



The World Bank

**Trade and Transport Facilitation Audit of  
The Baltic States (TTFBS):**  
*On a Fast Track to Economic Development*

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Infrastructure and Energy Services Department  
Europe and Central Asia Region**

**February 2005**

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1818 H Street, N.W., Washington, D.C. 20433, U.S.A.

*Published for The World Bank by*  
*Logistics, The Turku School of Economics and Business Administration, Rehtorinpellonkatu 3,*  
*20500 Turku, Finland*  
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*Printed in Paino-Raisio Oy, Finland*  
*First printing February 2005*

*This paper is published to communicate the results of the recent TTFBS study in the 3<sup>rd</sup> Transport Minister Seminar of The Baltic States, held in Vilnius, February 3-4, 2005.*

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ISBN 951-564-250-7

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## Acronyms

ACAS	Airborne Collision Avoidance System
Acquis	Acquis Communautaire, the body of EU legislation accepted by members
AETR	European Agreement on the Work of Crews in International Road Transport
ASYCUDA	Automated SYstem of CUstoms Data management developed by UNCTAD
ATA carnet	A customs document for temporary import of items free of duties
BASA	Bilateral Air Services Agreements, an international aviation convention
BEEPS	Business Environment and Enterprise Performance Survey (EBRD and WB)
CAA	Civil Aviation Authority
CAGR	Compound average annual growth rate
CEE(C)	Central and Eastern Europe (-ean Countries)
CIS	Commonwealth of Independent States
COTIF	Rail transport Convention of OTIF of western European countries (-> CIM)
CPI	Here: Corruption Perception Index
CSI	Container Security Initiative
Dwt	Dead weight ton; unit of a vessel's cargo carrying capacity in metric tons
EASA	European Aviation Safety Agency
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECA	Europe and Central Asia, a World Bank region
ECAC	European Civil Aviation Conference
ECMT	European Conference for Ministers of Transport; French acronym CEMT
EDI	Electronic Data Interchange
EEK	Estonian kroon, pegged in 2004 to euro at 1 EUR = 15.65 EEK
EIB	European Investment Bank
EMU	European Monetary Union
ERDF	European Regional Development Fund of the EU
ERM	European Exchange Rate Mechanism, stages I and II
EU (15; 25)	European Union; 15 member states before May 1, 2004, and 25 states after
EUR	Euro(s), currency unit of the Euro countries
EURO 0,1,2,3,4	An environmental classification of heavy trucks used in the EU
EVR	Eesti Raudtee Ltd, Estonian railways
FDI	Foreign Direct Investment
FIATA	International Freight Forwarders' Association
FIDIC	International Federation of Consulting Engineers
FTL	Full truck load (cf. LTL and FCL for Full container load)
GDP	Gross Domestic Product
GFP	Global Facilitation Partnership for Transport and Trade by the World Bank
GNI, GNP	Gross National Income, Gross National Product
GOST	Soviet standard system
GSA	General Sales Agent (of air freight capacity)
GT/ grt	Gross (register) ton; unit of a vessel's gross volume; 1 GRT $\approx$ 2.8 m <sup>3</sup>
GVA	Gross value added; it measures the contribution to GDP made by a sector
IATA	International Air Transport Association
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
ICT	Information and Communication Technology
IFI	International Financial Institutions
IMO	International Maritime Organization
INTERREG	An EU development program for Europe's regions
IRU	International Road Transport Union
ISPA	EU Instrument for Structural Policies for Pre-Accession countries
ISPS	International Ship and Port Facility Security Code

