day	Assumed reliable	90 kph	47%	€34.85
Tallinn - Warsaw	-	-	-	-	-	-	-
Riga-Tallinn	Good	Good	7 per day	Assumed reliable	107 kph	21%	€28.09
Riga-Vilnius	Good	Good	5 per day	Assumed reliable	100 kph	35%	€41.22
Riga-Kaunas	Good	Good	1 per day	Assumed reliable	95 kph	14%	€48.06
Riga – Warsaw	Good	Good	1 per day	Assumed reliable	90 kph	69%	
Vilnius-Riga	Good	Good	7 per day	Assumed reliable	100 kph	35%	€32.89
Vilnius-Warsaw	Good	Good	2 per day	Assumed reliable	114 kph	45%	€30.97
Vilnius - Tallinn	Good	Good	2 per day	Assumed reliable	90 kph	47%	€34.85
Kaunas-Riga	Good	Good	1 per day	Assumed reliable	95 kph	14%	€51.92
Kaunas-Warsaw	Good	Good	1 per day	Assumed reliable	101 kph	0%	€41.20
Kaunas – Tallinn	-	-	-	-	-	-	-

1.4 Freight Transit Traffic

As can be seen from the information on Lithuania, Latvia and Estonia freight volumes above a substantial proportion of traffic for each of the 3 countries is transit traffic, making this an important market for Rail Baltica to compete within.

Table 94 - B.94 - 2008 Tonnages for Major North – South Freight Transit Routes

Origin	Destination	Non Bulk	Dry Bulk / General Cargo	Modal Split Dry Bulk / General Cargo			Modal Split Non Bulk		
		Current Volumes (000 Tonnes pa)	Current Volumes (000 Tonnes pa)	Road	Rail	Sea	Road	Rail	Sea
Finland	Germany	6629	3270	1%	0%	99%	0%	0%	100%
Finland	Italy	0	809	0%	0%	100%			
Finland	Poland	328	358	32%	0%	68%	26%	0%	74%
Germany	Finland	6193	1471	1%	0%	99%	0%	0%	100%
Germany	Russia - Gulf of Finland	6392	290	0%	0%	100%	0%	0%	100%
Russia - Gulf of Finland	Germany	3200	2272	0%	0%	100%	0%	0%	100%
Russia - Gulf of Finland	Poland	76	132	100%	0%	0%	100%	0%	0%
Poland	Finland	437	405	27%	0%	73%	33%	0%	67%
Italy	Finland	0	43	0%	0%	100%			
Poland	Russia - Gulf of Finland	633	1092	100%	0%	0%	100%	0%	0%

Sources: Eurostat for road and sea freight data, rail freight data from Eesti Raudtree Annual Report 2008, detailed information provided by the Lithuanian government and detailed rail freight data provided by LDZ

As can be seen above the main transit traffic origin and destinations are:

- Finland - Poland and vice versa
- Finland - Germany and vice versa
- Germany - St Petersburg and vice versa
- Poland - St Petersburg and vice versa

The majority of the transit journeys shown are carried out by sea transport currently, with some transit traffic also carried out by road. Eurostat information did not provide any tonnages for sea traffic from Poland to Russia and vice versa, however, it is known that there is some traffic from Gdynia and Gdansk to St Petersburg, therefore volumes could be higher.

Transport to / from Finland will require a sea freight leg from Tallinn and then onward transportation by either road or rail as would have been the case with the original transportation via either ro ro ferry or shipping.

Road Network and Quality, Key Import, Export and Transit Countries
There are 3 countries where Rail Baltica could provide competition for transit traffic to traffic currently using the road network: Germany, Poland and Russia (St Petersburg area).

As a densely populated country in a central location in Europe and with a developed economy, Germany has a dense and modern transportation infrastructure. The volume of traffic in Germany, especially goods transportation, is at a very high level due to its central location in Europe. In the past few decades, much of the freight traffic shifted from rail to road, which led the Federal Government to introduce a motor toll for trucks in 2005. Individual road usage increased resulting in a relatively high traffic density to other nations. A further increase of traffic is expected in the future. Sunday driving bans are in force for HGV traffic on many roads in Germany and tolls are charged for use of the motorways.

There are few motorways in Poland and none on the route through from Lithuania. The directly competing route through Poland to the border is the E67. Information provided by trade associations suggests that there are no major problems with waiting times at the Polish border.

Transport to St Petersburg from Estonia is predominantly through the Narva border station leading onto the E20 and then M11 to Saint Petersburg. Road quality in Russia is generally significantly lower than in Western Europe and road safety in Russia is poor with road accident deaths per million population higher than all countries in the G8 and the other BRIC countries. Load security is also a key concern for transport through Russia, which according to Freighwatch has one of the highest levels of cargo theft in the Europe area. While cargo theft has been a known problem in Russia for some time, Eurowatch and other organizations are now beginning to find verifiable reports of theft activity, which almost exclusively involves the use of automatic assault rifles and violence by the perpetrators. Information from trade associations suggests that border crossings with Russia can involve long delays for freight traffic, ELEA stated queues are usually approx 3 days and that only 70 trucks per day can cross the border. ELEA also stated that this problem does not exist for rail, which might prove a great attraction for increased rail use to St Petersburg.

In the recent years certain sections of the regional M-11 motor road Ust-Luga — Kotly — Kerstovo to the intersection with the Narva Road from Saint Petersburg yo Tallinn have been repaired and widened with the money of Leningrad region and the allocated money of the Federal road fund.

From 1 January 2007 the M-11 motor-road was included in the list of federal roads and placed on the books of the Ministry of transport.

The governors of Leningrad region and Novgorod region suggested building a new federal roadway of Ust-Luga —Veliky Novgorod: to extend the M-11 motor-road from Tallinskoye highway to the highway near Novgorod. The road location has been identified and the feasibility study of the new roadway construction is under way.

Rail Network and Quality, Key Import, Export and Transit Countries
Poland is served by an extensive network of railways. In most cities the main railway station is located near a city centre and is well connected to the local transportation system. The infrastructure is operated by PKP PLK (PKP-Polskie Linie Kolejowe: PKP-Polish Rail Lines), part of state-run PKP Group. PKP Cargo provides the majority of cargo transport services. The rail network is very dense in western and northern Poland, while the eastern part of the country is less developed. Poland uses 1,435 mm (standard gauge) for its railways, except for Linia Hutnicza Szerokotorowa and a few very short stretches near border crossings. Linia Hutnicza Szerokotorowa in Sławków is the longest broad gauge railway line in Poland. The line runs on a single track for almost 400 km from the Polish-Ukrainian border, crossing it just east of Hrubieszów. It is the westernmost broad gauge railway line in Europe that is connected to the broad gauge rail system of the countries of the former Soviet Union.

Key terminals in Poland are:

- Gdańsk/Tczew: Zajączkowo Tczewskie
- Szczecin: Szczecin Port Centralny
- Toruń: Toruń Towarowy
- Warsaw: Warszawa Praga
- Małaszewicze Południowa South
- Poznań: Poznań Franowo
- Łódź Olechów
- Lublin Tatary
- Skarżysko-Kamienna
- Kielce Herbskie
- Wrocław: Wrocław Brochów
- Tarnowskie Góry/Katowice: Tarnowskie Góry Rozrządowa
- Katowice: Łazy, Jaworzno Szczakowa, Zabrzeg Charnolesie
- Kraków: Kraków Prokocim Towarowy
- Przemyśl: Medyka Towarowa

The table below shows international import, export and transit tariffs for Poland along with the rate in Euros per km. Container freight rates in Poland are determined according to distance, container length and whether the weight is over or under 22 tonnes (a standard coefficient is applied). For international transport 40’ containers cost 82% more to ship than 20’ containers. These rates are generally more expensive than those in the Baltic countries. Different rates are provided for bulk transport to/from Germany, Ukraine and some other countries not related to Rail Baltica.

Table 95 - B.95- Polish Rail Freight Prices: Standard International Container Transport Prices, January 2010

km	Container Rate 40' and 45' under 22T	Container Rate 20' under 22T	Euros per km - 40'	Euros per km - 20'
300	507.18	278.95	1.69	0.93
350	572.05	314.63	1.63	0.90
400	646.41	355.53	1.62	0.89
500	781.03	429.57	1.56	0.86
600	913.08	502.19	1.52	0.84
700	1043.33	573.83	1.49	0.82
800	1172.56	644.91	1.47	0.81
900	1307.44	719.09	1.45	0.80
1000	1438.46	791.15	1.44	0.79
1100	1570.77	863.92	1.43	0.79
1200	1702.05	936.13	1.42	0.78

Table 96 - B.96- Polish Rail Freight Prices: Standard International Bulk Freight Transport Prices, January 2010

km	Euros per 2 axle wagon	per lorry km (assuming 2 lorry loads in a wagon)	per lorry km (assuming 3 lorry loads in a wagon)
300	670.51	1.12	0.75
350	756.92	1.08	0.72
400	855.13	1.07	0.71
500	1033.08	1.03	0.69
600	1208.21	1.01	0.67
700	1380.77	0.99	0.66
800	1551.28	0.97	0.65
900	1729.23	0.96	0.64
1000	1903.59	0.95	0.63
1100	2078.72	0.94	0.63
1200	2252.31	0.94	0.63

Germany has a highly modernized rail freight system with the majority of cargo services being provided by DB Schenker. Germany has a vast network of intermodal terminals with over 140 different terminal operations currently listed by the Association of German Transport - Verband Deutscher Verkehrsunternehmen covering the entire German network. This means that transit and import / export traffic by rail to/from Germany is likely to be a very competitive market.

On 26 May 2010 DB Schenker sent out a press release stating that they will be setting up a road – rail integrated service with a shipment tracking option on the North-South corridor through the country organizations of Finland, Sweden and Norway via central Europe down to Italy and vice versa. For this purpose, they state that the company's intermodal operating centre, which is headquartered in Zürich, Switzerland, will operate around 4,000 block trains a year, primarily using its dedicated rolling stock, providing regular scheduled services several times a week on fixed routes. An extension of the service to the West is being prepared. They state that the solution is particularly suited to customers shipping heavy consignments such as paper, white goods, beverages and furniture. This service could either utilise Rail Baltica once it is constructed or prove a strong competitor to Rail Batlica traffic.

Russian Railways (First Freight) carries out all rail transportation in Russia. The Russian system is 1520mm gauge, which is not compatible with the proposed Rail Baltica line. Information provided by Riga University indicates that gauge transfer can be carried out in 2 hours if required. The relevant rail freight stations for Rail Baltica are Ust Luga and St Petersburg.

Russian rail freight has been hard hit by the recession and Business Monitor International's latest analysis (10.09.2010) suggests that the country's economy and the rail freight sector are not likely to return to pre-crisis levels before 2012. Growth in rail freight, which makes up around 85% of Russia's transportation, is expected to continue as the country recovers from recession. Moscow is still seeking membership of the WTO, which if achieved would be a clear positive for the shipping sector; however, BMI believes membership will not be achieved before 2012.

In April 2010 Russian Railways (RZD OJSC), together with the transport authorities in Austria, Slovakia and Ukraine have signed an agreement for the construction of a broad-gauge (1520mm) railway line between Kosice (Slovakia) and Vienna (Austria). The railway project will connect the rail network of Central Europe with the Trans-Siberian network. The implementation of this project will bring transit traffic on the Asia - Russia - Central Europe route and help boost the competitiveness of rail transport compared with shipments by sea or road transport. The new line will cut rail journey times from the Far East to Europe to 14 days, around half that of cheaper maritime transport and thus saving working capital on shipments.

This is a direct competitor to Rail Baltica and will likely rule out any traffic using Rail Baltica line from Austria and Slovakia as it provides a more direct route which can carry longer and heavier trains. The line is also likely to be used for transport to/from Asia via Turkey, making it unlikely that this traffic would use Rail Baltica.

According to estimates, the transport volume on the Kosice – Bratislava line could reach 23.7 million tonnes by 2025, and 18.5 million tonnes on the Bratislava – Vienna line. The main westwards traffic will be containers, iron ore and metals, with containers taking European goods east to the 1,520 mm gauge network. The planned route to Europe will carry both containers and raw materials and the reverse route will carry containers. According to preliminary estimates, the cost of the project could exceed €4.7 billion.

Business plan development and design work will be undertaken in 2011-13, with construction scheduled for 2013-15 and commercial services from 2016.

Sea Freight Quality and Services for Key Import, Export and Transit Countries

The main ports of interest, outside of the Baltics, to Rail Baltica are:

1. St Petersburg
2. Ust Luga
3. Gdynia
4. Gdansk
5. Helsinki
6. Rauma
7. Sassnitz
8. Bremerhaven
9. Hamburg
10. Kiel
11. Lubeck
12. Travemunde
13. Rostock

These represent ports which are likely to either compete with the new line or provide services which could use the new line.

Gdansk

The port of Gdansk handled 19 million tonnes of goods in 2009 (primarily fuels) including 241,000 TEUs of containers.

General cargo is handled in the Inner Port as well as in the Northern Port (DCT). Container handling at the Port of Gdansk is concentrated in the Inner Port at the Szczecinskie Quay operated by the Gdansk Container Terminal (GTK) and at the Deepwater Container Terminal (DCT) situated in the Northern Port.

These terminals operate mainly feeder and short sea shipping services. The Deepwater Container Terminal is designed to accommodate the largest vessels that can enter the Baltic Sea i.e. Postpanamax vessels.

Both GTK and DCT offer a variety of integrated terminal and holder depot operations: a full range of container handling and services, stuffing and stripping, repairs and cleaning, reefer plugs for refrigerated containers.

The Port of Gdansk provides services to Ro/Ro vessels at the quays of the Port Free Zone and at the state-of-the-art Westerplatte Ferry Terminal. A Ro/Ro ramp is also available at the Polferries Terminal operated by the Polish Baltic Shipping Co. offering regular ferry connections to Sweden, and additionally at the Deepwater Container Terminal.

Situated within a short distance of the entrance to the Inner Port, the Port Free Zone operates the handling of motor vehicles from manufacturers from the Far East and European countries. The Port Free Zone facilitates the storage of imported goods free of customs duty and guarantees, quota and tax for an unlimited period of time. Picking up and customs clearance of goods in batches is also available. Registration of goods supplied to and picked up from the Port Free Zone is implemented by means of an IT system.

The Port of Gdansk also offers a comprehensive range of specific cargo operations that require highly specialist handling and storage technologies.

According to the strategy of European Union the Port of Gdansk plays a significant role as a key link in the Trans-European Transport Corridor No. 6 connecting the Nordic countries with Southern and Eastern Europe.

The Port of Gdansk has a very good network of rail connections. In Gdansk there are railway connections with all strategic directions, i.e.: south, west and east. Two rail trunk lines connect Gdansk with the south of Poland through Lodz/ Warsaw to Katowice/ Cracow. Gdansk also has two electrified rail connections with Poznan and Wroclaw, as well as an electrified one - track rail connection with Szczecin and Kaliningrad.

There is a possibility of widening the deep-water part of the port through the construction of new quays on land reclaimed from the sea. The existing potential of its two container terminals (i.e. Gdansk Container Terminal in the Inner Port and Deepwater Container Terminal Gdansk) currently ensures the throughput capacity of 600,000 TEU's and will be further expanded over the coming years. The expansion potential at DCT Gdansk is estimated to reach up to 2 million TEU's.

Table 97 - The Port of Gdansk current services:

Country	Destination	Carrier	Frequency	Cargo type	Agent
FINLAND:	Helsinki	Unifeeder A/S	Twice-weekly	Containers	IMCL
	Kotka	Unifeeder A/S	Twice-weekly	Containers	IMCL
	Rauma	Unifeeder A/S	Weekly	Containers	IMCL
LATVIA:	Riga	Unifeeder A/S	Weekly	Containers	IMCL
LITHUANIA:	Klaipeda	Team Lines	Weekly	Containers	Team Lines
	Klaipeda	Unifeeder A/S	Twice-weekly	Containers	IMCL
RUSSIA:	St Petersburg	Maersk Line	Twice-weekly	Containers	Maersk Polska

Gdynia

13.3 million tonnes of goods were handled at Gdynia port in 2009 (primarily general cargo) including 378,000 TEUS on container traffic. Information on the port website shows an assumption that in 2010 the total cargo handling in Gdynia will increase over the previous year by 10-15%. The port has a depth of 14 metres at the main entrance.

With a current annual handling capacity of some 750.000 TEUs, and a potential capacity of 1.2m TEUs, the Port of Gdynia's Baltic Container Terminal (BCT) is the leading container terminal in Poland and one of the largest in the Baltic region.

Planned investments in railway infrastructure will enable efficient handling of railway wagons on the quays. Analyses and designs will be made within the framework of the Sebtrans-Link Project. Realisation of the above will be carried out in the years between 2004- 2015 and conducted in stages:

- Phase 1 - 2004-2006: main works within the administrative borders of the Port Authority. Estimated cost about 1 million Euro from own sources.
- Phase 2 - 2007-2015: works in the so-called "Międzytorze" area after conducting necessary analyses and obtaining the road construction permissions, with co-finance of EU funds.

Port of Gdynia and Gdynia Container Terminal SA (GCT) today signed an agreement in September 2010 on joint project to build deepwater ship 'position in the Bulgarian Quay in the Port of Gdynia. The new position will have a length of 357 meters and a maximum depth of 15 meters, allowing GCT support vessels with a capacity of over 8,000 TEUs. GCT will continue the expansion of storage yards and invest in new handling equipment, so as to adapt them to the operational requirements. It is planned that the new quay will be put into operation in mid-2012.

In addition in June 2010 Gdynia marshals of seven provinces located along the routes of the Polish part of the Baltic Transport Corridor - Adriatic: Pomorskie, Kujawsko-pomorskie, warmińsko-mazurskie, Mazowieckie, Lodz, Wielkopolska and Silesia have signed a "Letter of Intent on strengthening interregional cooperation to create conditions for the development of Transport Corridor Baltic - Adriatic in Poland. " Corridor Baltic - Adriatic is of great importance for strengthening the position of the Port of

Gdynia to handle cargo trade between Sweden, Norway, Finland and the countries of Central Europe, is also an important transport route for the Baltic Sea, beginning in Gdynia, and ending in Bologna. This is directly in competition with Rail Batlica.

Table 98 - Port of Gdynia services of interest:

Destination	Port	Operator	Agent	Type	Frequency
Finland	Kotka	UPM-Kymmene Seaways	Poseidon Frachtcontor	Ro-ro	weekly
Finland	Rauma	UPM-Kymmene Seaways	Poseidon Frachtcontor	Ro-ro	weekly
Finland	Rauma	Transfennica	Transfennica Polska	Ro-ro	weekly
Finland	Halla	UPM-Kymmene Seaways	Poseidon Frachtcontor	Ro-ro	weekly
Finland	Helsinki	Finnlines	Finnlines Polska	Ro-ro	3/week
Finland	Hamina	Transfennica	Transfennica Polska	Ro-ro	weekly
Finland	Hanko	Transfennica	Transfennica Polska	Ro-ro	weekly
Lithuania	Klaipeda	UNIFEEDER	IMCL	Containers	weekly
Lithuania	Klaipeda	MSC	MSC Poland	Containers	weekly
Russia	St Petersburg	MSC	MSC Poland	Containers	/weekly
Russia	St Petersburg	OOCL	ISS Poland	Containers	2/week

In addition a weekly service from Gdynia to Riga is provided by CMA CGM which takes between 2 and 12 days and costs €1050 for a 40’ container.

The Lithuania – Klaipeda service provided by MSC costs €1320 and takes 17 days. Freight link quoted €726 for a 21 hour service to Helsinki (40’ container) running 4 times weekly. The Gdynia – St. Petersburg service provided by MSC costs €900 + additional.

Helsinki

The majority of Finnish transport is outsourced – 96% said they outsourced partially and 84% totally in a recent survey of Finnish shippers. In this same survey it was found that only 7% of Finnish companies would use less road for environmental reasons, however, the target industries for Rail Baltica: forest products, chemicals and food were generally more environmentally conscious.

The Port of Helsinki is the largest port in Finland and the second largest throughout the Nordic countries. Ferries sail daily to Stockholm, Sweden and Travemünde, Germany, and almost continuously to Tallinn, Estonia.

Cargo traffic operations are centralized at the Vuosaari Harbour. Vuosaari Harbour offers good links for onward road and railway transport. A new intermodal terminal, estimated to be complete in early 2011, will even further enhance railway traffic to Vuosaari. The maximum annual capacity of the harbour is 1.2 million TEUs and 800,000 trucks and trailers.