JAA , JAR	Joint Aviation Authority, Joint Aviation Regulations; in Europe.
JSC	Joint-stock company
LDz	Latvian Railway
LG	Lithuanian Railways
LTL (a)	Lithuanian litas, pegged to Euro; in January 2004: 1 Euro = 3.4528 Litas
LTL/LCL (b)	Less-than-truckload (-containerload); the context of (a) or (b) is evident
LVL	Latvian lats, pegged to 1 SDR = 0.7997 LVL, allowing fluctuation at +/-1%
MEAC	Ministry of Economics and Communications (in Estonia since 2002)
MoE	Ministry of Economics
MOT(C)	Ministry of Transport (and Communications)
MOTW	Maximum Take-Off Weight of aircraft
MOU	Memorandum of Understanding
n.a.	Data not available
NACE	International classification system used e.g. by EU in sectoral statistics
NCTS	EU's transit declaration system
NGO	Non-Governmental organization
NIB	Nordic Investment Bank
OECD	Organisation of Economic Co-operation and Development
OFDI	Outward Foreign Direct Investment
PAX	Passengers
PHARE	EU's development program for CEE Countries
PPP	Purchasing Power Parity
PSO	Public Service Obligation
RD	Road Districts
RFS	Road Feeder Services (in connection to air freight operations)
Ro-Ro	Roll on – roll off vessel
SAD	Single Administrative Document, a customs declaration form
Schengen area	Passport-free area of 13 EU countries, Norway and Iceland (in 2004)
SDR	Special Drawing Right, 1 SDR ≈ 1.47 USD; 1 SDR ≈ 1.21 euro (June 2004)
SITC	Standard International Trade Classification
SME	Small and medium-sized enterprises
SMGS	International Goods Transport by Rail system of mainly CIS countries
SOE	State-owned enterprise
TACT	The Air Cargo Tariff of IATA
TARIC	The Integrated Customs Tariff of EC, “Tarif Intégré de la Communauté”
TEDIM	Organization of the MoT's around the Baltic Sea
TEN-T	Trans-European (Transport) Networks
TEU	Twenty feet equivalent unit, a measurement for unitized cargo
TINA	Transport Infrastructure Needs Assessment of the CEE Countries
TIR Carnet	A document issued by IRU for duty free road transit in Europe
TPL	Third Party Logistics, a form of advanced logistics provision
TRF	Transit Flights; used in aviation as opposed to non-stop flights
TTF	Trade and Transport Facilitation
TTFSE	Trade and Transport Facilitation in South Eastern Europe, a World Bank programme
UNCTAD	United Nations Conference for Trade and Development
USD	American dollar
VTMIS /VTS	Vessel Traffic Management Information System / Vessel Traffic Service
WS	World Scale; a freight quotation system used in oil shipping
WTO	World Trade Organization

# Foreword

Among the notable trends in the Baltic States is the rapid increase of demand for transport, which has grown at a rate higher than that of the gross national product. Each of the Baltic States has experienced substantial growth in the volume of merchandise exports and imports. This trend is partly a reflection of the rapid growth of transit traffic.

While the overwhelming part of the Baltic States' trade is directed toward other EU countries, the trade with the non-EU countries still remains an area where trade and transport facilitation is a potential source of prosperity for the Baltic States.

The Baltic Transport and Trade Facilitation study reported here provides a review of the situation pertaining to international transport and trade, in terms of transaction and transport costs and efficiency of the related services. It highlights difficulties that could be alleviated through streamlining and systematic rationalization of administrative procedures, while safeguarding the statutory and regulatory missions of the Governments in respect of domestic protection and defense of its basic national interests. The focus is on procedural and documentary requirements and quality of logistic services and infrastructure available to traders. The study also provides a comprehensive set of remedial actions to be undertaken by the various agencies involved in international transport and trade.

The report is based on a large number of interviews, transport sector reports, foreign trade data and case studies on the Baltic States. The firms interviewed include both importers and exporters from a number of industries (e.g., manufacturers, freight forwarders, transport firms, retail operators, agricultural firms, and commercial banks).

Over 200 interviews were conducted by the team of consultants between April and July 2004, on several visits to Estonia, Latvia and Lithuania. The study period overlapped with the Baltic States' accession to the EU and NATO. This provided an opportunity for the study team to observe the challenges of such transition.

The help, support and advice of management and staff at the Ministries of Transport, Ministries of Finance, and the Customs in all three countries, as well as the Klaipeda State Seaport Authority, were invaluable in carrying out the interviews and in gathering data for the survey. The support of the World Bank offices in Vilnius and Riga is also gratefully acknowledged.

The Estonian Ministry of Economic Affairs and Communications, Latvian Ministry of Transport, and Lithuanian Ministry of Transport and Communications provided invaluable comments to the several drafts of this report. Several World Bank staff, including Martin Humphreys, Gerald Ollivier, Michel Zarnowiecki, Meifu Wang, and Janardan Prasad Singh also contributed to the final report.

Special thanks go to Prof. Kari Liuhto of the Pan-European Institute at the Turku School of Economics and Business Administration for his cooperation and valuable insights in Russian economic interests in the Baltic States. The team is also indebted to Dr. Jari Hyvärinen, National Technology Agency of Finland (Tekes), for his contribution on FDI developments in the Baltic States.

A team of consultants led by Mr. Lauri Ojala performed the work; Mr. Tapio Naula (Customs issues and logistics services expert) was the co-leader of the consulting team. Other participants included Ms. Annukka Hejazi (Railways), Mr. Matti-Mikael Koskinen (Maritime and Ports), Mr. Torsten M. Hoffmann (Aviation), and Mr. Hannu Pirilä (Macroeconomic analysis), all of them attached to the Turku School of Economics and Business Administration in Finland.

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# EXECUTIVE SUMMARY

## 1. KEY FINDINGS

1. **On May 1, 2004 Estonia, Latvia and Lithuania joined the European Union.** This had a significant impact on day-to-day trade practices with other EU countries and with non-EU countries, notably that of Russia. In relation to the EU, the major changes were the removal of national customs borders and trading without customs clearances. As a result, traders save time and money in clearances and border crossings, which has reduced transaction costs. On the other hand, EU membership has affected the regulatory burden on firms, which were used to the relatively liberal regulatory environment. In CIS trade, bilateral trade agreements were largely replaced by the common EU trade policy. The three Baltic States have rapidly integrated to the world economy, and the EU membership did not dramatically change their trade or FDI patterns.

2. **Transport sector relies on transit traffic.** A clear majority of the transport work by rail is transit of oil and oil products via Baltic ports. The oil pipeline to Ventspils remains unused due to Russia's policy to favor its own ports. Transit volumes by rail are growing especially via Estonian ports. Road transport market was heavily affected by EU membership especially in Lithuania, where international road hauliers suffer from up to 25% overcapacity caused by faster transport times in the EU. Demand on air transport is growing, but limitations on aircraft size and airport equipment do not allow the industry to fully meet the demand.

3. **Very few problems with trade and border crossing practices in intra-EU trade** were reported in interviews for the TTFBS study, despite the fact that the interviews took place right before or after the EU accession.

4. **The main trade, transport and border crossing problems are with Russia and Belarus.** These problems have a political background, and as a rule, solutions require negotiations between the EU and Russia. Fundamental solutions are also beyond the means of national Governments or their transport and trade authorities. Some border crossing problems remain with countries such as Ukraine, Moldova, Kazakhstan and Georgia. A considerable part of transit traffic through the Baltic States originate from these countries.

## 2. DIAGNOSTIC IN BRIEF

### 2.1. MACROECONOMIC ISSUES

5. **The Baltic economies have grown rapidly during the last several years.** After the Russian economic crisis in autumn 1998, the annual growth rates have exceeded the EU's average growth rate by 4-5 percent units. In addition, the Baltic economies have grown faster than other acceding countries. In 2003, the largest growth was observed in Lithuania and Latvia. In Estonia, after a short recession, GDP growth accelerated again in the late 2003. According to latest forecasts, the Baltic States' strong growth is expected to be continuing within the next two years.

6. **Growth has been generated by almost all sectors of Baltic economies.** In Estonia, annual GDP growth in 2002 and 2003 reached 7.2% and 5.1 %, and forecasts for the years 2004-2005 vary around 5.2-6.0%. In 2003, Latvia's GDP grew by 7.5% compared to 2002. Since the year 2000, Latvia's economy has expanded more than 6% year-on-year. In 2003, Lithuania's GDP expanded by 9.7% from the previous year. The annual growth rate was the sharpest among the EU countries.

7. **The structure of economy has changed substantially during the transition period.** In Latvia and Lithuania, over 15% of employees are still working in agriculture and forestry, though the share has declined during the transition period. After the collapse of the Soviet Union, the former Soviet Union's (CIS) share in the Baltic States' foreign trade has dropped, and at the same time the EU countries' share has grown sharply. In Estonia the relative share of foreign trade is significantly larger than in Latvia and in Lithuania.

8. **Industrial production has increased rapidly,** but periodical fluctuations are notable, especially in Lithuania. Lithuania's industrial output increased extremely fast within the last quarters of 2003. The volume of industrial production has grown the most consistently in Estonia. In April 2004, 58% of Estonia's manufacturing was exported. The largest export share was in the manufacture of radio apparatus, nearly 97% of total production.

9. In Latvia, manufacturing constituted 15% of total production in 2003. In 2002, 52% of Latvian production was sold abroad. In light industry, the share of exports was 84% and with regards to wood and wood articles, 70%.