The Port of Helsinki has frequent cargo traffic connections among others to Germany, Great Britain, Netherlands, Belgium, Denmark, Sweden and Estonia.

In 2009 a total of 365,000 TEUs of containers were transported through the Port of Helsinki and 432,000 trucks and semi-trailers. These unitized cargos amounted to 8.5 million tonnes and were split relatively evenly between import and export traffic. The Port of Helsinki’s market share, of containers handled in all Finnish ports, totalled 33%. The number of containers decreased by nearly 17% in comparison to the previous year and the amount of transported cargo by 19%. The most important destinations of the container traffic from the Port of Helsinki were Hamburg, Rotterdam, Bremerhaven and Antwerp. 2010 has seen a 15% increase in container traffic and 12% increase in Ro Ro compared to 2009, however, bulk traffics have decreased by 37% (figures from Jan – Aug 2010).

Bulk cargo traffic totalled 1.2 million metric tons in 2009. This consisted of coal imported for the use of energy company Helsingin Energia and the imports of oil products for the use of oil companies in Laajasalo as well as Helsingin Energia. Domestic traffic included the transport of sand and construction materials for building projects.

Table 99 - The Port of Helsinki services of interest:

Route	Frequency	Shipping Company
Klaipeda/Helsinki/St Petersburg	Monthly	Containerships
St Petersburg/Helsinki/Teesport	Monthly	Containerships
Tallinn/Helsinki/Tallinn	Daily	Eckerö Line
Helsinki/Gdynia/Helsinki	Every 2 days	Finnlines
Hull/Helsinki/Kotka	Weekly	Finnlines
Wallhamn/Helsinki/Kalundborg	Monthly	Finnlines
Travemünde/Helsinki/Travemünde	daily	Finnlines
Travemünde/Helsinki/Gdynia	Monthly	Finnlines
Kotka/Helsinki/Immingham	Monthly	Finnlines
Århus/Helsinki/Kalundborg	Monthly	Finnlines
Lübeck/Helsinki/Kotka	Monthly	Finnlines
Travemünde/Helsinki/Kotka	Monthly	Finnlines
Amsterdam/Helsinki/Rauma	Monthly	Finnlines
Antwerpen/Helsinki/St Petersburg	Monthly	Finnlines
Malmö/Helsinki/Kalundborg	Monthly	Finnlines
Tallinn/Helsinki/Tallinn	2 x Daily	Navirail
Travemünde/Helsinki/Travemünde	Monthly	Powerline
St Petersburg/Helsinki/St Petersburg	Every 2 days	St. Peter Line
Tallinn/Helsinki/Tallinn	6 x Daily	Tallink Silja
Rostock/Helsinki/Rostock	4 x Weekly	Tallink Silja
Kotka/Helsinki/Bremerhaven	Monthly	Team Lines
Tallinn/Helsinki/Klaipeda	Monthly	Tschudilines
Hamina/Helsinki/Hamburg	Monthly	Unifeeder
Rotterdam/Helsinki/Kotka	Monthly	Unifeeder
Tallinn/Helsinki/Tallinn	2 x Daily	Viking Line

Rauma

The total traffic volume in the Port of Rauma was 5 million tons in 2009, showing a decrease of 29.7% over the previous year. The number of container units (TEU) shipped through Rauma in 2009 was a little over 143,000, which is 16.8 percent less than in 2008. The amount of goods shipped in containers totalled 1.30 million tons (-22.5%). The main commodities are paper for export, round wood and china clay for import and containerised cargoes. The clientele consists primarily of industry, forwarding companies and shipping lines. Traffic levels have increased in 2010 compared to 2009.

Table 100 - The Port of Rauma routes of interest for Rail Baltica.

DESTINATION	CHARTERER	Arrival	Departure	Journey Time	Export / Import	Type
GERMANY						
Rostock / Lubeck	Finnlines	Fri	Sat	2 – 3 days	E / I	Ro -Ro
Lubeck	Finnlines	Mon	Tue	2 – 4 days	E / I	Ro-Ro
Hamburg	Team Lines		Sat	3 days	E / I	Containers
Hamburg	CMA CGM	Thu	Thu	5 days	E / I	Containers
Hamburg	Unifeeder	Fri	Fri		E / I	Containers
Bremerhaven	Team Lines		Sat	3 days	E / I	Containers
Bremerhaven	Unifeeder	Fri	Fri		E / I	Containers
POLAND						
Gdynia	UPM-Kymmene Seaways	Fri	Sat	2 days	E / I	Ro-Ro

Rauma port has a large number of routes to various German ports and one ro-ro route to Poland. Unifeeder quoted €1,205 from Rauma to Riga for a 40' and €975 for a 20'. This service is not listed on the Rauma port website.

Sassnitz

Sassnitz is the largest rail ferry port in Germany and the only port in Europe which can handle broad-gauge Finnish and Russian rail cars. The Port of Sassnitz has become a specialist port for combined rail ferry traffic and is known as "the westernmost cargo station of the Trans-Siberian railway."

3 ferries now operate each week in both directions between Sassnitz and Klaipeda (up from 2 as of July 2010) with a capacity of 103 Russian rail cars carriages. The travel time is 18 hours. Goods are then shipped by rail via Lithuania to all desired recipients in Russia, White Russia, Ukraine, Kazakhstan, Uzbekistan, Turkmenistan, Azerbaijan, Tajikistan, Kyrgyztan, Mongolia and north China. Ferries to St Petersburg have also increased recently (up to 2 x weekly from a once weekly service as of August 2010).

The port currently has development plans for 2 further ferry berths at the south pier and 3 additional ro-ro berths at the northern port area along with conversion of one berth to a conventional gauge train ferry service.

Table 101 - The Port of Sassnitz current services:

Route	Frequency	Time
Klaipeda-Sassnitz	3 x Weekly both directions	17 – 19 hours
Sassnitz – Ventspils – St Petersburg	2 x Weekly	22¾ hours to Ventspils 30 hours from Ventspils to St Petersburg
St Petersburg – Ventspils – Sassnitz	1 x Weekly	20 hours to Ventspils 19 hours from Ventspils to Sassnitz

Bremerhaven

In 2009 Bremerhaven / Bremen port handled bulk amounted to approximately 63 million tonnes. Bulk traffic accounted for 8 million tons and general cargo accounted for 55 million tons.
With a throughput of almost 52 million tons or approx. 4.6 million TEU in 2009, Stromkaje – the quay beside the Weser in Bremerhaven at Wilhelm Kaisen Container Terminal – is the backbone of the ports and can accommodate the world's largest container ships. Bremerhaven has 14 purpose- built berths for mega-container vessels.

Key trading partners for Bremerhaven in 2009 relevant to Rail Baltica are:

- Finland: 2.3 million tonnes
- Russia: 4.8 million tonnes
- Lithuania: 1.2 million tonnes
- Latvia: 1.2 million tonnes
- Estonia: 570,000 tonnes

571,000 TEUS were transported to/from the Baltic states / CIS from Bremerhaven in 2009 (majority of this to/from Russia) and 169,000 TEUS were transport to/from Finland.

The port of Bremerhaven website states that experts forecast a doubling of container handling capacities in German seaports within the next 10 years and that the "Wilhelm Kaisen" Container Terminal in Bremerhaven will reach its capacity limits in the foreseeable future. From 2011 the JadeWeserPort in Wilhelmshaven, will offer a premium service for mega-container vessels and will be used as a transhipment hub and for the purpose of intensifying feeder and short sea traffic to Scandinavia, Finland, the Baltic states, Russia and Great Britain.

Table 102 - The port of Bremerhaven key services:

Carrier	Frequency	Served ports	Region
Samskip	4 x per week	Helsinki	Finland
Samskip	2 x per week	Kotka	Finland
TransAtlantic	Biweekly	Oulu	Finland
Unifeeder	2 x per week	Helsinki	Finland
Unifeeder	weekly	Kotka	Finland
Unifeeder	weekly	Rauma	Finland
Unifeeder	weekly	Hamina	Finland
MSC	weekly	Bremerhaven - Antwerp - Tallinn - Helsinki - Kotka - Antwerp	Estonia / Finland
Team Lines	weekly	Tallinn	Estonia
Tschudi Lines Baltic Sea	weekly	Muuga	Estonia
Unifeeder	weekly	Tallinn	Estonia
MSC	weekly	Bremerhaven - Kaliningrad - Riga - Norrköping - Antwerp	Latvia
Samskip	2 x per week	Riga	Latvia
Team Lines	weekly	Riga	Latvia
Unifeeder	weekly	Riga	Latvia
MAERSK	weekly	Bremerhaven - Klaipeda	Lithuania
MSC	weekly	Bremerhaven - Klaipeda - Rauma - Antwerp	Lithuania / Finland
MSC	weekly	Bremerhaven - Gdynia - Klaipeda - Antwerp	Lithuania
Samskip	2 x per week	Klaipeda	Lithuania
Team Lines	weekly	Klaipeda	Lithuania
Unifeeder	weekly	Klaipeda	Lithuania
MSC	weekly	Bremerhaven - St.Petersburg - Bremerhaven	Russia
MSC	weekly	Bremerhaven - St.Petersburg - Bremerhaven	Russia
Samskip	4 x per week	St. Petersburg	Russia
Unifeeder	weekly	St. Petersburg	Russia

It should be noted, however, that on further investigation some of these services for example the Samskip service to St Petersburg do not run via Bremerhaven, running instead now from Hamburg. A different Bremerhaven – St Petersburg service was quoted as follows:

- 20' laden €340
- 20' empty €240
- 40' laden €520
- 40' empty €320
- BAF €100 / TEU and Marpol €6 per TEU

The journey takes 5 days from Bremerhaven to St Petersburg and 3 days on the return leg.

Unifeeder quoted €1,164 for a 40’ laden container to Helsinki with a journey time of 5 to 6 days.

Hamburg

Hamburg is Germany's biggest seaport handling 110 million tonnes in 2009. On the imports side, the Port of Hamburg recorded a total handling volume of 62.2 million tonnes (–24.2 per cent) in 2009. Exports via Hamburg also declined, compared with the same period of last year, with a total of 48.2 million tons (–17.4 per cent). The key traffics are containers (71 million tonnes) and dry bulk (22 million tonnes). Suction cargo like grain, oilseeds and animal feed play an important role in the Port of Hamburg, both as import and as export cargo. The result of the first half-year 2010 shows an 8 per cent growth of total cargo handling indicating that volumes are starting to increase post recession.

Four large container terminals are available in Hamburg. High-performance handling with short mooring times means that even the biggest container carriers leave the port again after one or two days. Bulk cargo is handled, stored and forwarded in the form of loose, suction, grab and liquid cargo at various terminals in the Port of Hamburg. Neighbouring industrial plants process many raw materials right in Hamburg.

Current container volumes (2009) to key Rail Baltica destinations are:

- St. Petersburg 1,322,778 TEU
- Helsinki 360,470 TEU
- Kotka 340,606 TEU
- Klaipeda 247,982 TEU
- Riga 182,980 TEU
- Rauma 135,040 TEU
- Tallinn 130,939 TEU
- Liepaja 1,039 TEU

Table 103 - The Port of Hamburg key services:

	Port	Shipping Company	Sailings	Cargo
Estonia	Muuga	LPS	weekly	Conv
	Muuga	TECO	weekly	*
	Paldiski	NSA	twice weekly	BB C Conv FCL HL K LCL RoRo (tr.) *
	Paldiski	Stella	weekly	BB C Conv FCL HL RoRo
	Tallinn	APL	weekly	FCL (tr.)
	Tallinn	LPS	weekly	Conv
	Tallinn	SSL	weekly	FCL LCL
	Tallinn	Team Lines	twice weekly	BB C FCL K RF *
	Tallinn	TECO	weekly	C FCL 45 HC
	Tallinn	Unifeeder	weekly	C FCL RF TC 45 HC
Finland	Helsinki	CMA CGM	weekly	FCL
	Helsinki	Containerships	twice weekly	C FCL HL RF 45 HC *
	Helsinki	Hacklin	twice weekly	BB C Conv FCL HL K Helsinki LCL RF TC HC (tr.) *
	Helsinki	Samskip	twice weekly	C FCL 45 HC
	Helsinki	SSL	weekly	FCL LCL
	Helsinki	Stella	4 x weekly	BB C Conv FCL HL RoRo
	Helsinki	Team Lines	twice weekly	BB C FCL K RF *
	Helsinki	Unifeeder	2 x weekly	C FCL RF TC 45 HC
	Rauma	Samskip	weekly	C FCL 45 HC
	Rauma	SSL	weekly	FCL LCL
	Rauma	Team Lines	weekly	BB C FCL K RF *
	Kotka	CMA CGM	weekly	FCL
	Kotka	Samskip	twice weekly	C FCL 45 HC

	Port	Shipping Company	Sailings	Cargo
	Kotka	SSL	weekly	FCL LCL
	Kotka	Stella	4 x weekly	BB C Conv FCL HL RoRo
	Kotka	Team Lines	twice weekly	BB C FCL K RF *
	Kotka	Unifeeder	twice weekly	C FCL RF TC 45 HC
Latvia	Riga	CMA CGM	weekly	FCL
	Riga	Containerships	twice weekly	C FCL HL RF 45 HC *
	Riga	FESCO	weekly	FCL
	Riga	IMCL	weekly	C FCL K LCL RF TC 45 HC (tr.) *
	Riga	Samskip	3 times weekly	C FCL 45 HC
	Riga	SSL	weekly	FCL LCL
	Riga	Stella	every 4-5 weeks	BB C Conv FCL HL RoRo
	Riga	TBL	weekly	BB C FCL K RF TC HC (tr.) *
	Riga	Team Lines	twice weekly	BB C FCL K RF *
	Riga	Unifeeder	weekly	C FCL RF TC 45 HC
Lithuania	Klaipeda	CMA CGM	weekly	FCL
	Klaipeda	Containerships	twice weekly	C FCL HL RF 45 HC *
	Klaipeda	FESCO	weekly	FCL
	Klaipeda	IMCL	weekly	C FCL K LCL RF TC 45 HC (tr.) *
	Klaipeda	LPS	weekly	Conv
	Klaipeda	NSA	twice weekly	BB C Conv FCL HL K LCL RoRo (tr.) *
	Klaipeda	Samskip	twice weekly	C FCL 45 HC
	Klaipeda	SSL	weekly	FCL LCL
	Klaipeda	Stella	every 4-5 weeks	BB C Conv FCL HL RoRo
	Klaipeda	Team Lines	weekly	BB C FCL K RF *
	Klaipeda	Unifeeder	weekly	C FCL RF TC 45 HC
Russia	St. Petersburg	19	twice monthly	BB Conv HL L (tr.) *
	St. Petersburg	AGS	monthly	BB Conv HL
	St. Petersburg	APL	weekly	FCL (tr.)
	St. Petersburg	CMA CGM	weekly	FCL
	St. Petersburg	Containerships	twice weekly	C FCL HL RF 45 HC *
	St. Petersburg	Delta	every 3-4 days	C FCL RF TC HC (tr.) *
	St. Petersburg	ECU-LINE	weekly	LCL
	St. Petersburg	Evergreen	weekly	FCL RF
	St. Petersburg	FESCO	twice weekly	FCL
	St. Petersburg	NSA	twice weekly	BB C Conv FCL HL K LCL RoRo (tr.) *
	St. Petersburg	NSC	weekly	BB C Conv FCL HL
	St. Petersburg	NSC	monthly	BB Conv FCL
	St. Petersburg	OOCL	weekly	C FCL RF 45 HC
	St. Petersburg	Samskip	every 2 weeks	BB Conv
	St. Petersburg	Sea Connect	every 11 days	C Conv FCL RF HC *
	St. Petersburg	SSL	weekly	FCL LCL
	St. Petersburg	SWAN	every 12 days	C FCL RF TC 45 HC *
	St. Petersburg	TBL	weekly	BB C FCL K RF TC HC (tr.) *

	Port	Shipping Company	Sailings	Cargo
	St. Petersburg	Team Lines	weekly	BB C FCL K RF *
	St. Petersburg	Unifeeder	4 x weekly	C FCL RF TC 45 HC
	St. Petersburg	WEC	3 x weekly	FCL

Almost 40 feeder services with over 160 departures per week take care of the North Sea and Baltic Sea regions, 5 new liner services to the Baltic Sea were added in 2009. From the end of August shipping companies Team Lines and APL shifted some of their feeder services into the Baltic from Rotterdam to Hamburg.

Container transport from Hamburg to St Petersburg was quoted at:

- 20' = €675 + BAF €50 and Marpol €10
- 40' = €750 + BAF €100 and Marpol €20

Including terminal handling charges at Hamburg + St Petersburg and ISPS

Container transport from St Petersburg to Hamburg was quoted at:

- 20' laden = €470
- 20' empty = €430,- EUR
- 40' laden = €530,- EUR
- 40' empty = €480,- EUR

Including terminal handling charges at St.Petersburg + Hamburg and ISPS / BAF / Marpol

Sailing schedules indicate a journey time of between 2 and 7 days.

Unifeeder quoted €1,164 for a 40' laden container to Helsinki with a journey time of 5 to 6 days, the same as for Bremerhaven.

Kiel

The seaport of Kiel is one of the most versatile Baltic Sea ports. The port handled 4.9 million tonnes in 2009, 3.2 million of which was ferry cargo (predominantly general cargo).

In 2009 the handling of bulk cargo, containers and conventional breakbulk bound for Lithuania increased while ferry traffic to and from Scandinavia and Russia declined in volume.

Ro Ro traffic to the port has increased 13.4% in the first half of 2010 and a new large RoPax ferry "Lisco Maxima" has been added from Lithuania. In the container transport sector, over 10,000 TEUs were handled in the first half of 2010 – more than twice as many as in the same period of last year.

Table 104 - The seaport of Kiel services of interest:

To	Line	Cargo Type	Frequency	Journey Time
St Petersburg	Neva Bridge	Ro Ro	Weekly	2 days 16 hours
Klaipeda	DFDS Lisco Line	Ro Pax	6 x Weekly	22 – 23 hours

Lubeck / Travemunde

The Port of Lübeck advertises itself as the central logistic hub between Europe's major industrial centres and Scandinavia, Finland, Russia, the Baltic States and Poland. The port handled 24 million tonnes in 2009, 3 million tonnes of which was paper. The port handled 394,000 accompanied trucks, 325 non accompanied trucks and 79,000 containers in 2009. Paper handling increased 16% in the first half of 2010 and containers increased 10%.

Terminal Skandinavienkai is the largest ferry port in Europe and focuses on all types of rolling goods e.g. trucks, trailers, vehicles, railway wagons, swap bodies, containers and passenger car. A rail terminal for combined freight traffic has been in operation since June 2003.

Terminal Nordlandkai: is the Finnish center of the Lübeck ports and in 2008 had a turnover of 3.3 million tonnes and states that it is the distribution centre of the Finnish paper industry for the entire European hinterland as well as handling trucks, trailers, vehicles and containers. Expansion areas and new possibilities of paper handling, allowing for a significant increase in capacity of the terminal are currently being planned.

Terminal Konstinkai is a multifunctional RoRo terminal for forest products, trucks, trailers, new cars and bulk goods and offers transport to St. Petersburg.

Nearly 60 block train services are offered from Lübeck each week to various destinations in Germany, Holland and Italy. The rail share of goods is 16%.

Table 105 - The Port of Lübeck/ Travemunde key services:

Destination	Line	Frequency
Kotka	Finnlines	Weekly
Rauma	Finnlines	3 x Weekly
Helsinki	Finnlines	Daily
Turku	Finnlines	3 x Weekly
Helsinki	Powerline	Weekly
Kotka	Transatlantic	3 x Fortnightly
Turku	Powerline	Weekly
Hamina	Transfennica	2 x Weekly
Hanko	Transfennica	3 x Weekly
Kemi	Transatlantic	2 x Weekly
St Petersburg	Transfennica	Weekly
Ventspils / Liepaja	Scandlines Germany	4 x Weekly
Riga	AVE Line	2 x Weekly
Paldiski	Transfennica	3 x Weekly

Freightlink quoted €1,341 for a 40' laden container to Helsinki with a journey time of 36 hours.

Rostock
Goods transported through Rostock accounted for 27.2 million tonnes in 2008 and 21.5 million tonnes in 2009. Figures are starting to recover however with a comparative increase in goods traffic of 10% for the first half of 2010. With a total of 10.6 million tons of bulk goods handled in 2008, Rostock is the largest bulk goods port on the German Baltic Sea coast.