10. In Lithuania, manufacturing covered 20% share of total GVA in 2003. Within the manufacturing sector, the most important industries are the manufacturing of food, beverages and tobacco (as in Latvia and Estonia), by its 24% share (data as of 2002), the production of wood and wood products (20%) and textile industry (17%). Contrasting with Estonia and Latvia, the production of refined oil products is one of the main industries in Lithuania. Refined oil products is the most important export product group, and its share of total manufacturing is over 6%.

**Inflation is relatively low, while wages go up and unemployment declines.**

11. **Since 1999, prices have risen moderately** after years of high inflation in the early 1990s. In Lithuania, prices even went down in 2002 and 2003 due to deflation of dollar-related imports and decline of food prices. Inflation is expected to accelerate -this year - due to higher excise taxes (upon accession to EU). In May 2004, the global price of oil products increased sharply, which caused rapid monthly price increase in the transport sector.

12. **Wages have risen fast.** In the first quarter of 2004, the average monthly wage in Estonia was USD 516, in Latvia USD 354 and in Lithuania USD 392. In Estonia, average wages were 37% higher than in 2000 when measured in local currency, while in Latvia the rise was 31% from 2000. In Lithuania, wages in the first quarter of 2004 were only 18% higher than in 2000.

13. **Unemployment has declined due to strong economic growth.** The sharpest decline was observed in Lithuania, from 17.5% unemployment rate in the last quarter of 2001 down to 11.6% in the last quarter of 2003. Also in Estonia and Latvia, the unemployment rate has declined about 2-3% within the same period. The least developed rural regions still suffer from high unemployment rates.

14. **Public deficits have remained modest in the Baltic States** despite the implemented structural reforms, e.g. the EU and NATO related costs. In 2003, Estonia had a record-high fiscal surplus, at 2.4% of GDP, while Latvia's public deficit was 1.6% and Lithuania's 1.9% of GDP.

15. **National currencies are pegged to either the Euro or SDR. The** Estonian kroon is pegged to the Euro (via German marks since 1992). Thus its value against the USD has increased due to the Euro's appreciation. Latvian lat is still pegged to SDR and its ratio against USD and the Euro has remained quite stable. Lithuania's lita was pegged to USD since 1994, but Lithuania changed the pegging to euro in February 2002. Thus, the litas ratio against USD has appreciated during the last two years.

16. **The Baltic States aspire to join the EMU soon.** Estonia intends to enter to the EMU in 2006, Lithuania in 2007 and Latvia in 2008. In June 2004, Estonia and Lithuania were joining ERM-2 with their existing currency board arrangements in place. However, this was a unilateral commitment and therefore placed no additional obligation on the European Central Bank.

17. **The Baltic economies are small and open economies,** and are thus very sensitive to internal and external fluctuations. The most serious structural problem for the economies has been the large external deficit. Due to continuous growth of domestic demand (investments and consumption), imports have grown much faster than exports. Therefore, the trade deficits and current account deficits have widened year after year from 2000 to present despite the rapid economic growth.

18. **In 2003, Estonia made a record-high current account deficit,** nearly 14% of GDP (figure B.8). The deficit was significantly larger than in Latvia and Lithuania. The current account deficit is the lowest in Lithuania due to recent positive trend in its exports.

## 2.2. BUSINESS ENVIRONMENT IS ALREADY GOOD AND IMPROVING

19. **In business environment comparisons the three countries score well.** Estonia qualifies significantly better than Latvia and Lithuania. The World Economic Forum's survey in 2003 listed the most problematic factors for doing business in the Baltic States as shown in Table 1.

Table 1. Top 5 - The Most problematic Factors for doing Business in The Baltic States. Source: World Economic Forum, Executive Opinion Survey (2003)

Rank	Estonia	Latvia	Lithuania
1.	Inadequately educated workforce	Corruption	Tax rates
2.	Inefficient bureaucracy	Inefficient bureaucracy	Inefficient bureaucracy
3.	Access to financing	Tax rates	Tax regulations
4.	Inadequate infrastructure	Tax regulations	Corruption
5.	Poor work ethic	Access to financing	Access to financing

20. **Logistics Friendliness Survey rate the Baltic States as easy countries.** Compared against the GNI/capita data, the Baltic States rank at par with other accession countries, but substantially higher than CIS countries. The Baltic States lag somewhat behind the EU15 countries.

21. **Access to high quality banking, and insurance and legal service is good.** Financial and insurance markets have undergone a rapid restructuring and these markets have been consolidated substantially. According to law firms, the legal environment and court processes are not a substantial barrier to trade in the Baltic States. In domestic business, corruption is an issue that needs to be considered especially in Latvia, and to a lesser degree in Lithuania.

22. **Access to business information has improved significantly in the Baltic States.** Transport issues are widely discussed in the major business journals and are well covered by news agencies. A wide variety of specialized transport and logistics journals and periodicals are available. Access to statistics and transport data is excellent in Estonia, good in Lithuania, but somewhat problematic in Latvia.

### **2.3. TRADE ISSUES: EU IS THE MAIN ECONOMIC PARTNER**

23. **EU is the main trading partner.** In the first quarter of 2004, the share of EU-15 trade was the largest in Estonia. In exports, the share was 68% and in imports 52% of total. In Latvia, the corresponding share in exports was 61% in imports 49%. In Lithuania, the EU trade covered only 43% of exports 41% of imports.

24. Estonia's economy is orientated towards the Nordic Countries. Latvia's most important trade partners are Germany, UK and Sweden in exports, and Germany, Russia, Lithuania and Estonia in imports. Lithuania's main export countries are Switzerland, Russia, Germany and Latvia. Main import countries are Russia and Germany, covering nearly 40% of total imports.

25. **FDI has reached a high level.** Estonia's FDI inflows per capita and the ratio of FDI to GDP are among the CEE's highest. Estonia's inward FDI stock has tripled in 1998-2003, reaching USD 6.5 billion. FDI inflows to Latvia reached USD 3.3 billion in 2003. In Lithuania, inward FDI stock reached USD 4.8 billion. While most FDI originates from EU countries, Russian FDI in the Baltic States has grown rapidly in the energy and related oil transit traffic operations.

26. **In 2004-2006, the Baltic States get USD 8 billion of structural support from EU.** Estonia gets euros 505 per capita (USD 610), the highest figure of all accession countries. Latvia gets 494 euros (USD 590) and Lithuania 438 euros (USD 530) per capita. However, this is less than normal influx of FDI. Structural transfers from EU cause heavy pressure on national budgets due to required co-financing. Approximately 20 per cent of EU's structural support goes to the transport sector.

#### **Customs issues no longer a problem in EU trade, but problems remain in Russia**

27. **Customs were well prepared for EU in Estonia and Lithuania, less so in Latvia.** The principal areas needing improvements are: (a) border crossings with Russia and Belarus with excessive delays such as at Terehova and Grebneva; (b) data exchange systems between ports and custom warehouses; and (c) customs relations between Baltic countries and Russia.

28. **Much of customs clearance work disappeared in intra-EU trade.** As a consequence, many customs, customs brokers and freight forwarding staff have become redundant. Persistent borders crossing delays affected EU trade in late 2003, but the change to EU customs procedures on May 1, 2004 took place with relatively small disturbances in Estonia and Lithuania.

29. **The key logistics problems of EU-Russian trade relate to administrative procedures,** involving Russian authorities. The key problems relate to) customs clearances, goods inspections, and border crossings. Russian customs clearance procedure is generally perceived by traders as complicated, time consuming and expensive, which affects the whole supply chain.

30. The costs of a customs clearance in Russia vary from USD 200 to USD 3,000. Firms prefer to clear goods in large quantities in order to limit the number of clearances to the minimum. Clearances are typically centralized in major Russian cities such as in Moscow and St. Petersburg. As a consequence, goods must often be redistributed over long distances.

31. **The new Russian customs codex came into force January 1, 2004.** The new codex emphasizes customs role as a regulator and facilitator of the international trade and it is based on Kyoto International Convention on Customs Simplification and Harmonization. From the view of logistics providers, the new customs code provides a framework for modern provision of services in respect of border crossings, transiting goods under customs bond, bonded warehousing services and customs clearance services. Companies are free to apply for the status of customs related service operator provided that the business is covered by a customs guarantee.

32. **Overall, the new customs code seems to fulfill the basic requirements for transparency, predictability and legal protection.** However, it remains to be seen how well the reform will be implemented throughout the Russian Customs Service organization, which employs approximately 63,000 customs officers.