The ferry and ro-ro lines of Rostock seaport provide rapid connections in the Baltic Sea region. The ferry and ro-ro traffic accounts for a significant portion of cargo handling in the port of Rostock and has exhibited enormous growth in the recent years. A total of 16 million tonnes of rolling cargo – ferry and Ro-Ro cargo – was moved through the seaport in 2008 accounting for 59% of the total cargo volume. In 2008 a decline was recorded in ferry cargo, down 10% or 1.4 million tons to only 13.7 million tons at the year's end. In contrast, Ro-Ro cargo increased by one million tons to 2.3 million tons. These results are attributable to the new Ro-Ro connection between Rostock and Hanko, Finland. At the terminal for intermodal traffic, a total of 69,053 cargo units with a total tonnage of 1.46 million tons were moved in 2008.

The port has very good intermodal connections and 25 block trains from and to Verona, Basel, Hamburg and Wels (Austria) are cleared weekly at the combined cargo terminal. The capacity was increased to process three trains simultaneously since the beginning of 2006. Up to 85,000 units per year can be handled now. It is planned to expand the capacity to 120,000 units per year if required. Furthermore, the introduction of a high-efficiency IT system is to be carried out in order to support operational processes.

Table 106 – The port of Rostock key services:

Route	Frequency	Shipper	Travel Time
Rostock - Lübeck - Turku (Finland) - Rauma (Finland) - Rostock	Weekly	Finnlines	
Hanko	4 x Weekly	Scandlines	35 hours

Freightlink quoted €1,279 for a 40' laden container from Rostock to Helsinki with a journey time of 24 hours.

St Petersburg
The port of St Petersburg handled 50 million tonnes in 2009 with the main commodities being oil products (15.9 million), containerised cargo (14.5 million tonnes or 1.3 million TEU) and metals (5.9 million).

St Petersburg is known as the marine capital of Russia. St Petersburg has 36 berths with a total length of 6.5 km.

Dramatic changes in the structure of the external trade of Russia due the world financial crisis caused significant changes in the cargo flows of Baltic ports. In order to ensure the stable development of port complex the group of companies St Petersburg is trying to diversify its capacities.

The development programme of port infrastructure up to 2015 envisages placing into operation the following facilities:

- Terminal for ferrous metals with annual capacity of 2 mln. tons;
- Terminal for ro-ro cargoes with annual capacity of 1.4 mln. tons;
- Refrigerated terminal with annual capacity of 1.5 mln. tons;
- Multipurpose handling facilities with annual capacity of 3 mln. tons;
- Second phase of car terminal with the annual capacity of 170 thousand units (255 thousand tons)
- Second phase of container terminal in order to handle 1.5 mln. TEUs (17 mln. tons) per year

Ust Luga

The port of Ust Luga has a depth of 16m and a design capacity of 12 – 15 million tonnes per year. In 2009 the cargo turnover of Ust-Luga port increased 53.2% compared to 2008 and amounted to 10.4 mln. tons

From Jan – August 2010 the port handled 7.4 million tonnes. Transshipment of general amounted to 696 thousand tons, predominantly ferrous metals - 509 thousand tons. Transshipment of bulk cargo reached 6.3 million tonnes - predominantly coal and coke 5.5 million tonnes. Handling of timber cargo amounted to 140 thousand tons and ro ro 336 thousand tons.

There are six terminals currently working in Ust-Luga port: a coal transshipping complex, a Universal transshipping complex, a terminal for transshipment of technical sulfur, a motor-railway ferry complex, the Multipurpose transshipping complex and the timber terminal. The plans for 2010 include startup of the Ust-Luga container terminal and a complex of oil cargo. Ust-Luga tank farm facility (the final point of the BPS-2) is expected to start operation in 2011. The first stage of the complex of stabilized gas condensate and the complex of transshipment of liquefied hydrocarbon gases and light oil products is supposed to start operation in 2012.

According to forecasts, by 2015 the cargo turnover of Ust-Luga port will amount to 170 million tonnes. Ust-Luga port is supposed to be built as a universal port. The terminals and specialized zones for various purposes will render services of transshipping and additional handling of over 20 categories of cargo.

Development of Northwest ports and Ust-Luga, in particular, is attached great importance in issues of Russian goods export; therefore, apart from development of the ports themselves, they must have a modern infrastructure, including modern rail infrastructure. The Strategy of railway transport development until 2030 provides for increase of the volume of transit freight transportation 2.8 times. Recently the Russian Railways president stated that “although the [financial] crisis has made considerable adjustments in economic development of the absolute majority of states, development of transit transportation is still a priority task. This task is especially relevant in the light of interests of the railways of the Baltic region.”

Russian Railways provides up-to-date reinforcement of external railroad approaches to the port along the line of Mga — Gatchina — Veimarn — Ust-Luga by-passing the congested railroad junction of Saint Petersburg. The first stage of Luzhskaya railroad station, including the first stage of Severny transit-display yard, has been built and put into operation.

Levels of Containerisation

Of goods likely to be able to travel in a container (current unitised goods, Ro Ro and other cargo) the following proportions are currently containerised by country for maritime freight. Statistics are not available for road freight; however, levels are likely to be substantially lower. There has been a growth in containerisation since 1960 and this trend has been faster in countries where labour costs are higher and there are more intermodal movements. Where land based movement are possible by road freight, most goods go in standard road trailers rather than containers. These are not recorded separately to lorries moving containers so are difficult to assess. Lorryies moving containers tend to run from either ports or inland rail terminals.

Table 107 – Estonia – Levels of Containerisation

	2002	**2004**	**2005**	**2006**	**2007**	**2008**
Inwards to Estonia	18%	17%	20%	20%	21%	25%
Outwards from Estonia	6%	8%	31%	12%	10%	9%
Inwards to Estonia from Germany, Finland and Poland	20%	24%	25%	24%	25%	23%
Outwards from Estonia from Germany, Finland and Poland	10%	14%	20%	21%	16%	12%

Table 108 – Latvia – Levels of Containerisation

	2004	2005	2006	2007	2008
Inwards to Latvia	28%	45%	52%	44%	52%
Outwards from Latvia	4%	9%	11%	12%	14%
Inwards to Latvia from Germany, Finland and Poland	39%	56%	58%	55%	63%
Outwards from Latvia from Germany, Finland and Poland	11%	24%	26%	26%	25%

Table 109 – Lithuania – Levels of Containerisation

	2004	2005	2006	2007	2008	2009
Inwards to Lithuania	32%	33%	36%	43%	49%	46%
Outwards from Lithuania	17%	19%	19%	22%	27%	35%
Inwards to Lithuania from Germany, Finland and Poland	35%	46%	45%	54%	64%	56%
Outwards from Lithuania from Germany, Finland and Poland	37%	42%	36%	39%	50%	41%

Levels of containerisation are generally much higher for traffics to/from Germany, Finland and Poland. In the main levels have been rising over the last 5 or 6 years for all 3 countries with much higher rates of containerisation seen inwards than outwards indicating that there is likely room for growth in outward levels of containerisation. Based upon these figures there is likely also room for growth in containerisation of goods transported between the Baltic States.

1.5 Summary

Table 110 - B.110- Internal Passenger Metric Summary

	Rail							Road (car)							Road (coach)							Air							Total Volume (passengers per day)
	Quality		Service					Quality		Service					Quality		Service					Quality		Service					
	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	
E S T O N I A																													
Tallinn-Tartu	3	3	2	3	2	4	6%	3	3	5	3	2	3	70%	4	4	4	3	2	3	24%	-	-	-	-	-	-	-	4,724
Tallinn-Parnu	3	3	1	3	1	4	2%	3	3	5	3	2	3	80%	4	4	3	3	2	3	18%	-	-	-	-	-	-	-	3,589
L A T V I A																													
Riga-Jelgava	3	3	4	5	1	4	27%	3	3	5	3	2	3	62%	3	3	4	3	1	4	10%	-	-	-	-	-	-	-	11,592
Riga-Daugavpils	3	3	1	5	2	4	4%	3	3	5	3	2	3	67%	3	3	4	3	2	4	29%	-	-	-	-	-	-	-	4,808
Riga-Tukums	3	3	3	5	1	4	19%	3	3	5	3	2	3	71%	3	3	3	3	1	4	10%	-	-	-	-	-	-	-	3,980
Riga - Valmeira	3	3	1	5	1	4	2%	3	3	5	3	2	3	79%	3	3	3	3	1	4	19%	-	-	-	-	-	-	-	3,694
L I T H U A N I A																													
Kaunas – Vilnius	3	3	3	3	2	4	14%	4	3	5	3	3	3	73%	3	3	4	3	2	3	14%	-	-	-	-	-	-	-	20,110
Kaunas - Šiauliai	3	3	1	3	2	4	3%	3	3	5	3	3	3	81%	3	3	3	3	1	3	16%	-	-	-	-	-	-	-	3,626

Excellent	5	Good	4	Fair	3	Poor	2	Very Poor	1

Table 111 - B.111 - Summary of International Passenger Metric Results

	Rail							Road (car)							Road (coach)							Air							
	Quality		Service					Quality		Service					Quality		Service					Quality		Service					
	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Comfort	Facilities	Freq	Reliability	Speed	Pricing	Mode Share	Volume (passengers per day) one-way
E S T O N I A																													
Tallinn-Riga	-	-	-	-	-	-	-	3	3	5		2	3	63%	3	3	4		2	4	16%	4	4	3	3	4	1	21%	1,001
Tallinn – Kaunas	-	-	-	-	-	-	-	3	3	5		2	3	86%	3	3	3		1	3	14%	-	-	-	-	-	-	-	28
Tallinn – Vilnius	-	-	-	-	-	-	-	3	3	5		2	3	43%	-	-	-	-	-	-	11%	4	4	2	3	4	1	47%	160
Tallinn - Warsaw	-	-	-	-	-	-	-	2	2	5		2	3	19%	-	-	-	-	-	-	2%	-	-	-	-	-	-	79%	68
L A T V I A																													
Riga-Tallinn	-	-	-	-	-	-	-	3	3	5		2	3	63%	3	3	4		2	4	16%	4	4	3	3	4	1	21%	1,001
Riga-Vilnius	-	-	-	-	-	-	-	2	2	5		3	3	40%	3	3	3		2	3	25%	4	4	3	3	4	1	35%	587
Riga-Kaunas	-	-	-	-	-	-	-	2	2	5		2	3	61%	3	3	2		1	3	25%	4	4	2	3	3	1	14%	232
Riga - Warsaw	-	-	-	-	-	-	-	2	2	5		2	3	27%	3	3	1		1	3	4%	4	4	2	3	4	1	69%	69
L I T H U A N I A																													
Vilnius-Riga	-	-	-	-	-	-	-	2	2	5		3	3	40%	3	3	3		2	3	25%	4	4	3	3	4	1	35%	587
Vilnius-Warsaw	3	3	1	1	1	3	5%	2	2	5		2	3	24%	3	3	1		2	3	25%	4	4	2	3	4	1	45%	135
Vilnius - Tallinn	-	-	-	-	-	-	-	3	3	5		2	3	43%	-	-	-	-	-	-	11%	4	4	2	3	4	1	47%	160
Kaunas-Riga	-	-	-	-	-	-	-	2	2	5		2	3	61%	3	3	2		2	3	25%	4	4	2	3	3	1	14%	232
Kaunas-Warsaw	3	3	1	1	1	3	2%	2		5		2	3	89%	3	3	1		2	3	8%	4	4	2	3	4	1	0%	197
Kaunas - Tallinn	-	-	-	-	-	-	-	3		5		2	3	86%	3	3	3		1	3	14%	-	-	-	-	-	-	-	28

Excellent	5	Good	4	Fair	3	Poor	2	Very Poor	1

Note: The Passenger volumes between Vilnius – Warsaw and Kaunas – Warsaw give in the Table are average daily one-way volumes. The numbers have been calculated from data obtained from Lithuanian National Statistics Database (http://www.stat.gov.lt/en)

Table 112 - B.112 - Summary of Freight Metric Results

			RAIL			ROAD			SEA			Current Modal Split		
From	*To*	*Type*	*Quality*	*Service*	*Pricing*	*Quality*	*Service*	*Pricing*	*Quality*	*Service*	*Pricing*	*Rail*	*Road*	*Sea*
Finland	Germany		No Current Service			3 4	2 2	1	5	3 3	4	0%	1%	99%
Germany	Finland		No Current Service			As above		As above	5	3 3	4	0%	1%	99%
Germany	St Petersburg		No Current Service			4 1	2 1	2	4	3	5	0%	0%	100%
St Petersburg	Germany		No Current Service			As above		As above	4	3	5	0%	0%	100%
Latvia	Germany		No Current Service			4	4 2	3	4	4 4	5 5	0%	6%	94%
Lithuania (N)	Lithuania	Bulk non-bulk	5 2	5 2	4 3	5	5	5	No Service			10%	90%	0%
Latvia	Finland		No Current Service			3 4		3	4	3	3	0%	2%	98%
Estonia (N)	Estonia	Bulk non-bulk	5 2	5 2	5	4	4 5	4	No Service			11%	89%	0%
Lithuania	Germany		No Current Service			4	4	3	4	4	4	0%	40%	60%
Estonia (S)	Estonia		As Estonia (N)			4	4	4	No Service			13%	87%	0%
Germany	Lithuania		No Current Service			4	4 3	3	4	3 4	4	0%	34%	66%
Poland	St Petersburg		No Current Service			4 1	4 1	3	4	4	4	0%	100%	0%
Germany	Latvia		No Current Service			4	4 3	3	4	4 4	4	0%	24%	76%
Lithuania	Poland	Bulk non-bulk	2	5	4 3	4	3	3	4	3	4	41%	44%	16%
Latvia (N)	Latvia	Bulk non-bulk	5 2	5 2	4 4	4	4	5	No Service			1%	99%	0%
Estonia	Germany		No Current Service			4	2	2	4	4	4	0%	12%	88%
Lithuania	St Petersburg		No Current Service			4 1	4 5	4	4	1 4	3	0%	97%	3%
Lithuania (S)	Lithuania		As Lithuania (N)									1%	99%	0%
Lithuania	Latvia	Bulk non-bulk	5 2	5 2	4 3	4	4	3	2			57%	32%	11%

In table below only combined flows of greater than 1 million tonnes have been included. The table below shows the routes requested by the Estonian Government. Finland Estonia had been omitted from the original table because of the lack of sensible mode choice options and the lack of addressable market, very little of this volume will be attracted to the Rail Baltica Line. The other two routes were omitted from the original table due to having volumes less than 1 million tonnes.

Country		Volume (Thousands Tonnes)			Mode			Rail			Road		Sea		
Origin	Destination	Non Bulk	Bulk	Total	Road	Rail	Sea	Quality	Service	Pricing	Quality	Pricing	Quality	Service	Pricing
Finland	Estonia	316	2361	2677	0%	0%	100%	No Current Service			Involves going Via St Petersburg not modelled		Good quality ports	2- 4 hours 3-6 per day	Approx 500 euros 40' container
Estonia	Latvia	177	371	548	90%	8%	2%	Russian gauge lack of intermodal facilities	Good bulk freight services very little non bulk		Mainly Dual Carriage way	Approx 280 euros	Good quality ports	2 days once a week	Approx 300 euros 40' container
Estonia	Lithuania	83	92	175	78%	0%	22%	Russian gauge lack of intermodal facilities	Good bulk freight services very little non bulk		Mainly Dual Carriage way	Approx 650 euros	Good quality ports	1 day	

Appendix C – Regulatory Constraints

Appendix C – Regulatory Constraints

1.6 Regulatory Constraints

Planning

The hierarchy of the different planning levels needed for a cross-national railway

Estonia

Territorial planning is undertaken at three different levels. In descending hierarchy they are:

a) county plan or county thematic plan (with different alternatives for the railway alignment) based on preliminary design (with different alternatives for the railway alignment);

b) general plans of the local municipalities that must be coherent with the county plans (not needed for a railway);

c) detailed plan for land plot(s) where the buildings and structures will be erected.

Plans at each level, as well as the plans from adjacent regions and municipalities, have to be coherent. Planning documents of a hierarchically lower level are subordinated to the hierarchically higher planning documents (e.g. municipal territorial plan is subordinated to the regional plan, which in its turn is subordinated to the national plan).

Latvia

As with Estonia Territorial planning in Latvia is undertaken at three levels:

a) National level;

b) Regional level, and

c) Municipality level (territorial plan and detailed plan (the detailed plan further details part of the municipal territorial plan)).

Plans at each level, as well as the plans from adjacent regions and municipalities, have to be coherent. Planning documents of a hierarchically lower level are subordinated to the hierarchically higher planning documents (e.g. municipal territorial plan is subordinated to the regional plan, which in its turn is subordinated to the national plan).

Hierarchically the highest document in this chain is the Strategy for the long-term development of Latvia. This document was approved by the Saeima (the Parliament) on 10 June 2010, and the project “Rail Baltica” is envisaged in it[14].

The next level is the territorial plans of the planning regions. There are five planning regions in Latvia. Depending on the selected route for the project, 2 – 3 planning regions could be affected, namely the Zemgale region, the Riga region and the Vidzeme region. It is necessary to ensure that territorial plans of the planning regions reflect the route of the railway.

Finally, based on the regional territorial plans, the municipalities have to foresee a railway within their territorial plans. The municipalities have a right to suggest amendments to the regional territorial plans, so, in principle, planning regions and municipalities have to work in coordination.

Lithuania

According to Lithuanian law, there are 3 levels of territory planning documents. These are:

a) master plans;

b) special plans;

c) detailed plans.

The master plans are prepared for bigger territories comprising the state, the municipality or its parts (cities and towns). Currently almost all of the municipalities of Lithuania have valid master plans (master plans of 5 municipalities have been prepared, but have not been approved yet, procedures on preparation of the master plan of 1 municipality have been started).

[14] Available in Latvian at <http://www.latvija2030.lv/upload/latvija2030_saeima.pdf>

The special plans are prepared for the development of specific activities (e. g., in order to develop infrastructure (engineering, communication etc.), high-rise dwellings or for particular territories (parks and etc). Please note that in the case where a municipality has a valid master plan and issues related to infrastructure or objects of significant importance to the state/municipality and their location are covered in these plans then there is no need for a special plan. However, a special plan (when it is prepared) must comply with the master plan for the respective territory.

The detailed plans are prepared for a particular land plot or group of land plots. Possible activities which are permitted on the plot are established in the detailed plan. It is important to note that the detailed plan must comply with both the master plan and the special plans valid within the respective territory. In the case where it is intended to develop an activity on the land plot other than that indicated in the master plan, then the master plan must be amended. It should also be noted that preparation of a detailed plan may not be needed for the purpose of constructing communication infrastructure, e.g. a railway, a road etc provided that all of the issues have been solved in the master or special plans.

Referring to the above, before starting any territory planning procedure for the Rail Baltica project, the master plan (if any) should be analysed and clarification should be sought as to whether special plans and/or detailed plans are needed for the purpose of construction of the railway. In addition, if it is intended to be construct the railway along the line of the existing route, the previously approved special and/or detailed plans should be analysed and if these plans and their regulations are appropriate for the construction of the new railway, it may be possible to avoid many of the procedures regarding adoption of the detailed/special plans.

1.6.1 Time frame of different planning procedures

Estonia

County plan

Adoption of a county plan usually takes 1.5-4 years. Depending on the actual circumstances the period may be shorter, but also significantly longer.