#### **2.4. TRANSPORT SECTOR: HIGHEST GDP SHARE OF EU-25**

33. In 2002, 15.5% of the Gross Value Added<sup>1</sup> in Estonia, 14.5% in Latvia, and 13.7% in Lithuania was produced by the transport, storage and communications sector. These are the highest figures of all EU.

34. About 35% of the sector's GVA is produced in transport, 35% in storage and the remaining 30% by communications. In other words, transport and storage contributed from 10% to 11% of the countries' Gross Value Added or GDP in 2002.

35. **Transport services trade is important for the Baltic States.** Latvia has the highest net cash flow from trade in transport services, a situation mainly attributable to transit flow of oil and related products by railways and pipeline. In 2003, transport services trade generated USD 595 million foreign currency for Latvia, USD 470 million for Estonia, USD 414 million for Lithuania.

36. **The demand for transport is growing rapidly in the Baltic States.** There has also been increasing demand for consolidated transport-related support services. Moreover, privatization has been widely used as a vehicle to restructure transport and transport infrastructure markets. Public-private partnerships have been introduced as a mechanism for providing good quality transport and infrastructure services at a reasonable cost.

#### **TEN-T infrastructure investment in 1996-2001 almost 900 million euros**

37. The three countries have invested substantially in their TEN-T transport infrastructure. In 1996-2001, Estonia invested 235 million euros, of which almost half in ports. In the same period,

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<sup>1</sup> Gross value added (GVA) is a measure of the contribution to GDP made by an individual industry.

Latvia invested almost 370 million euros, 2/3 of which into railways. Lithuania invested 270 million euros, half of which in roads.

38. For the period 2002-2010, Estonia intends to spend over 550 million euros, mostly on roads and ports. Latvia plans to invest approximately 500 million euros, half of which will be spent on roads. Lithuania plans to invest up to 1,250 million euros mostly on railways and ports. This totals to 2,300 million euros until 2010 even without the proposed Rail Baltica project.

### **Transit of oil and oil products remains a major activity in the Baltic States**

39. The volume of transit oil and oil products handled at Baltic States and Russian Baltic Sea ports has increased from 50 million tons in 1997 to 100 million tons in 2003. Transit revenues represent 5 to 8 percent of gross domestic product of the three Baltic countries. Russian firms, recognizing the importance of the transit revenue through the Baltic States, have tried to obtain controlling stakes in companies operating oil export facilities in the Baltic countries.

40. It is expected that Russian oil exports will rise substantially and that the Baltic States will benefit from this trade through transit operations. Russian money has also been used in new port constructions in Estonia.

## **2.5. ROAD TRANSPORT INCREASES, TRAFFIC SAFETY A CONCERN**

41. **There is an urgent need to enhance road safety**, increase road maintenance and develop better highway links between poorer areas and main centers as well as to improve training for road transport operators. A number of national projects have been performed and are underway, notably that in Lithuania with ECMT.

42. Road traffic safety in the Baltic States has improved but the number of fatalities and accidents in relation to the number of vehicles are still among the highest in Europe. The number of vehicles has increased substantially, and fleet renewal has been profound.

43. **The Baltic States have invested heavily in their main road network**, and will do so throughout the decade. Projects related to Via Baltica have a high priority, but projects with secondary roads also receive more funds. As budgetary allocations are not fully sufficient to cover capital investments, road finance from external sources will be needed. The Baltic States spend now less money on maintaining their road networks than before.

44. **Demand for road freight transport has grown very rapidly in Latvia and Lithuania.** In Lithuania, road transport demand surpassed that of rail transport in 2002. In Latvia and Estonia, rail transport performs roughly twice the ton kilometers than road transport. In Estonia, there is a growing demand for short-distance domestic transports, for example, in construction, but in early 2004 also in international transport.

## **2.6. PORTS VERY PROFITABLE; MARITIME TRANSPORT GROWS**

45. The workshop on maritime and port issues in the Parnu seminar prioritized the most important development areas as follows: (1) information flows and systems, (2) maritime safety

issues, and especially ISPS, (3) infrastructure development and (4) environmental protection. Other issues that were mentioned included EU Transport Policy, transit traffic, cargo security, competition of ports and shipping as well as institutional development.

**46. Port services available 24/7 in all three countries, which is exceptional in Europe.** Availability of and competition in the port services market is good. Port services, especially loading and discharging of vessels and supporting functions, such as agency services, are available for traders seven days a week. Docking and dwell times at ports are normally not hindering trade.