The main actions, statutory deadlines and participants in the procedure for adopting a county plan are described in the table below:

Table 113 - Estonia County Plan Actions

Action	**Time-line**
Initiation of the county plan	Initiation will be decided by the Government.
Informing the public and the local municipalities about the initiation of the county plan	The county governor informs: • the public through a newspaper within 30 days; • local municipalities within 2 weeks after the initiation decision.
Preparation of the county plan	The land plot owners within the planning area and the neighbours must be involved in the planning process. Every person has the right to submit proposals and the county governor is obligated to respond within 4 weeks.
Public display and public hearing before county plan acceptance	Before the county plan can be accepted the county governor must organize the presentation of the initial planning outlines, draft plans and alternative railway routes. Public hearings and a public display must be organized together with the local municipalities. The term is not specified.
Agreement of the county plan	The county governor shall seek agreement on the contents of the county plan from the county governors of counties neighbouring the planning area and from local municipalities within the planning area. The term is not specified.
Acceptance, public display	The county governor makes the decision to accept the county

and public hearing of the county plan	plan and organizes a public display. The county governor informs affected land owners by registered mail at least 2 weeks before the start of the public display and sets the date and time for the public hearing. Also the county governor informs the public 1 week before the start of the public display and also the date and time of the public hearing via newspaper entries. Also the county plan must be accessible through the county governor website until the end date of the public hearing. The public display of the county plan lasts 4 weeks. Everyone has the right to object to the plan or to propose alterations. The county governor has to give a reasoned opinion on all the proposals and objections received within 4 weeks of the end of the public. The county governor must organize the public hearing within 6 weeks. The county governor is obligated to publish in a newspaper a notification about the outcome of the public display and public hearing within 2 weeks if there were any written proposals or objections. The county governor will make the necessary changes to the county plan and if there are many changes then a new agreement process is needed.
Surveillance proceeding	After the changes the county governor sends the revised county plan to the Estonian Ministry of the Interior together with the proposals and objections that were ignored. The minister sends a written response to the parties within 2 weeks of hearing the arguments from the parties. The Minister will accept the county plan after the governor has made any changes requested by the Ministry.
Adopting the county plan and notification	The county plan will be adopted by the county governor after the surveillance proceeding.The County governor informs : • the public within 1 month after the adoption of the county plan; and • the local municipalities and the Ministry of the Interior by sending a copy from the adoption decision and the county plan. Everyone has the right to contest the county plan in the administrative court within one month from the day they became aware or should have become aware of the adoption of the county plan. The county plan enters into force one day after the location of the railway has entered into every existing adopted general plan.

Detail plan

Adoption of a detail plan usually takes 6 months-3 years. Depending upon the actual circumstances the period may be significantly longer.

The main actions, statutory deadlines and participants in the procedure of adopting a detail plan are described in the table below:

Table 114 - Estonia Detail Plan Action

Action	Time-line
Initiation of the detail plan	Initiation will be decided by the local municipality. Term is not specified.
Informing the public about the initiation of the detail plan	The local municipality informs the public within 30 days after the initiation decision through a public newspaper. Within 1 month after the initiation of a detail plan the local municipality is obligated to but up an information plaque on the planning area and the plaque must stay there for at least 1 month. If the detail plan leads to land expropriation then the local municipality is obligated to inform the land owners via registered mail within 2 weeks after the initiation decision or after the expropriation need has occurred. The local municipality will provide to the county governor within 2 weeks of the initiation decision the necessary information. Also the local municipality sends a notification within 2 weeks to the land owners on and neighbours to the planning area.
Preparation of the detail plan	The local municipality is obligated to involve the land plot owner and the neighbouring land plot owners. The term is not specified.
Agreement of detail plan	Term is not specified. Usually the agreement from different state authorities takes 30 days after receiving the agreement application from the local municipality.
Public display and public hearing before detail plan acceptance	The local municipality will decide if a public presentation and public display of the initial planning outlines and draft plans is necessary.
Acceptance and public display of the detail plan	The local municipality makes the decision to accept the detail plan and organizes a public display in the municipality centre. No later than 2 weeks before the date of the public display of the detail plan the local municipality informs: • the land plot owners who might be affected by the expropriation process; • other affected persons; • the pepole who's objections where not accepted during the preparation of the detail plan; • the non-profit organization which represents the local residents, if necessary; • the people who submitted proposals or objections during the last public display or hearing. The local municipality is obligated to inform the general public through a local newspaper 1 week before the start of the public display. In addition the detail plan must be accessible through the local municipality website until the end of the public display. The detail plan must also be added to the information plaque in a public place or building (for example in bus stops) 2 weeks

	before the start of the public display. The public display lasts 2 weeks. The local municipality has to give a reasoned opinion on all the proposals and objections received within 4 weeks from the end of the public display. The date and time for the public hearing must also be notified within the same period. The local municipality organizes the public hearing within 6 weeks. The local municipality is obligated to publish in a newspaper a notification about the outcome of the public display and public hearing within 2 weeks if there were any written proposals or objections.
Surveillance proceeding	After the changes the local municipality sends the detail plan, if necessary, to the county governor with the proposals and objections that the local municipality ignored. The county governor will send the written response to the parties within 2 weeks after the county governor have listened to both parties. The county governor will accept the county plan after the local municipality has fulfilled all the governors' requests. Any disagreements between the local municipality and county governor are settled by the Ministry of the Interior.
Adopting the detail plan and notification	The detail plan will be adopted by the local municipality after the surveillance proceeding. The local municipality informs : • the public within 1 month after the adoption of the detail plan in a local newspaper; and • the county governor by sending a copy of the adoption decision and the county plan; • people who submitted written proposals or objections during the public display; land owners whose land will be expropriated or on whose land there is a requirement for a temporary building; or any other persons affected by the plan within one week after the adoption of the detail plan via registered mail; If during the public display there were written proposals or objections then within 14 days after adoption of the detail plan the local municipality is permitted to give out any building permits or permit of use. Everyone has the right to contest the detail plan in court within 30 days of the day on which he or she became aware or should have become aware of the adoption of the detail plan.

Latvia

The Strategy for the long-term development of Latvia was approved by Saeima (the Parliament) on 10 June 2010, and the project “Rail Baltica” is envisaged in it.[15]

There are no concrete deadlines within which territorial plans should be developed and approved. A review of publicly available information revealed that at the municipal level, development and approval of a territorial plan may take from 1 to 4 years (in the majority of cases it was 2 to 3 years). This timeframe includes also the public debates, which are mandatory.

Lithuania

If the proper master plan exists for the respective municipality or territory, the process of preparation and approval of the detailed plan may take approximately 6 to 12 months or in some cases even longer. In situations where amendments to the master plan or preparation of a special plan are needed, the procedure may be significantly longer and more complicated.

Adoption of a special plan also takes approximately 6 to 12 months or even longer (depending on the level of the special plan and other issues).

The detailed plan/special plan is prepared according to the set of the conditions for detailed/special planning. The respective authority must issue the set within 20 business days after the receipt of the respective application.

After the detailed/special plan is drawn up, the organiser of the planning procedures must make it available to the general public. The organiser must allow at least 20 business days for familiarisation of the details of a detailed plan, not less than 1 month for a special plan of district level and not less than 2 months for a special plan of national or regional level.

The general public as well as the owners and the users of the neighbouring land plots have the right to put forward their suggestions to the organiser of the detailed/special planning regarding the detailed/special plan before its public consideration. These suggestions must be considered and the organiser must reply to these suggestions in writing. If the proposer of the suggestion is unhappy with the reply then they may appeal to the authority monitoring territorial planning within 1 month. The reply from this authority may also be appealed by submitting a claim to the courts. Any judicial procedures may significantly extend the duration of the detailed/special planning procedure, as it is very likely that the authorities will not approve the detailed/special plan until these procedures are complete.

After the detailed/special plan is presented to the general public and the latter has no suggestions or appeals regarding the detailed/special plan or these appeals have been solved, the detailed/special plan must be delivered to the authority monitoring territorial planning. This authority must issue a verification deed of the detailed/special plan within 20 business days after the receipt of the detailed/special plan. This deed may contain a positive or negative decision by the authority regarding the detailed/special plan. In the case of a positive decision, the detailed/special plan may be submitted for approval to the respective authorities. The authority should approve or refuse to approve the detailed plan or the special plan of district or territory level within 20 business days after the receipt of the plan, the special plan of regional level – within 2 months and the special plan of the national level – within 3 months. The detailed/special plan enters into force after it is approved by the respective authority and announced in accordance with the relevant Lithuanian legal acts.

1.6.2 Existence of the Government’s special rights to override municipalities in planning matters for projects of national interest

Estonia

Railroads in Estonia are not projects of national interest but according to planning laws special rules apply for railroad planning. The Government has the right to initiate a county plan for the railway. The procedure is managed and the county plans are adopted by the county governor (who by law is a representative of the state interests). The law clearly divides the competences of the state and municipality. The final decision with regard to the validation of county planning document will be made by the county governor in co-operation with the local municipalities. After the adoption of the county plan the general plans that have been adopted before the county plan must be changed according to the county plan. The county plan enters into force 1 day after the changes to all general plans related with the county plan have been made.

[15] Available in Latvian at http://www.latvija2030.lv/upload/latvija2030_saeima.pdf.

Specific rules described above apply to the planning of a railway, which does not require a detail plan. However buildings and structures e.g. stations on the railway land still require a detail plan. The law does not define clearly the list of structures that need a detail plan (only substations are mentioned expressly in the law).

Latvia

There are no special rules with respect to railways, and in Latvia there is no such category of projects as “projects of national interest”, but the hierarchy of the planning documents and the subordinated nature of documents of a lower hierarchical level is clearly defined.

The Minister of regional development and municipalities has a right to stop whole or part of illegal municipal territorial plans, which, in our opinion, could be also a case of discrepancies between the plans at regional and municipal level.

On the other hand, since territorial plans are adopted as normative acts (municipal regulations), the people have a right to contest the territorial plans in the Satversmes tiesa (the Constitutional Court). There have been several such cases, many of them still pending.

Lithuania

We are not aware of any Government right to override municipalities or more favourable rules for projects of national interest/importance. All regulations set in the legal acts regulating territory planning are applicable for projects of national importance. However, the respective authorities may be more co-operative or make decisions/issue documents faster in the case of a project of national interest (e.g., the Government of the Republic of Lithuania recognised the project “Rail Baltica” as project of national interest by the Resolution No. 371 dated 7 April 2010).

1.6.2.1 Levels of planning that could be avoided if Rail Baltica would use the current alignments

Estonia

Provided that there is no need to acquire additional land for building the new tracks next to the existing ones, the need for a county plan can most probably be avoided. However, if some additional land is necessary and the safety zones of the railway change due to the new alignment, then a detailed plan is most likely necessary and it is possible that the general plans may also need to be changed. A detail plan is required for any new buildings or structures.

Latvia

If there are no changes with respect to the land plots and their intended use, as well as to the restrictions arising out of its use (e.g. safety zones), amendments to the existing plans or development of new plans will not be necessary. However, it is unlikely that no amendments will be necessary at the municipal territorial plan and detailed plan level.

Lithuania

If construction of the railway or buildings related to it complies with the existing territory planning documents there is no need to change these documents or prepare new ones. However, if construction of the railway or buildings related to it does not comply with the detailed plan of the particular land plot, special plan and/or the master plan of the territory, the new detailed plan of the land plot must be prepared and the special plan and/or master plan should be amended accordingly.

1.6.2.2 Effect of an appeal to administrative court in related to the detailed planning

Estonia

An appeal to the administrative court does not suspend the detailed planning procedure or implementation of the plan, unless the court decides to suspend it (interim injunction).

Any administrative act is valid until declared invalid by the court or by the administrative authority. So filing a claim to the court does not legally postpone the implementation of the detail plan (or any other validated planning document either). which means a claim to stop the implementation must also be filed (interim injunction).

The court may ask for the opponent’s opinion before ruling on an interim injunction. It is possible to challenge the ruling (possible only one time, i.e. the challenge will not go through all three court instances).

Latvia

The people do not have a right to appeal against the territorial plan during the process of its development. They have a right to be informed and to express their opinion and submit proposals, which can be rejected.

However, once the territorial plan at the municipal level is approved, people have a right to contest it in the Satversmes tiesa (the Constitutional court). An application to the Constitutional Court does not stop the operation of a plan. However, there is a risk that the Constitutional Court may revoke all or part of the territorial plan and it can do so as of the date of its judgement, or as of the date of the entry into force of the contested territorial plan.

Lithuania

As mentioned above, the general public as well as the owners and the users of the neighbouring land plots have the right to put forward their suggestions to the organiser of the territory planning before public consideration of the plan. These suggestions must be considered and the organiser must reply to these suggestions in writing. The reply may be appealed to the authority monitoring territorial planning within 1 month. Then the reply of this authority may also be appealed by submitting a claim to court and it is very likely that the authorities will not approve the detailed/special plan until these procedures are completed.

1.6.3 Land Expropriation

1.6.3.1 The timeframe of the procedure

Estonia

The expropriation procedure usually takes 2-2.5 years, but depending on the circumstances can take substantially longer. The expropriation procedure can be started after the relevant planning justifying the need for the expropriation is adopted.

The main actions, statutory deadlines and participants in the procedure for land expropriation are described in the table below:

Table 115 - Estonia Land Expropriation Actions

Action	Time-line
Decision to start preliminary works	6 months.
Finalizing of the preliminary works	6 months.
Notice regarding the filing of the expropriation application	The deadline to submit objections is 2 weeks.
Compilation of the expropriation application	Term is not specified.
Filing the expropriation application	State institution shall submit an expropriation application to the minister whose area of government corresponds to that for which the expropriation is applied. The minister submits the application to the Government within 1 month.
Decision to start compulsory execution	Revocation complaint deadline is 30 days from communication of the complaint. In this part there can be also an appraisal which can last 2 week or up to 2 months.
Appraisal report sent to land plot owner	Term is not specified
Delivery or the appraisal report	
Compromise procedure	1) Notification in the public newspaper to inform the related persons that they can notify at least within 2 weeks about their

	rights and claims; 2) Notification to the land plot owner and limited real right owners. Land lord and limited real right owner are obligated to inform about their claims within 2 weeks after receiving the notification; 3) The term of summoning the participants is not specified; 4) The second meeting date will be set at the end of the First meeting and the term is not specified; 5) Deadline for the compromise is 30 days; 6) The term for preparation of the compromise statement and protocol is not specified;
Determine the price of the compulsory execution	Revocation complaint deadline is 30 days from the communication. The deadline to pay compulsory execution price is 3 months.
Transferring the price of the compulsory execution and transferring the land plot.	Term is not specified but the ownership can be transferred after the compulsory execution price is paid.

Latvia

There is no timing defined by the laws of Latvia. Since expropriation in Latvia can be done only by adopting a separate law, the timing depends on the political will of the Saeima (the Parliament). Some of the latest laws were adopted in a time frame 2 – 8 months.

Lithuania

A state institution or municipality council may initiate the procedure of expropriation. However, the decision regarding the commencement of the procedure and expropriation itself is taken by the National Land Survey under the Ministry of Agriculture.

Land may be expropriated from private land owners for public needs only in exceptional cases by the decision of the National Land Service following the request submitted by a state institution or the municipal council where the land, pursuant to the detailed and special plans is required for:

a) the construction of public railways and roads, pipe lines, and high voltage transmission lines as well as for engineering structures required for their operation that belong to the state or a municipality by the right of ownership and used for public needs;

b) the implementation by the state of economic projects of state significance whose importance for public needs is recognised by the Seimas or the Government by its decision;

c) or other activities established in legal acts (the list is exhaustive).

A state institution or municipal council, when submitting an application to the National Land Service regarding expropriation of land for public needs, shall also inform the owner of the land about the submission of such application and indicate the specific goals for which the land is intended to be expropriated. The National Land Service (or its subdivision) shall consider the application and take a decision as to whether to start or not the procedure for land expropriation. The decision of the National Land Service may be appealed in the court.

The National Land Service takes a decision concerning expropriation of land pursuant to the approved project for expropriation of land for public needs and the agreement on the manner and amount of compensation concluded between the owner of private land, other user of land and the institution which has filed an application for expropriation of land for public needs. The value of the land plot to be expropriated, the losses related to expropriation of land and the manner of compensation shall be stipulated in the decision concerning expropriation of land for public needs. This decision within 5 business days must be sent to the institution

which has initiated the expropriation procedure and to the land owner as well as the Real Estate Register. The latter shall make a record in the Real Estate Register about taking the decision to expropriate the land for public needs.

The timing depends on time which will take preparation and approval of the expropriation project and if there are any disputes and/or court claims.

1.6.3.2 The parties to the expropriation

Estonia

As a general rule, the procedure is initiated by the government. In the application of the compulsory execution the applicant is obligated to get an opinion from the municipality.

Latvia

Expropriation is necessary if it is not possible to reach an agreement with the owner of the real estate.

Formally a proposal to expropriate a real estate, in a form of a draft law, is submitted by the Cabinet of Ministers. Such proposal can be initiated either at the request of the responsible Ministry, or at the request of a municipality.

During the discussions in the Saeima (the Parliament) also the opinion of the owner should be found out.

The Saeima (the Parliament) only decides on the fact of the expropriation. After such a law enters into force, it is possible to write in the Land register a prohibition to alienate the said property. Still, the remuneration or barter for the property has to be agreed with the owner.

Lithuania

A state institution or municipality council may initiate the procedure of expropriation. However, the decision regarding beginning of the procedure and expropriation itself is taken by the National Land Survey under the Ministry of Agriculture.

1.6.3.3 Effects of disputes over fair price of land

Estonia

Commonly, before starting the expropriation official procedure, parties negotiate the price. If there is no consensus reached, the state or local government will continue with the expropriation procedure. During that, also a compromise procedure is carried out to agree on the expropriation payment payable to the owner the immovable under expropriation and of the compensation for damage caused to the rights of other persons by the expropriation. If compromise is not reached, the state or the municipality decides the price unilaterally, pays it and only then the ownership will be transferred.

So the price matter is always solved before the land is transferred, either by an agreement or by the authority's unilateral decision.

Latvia

If an agreement with the owner on the price cannot be reached, the price will have to be determined by the court. A state will be entitled to register its ownership rights on the said property only after the judgement of the court will enter into force (it is subject to appeal) and the price will be paid.

Lithuania

The value of expropriated property is established by evaluating the property pursuant to the requirements set in the respective regulations. However, even in case the institution and the owner/user of the land plot fail to agree the amount of compensation for expropriated property, the National Land Service takes decision to expropriate the property. In this case the institutions initiating the expropriation procedure within 3 months must apply to the court requesting to confirm legitimacy of the decision. When the court confirms the legitimacy of the decision, and expires term for appeal of the court's decision, the court may permit to register the property with the Real Estate Register as the ownership of the state. Please note that the court may confirm the legitimacy of the decision without taking the decision whether the amount of compensation is fair. The court may continue procedures and investigation regarding fairness of the compensation. These procedures do not prevent from registration of the property as the ownership of the state and use of the property for the purposes indicated in the decision on its expropriation.

In case of other court claims the expropriated property may be registered as the ownership of the state only after the institution settles with the owner/user of the property pursuant to the order established in the decision of the court, except cases when the court by a separate decision permits otherwise.

1.6.4 Setting of tariffs

1.6.4.1 Estonia

Infrastructure access fee

Entity setting infrastructure usage fee

Currently the infrastructure usage fee (Tariff hereinafter in subsection 1.1) are determined by the Estonian Technical Surveillance Authority (the Regulator hereinafter in section 1), a state authority independent from market participants. The Regulator is determining the tariffs to assure non-discriminatory access to public railways as currently infrastructure managers belong to the same group with train operators.

Legal basis and aim of regulated tariffs

The Tariff is determined on the basis of the Railways Act and national methodology of calculation of the railway infrastructure usage fee (the Methodology hereinafter in section 1)[16].

The Tariff comprises the costs of giving the railway infrastructure into use and of a reasonable commercial profit.

Separate tariffs

Separate tariffs are determined for main services, additional services and ancillary services (scope of these services is similar, but not identical to the catalogue provided in Annex II to Directive 2001/14/EC).

Tariffs for main services and additional services include the costs of giving the railway infrastructure into use and of a reasonable commercial profit. The tariffs for ancillary services include costs, but profits only if multiple ancillary service providers exist.

Below we shall provide an overview of determination of the Tariff for main services only.

Structure of total cost base

The cost base (Total Cost Base hereinafter in section 1) for determining the Tariff is the sum of the following components:

- Operational cost of the respective service (direct costs and proportional part of overheads);
- Depreciation allowance calculated from regulatory value of [i.e. value of necessary investments at cost (no revaluations are taken into account[17]] the regulatory asset base;
- Reasonable profit [regulatory (not market based) WACC applied to the value of the regulatory asset base].

Components of the Tariff

The Tariff consists of two components:

- Fixed part calculated based on reserved train kilometres (effectively working as reservation charge);
- Variable part calculated based on actual gross ton-kilometres (=weight of train in tons multiplied by the covered distance in kilometres).

Fixed part is payable based on train paths reserved by (allocated to) a train operator in capacity allocation process irrespective whether the paths are used. Therefore the fixed part also works as a reservation charge.

The fix part must be in the range of 4.15-6.39 EUR per train kilometre and the variable part in the range of 0,00255-0,00447 EUR per gross ton-kilometre.