**47. The significance of Ro-Ro ferry and container feeder lines has become greater** since each Baltic State is clearly oriented to the European Union in foreign trade, and Baltic transport companies operate widely in the European Union area. Liner shipping connections are well developed especially in Estonia and Lithuania. Vessels on the routes have successively been renewed, and sub-standard vessels have been phased out from the market.

48. Dry bulk flows in the whole Baltic Sea region amount to some 150 million tons. The main commodities are iron ore, coal, grain, fertilizers and limestone, which are suitable for large bulk ships up to 100,000 tons. However, a considerable part of Baltic States' bulk trade is carried on spot basis on small bulk vessels, generally in the 1,000 to 5,000 dwt range. While transit of oil and oil products is significant business in ports and railways in the Baltic States, practically none of this trade is carried by Baltic shipping companies.

## **2.7. RAILWAYS RELY ON TRANSIT TRAFFIC**

49. Railway restructuring needs to continue especially in Latvia and Lithuania. This includes efforts to separate commercial operations from rail administration, reduce over-capacity, rationalize tariffs, raise levels of safety, and improve railway service. Railways have been privatized in Estonia. In Latvia a small part of freight and passenger transportation on state owned infrastructure has been performed by newly established private companies. Railway services in Lithuania are owned by the public sector.

**50. Rail transport work grew between 23% and 33% in 1999-2002**, propelled by oil transit trade. In the medium to long term, continued growth may be limited, as oil transport facilities develop in Russian territory. Over 80% of Estonian and over 70% of Latvian rail freight traffic is oil and oil product transit trade through ports.

**51. Net profits of main rail operators have grown significantly in 2002-2003.** Net profit of Estonian Railways Ltd. in 2003 presents an improvement of 65% compared to 2002. Also Lithuanian and Latvian Railways have turned profitable. The profit of Lithuanian railways was USD 5.1 million in 2003. In 2003, Latvian railways' net profit was USD 11 million.

**52. The Russian tariff system is a significant problem for transit operations.** The transit tariff to Baltic ports is three to four times higher than the tariffs to Russian ports, such as Kaliningrad. For the port of Klaipeda this resulted in a significant decline. In February 2004, Lithuania raised tariffs for rail transit to Kaliningrad by 11 % with the aim to ensure profitability of the railways. However, Lithuanian stevedoring companies claim that tariffs for transit trade should be increased even further to ensure future cargo flows to the port of Klaipeda.

53. European Commission (EC) considers ways for eliminating Russia's discriminatory railway tariff policy, e.g. by calling Russia accountable to the World Trade Organization (WTO). According to the EC, Russia's policy creates unequal competition between EU and Russian ports.

54. **Transit traffic to Kaliningrad remains a substantial operation for Lithuania**; in 2002, it accounted for 36% of the cargo volume carried by rail. However, Russia exercises heavy political pressure towards EU to improve rail connections to Kaliningrad, and to remove inspection of all cargo traffic, and later also those on passenger transport. This affects Lithuania politically and economically, as the only viable rail connection is also the one serving the port of Klaipeda.

55. **Rolling stock (except for tank wagons) is in rather poor condition in all the Baltic States.** The interviewees agreed that more investment is needed. Poor funding for the maintenance and development has led to obsolete rolling stock, and the inability to timely renovate it.

56. **Interoperability of CIM and SMGS legal regimes of great concern.** The Baltic States are at the junction of two rail regimes. All Western countries as well as some African countries are working under COTIF (Convention concerning International Carriage by Rail) convention and using CIM Bill of Lading, while Eastern European countries, Russia, China, and CIS countries are working in SMGS (International Goods Transport by Rail) system. Lithuania joined COTIF convention in 1995 and Latvia in 1999, whereas Estonia has not yet joined the convention ([www.otif.org](http://www.otif.org)).

57. **Interoperability with other European railways is a major concern.** The 2<sup>nd</sup> railway package<sup>2</sup> set by the European Commission aims at putting an end to the physical and technical barriers in the European freight railway transport. The objective is to extend infrastructure access to rights to services within a member state and open up market for new railway operators. The agreed date for complete opening of the rail freight markets is January 1, 2007. The 2<sup>nd</sup> railway package also outlines a proposal for a directive on railway safety concerning the definition of the essential features of safety systems for infrastructure managers and railway undertakings.