[16] Official text available form (in Estonian) http://www.riigiteataja.ee/ert/act.jsp?id=13304518, 30. august 2010

[17] Currently the Supreme Court is analysing whether prohibition to take into account revaluations is constitutional in high inflation

Calculation of fixed and variable part of the Tariff

The Methodology stipulates that the following rules are used to determine fixed and variable costs and fixed and variable part of the Tariff:

- If at least 75 % of train kilometres on relevant infrastructure for a working timetable period are ordered / reserved for public passenger service then 70 % of the cost base is regarded as fixed costs and 30 % of the cost base is regarded as variable costs;
- If less than 75 % of train kilometres on relevant infrastructure for a working timetable period are ordered / reserved for public passenger service then 30 % of the cost base is regarded as fixed costs and 70 % of the cost base is regarded as variable costs

For infrastructures where less than 75 % of train kilometres are reserved for public passenger service only variable part of the Tariff is charged from providers of public passenger service.

For infrastructures where at least 75 % of train kilometres are reserved for public passenger service only variable part of the Tariff is charged from providers of freight service.

There is no evidence available on financial justification of sharing fixed and variable costs under these proportions and some specialists have regarded these methods as unjustified.

Calculation of the Tariff for the main service

The Tariff for the main service is calculated based on the following formula:

Figure 70 - Calculation of the Tariff for the main service

$T_0=P_0+M_0$,

Whereas:

T_0=total monthly Tariff for the main service

P_0=fixed part of the monthly Tariff for the main service per one train-kilometre

If at least 75 % of train kilometres on relevant infrastructure for a working timetable period are reserved for public passenger service then the fixed and variable parts of the monthly Tariff for the main service is calculated based on the following formulas:

P_0=(70%*Total Cost Base/12)/train-kilometres reserved in the particular month for public passenger service

and

M_0=(30%*Total Cost Base/12)/actual gross ton-kilometres.

P_0=(30%*Total Cost Base/12)/train-kilometres reserved in the particular month for other service than public passenger service

The fixed part calculated in case of this scenario under the formula must be within the range of 4.15-6.39 EUR.

and

Based on the above formulas the Regulator determines the estimated Tariff, which will be the basis for payments from train operators to the infrastructure manager. Based on actual monthly data the Regulator *ex post* adjusts the estimated Tariff for particular month. The infrastructure manager and train operators will settle the imbalances so the adjusted Tariff will represent the actual and final Tariff.

Overview of the Tariff levels

The following table provides overview of the average fixed and variable parts of the Tariff (adjusted) for the use of EVR Infra AS infrastructure (majority of the Estonian rail network) during the last timetable periods[18]:

Table 116 – Estonia Tariff Levels

Timetable Period	Average Fixed Part (EUR/ train/km)	Average Variable Part (EUR/ gross ton km)
2005/2006	1.625	0.002
2006/2007	1.569	0.002
2007/2008	2.302	0.003
2008/2009	5.701	0.004
2009/2010	5.236	0.004
2010/2011[19]	4.274	0.004

Possibilities to negotiate different tariffs

The Methodology stipulates a possibility to negotiate tariffs different from tariffs determined under the rules provided above if the infrastructure manager and the train operator are concluding a contract for use of rail infrastructure for a longer period than one timetable period. In such a case the tariff to be used in the contract must be approved by the Regulator. The negotiation procedure should be used in situations where there is a need to tariffs for several years and to overcome insecurity arising from the fact that the tariffs are regulated on yearly basis. The approval will be granted based on proposals by the infrastructure manager and the train operator and economical justifications to the proposed tariff and the competition situation in the rail freight market. If the operator commits to guaranteed volume, some discounts may be available, but it should still be cost based and in line with general principles on calculating the tariff. There is no public information on such negotiated tariffs.

Possible regulatory difficulties for setting different level tariffs for Rail Baltica

In Estonia the Tariffs are determined based on actual costs of a respective rail infrastructure. So it is not contradicted, but alleged that because of the investments necessary for Rail Baltica the Tariffs for Rail Baltica will be different (presumably higher) than the current tariffs.

For mitigating risk of or allegation on cross-subsidies between existing infrastructure and Rail Baltica it may be advisable to assure that Rail Baltica is regarded as an infrastructure separate from the other infrastructures servicing East-West or other traffic, and separate tariff is determined for Rail Baltica.

Another concern is related to level of tariffs, if the current Methodology is used. Because of some features of the current Methodology aimed to keep the tariffs on low level (e.g. prohibition to calculate depreciation allowances from fair value of the infrastructure) the tariffs for Rail Baltica, if aim is to charge the total costs, may not be competitive with the tariffs for older 1,520 mm railway. Achieving competitive tariff levels may require substantial public funding.

Based on above it is recommended to conduct a simulation of possible Rail Baltica tariffs if current charging principles are applied. The simulation may reveal that the current models are not suitable for Rail Baltica and new models need to be designed, possibly demanding material changes in policy (e.g. abandoning total cost recovery in pricing).

[18] Information available from the Regulator's webpage: http://tja.ee/index.php?id=11133

[19] Information for timetable period 2010/2010 is not annual adjusted Tariff, but the average if estimated Tariffs for May and June 2010. Adjusted Tariffs were not publicly available.

The Methodology can be changed with a regulation of the Minister of Economics and Communication. Recently it has been done without much public debate. This allows flexibility in tariff policies for Rail Baltica; however this increases the risk of arbitrary and short-term policy decisions.

Setting of freight tariffs

The tariffs for carriage of cargo are determined by cargo train operators. These tariffs are not regulated, except general restrictions arising from the competition law (prohibition to charge excessive prices, discriminate or cross-subsidise). The cargo operators calculate exact price for carriage of particular shipment on basis of type of cargo, distance, volume etc. The tariff policy for EVR Cargo, the largest Estonian freight operator, is publicly available and was sent to you on 1 September 2010. The tariff policy is unfortunately available only in Estonian or Russian.

Setting of passenger tariffs

The tariffs to passengers are set by passenger train operators. These tariffs are not directly regulated and depend on the level of service, distance covered, type of ticket (single, period) etc. Also some special discounts can be available for limited groups of persons (e.g. children, students, retired persons). However the tariffs determined by the passenger train company cannot exceed the maximum ticket price and kilometre price determined by the Ministry of Economic Affairs and Communication under the public service contract. Maximum prices are determined so that on one hand the revenue from tickets would cover reasonable part of the costs arising from the service, but at the same time maintaining the affordability of passenger train transport.

Tariffs and subsidies for other modes of transport

Public transport is organised on two levels – municipality level by municipalities and national level by county governments (intra-county lines), the Ministry of Economic Affairs and Communications and the Government.

The following modes of public regular service are subsidised from the state budget:

- National train service;
- Intra-county bus lines and national non-commercial long-distance lines;
- Ship and ferry lines connecting Estonian islands with mainland (or small islands with islands);
- Air service lines connecting Estonian islands with mainland (or small islands with islands).

The following modes of public regular service are subsidised from the municipalities' budget:

- Intra-city or other national train services;
- Intra-city bus, tram, trolley-bus lines, intra-parish bus lines, lines connecting neighbouring municipalities;
- Intra-municipality ship and ferry lines.

Only public regular service lines serviced under public service contract are entitled to public subsidies. The public service contracts are awarded based on public tendering. For larger contracts public procurement regulations must be applied. The main financial criterion for selecting a successful bid is the (lowest) price of line kilometre.

The tariffs for public regular service are set by entities responsible for organising respective mode of transport on level affordable to the customers. The gap between line kilometre of the successful tender and funds received from sales of tickets are covered by subsidies. Total amounts of state subsidies are determined by the parliament in the course of adopting annual state budget.

International air services (inter alia airport services) and commercial lines (e.g. intercity express buses) are not subsidised.

1.6.4.2 LATVIA

General

In Latvia there are separate tariffs for (1) use of public railway infrastructure, (2) for carrying passengers ("Pasažieru vilciens" has different tariffs for carrying passengers in electric or diesel trains) and (3) for carrying cargoes.

In Latvia only tariffs for the use of public railway infrastructure and tariffs for providing services of public transportation (such as carriage of passengers by railway) are partly regulated, that is, there is an approved methodology, according to which the tariffs shall be calculated.

Infrastructure access fee

According to the Railway Law, the Public Utilities Commission, in consultation with the operators of the public use railway infrastructure, develops methodology for calculating tariffs for the use of public railway infrastructure. Such methodology was developed and approved on 18 January 2006.

In principle, the tariffs for the use of public railway infrastructure as such, based on the methodology, should be calculated by the operator of the railway infrastructure. However, the Railway Law entrusts Public Utilities Commission to set tariffs in those cases when both – the operator of the railway infrastructure and the carrier are related companies. Since in Latvia this is the case because state owned company "Latvijas Dzelzceļš", who is the operator of the public railway infrastructure, is in the same holding as the carrier of cargos and the provider of international passenger carriage services, on 29 November 2010 the Public Utilities Commission has set tariffs for use of "Latvijas Dzelzceļš" public railway infrastructure for carriage.

The tariffs are set for the use of public railway infrastructure for the year 2011. The calculation for the tariff was submitted by the operator of the public railway infrastructure ("Latvijas Dzelzceļš"), and according to the approved methodology for calculating this tariff, the calculation is done on the basis of the total cost of the infrastructure, cost for maintaining and operating the infrastructure, investments in the infrastructure, taxes and duties and the correction of costs. Detailed formulas for calculating each of these elements are found in the methodology, approved by the Public Utilities Commission.

In accordance with the amendments in the Railway Law, starting from 1 January 2011 a new commercial entity had to be established which would perform the main functions of a railway infrastructure operator and among other things it would set tariffs for the use of the public railway infrastructure on the basis of a methodology, approved by the Public Utilities Commission. However, as outlined above, for the time being the tariffs are set by the Public Utilities Commission.

Setting of passenger tariffs

Tariffs for carriage of passengers in principle are set by the carriers themselves, except, there is a methodology, according to which tariffs for services of public transportation (such as carriage of passengers by railway) shall be calculated. Carrying of passengers by railway in most, if not all, routes in Latvia is procured by the state as the public transportation services.

The methodology for calculating tariffs for carriage of passengers is not publicly available, except the methodology for calculating tariffs for services of public transportation. This methodology allows the procurer of these services to set the tariffs. If this has not been done, the carrier is allowed to set tariffs after they have been accepted by the procurer of the services of the public transportation. The methodology itself relates to carrying passengers within Latvia and mainly describes different methods, available to the carrier for setting tariffs, such as on the basis of the distance, zones, period of time etc. This methodology envisages that:

In the cases of routes of regional local importance or routes between cities, the tariff is based on the passenger kilometre and it is calculated by dividing the anticipated total costs of carriage with the anticipated number of kilometres of carriage.

In the routes within the cities the tariff is calculated on the basis of cost for carrying one passenger, which is calculated by dividing the anticipated total cost for carrying passengers in the given network of routes with the number of passengers.

Tariff for carrying luggage and animals can be disproportional to the length of a trip.

In addition it should be mentioned that according to the Railway Law the carriers of passengers get compensated from the State budget for their payments for the use of railway infrastructure for carrying passengers on inland routes. Such compensation is not available to carriers of cargoes.

Setting of freight tariffs

Tariffs for carrying of cargos are not regulated by governmental institutions. However, for information purposes explanation of tariffs of "LDz Cargo" is available publicly.

Information about methodology of setting tariffs by "LDz Cargo" reveals that "LDz Cargo" calculates its tariff on the basis of cargo (according to the Harmonised Cargo Nomenclature), distance, type of carriage, speed, weight, type and ownership of the rolling stock, category and ownership of the container, services to be provided. Detailed algorithm for calculating the tariff is available in the Tariffs for transit of cargos for year 2010 KTT-LV/2010.

Private freight operator's possibilities to negotiate different tariffs

As far as we are informed, one of the few private cargo carriers – "Baltijas ekspresis" – complained in the court against the set tariffs for the use of the public railway infrastructure in the year 2009. So far the court has rejected this complaint, reasoning that the tariffs are equally applicable to any cargo carrier; therefore there is no basis to complain about these tariffs. "Baltijas ekspresis" initially complained also about the methodology for calculating these tariffs, but the court did not accept the complaint.

We are not aware of any other discussions or negotiations, because setting the tariffs for the carriage of cargos is within the competency of the carrier itself.

Possible regulatory difficulties for setting different level tariffs for Rail Baltica

With respect to the possible tariffs for the use of the infrastructure of Rail Baltica the answer depends on the owner of it. If the owner of the infrastructure in Latvia will be "Latvijas Dzelzceļš", until an independent railway infrastructure operator will be established, the tariffs for the use of this infrastructure will have to be set by the Public Utilities Commission. At this point in time it is impossible to tell if the Public Utilities Commission will be ready to set different tariffs for different types of infrastructure. If, however, the owner of the infrastructure will be another entity, which is not connected to the carriers of passengers or cargos, tariff will be set by that entity. In both scenarios the methodology for calculating tariffs for the use of public railway infrastructure, in force at the given time, will have to be complied with. This methodology is approved by the Public Utilities Commission.

As explained earlier, setting of tariffs for carrying of passengers and cargos is within the competency of the carrier itself. The only exception, which we can see at this point in time, is related to providing the so called "services of public transportation", carrying of passengers by railway being one of them. In case carriers of passengers, operating through Rail Baltica, will receive the rights to provide the mentioned services of public transportation (in Latvia) they will be constrained by the requirements of the procurer of the services and the methodology. This methodology is approved by the Government (the Cabinet of Ministers).

Additional difficulty may arise from the regulations of the Cabinet of Ministers No 854, dated 14 September 2010, which set the criteria for establishing that the main purpose of the service is carrying of passengers between different Member States of the European Union, as well as set criteria for recognising that such service distorts the economical balance of the concluded contracts for services of public transportation. In accordance with these regulations, if embarking and disembarking of passengers within the territory of Latvia distorts the economical balance of the concluded contracts for services of public transportation, the State Railway Administration may impose restrictions on embarking and disembarking of passengers within the territory of Latvia. In accordance with these regulations it is considered that there is a distortion of the economical balance if, firstly, the ticket price is cheaper than the price for equivalent ticket by the local carrier multiplied by 1,2. and/or secondly, if more that 1/3 of the passengers were carried within the territory of Latvia and the departing time of the train is within 10 minutes to 1 hour (depending on the number of local trains per day in the same route) from the departing time of the local train.

Tariffs and subsidies for other modes of transport

International air services (inter alia airport services) and commercial lines (e.g. international intercity express buses) are not subsidised. A concealed way of subsidising intercity bus and train routes within Latvia is the procurement of "services of public transportation".

As explained earlier, setting of tariffs for carrying passengers are within the competency of the carrier itself, except in the case of the so called "services of public transportation" the carrier is constrained by the requirements of the procurer of these services and by the methodology for calculating tariffs for these services, approved by the Cabinet of Ministers.

Since carrying of passengers between Riga and Tallinn currently would not be considered as "service of public transportation" for the purposes of regulating methodology for calculating tariffs, the carrier will be free to set tariffs by itself. On the other hand, carrying of passengers between Riga and Jelgava is falling under the "procured services of public transportation"; therefore setting of tariffs is and most probably will remain constrained by the requirements of the procurer of these services and by the methodology for calculating tariffs for these services, approved by the Cabinet of Ministers.

1.6.4.3 LITHUANIA

The regulatory position on how tariffs for rail are currently set in Lithuania

Infrastructure charge

An infrastructure charge is paid by the railway company (the carrier) to the operator of the railway infrastructure (which is the state owned company AB "Lietuvos geležinkeliai") for the use of the railway infrastructure and the services, provided by the operator.

The method of calculation for this charge (in formulas) is established by the Cabinet of Ministers of Lithuania[20], however detailed tariffs (figures, components of the formulas) are set by the State Railway Inspection under the Ministry of Transport. The tariffs set for the year 2010-2011 are publically available[21]. For your convenience, please find below the link to the scheme, picturing

[20] Regulations of the Cabinet of Ministers of Lithuania No 610, dated 19 May 2004, available in Lithuanian at <http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=291553>

[21] Regulations of the State Railway Inspection under the Ministry of Transport No V-27, dated 28 January 2010, available in Lithuanian at <http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=364786>

the dynamic of the tariffs from 2008 to 2012[22]. The methodology is mainly based on actual costs and workload of a respective rail infrastructure.

Tariffs for carrying of freight

Tariffs for carrying of freight are not regulated by governmental institutions. Carriage of freight and other services provided by the railway operator shall be charged in accordance with the charges set forth in the contract of carriage or contract for organisation of carriage. Carriage tariffs shall be fixed by the railway operator (AB „Lietuvos geležinkeliai“). For information purposes the tariff book for import, export and local transportation of freight is publically available[23].

According to the aforementioned tariff book, the calculation of the tariff is mainly based on the distance, weight and type of carriage.

Setting of passenger tariffs

In Lithuania the maximum tariffs for carrying of passengers on local service routes are regulated by the State Price and Energy Control Commission (the Regulator).

It should be noted, that recently the Regulator proposed to the Government of Lithuania to withdraw regulation of tariffs in the railway, water and long-distance road transport sectors. However, it was decided to uphold the regulation of tariffs in monopolistic sectors. Thus, regulation on the maximum tariffs for the carrying of passengers on the railway remained unaltered, the regulation in water transport was slightly liberalised and regulation in long-distance regular routes road transport was withdrawn based on figures showing the impact on the market resulting in tariffs 10-15 % lower than the maximum tariff, set by the Regulator.

The tariffs in the railway sector are determined on the basis of the Railways Transport Code of the Republic of Lithuania and the Methodology for Determining Maximum Tariffs for Carriage of Passengers on Local Service Routes[24].

According to the methodology the maximum tariffs are to be set by the Regulator for every operator individually. The calculation methodology is based on the costs incurred by the operator. The formula components, determining the maximum tariff are:

- Incomes for ensuring profitable activities (planned incomes plus indispensable expenditures);
- The average tariff for the carriage of passengers on local service routes (incomes for ensuring profitable activities divided by the traffic of passengers (turnover) and multiplied by 100);
- After evaluation of additional services for every type of carriages, passengers’ comfort level, speed of the train - additional coefficients are determined;
- Planned kilometres of the passengers on local service routes in different carriages.

Charges for the carriage of passengers and luggage on international service routes shall be fixed by the operator in accordance with the procedure established by international treaties of the Republic of Lithuania concerning cross border railway service.

[22] Tariff scheme prepared by Regulations of the State Railway Inspection under the Ministry of Transport, available in Lithuanian at <http://www.vgi.lt/images/dinamika.doc>

[23] Tariff book for import, export and local transportation of freight, confirmed by AB “Lietuvos geležinkeliai” on 25 January 2010, available in Lithuanian at <http://www.litrail.lt/wps/wcm/connect/c942e3804137d9dc939ffb5dde0e8d72/01-LG-LT.pdf?MOD=AJPERES&CACHEID=c942e3804137d9dc939ffb5dde0e8d72>

[24] Regulation of the State Price and Energy Control Commission No 154, dated 17 November 2000, available in Lithuanian at < http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=114034&p_query=&p_tr2=>

Private freight operator’s possibilities to negotiate different tariffs

There is no specific regulation in Lithuania as regards to the possibility for the private freight operators to negotiate different tariffs. However, according to publicly available information big strategic companies (e.g. Orlen Lietuva), generating a substantial volume of freight enjoy more beneficial tariffs. We are not aware of other discussions or negotiations as setting of the tariffs for the carriage of freights is within the competence of the carrier itself.

Possible regulatory difficulties for setting different level tariffs for Rail Baltica

As the ownership and operation details of Rail Baltica are not clear, it is very hard to predict possible difficulties for setting infrastructure tariffs for Rail Baltica.

Assuming that Rail Baltica as a part of public railway infrastructure shall be owned by the state (operated by AB “Lietuvos geležinkeliai”) and the regulations mentioned above shall apply, presumably the tariffs may be negotiated based on strategic importance of the project itself and substantial volumes of freight delivered by Rail Baltica.

It should be also noted, that in Lithuania tariffs determination is based on actual costs and workload of the corresponding rail infrastructure. Accordingly, investment necessary for the railway infrastructure would influence the tariffs for Rail Baltica.

Nevertheless that new legal act regulating the use of Rail Baltica infrastructure may be adopted or existing acts changed/amended, establishing unreasonably favourable legal framework only for Rail Baltica would increase the risk of infringement of competition law as regards to equal treatment and state aid.

Tariffs and subsidies for other modes of transport

International air services (*inter alia* airport services) and commercial lines (e.g. intercity express buses) are not subsidised.

The setting of passenger tariffs are the responsibility of the carrier, except in the case of the so called “services of public transportation”, where the tariff is set by the municipality.

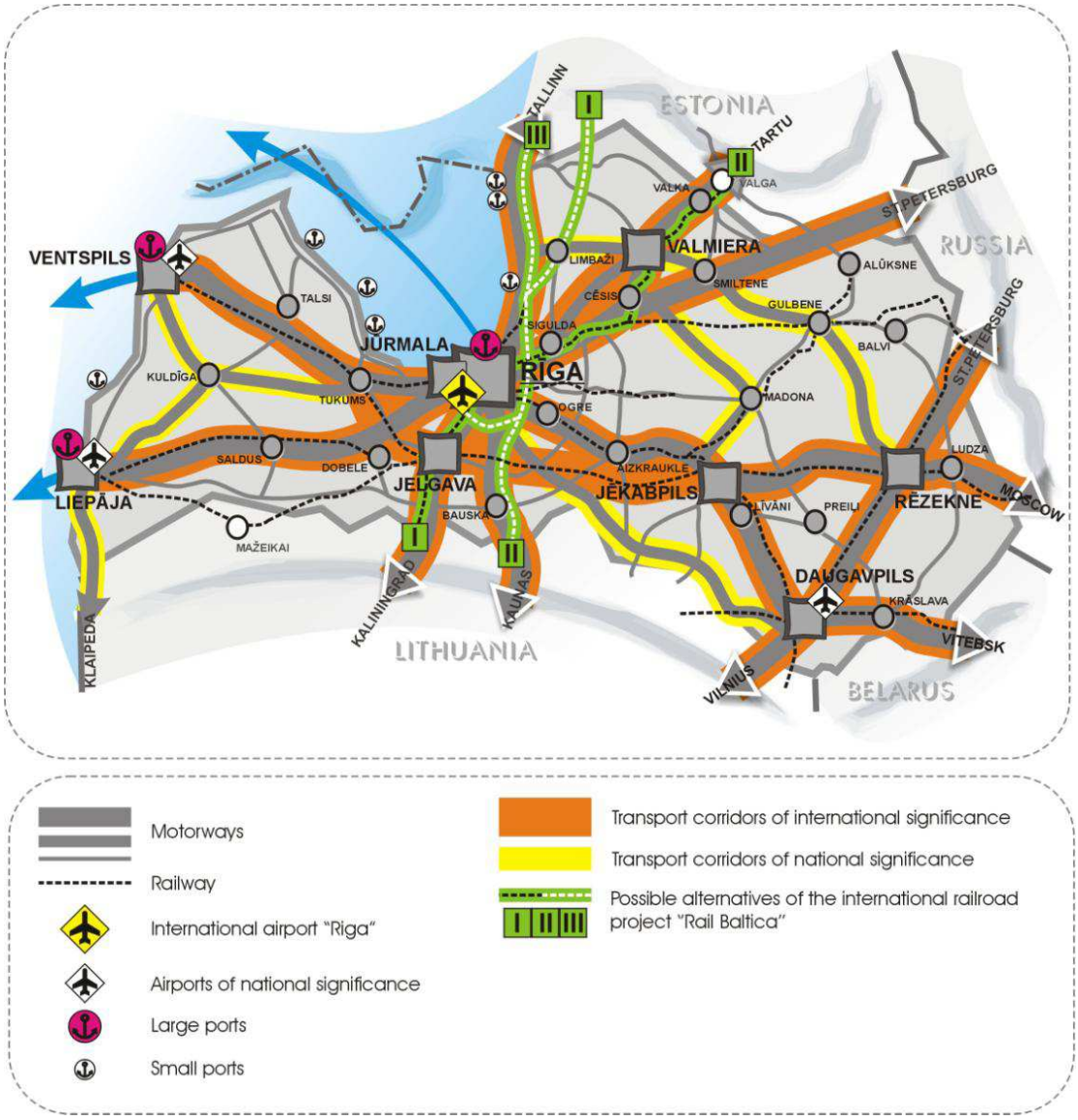
Appendix D – Spatial Plans

Appendix D – Spatial Plans

Figure 71 - National spatial plan „Estonia 2010“ (2000), transportation map

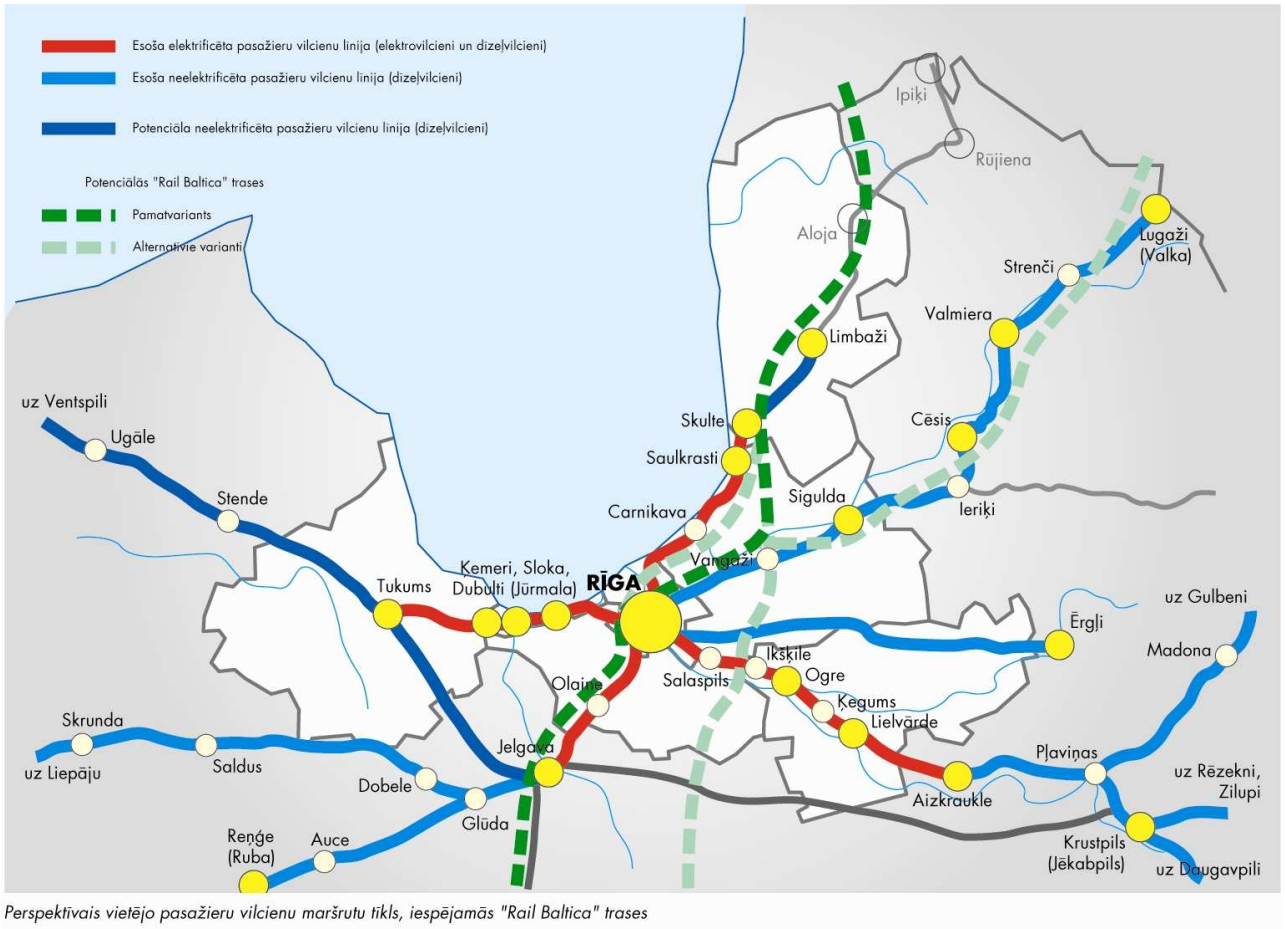
National spatial plan „Estonia 2010“(2000), transportation map (http://www.siseministeerium.ee/)

Figure 72 - Sustainable Development Strategy of Latvia until 2030



Sustainable Development Strategy of Latvia until 2030 (http://www.latvija2030.lv/upload/latvija2030_en.pdf)

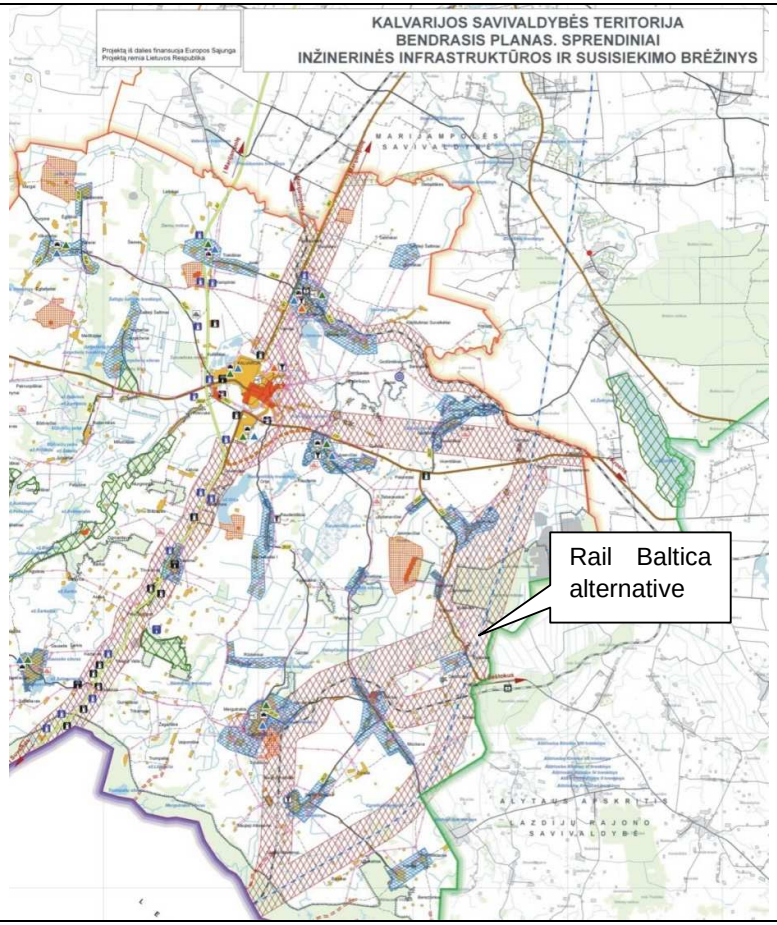
Figure 73 - Perspective Railway net and possible Rail Baltica alternatives

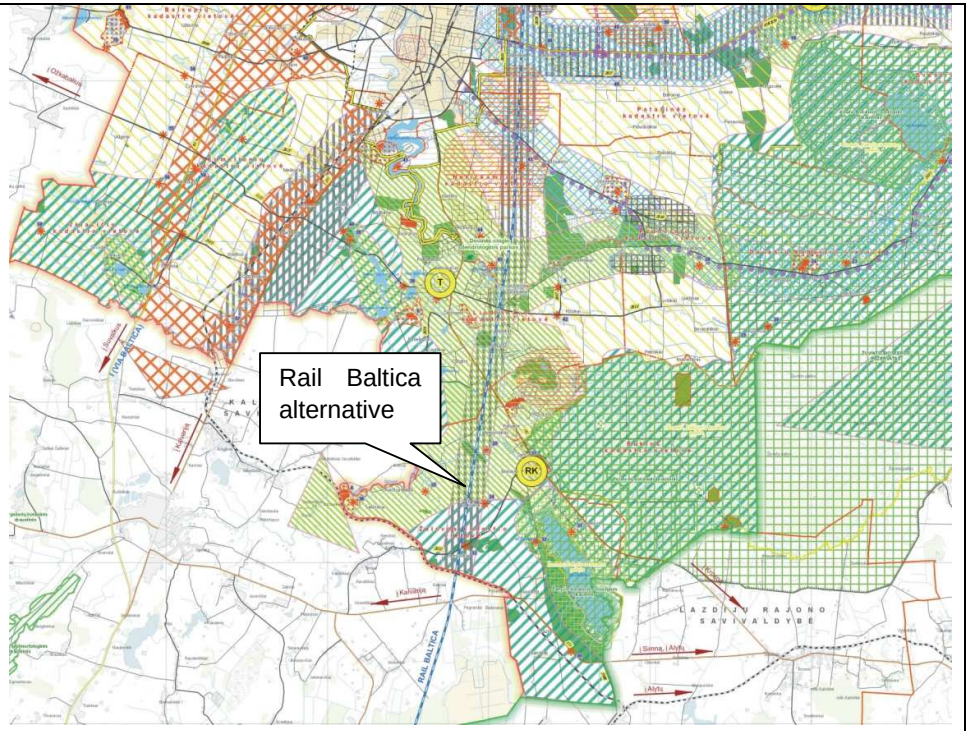


Perspektīvais vietējo pasažieru vilcienu maršrutu tīkls, iespējamās "Rail Baltica" trases

Perspective Railway net and possible Rail Baltica alternatives (map from spatial plan of Riga region - http://www.rigaregion.lv)

Figure 74 - The Rail Baltica alternatives in spatial plans of Kalvarijos and Marijampole





The Rail Baltica alternatives in spatial plans of Kalvarijos and Marijampole (http://www.kalvarija.lt, http://www.marijampole.aps.lt)

Figure 75 - Rail Baltica alternatives in spatial plans of Baltic States

Appendix E – Environmental Considerations

Appendix E – Environmental Considerations

Table 117 – Environmental Consideration Option 1

Option 1 (RED)							Birds listed on Annex I of Council directive 79/409/EEC		Listed on Annex II of Council directive 92/43/EEC				
Name of site	Site code	Area (ha)	Site type	Railway's proximity to site (distance from railway corridor)	Annex 1, habitat types (number)	Annex 1, Territory covered by habitat (%)	Birds, Annex 1	Regularly occurring Migratory Birds	Mammals	Amphibians	Fishes	Invertebrate	Plants
Taarikõnnu-Kaisma	EE0020340	7519	Birds directive site (SPA)	< 500 m	*No data*	*No data*	8	*No data*	*No data*	*No data*	1	*No data*	1
Põhja-Liivimaa	EE0040344	19336	Birds directive site (SPA)	< 500 m	*No data*	*No data*	23	8	*No data*	*No data*	1	1	*No data*
Luitemaa	EE0040351	12982	Birds and habitats directives site (C)	< 1 km	30	48.98	25	26	2	*No data*	2	1	3
Salavalge-Tõrasoo	EE0020314	4534	Habitats directive site (SCI)	< 500 m	19	43	4	*No data*	*No data*	*No data*	*No data*	*No data*	2
Rahaaugu	EE0020319	473	Habitats directive site (SCI)	< 500 m	9	38.5	1	*No data*	1	*No data*	*No data*	*No data*	1
Raikküla-Paka	EE0020322	139	Habitats directive site (SCI)	< 500 m	6	28.5	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	1
Kuusiku	EE0020336	121	Habitats directive site (SCI)	< 500 m	7	40.4	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kaisma	EE0040306	3170	Habitats directive site (SCI)	< 500 m	10	80.4	2	*No data*	*No data*	*No data*	1	*No data*	1
Kivikupitsa	EE0040317	135	Habitats directive site (SCI)	< 500 m	3	27.8	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Lemmejõe	EE0040342	5	Habitats directive site (SCI)	crosses	1	100	*No data*	*No data*	1	*No data*	1	1	*No data*
Pärnu jõe	EE0040345	862	Habitats directive site (SCI)	crosses	3	100	*No data*	*No data*	*No data*	*No data*	4	1	*No data*
Pärnu	EE0040347	519	Habitats directive site (SCI)	< 500 m	5	90.8	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Tolkuse	EE0040359	809	Habitats directive site (SCI)	< 1 km	2	54.2	1	*No data*	*No data*	*No data*	*No data*	1	*No data*
Laiksaare	EE0040322	399	Habitats directive site (SCI)	<500m	4	23.8	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Nepste	EE0040335	34	Habitats directive site (SCI)	<500m	2	80.9	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Reiu jõe	EE0040384	104	Habitats directive site (SCI)	crosses	1	100	*No data*	*No data*	*No data*	*No data*	3	1	*No data*
Salacas ieleja	LV0302200	6251	Birds and habitats directives site (C)	crosses	16	24.5	17	*No data*	3	*No data*	8	6	2
Dzelves-Krona purvs	LV0523300	1197	Birds and habitats directives site (C)	<500m	7	85	14	*No data*	1	*No data*	*No data*	*No data*	*No data*
Garkalnes mezi	LV0527400	1785	Birds and habitats directives site (C)	crosses	2	8.5	11	*No data*	*No data*	*No data*	*No data*	1	1
Vitrupes ieleja	LV0530500	126	Habitats directive site (SCI)	crosses	7	45.5	12	*No data*	1	*No data*	5	3	*No data*
Adazi	LV0600800	6128	Birds and habitats directives site (C)	<500m	11	30	21	*No data*	1	*No data*	2	1	2
Budos - Pravieniskiu mis	LTKAIB006	5174	Birds directive site (SPA)	<500m	*No data*	*No data*	8	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kauno marios	LTKAUB008	5773	Birds directive site (SPA)	<1 km	*No data*	*No data*	14	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kauno marios	LTKAU0007	9026	Habitats directive site (SCI)	<500m	8	4.48	*No data*	*No data*	2	*No data*	1	1	*No data*
Naujosios Fredos fortas	LTKAU0011	30	Habitats directive site (SCI)	<1 km	*No data*	*No data*	*No data*	*No data*	1	*No data*	*No data*	*No data*	*No data*
Kauno azuolynas	LTKAU0020	62	Habitats directive site (SCI)	<500m	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	1	*No data*
Sventosios upe zemiau A	LTUKM0002	1654	Habitats directive site (SCI)	crosses	*No data*	*No data*	*No data*	*No data*	1	*No data*	4	1	*No data*
Neries upe	LTVIN0009	2395	Habitats directive site (SCI)	crosses	1	11	*No data*	*No data*	1	*No data*	4	1	*No data*

Table 118 – Environmental Consideration Option 2

Option 2 (Orange)							Birds listed on Annex I of Council directive 79/409/EEC		Listed on Annex II of Council directive 92/43/EEC				
Name of site	Site code	Area (ha)	Site type	Railway's proximity to site (distance from railway corridor)	Annex 1, habitat types (number)	Annex 1, Territory covered by habitat (%)	Birds, Annex I	Regularly occurring Migratory Birds	Mammals	Amphibians	Fishes	Invertebrates	Plants
Taarikõnnu-Kaisma	EE0020340	7519	Birds directive site (SPA)	< 500 m	*No data*	*No data*	8	*No data*	*No data*	*No data*	1	*No data*	1
Kõnnumaa-Väätsa	EE0020341	17955	Birds directive site (SPA)	crosses	*No data*	*No data*	7	1	*No data*	*No data*	*No data*	1	1
Kikepera	EE0040316	10402	Birds directive site (SPA)	crosses	*No data*	*No data*	3	1	*No data*	*No data*	*No data*	*No data*	*No data*
Taarikõnnu	EE0020315	2857	Habitats directive site (SCI)	crosses	8	64.5	3	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Rabivere	EE0020316	2169	Habitats directive site (SCI)	crosses	15	61.9	7	7	*No data*	*No data*	*No data*	*No data*	1
Kurtna-Vilivere	EE0020318	71	Habitats directive site (SCI)	< 500 m	5	64.7	*No data*	*No data*	1	*No data*	*No data*	1	*No data*
Ridaküla	EE0020321	144	Habitats directive site (SCI)	< 500 m	6	76.8	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kõnnumaa	EE0020325	11397	Habitats directive site (SCI)	crosses	21	65.1	16	10	*No data*	*No data*	*No data*	1	2
Tilnliidu	EE0020326	346	Habitats directive site (SCI)	crosses	7	25.5	4	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Mukri	EE0020327	2211	Habitats directive site (SCI)	< 500 m	10	66.3	6	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Nõlvasoo	EE0020337	1106	Habitats directive site (SCI)	< 500 m	9	75	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Allikukivi	EE0040301	17	Habitats directive site (SCI)	< 500 m	3	22.4	*No data*	*No data*	1	*No data*	*No data*	*No data*	*No data*
Metsaääre	EE0040302	160	Habitats directive site (SCI)	< 500 m	6	74.6	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Siiraku	EE0040314	685	Habitats directive site (SCI)	< 500 m	3	71.7	2	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kuiaru	EE0040320	222	Habitats directive site (SCI)	< 500 m	2	78.2	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Mõrdama	EE0040331	1524	Habitats directive site (SCI)	< 500 m	6	57.6	2	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Pärnu jõe	EE0040345	862	Habitats directive site (SCI)	crosses	3	100	*No data*	*No data*	*No data*	*No data*	4	1	*No data*
Pärnu	EE0040347	519	Habitats directive site (SCI)	< 500 m	5	90.8	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Reiu jõe	EE0040384	105	Habitats directive site (SCI)	crosses	1	100	*No data*	*No data*	*No data*	*No data*	*3*	*1*	*No data*
Sanga	EE0040362	153	Habitats directive site (SCI)	< 500 m	1	81	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Piejura	LV0301700	4141	Birds and habitats directives site (C)	crosses	18	87	14	*No data*	1	*No data*	7	*2*	2
Salacas ieleja	LV0302200	6251	Birds and habitats directives site (C)	< 500 m	16	24.5	17	*No data*	3	*No data*	8	6	2
Vecdaugava	LV0518300	238	Habitats directive site (SCI)	< 500 m	3	11	7	5	*No data*	*No data*	5	*No data*	*No data*
Lielupes palienas plavas	LV0523100	354	Birds and habitats directives site (C)	< 500 m	3	47.2	14	*No data*	1	*No data*		1	*No data*
Naujosios Fredos fortas	LTKAU0011	30	Habitats directive site (SCI)	<1 km	*No data*	*No data*	*No data*	*No data*	1	*No data*	*No data*	*No data*	*No data*
Zuvinto, Zaltycio ir Amalvo pelkes	LTALYB003	14196	Birds directive site (SPA)	<1 km	*No data*	*No data*	27	2	*No data*	*No data*	*No data*	*No data*	*No data*
Zuvinto ezeras ir Buktos miskas	LTALY0005	18492	Habitats directive site (SCI)	<1 km	16	55.84	*No data*	*No data*	1	1	*No data*	2	2
Kauno marios	LTKAUB008	5773	Birds directive site (SPA)	<1 km	*No data*	*No data*	14	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kauno marios	LTKAU0007	9026	Habitats directive site (SCI)	< 500 m	8	4.48	*No data*	*No data*	2	*No data*	1	1	*No data*
Kauno azuolynas	LTKAU0020	62	Habitats directive site (SCI)	< 1 km	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	1	*No data*
Azuolu budos miskas	LTMAR0001	859	Habitats directive site (SCI)	<1 km	4	63	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Neries upe	LTVIN0009	2395	Habitats directive site (SCI)	crosses	1	11	*No data*	*No data*	1	*No data*	4	1	*No data*

Table 119 – Environmental Consideration Option 2

Option 3 (Yellow)							Birds listed on Annex I of Council directive 79/409/EEC		Listed on Annex II of Council directive 92/43/EEC				
Name of site	Site code	Area (ha)	Site type	Railway's proximity to site (distance from railway corridor)	Annex 1, habitat types (number)	Annex 1, Territory covered by habitat (%)	Birds, Annex I	Regularly occurring Migratory Birds	Mammals	Amphibians	Fishes	Invertebrates	Plants
Kõnnumaa-Väätsa	EE0020341	17955	Birds directive site (SPA)	< 500 m	*No data*	*No data*	7	1	*No data*	*No data*	*No data*	1	1
Kämbla	EE0010103	165	Habitats directive site (SCI)	< 500 m	5	92.6	*No data*	*No data*	1	*No data*	*No data*	*No data*	2
Paunküla	EE0010104	623	Habitats directive site (SCI)	<1 km	10	66.8	1	*No data*	*No data*	*No data*	*No data*	*No data*	2
Vapramäe	EE0080309	100	Habitats directive site (SCI)	< 500 m	4	79.9	*No data*	*No data*	*No data*	*No data*	*No data*	1	*No data*
Pärnu jõe	EE0040345	862	Habitats directive site (SCI)	< 500 m	3	100	*No data*	*No data*	*No data*	*No data*	4	1	*No data*
Elva-Vitipalu	EE0080318	921	Habitats directive site (SCI)	crosses	10	76.8	*No data*	*No data*	1	*No data*	1	3	3
Mõneku	EE0080472	48	Habitats directive site (SCI)	< 500 m	4	58.7	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Ardu	EE0010112	43	Habitats directive site (SCI)	<1 km	1	83.7	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kärevere	EE0080371	2509	Birds and habitats directives site (C)	crosses	8	32.5	6	1	*No data*	*No data*	4	3	*No data*
Linezers	LV0525200	127	Habitats directive site (SCI)	<1 km	5	98	1	*No data*	*No data*	*No data*	*No data*	1	1
Gaujas nacionalais parks	LV0200100	92286	Birds and habitats directives site (C)	crosses	27	14.32	29	2	3	1	7	10	6
Sedas purvs	LV0526800	7261	Birds and habitats directives site (C)	< 500 m	6	12.51	29	3	1	*No data*	*No data*	1	*No data*
Garkalnes mezi	LV0527400	1785	Birds and habitats directives site (C)	crosses	2	8.5	11	*No data*	*No data*	*No data*	*No data*	1	1
Ziemelgauja	LV0600700	21750	Birds and habitats directives site (C)	crosses	24	15.13	30		2	1	8	9	1
Budos - Pravieniskiu miskai	LTKAIB006	5174	Birds directive site (SPA)	<1 km	*No data*	*No data*	8	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kauno marios	LTKAUB008	5773	Birds directive site (SPA)	<1 km	*No data*	*No data*	14	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kauno marios	LTKAU0007	9026	Habitats directive site (SCI)	< 500 m	8	4.48	*No data*	*No data*	2	*No data*	1	1	*No data*
Kauno azuolynas	LTKAU0020	62	Habitats directive site (SCI)	< 1 km	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	1	*No data*
Naujosios Fredos fortas	LTKAU0011	30	Habitats directive site (SCI)	<1 km	*No data*	*No data*	*No data*	*No data*	1	*No data*	*No data*	*No data*	*No data*
Sventosios upe zemiau Andrioniskio	LTUKM0002	1654	Habitats directive site (SCI)	crosses	*No data*	*No data*	*No data*	*No data*	1	*No data*	4	1	*No data*
Neries upe	LTVIN0009	2395	Habitats directive site (SCI)	crosses	1	11	*No data*	*No data*	1	*No data*	4	1	*No data*

Table 120 – Environmental Consideration Option 4

Option 4 (Green)

							Birds listed on Annex I of Council directive 79/409/EEC		Listed on Annex II of Council directive 92/43/EEC				
Name of site	Site code	Area (ha)	Site type	Railway's proximity to site (distance from railway corridor)	Annex 1, habitat types (number)	Annex 1, Territory covered by habitat (%)	Birds, Annex I	Regularly occurring Migratory Birds	Mammals	Amphibians	Fishes	Invertebrates	Plants
Ohepalu	EE0020205	5928	Birds and habitats directives site ((	<1 km	13	65	3	1	*No data*	*No data*	*No data*	*No data*	2
Kõrvemaa	EE0060171	22888	Birds directive site (SPA)	< 500 m	*No data*	*No data*	13	7	*No data*	*No data*	*No data*	*No data*	*No data*
Vooremaa	EE0080171	3750	Birds directive site (SPA)	<1 km	*No data*	*No data*	3	10	*No data*	*No data*	*No data*	*No data*	*No data*
Kõrvemaa	EE0060119	20646	Habitats directive site (SCI)	< 500 m	15	92.75	4	*No data*	*No data*	*No data*	*No data*	1	4
Seljamäe	EE0060211	215	Habitats directive site (SCI)	< 500 m	7	71.9	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Äntu	EE0060212	391	Habitats directive site (SCI)	< 500 m	6	75.8	*No data*	*No data*	*No data*	*No data*	*No data*	1	3
Mustallika	EE0080109	50	Habitats directive site (SCI)	< 500 m	4	54.6	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	1
Vooremaa järvede	EE0080110	2109	Habitats directive site (SCI)	<1 km	5	67.6	*No data*	*No data*	2	*No data*	2	2	*No data*
Vapramäe	EE0080309	100	Habitats directive site (SCI)	< 500 m	4	79.9	*No data*	*No data*	*No data*	*No data*	*No data*	1	*No data*
Elva-Vitipalu	EE0080318	926	Habitats directive site (SCI)	crosses	10	86.8	*No data*	*No data*	1	*No data*	1	3	3
Mõneku	EE0080472	48	Habitats directive site (SCI)	< 500 m	4	58.7	1	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Melturu sils	LV0527800	288	Habitats directive site (SCI)	crosses	3	23.1	3	*No data*	*No data*	*No data*	*1*	*No data*	*No data*
Gaujas nacionalais parks	LV0200100	92286	Birds and habitats directives site ((	crosses	27	14.32	29	2	3	1	7	10	6
Lielupes palienas plavas	LV0523100	354	Birds and habitats directives site ((	< 500 m	3	47.2	14	*No data*	1	*No data*		1	*No data*
Jaunciems	LV0524600	351	Habitats directive site (SCI)	<1 km	6	52.9	9	*No data*	*No data*	*No data*	2	1	*No data*
Sedas purvs	LV0526800	7261	Birds and habitats directives site ((	< 500 m	6	12.51	29	3	1	*No data*	*No data*	1	*No data*
Garkalnes mezi	LV0527400	1785	Birds and habitats directives site ((	crosses	2	8.5	11	*No data*	*No data*	*No data*	*No data*	1	1
Ziemelgauja	LV0600700	21750	Birds and habitats directives site ((	crosses	24	15.13	30	*No data*	2	1	8	9	1
Zuvinto, Zaltycio ir Amalvo pelkes	LTALYB003	14196	Birds directive site (SPA)	<1 km	*No data*	*No data*	27	2	*No data*	*No data*	*No data*	*No data*	*No data*
Zuvinto ezeras ir Buktos miskas	LTALY0005	18492	Habitats directive site (SCI)	<1 km	16	55.84	*No data*	*No data*	1	1	*No data*	2	2
Kauno marios	LTKAUB008	5773	Birds directive site (SPA)	<1 km	*No data*	*No data*	14	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Kauno marios	LTKAU0007	9026	Habitats directive site (SCI)	< 500 m	8	4.48	*No data*	*No data*	2	*No data*	1	1	*No data*
Naujosios Fredos fortas	LTKAU0011	30	Habitats directive site (SCI)	<1 km	*No data*	*No data*	*No data*	*No data*	1	*No data*	*No data*	*No data*	*No data*
Kauno azuolynas	LTKAU0020	62	Habitats directive site (SCI)	< 1 km	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	1	*No data*
Azuolu budos miskas	LTMAR0001	859	Habitats directive site (SCI)	<1 km	4	63	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*	*No data*
Neries upe	LTVIN0009	2395	Habitats directive site (SCI)	crosses	1	11	*No data*	*No data*	1	*No data*	4	1	*No data*

Appendix F – Initial Capital Cost (CAPEX) Calculations (for Option Evaluation)

Appendix F – Initial Capex Calculations

Table 121 – Initial Capital Cost (CAPEX) Consolidated Summary

OPTION IDENTIFICATION COST SUMMARY											
		TOTAL	PASSENGER			FREIGHT			Constuction	Land	Total
Description	Alignment	km	km	hrs	ave kmh	km	hrs	ave kmh	Cost (EUR)	Cost	Cost
Option 1											
LT BORDER - TALLINN via KAUNAS/PANEVEZYS/RIGA/PARNU	New	728	701	4,13	170	708	10,38	68	4 835 250 000	46 256 875	4 881 506 875
Option 2											
LT BORDER - TALLINN via KAUNAS/JELGAVA/RIGA/PARNU	Existing	815	788	6,14	128	804	11,56	70	5 023 600 000	53 761 250	5 077 361 250
Option 3											
LT BORDER - TALLINN via KAUNAS/PANEVEZYS/RIGA/VALMIERA/TARTU	New/Existing	818	791	4,81	165	792	11,17	71	5 456 250 000	51 613 500	5 507 863 500
Option 4											
LT BORDER - RIGA via JELGAVA	Existing	885	858	6,74	127	859	11,88	72	5 274 300 000	54 178 500	5 328 478 500

Table 122 – Initial Capital Cost (CAPEX) – Option 1 – Red

RAIL BALTICA section description. Option 1.

Section code	Cross-section type	Length, km	Cost per km, €	Cost, €	Road crossings (bridges)								Water crossings						Territory type, km						Settlements, km				Passenger Design speed limits	Passenger Journey Times	Freight Design speed limits	Freight Journey Times	Adjacent to the existing track, km	Passanger stations	Cost per unit, €	Intermodal facilites	Cost per unit, €	Passing loops	Cost per unit, €	Nodes, interchanges	Total cost, €
					main roads (A, E class)	Cost per unit, €	1st class roads	Cost per unit, €	2nd class roads	Cost per unit, €	other roads	Cost per unit, €	rivers	Cost per unit, €	reservoirs	Cost per unit, €	lakes	Cost per unit, €	forest	Cost, €	fields	Cost, €	swamps	Cost, €	towns	Cost, €	suburbs	Cost, €													
A	1,2	10,6	4 500 000,0	47 700 000,0	1	400000	1	350000	4	300000	19	250000											10,6	5 300 000															54 400 000,00
B	2	10,1	4 000 000,0	40 400 000,0	1	400000	1	350000	1	300000	6	250000											10,1	5 050 000						60	0,17	7,4								42 950 000,00
C	2	5,8	4 000 000,0	23 200 000,0					1	300000	4	250000	1	350000							4,8	42 000				1	150 000				60	0,10	-								24 850 000,00
Tallinn																																								5 000 000,00
E (1)	2,3	6,9	5 000 000,0	34 500 000,0					1	300000													6,9	1 725 000				80	0,09											34 800 000,00
TLL																													0,05				1	30000000	1	50000000				80 000 000,00
E (2)	2,3	8,7	5 000 000,0	43 500 000,0									1	350000					0,5	7 500	1,1	9 625			6,2	3 100 000	0,9	135 000	80	0,11			2,6								44 150 000,00
D	1	2,4	5 000 000,0	12 000 000,0	4	400000	1	350000	2	300000	13	250000									1,2	21 000				1,2	180 000	80	0,03	60	0,04	15,0								17 800 000,00
F	1	10,9	4 000 000,0	43 600 000,0	1	400000			2	300000	6	250000	3	350000					4,6	138 000	4,8	84 000	0,7	10 500			0,8	120 000	160	0,07	100	0,11	-								47 150 000,00
G	1	27,5	4 000 000,0	110 000 000,0	0	400000	2	350000	3	300000	15	250000	4	350000					12,6	378 000	7,6	133 000	5,7	85 500	0,7	122 500	0,9	135 000	240	0,11	120	0,23	-								116 750 000,00
H	1	83,6	4 000 000,0	334 400 000,0			2	350000	16	300000	44	250000	22	350000					40,4	1 212 000	17,5	262 500	24,5	367 500			1,2	180 000	240	0,35	120	0,70	-								358 600 000,00
Parnu	2																												0,05				1	5000000	1	10000000				15 000 000,00
I	2	4,0	4 000 000,0	16 000 000,0	1	400000					3	250000							0,6	18 000	2,6	45 500	0,8	12 000					80	0,05	80	0,05									17 150 000,00
J	1	58,3	4 000 000,0	233 200 000,0	1	400000	3	350000	8	300000	16	250000	13	350000			1	400000	36,6	1 098 000	11,6	203 000	10,1	151 500					240	0,24	120	0,49	-								246 000 000,00
K	1	61,1	4 000 000,0	244 400 000,0			3	350000	11	300000	25	250000	40	350000					42,4	1 272 000	13,1	229 250	1,2	18 000			4,4	660 000	240	0,25	120	0,51	-								269 000 000,00
L	1	30,8	4 000 000,0	123 200 000,0			2	350000	6	300000	12	250000	21	350000					18,7	561 000	1,8	31 500	8,9	133 500			1,4	210 000	240	0,13	120	0,26	-								136 050 000,00
M	1	5,2	4 000 000,0	20 800 000,0	1	400000			2	300000	6	250000	2	350000					4,6	138 000	0,6	10 500							240	0,02	120	0,04	-								24 000 000,00
N	1	15,4	5 000 000,0	77 000 000,0			2	350000			31	250000	3	350000					13,1	393 000	2,3	40 250							240	0,06	120	0,13	-								86 500 000,00
O (in)	1,3	25,4	5 500 000,0	139 700 000,0	2	400000	2	350000	4	300000	6	250000	1	350000					4,5	135 000	0,5	8 750			12,4	6 200 000	8,0	1 200 000	80	0,32	80	0,32	13,0								144 250 000,00
Riga																													0,08		2,00		1	30000000	1	50000000				80 000 000,00
O (out)	1,3	25,4																	4,5		0,5	8 750			12,4		8,0		80	0,32	80	0,32								
P	1	71,7	5 000 000,0	358 500 000,0	3	400000	6	350000	31	300000	33	250000	42	350000	1	400000000			18,8	564 000	51,2	896 000	1,2	18 000			0,5	75 000	240	0,30	120	0,60	-			1	10000000			804 050 000,00
Q (1)	1	62,5	5 000 000,0	312 500 000,0	2	400000	2	350000	16	300000	13	250000	17	350000					16,0	480 000	44,1	771 750			1,5	525 000	0,9	135 000	240	0,26	120	0,52	-								328 000 000,00
Panevezys	1																												0,05				1	5000000	1	10000000				15 000 000,00
Q (2)	1	80,7	5 000 000,0	403 500 000,0	3	400000	3	350000	19	300000	13	250000	13	350000					23,4	702 000	54,3	950 250			2	700 000	1	75 000	240	0,34	120	0,67	-								419 250 000,00
R	1	23,9	5 000 000,0	119 500 000,0	1	400000			2	300000	11	250000	7	350000					15,8	474 000	3,9	68 250			4,2	1 890 000			160	0,15	120	0,20	-								125 700 000,00
Kaunas	2																												0,08		2,00		1	100000000	1	50000000				150 000 000,00
S	2	15,4	4 500 000,0	69 300 000,0			2	350000	5	300000	10	250000	9	350000					1,2	36 000	3,5	61 250			5,1	2 295 000	5,6	840 000	80	0,19	60	0,26	22,5								77 150 000,00
T	1	61,8	4 000 000,0	247 200 000,0	1	400000	3	350000	19	300000	12	250000	20	350000			1	400000	19,5	585 000	36,8	644 000			1,7	765 000	3,8	570 000	240	0,26	120	0,52	-								264 750 000,00
U	1	10,9	4 000 000,0	43 600 000,0			2	350000	2	300000	2	250000	4	350000					2,2	66 000	8,7	152 250							240	0,05	120	0,09	-								46 800 000,00
V	1	7,6	4 000 000,0	30 400 000,0					2	300000	3	250000	2	350000							7,3	127 750					0,3	45 000	200	0,04	120	0,06	-								32 450 000,00
W	2	1,1	4 000 000,0	4 400 000,0							1	250000									1,1	19 250							160	0,01	100	0,01	1,0								4 650 000,00
TOTAL:		**727,7**		**3 132 500 000,0**	**22**		**37**		**158**		**304**		**225**		**1**		**2**		**280,0**		**280,9**		**53,1**		**73,8**		**39,9**		**170**	**4,13**	**68**	**10,38**	**65,9**	**6**		**6**		**0**		**0**	**4 107 550 000,00**
Electfication			**1 000 000,0**	**727 700 000,0**																**8 257 500**		**4 820 375**		**796 500**		**27 672 500**		**4 710 000**											
																						46 256 875							**701,2**	**Passenger Distance**	**708,4**	**Freight Distance**						**Capital cost, €**		**4 835 250 000,00**

Table 123 – Initial Capital Cost (CAPEX) – Option 2 – Orange

RAIL BALTICA section description. Option 2.

Section code	Cross-section type	Length, km	Cost per km, €	Cost, €	Road crossings (bridges)								Water crossings						Territory type, km						Settlements, km				Passenger Design speed limits	Passenger Journey Times	Freight Design speed limits	Freight Journey Times	Adjacent to the existing track, km	Passanger stations	Cost per unit, €	Intermodal facilites	Cost per unit, €	Passing loops	Cost per unit, €	Nodes, interchanges	Total cost, €
					main roads (A, E class)	Cost per unit, €	1st class roads	Cost per unit, €	2nd class roads	Cost per unit, €	other roads	Cost per unit, €	rivers	Cost per unit, €	reservoirs	Cost per unit, €	lakes	Cost per unit, €	forest	Cost, €	fields	Cost, €	swamps	Cost, €	towns	Cost, €	suburbs	Cost, €													
A	1,2	10,6	4 500 000,0	47 700 000,0	1	400000	1	350000	4	300000	19	250000											10,6	5 300 000							4,4							54 400 000,00
B	2	10,1	4 500 000,0	45 450 000,0	1	400000	1	350000	1	300000	6	250000											10,1	2 525 000						60	0,17	7,4							48 000 000,00
C	2,3	5,8	4 500 000,0	26 100 000,0					1	300000	4	250000	1	350000							4,8	42 000					1	75 000			60	0,10	-							27 750 000,00
E	2	2,7	4 500 000,0	12 150 000,0																	2,7	23 625									60	0,05	2,6							12 150 000,00
D (1)	2,3	8,6	5 000 000,0	43 000 000,0					3	300000	3	250000	1	350000					1,9	28 500	2,1	18 375			1,5	375 000	3,1	232 500												45 000 000,00
TLL																														0,08				1	30000000	1	50000000				80 000 000,00
D (2 in)	2,3	6,9	5 000 000,0	34 500 000,0	4	400000	1	350000	1	300000	5	250000											6,9	1 725 000					80	0,09	60	0,12	15,0							38 000 000,00
Tallinn																														0,05				1	5000000						5 000 000,00
D (2 out)	2,3	5,3																					5,3	1 325 000					80	0,07	60	0,09	15,0							
F	2	45,2	5 000 000,0	226 000 000,0			1	350000	5	300000	11	250000	3	350000			1	400000	8,8	132 000	16,3	142 625			11,6	2 900 000	8,5	637 500	120	0,38	100	0,45	38,9							232 050 000,00
G	2	92,4	5 000 000,0	462 000 000,0			4	350000	16	300000	46	250000	13	350000					33,7	505 500	16,4	143 500	24,8	186 000	8	2 000 000	9,5	712 500	160	0,58	120	0,77	91,9							484 250 000,00
Parnu	2																													0,05				1	5000000	1	10000000				15 000 000,00
H	2	4,1	5 000 000,0	20 500 000,0	1	400000					3	250000							0,6	9 000	2,7	23 625	0,8	6 000					120	0,03	120	0,03								21 650 000,00
I	2	46,5	5 000 000,0	232 500 000,0	1	400000	1	350000	7	300000	14	250000	6	350000					16,1	241 500	2,0	17 500	17,1	128 250	4,8	840 000	6,5	487 500	120	0,39	120	0,39	47,0							240 950 000,00
J	2	78,1	5 000 000,0	390 500 000,0	0	400000	9	350000	20	300000	26	250000	58	350000					30,6	459 000	31,8	278 250	7,8	58 500	7,9	1 185 000			160	0,49	120	0,65	110,2							426 450 000,00
K	2	75,4	4 000 000,0	301 600 000,0	1	400000	1	350000	19	300000	23	250000	12	350000			1	400000	31,0	465 000	13,6	119 000	2,2	16 500	11,3	2 825 000	17,3	1 297 500	160	0,47	120	0,63	50,3							318 400 000,00
L(in)	3	14,0	5 000 000,0	70 000 000,0	0	400000	3	350000	1	300000	1	250000	2	350000					1,2	18 000	1,9	16 625	1,1	8 250	7,3	1 825 000	2,5	187 500	80	0,18	80	0,18	4,1							72 300 000,00
Riga																														0,08		2,00		1	30000000	1	50000000				80 000 000,00
M(1)	2,3	42,3	5 000 000,0	211 500 000,0			3	350000	1	300000	1	250000	1	20000000					9,5	142 500	7,2	63 000	1,3	9 750	21,4	5 350 000	2,9	217 500	120	0,35	60	0,71	77,8							233 100 000,00
Jelgava	2,3																													0,05				1	5000000	1	10000000				15 000 000,00
M(2)	2,3	33,1	5 000 000,0	165 500 000,0	5	400000	3	350000	24	300000	10	250000	17	350000					8,5	127 500	18,9	165 375			5,1	765 000	0,6	45 000	120	0,28	100	0,33								184 200 000,00
N	2	60,6	4 000 000,0	242 400 000,0	7	400000	4	350000	38	300000	19	250000	34	350000					7,2	108 000	40,7	356 125			7,8	1 365 000	4,9	367 500	160	0,38	120	0,51	182,6							274 650 000,00
Siauliai	2																													0,05				1	5000000	1	10000000				15 000 000,00
O	2	148,3	4 000 000,0	593 200 000,0	1	400000			5	300000	3	250000	6	350000					40,7	610 500	58,3	510 125			34,1	7 672 500	15,2	1 140 000	160	0,93	120	1,24	23,0							597 950 000,00
Kaunas	2																													0,08		2,00		1	100000000	1	50000000				150 000 000,00
P	2	15,4	4 500 000,0	69 300 000,0			2	350000	5	300000	10	250000	9	350000					1,2	18 000	3,5	30 625			5,1	1 147 500	5,6	420 000	80	0,19	60	0,26	22,5							72 150 000,00
Q	2	56,4	4 000 000,0	225 600 000,0	3	400000	7	350000	16	300000	8	250000	13	350000					9,7	145 500	34,0	297 500			9,4	2 115 000	3,3	247 500	120	0,47	120	0,47	72,8							240 600 000,00
R	2	29,2	4 000 000,0	116 800 000,0			2	350000	6	300000	4	250000	5	350000							25,7	224 875					3,5	262 500	120	0,24	120	0,24	19,7							122 050 000,00
S	2	22,7	4 000 000,0	90 800 000,0					2	300000	4	250000	2	350000					4,3	64 500	17,5	153 125					0,9	67 500	120	0,19	120	0,19	10,3							93 100 000,00
T	2	1,1	4 000 000,0	4 400 000,0							1	250000	0	350000							1,1	9 625							120	0,01	80	0,01	1,0							4 650 000,00
TOTAL:		**814,8**		**3 631 500 000,0**	**25**		**43**		**175**		**221**		**183**		**0**		**2**		**205,0**		**301,2**		**55,1**		**168,2**		**85,3**		**128**	**6,1**	**70**	**11,6**	**796,5**	**7**		**6**		**0**		**0**	##############
Electrification			1 000 000,0	**814 800 000,0**																**3 075 000**		**2 635 500**		**413 250**		**41 240 000**		**6 397 500**												
																						53 761 250							**128**	**6,1**	**70**	**11,6**						**Capital cost, €**		##############
																													788,3	**Passenger Distance**	**804,2**	**Freight Distance**								

Table 124 – Initial Capital Cost (CAPEX) – Option 3 – Yellow

RAIL BALTICA section description. Option 3.

Section code	Cross-section type	Length, km	Cost per km, €	Cost, €	Road crossings (bridges)								Water crossings						Territory type, km						Settlements, km				Passenger Design speed limits	Passenger Journey Times	Freight Design speed limits	Freight Journey Times	Adjacent to the existing track, km	Passanger stations	Cost per unit, €	Intermodal facilites	Cost per unit, €	Passing loops	Cost per unit, €	Nodes, interchanges	Total cost, €
					main roads (A, E class)	Cost per unit, €	1st class roads	Cost per unit, €	2nd class roads	Cost per unit, €	other roads	Cost per unit, €	rivers	Cost per unit, €	reservoirs	Cost per unit, €	lakes	Cost per unit, €	forest	Cost, €	fields	Cost, €	swamps	Cost, €	towns	Cost, €	suburbs	Cost, €													
A	1,2	10,6	4 500 000,0	47 700 000,0	1	400000	1	350000	4	300000	19	250000											10,6	5 300 000							4,4								54 400 000,00
B	2	10,1	4 500 000,0	45 450 000,0	1	400000	1	350000	1	300000	6	250000											10,1	5 050 000					60	0,17	7,4								48 000 000,00
C	2	5,8	4 500 000,0	26 100 000,0					1	300000	4	250000	1	350000							4,8	42 000					1	75 000			60	0,10	-								27 750 000,00
Tallinn																														0,08				1	5000000						5 000 000,00
D (1)	2,3	6,9	5 000 000,0	34 500 000,0					1	300000													6,9	1 725 000				80	0,09											34 800 000,00
TLL																														0,05				1	30000000	1	50000000				80 000 000,00
D (2)	2,3	8,7	5 000 000,0	43 500 000,0					1	300000			1	350000					0,5	7 500	1,1	9 625			6,2	1 550 000	0,9	67 500	120	0,07			2,6								44 150 000,00
E	1	2,4	5 000 000,0	12 000 000,0	4	400000	1	350000	2	300000	13	250000									1,2	10 500					1,2	90 000	160	0,02	60	0,04	15,0								17 800 000,00
G	1	160,3	4 000 000,0	641 200 000,0	5	400000	4	350000	21	300000	66	250000	41	350000					42,3	1 269 000	51,3	897 750	46,1	691 500	3	600 000	17,6	2 640 000	240	0,67	120	1,34	-								681 750 000,00
Tartu	2,3																													0,05				1	5000000	1	10000000				15 000 000,00
H	2,3	85,4	5 000 000,0	427 000 000,0	2	400000	5	350000	8	300000	16	250000	13	350000					25,1	376 500	26,4	231 000	10,0	75 000	17,9	3 580 000	6	450 000	160	0,53	120	0,71	93,2								440 500 000,00
J	2,3	46,3	5 000 000,0	231 500 000,0	2	400000	1	350000	7	300000	18	250000	28	350000					25,8	387 000	3,3	28 875	7,7	57 750	4,3	1 290 000	5,2	390 000	160	0,29	100	0,46	44,8								249 050 000,00
Valmiera	2,3																													0,05				1	5000000						5 000 000,00
I	1	74,2	4 000 000,0	296 800 000,0	1	400000	5	350000	23	300000	25	250000	42	350000			2	400000	37,8	1 134 000	21,7	379 750	12,0	180 000			2,7	405 000	240	0,31	120	0,62	-								327 600 000,00
K	1	5,2	5 000 000,0	26 000 000,0	1	400000			2	300000	6	250000	2	350000					4,6	30 000	0,6	10 500							200	0,03	120	0,04	-								29 200 000,00
L	1	15,4	5 000 000,0	77 000 000,0			2	350000			31	250000	3	350000					13,1	393 000	2,3	40 250							160	0,10	120	0,13	-								86 500 000,00
M(in)	1,3	25,4	5 500 000,0	139 700 000,0	2	400000	2	350000	4	300000	6	250000	1	350000					4,5	135 000	0,5	8 750			12,4	6 200 000	8,0	1 200 000	80	0,32	80	0,32	13,0								144 250 000,00
Riga																														0,08		2,00		1	30000000	1	50000000				80 000 000,00
M(out)	1,3	25,4																	4,5		0,5				12,4		8,0		80	0,32	80	0,32									
N	1	71,7	5 000 000,0	358 500 000,0	3	400000	6	350000	31	300000	33	250000	42	350000	1	400000000			18,8	564 000	51,2	896 000	1,2	18 000			0,5	75 000	240	0,30	120	0,60	-			1	10000000				804 050 000,00
O (1)	1	62,5	5 000 000,0	312 500 000,0	2	400000	2	350000	16	300000	13	250000	17	350000					16,0	480 000	44,1	771 750			1,5	525 000	0,9	135 000	240	0,26	120	0,52	-								328 000 000,00
Panevezys	1																													0,05				1	5000000	1	10000000				15 000 000,00
O (2)	1	80,7	5 000 000,0	403 500 000,0	3	400000	3	350000	19	300000	13	250000	13	350000					23,4	702 000	54,3	950 250			2	700 000	1	150 000	240	0,14	120	0,67	-								419 250 000,00
P	1	23,9	5 000 000,0	119 500 000,0	1	400000			2	300000	11	250000	7	350000					15,8	474 000	3,9	68 250			4,2	1 890 000			120	0,20	120	0,20	-								125 700 000,00
Kaunas	2																													0,08		2,00		1	100000000	1	50000000				150 000 000,00
Q	2	15,4	4 500 000,0	69 300 000,0			2	350000	5	300000	10	250000	9	350000					1,2	36 000	3,5	61 250			5,1	2 295 000	5,6	840 000	80	0,19	60	0,26	22,5								77 150 000,00
R	1	61,8	4 000 000,0	247 200 000,0	1	400000	3	350000	19	300000	12	250000	20	350000			1	400000	19,5	585 000	36,8	644 000			1,7	765 000	3,8	570 000	240	0,26	120	0,52	-								264 750 000,00
S	1	10,9	4 000 000,0	43 600 000,0			2	350000	2	300000	2	250000	4	350000					2,2	66 000	8,7	152 250							240	0,05	120	0,09	-								46 800 000,00
T	1	7,6	4 000 000,0	30 400 000,0					2	300000	3	250000	2	350000							7,3	127 750					0,3	45 000	200	0,04	120	0,06	-								32 450 000,00
U	2	1,1	4 000 000,0	4 400 000,0							1	250000									1,1	19 250							160	0,01	100	0,01	1,0								4 650 000,00
TOTAL:		**817,7**		**3 637 350 000,0**	**29**		**40**		**171**		**308**		**246**		**1**		**3**		**255,1**		**324,6**		**77,0**		**98,3**		**62,7**		**165**	**4,81**	**71**	**11,17**	**203,9**	**7**		**6**		**0**		**0**	**4 638 550 000,00**
Electrification			1 000 000,0	**817 700 000,0**															**6 639 000**		**5 349 750**		**1 022 250**		**31 470 000**		**7 132 500**													
																							51 613 500						**791,2**	**Passenger Distance**	**791,5**	**Freight Distance**							**Capital cost, €**		**5 456 250 000,00**

Table 125 – Initial Capital Cost (CAPEX) – Option 4 – Green

RAIL BALTICA section description. Option 4.

Section code	Cross-section type	Length, km	Cost per km, €	Cost, €	Road crossings (bridges)								Water crossings						Territory type, km						Settlements, km				Passenger Design speed limits	Passenger Journey Times	Freight Design speed limits	Freight Journey Times	Adjacent to the existing track, km	Passanger stations	Cost per unit, €	Intermodal facilites	Cost per unit, €	Passing loops	Cost per unit, €	Nodes, interchanges	Total cost, €
					main roads (A, E class)	Cost per unit, €	1st class roads	Cost per unit, €	2nd class roads	Cost per unit, €	other roads	Cost per unit, €	rivers	Cost per unit, €	reservoirs	Cost per unit, €	lakes	Cost per unit, €	forest	Cost, €	fields	Cost, €	swamps	Cost, €	towns	Cost, €	suburbs	Cost, €													
A	1,2	10,6	4 500 000,0	47 700 000,0	1	400000	1	350000	4	300000	19	250000													10,6	5 300 000							4,4								54 400 000,00
B	2	10,1	4 500 000,0	45 450 000,0	1	400000	1	350000	1	300000	6	250000													10,1	2 525 000					60	0,17	7,4								48 000 000,00
C	2	5,8	4 500 000,0	26 100 000,0					1	300000	4	250000	1	350000							4,8	42 000					1	75 000			60	0,10	-								27 750 000,00
Tallinn																														0,05				1	5000000						5 000 000,00
D (1)	2,3	6,9	5 000 000,0	34 500 000,0	4	400000	1	350000	1	300000	5	250000													6,9	1 725 000			80	0,09	60	0,12	15,0								38 000 000,00
TLL																														0,08				1	30000000	1	50000000				80 000 000,00
D (2)	2,3	8,7	5 000 000,0	43 500 000,0					1	300000			1	350000					0,5	7 500	1,1	9 625			6,2	1 550 000	0,9	67 500	100	0,09			2,6								44 150 000,00
E	2,3	15,4	5 000 000,0	77 000 000,0					2	300000			1	350000					0,5	7 500	1,1	9 625			12,9	3 225 000	0,9	67 500	100	0,15			2,6								77 950 000,00
F	2	159,6	4 000 000,0	638 400 000,0	2	400000	11	350000	15	300000	28	250000	17	350000					32,4	486 000	51,8	453 250	39,8	298 500	20,5	4 100 000	15,1	1 132 500	160	1,00	120	1,33	-								660 500 000,00
Tartu	2,3																													0,05				1	5000000	1	10000000				15 000 000,00
G	2,3	88,4	5 000 000,0	442 000 000,0	2	400000	5	350000	8	300000	16	250000	13	350000					26,1	391 500	27,4	239 750	11,0	82 500	17,9	3 580 000	6	450 000	160	0,55	120	0,74	-								455 500 000,00
H	2,3	46,3	5 000 000,0	231 500 000,0	2	400000	1	350000	7	300000	18	250000	28	350000					25,8	387 000	3,3	28 875	7,7	57 750	4,3	645 000	5,2	390 000	160	0,29	100	0,46	44,8								249 050 000,00
Valmiera	2																																	1	5000000						5 000 000,00
I	2	117,3	4 000 000,0	469 200 000,0	3	400000	11	350000	19	300000	28	250000	35	350000			1	400000	60,2	903 000	27,4	239 750	2,1	15 750	19,3	2 895 000	8,3	622 500	120	0,98	100	1,17	7,2								499 600 000,00
J	2,3	6,2	5 000 000,0	31 000 000,0	2	400000	2	350000	8	300000	15	250000	2	350000			2	400000							6,2	1 550 000			100	0,06	80	0,08	-								40 150 000,00
Riga																														0,08		2,00		1	30000000	1	50000000				80 000 000,00
K	2,3	42,4	5 000 000,0	212 000 000,0			3	350000	1	300000	1	250000	1	20000000					9,2	138 000	7,9	69 125	0,8	6 000	20,4	5 100 000	4,1	307 500	120	0,35	80	0,53	78,8								233 600 000,00
Jelgava	2,3																													0,05				1	5000000	1	10000000				15 000 000,00
L	2	33,4	5 000 000,0	167 000 000,0	5	400000	3	350000	24	300000	10	250000	17	350000					8,9	133 500	20,4	178 500			2,8	150 000	1,3	97 500	120	0,28	120	0,28	-								185 700 000,00
M	2	60,6	4 000 000,0	242 400 000,0	7	400000	4	350000	38	300000	19	250000	34	350000					7,2	108 000	40,7	356 125			7,8	175 000	4,9	367 500	160	0,38	120	0,51	-								274 650 000,00
Siauliai	2																													0,05				1	5000000	1	10000000				15 000 000,00
N	2	148,3	4 000 000,0	593 200 000,0	1	400000			5	300000	3	250000	6	350000					40,7	610 500	58,3	510 125			34,1	5 967 500	15,2	1 140 000	160	0,93	120	1,24	-								597 950 000,00
Kaunas	2																													0,08		2,00		1	100000000	1	50000000				150 000 000,00
O	2	15,4	4 500 000,0	69 300 000,0			2	350000	5	300000	10	250000	9	350000					1,2	18 000	3,5	30 625			5,1	1 147 500	5,6	420 000	80	0,19	60	0,26	22,5								77 150 000,00
P	2	56,4	4 000 000,0	225 600 000,0	3	400000	7	350000	16	300000	8	250000	13	350000					9,7	145 500	34,0	297 500			9,4	2 115 000	3,3	247 500	120	0,47	120	0,47	-								240 600 000,00
Q	2	29,2	4 000 000,0	116 800 000,0			2	350000	6	300000	4	250000	5	350000							25,7	224 875					3,5	262 500	120	0,24	120	0,24	-								122 050 000,00
R	2	22,7	4 000 000,0	90 800 000,0					2	300000	4	250000	2	350000					4,3	64 500	17,5	153 125					0,9	67 500	120	0,19	120	0,19	-								93 100 000,00
S	2	1,1	4 000 000,0	4 400 000,0							1	250000									1,1	9 625							120	0,01	80	0,01	22,5								4 650 000,00
TOTAL:		**884,8**		**3 807 850 000,0**	**33**		**54**		**164**		**199**		**185**		**0**		**3**		**226,7**		**326,0**		**61,4**		**194,5**		**76,2**		**127**	**6,74**	**72**	**11,88**	**207,8**	**8**		**6**		**0**		**0**	**4 389 500 000,00**
Electification			1 000 000,0	**884 800 000,0**															**3 400 500**		**2 852 500**		**460 500**		**41 750 000**		**5 715 000**													
																			54 178 500										**858,3**	**Passenger Distance**	**858,8**	**Freight Distance**							**Capital cost, €**		**5 274 300 000,00**