#### **Rail links in ports is working fairly well, but track ownership poses problems**

58. Rail freight forwarders deem port equipment for handling rail cargo as old and in bad condition in Riga. They also cite lack of personnel at the Riga port, which causes unnecessary detention of rail wagons, and the cost of this detention has to be paid by the rail forwarders. Another problem is the current location of the railhead in the center of the city, which poses a bottleneck for rail transport to the port, and a better location would move the railhead about 7-8 kilometers ahead to the second container terminal in Kundzisa.

59. The fees for using private railway tracks at the Riga port are reported to be very high. As there is no space to build extra tracks in the port, users are forced to pay the fee for using the private tracks. According to respondents, the rail tracks in the port area should be owned by the Latvian railways or by the port as, for example, in Ventspils port.

60. Respondents claim that the tracks owned by private firms in ports of Klaipeda and Riga should be given to the port administration. This notion could be subject to a small feasibility study to substantiate the claim, which is potentially a trade hindrance. Many companies that build their own terminals at the ports look only after their own interests and construct only one

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<sup>2</sup> See: European Union press release on April 22, 2004 at: <http://europa.eu.int/rapid>

reloading track to the terminal. For example, originally only Mazeikiai oil was reloaded in one terminal, but currently more than thirteen types of oil products are handled in the same terminal.

**61. Handling of rail cargo at ports is rather effective.** As most of the cargo carried by railways in the Baltic States is transported through ports. In general, the cooperation seems to be rather effective. However, Estonian rail forwarders claimed that the quality of service received at the port of Tallinn is often very poor and the rates are very high.

**62.** Lithuanian railways maintains that an unfair situation among EU countries exists as to where the veterinary controls of rail transport should be conducted. In Latvia, control procedures can be carried out at the Daugavpils and Rezekne railway stations, which for year have served as border stations. However, for Lithuania such an arrangement is not allowed, but veterinary inspections are to be conducted on boundary stations.

**63. Long Russian cargo trains create pressure for the Baltic marshalling yards.** Russian railways tend to prefer to transport on long trains and for long distances as much as possible. However, Estonia has extended the marshalling yards and is able to receive trains as long as 72-75 cars. In Latvia, the new yard is being built as part of Rezekne II freight junction project.

**64. Trans-Siberian route (TSR) is a business opportunity for Baltic rail operators.** TSR, starting in Moscow and ending in Vladivostok offers possibilities for Baltic railways especially in containerized cargo. The TSR offers the shortest transit way from Asia to Europe. Compared to sea transport the TSR is 1-3 weeks faster, while the transport cost is approximately the same. Russian regional railway operators are looking for partners, which is an opportunity for Baltic railways.

## **2.8. SMOOTH AIR FREIGHT - GROWING PASSENGER VOLUMES**

**65. There are about 600,000 air passengers per year in each of the Baltic States,** of which roughly ½ use national and ½ use foreign carriers. The volume has increased at all key airports, especially in the first months of 2004. Cargo traffic is modest in each country, between 4,000 to 7,000 tons per year; however, much higher volumes are transported by trucks (RFS, Road Feeder Services) under air waybill.

**66. Throughput times in all airports are very short.** Throughput time for import goods range from 50 minutes to 2 hours from touchdown of the aircraft to the release of the goods, assuming that documentation is correct for customs clearance. This offers little room for improvement.

**67. Phyto-sanitary inspection facilities required for the import of food and animals from non-EU countries is only available at Vilnius airport since mid-April 2004.** In Tallinn, the closest inspection post is located at the harbor, (distance 10km) and in Riga there are no facilities available at all. However, these shortcomings were not seen as a major obstacle by traders.

### **Air transport restructuring continues**

**68. Air infrastructure management remains the responsibility of the public sector** in all three countries, but the ways in which civil aviation administrations and airport administrations have been organized differ to some extent among the three countries. The provision of air transport services has been partially privatized in Estonia and Latvia, where the airlines have been transformed to joint ventures with established international carriers and other investors.

**69. Baltic airlines with valid operating licenses do not need a separate permission for flights within the EU,** Iceland, Norway and Switzerland after EU accession. Air Baltic was quick to benefit from this, as it established a hub in Vilnius in June 2004.

**70. Bilateral flight permissions to Russia are investigated for conformity with EU legislation.** Permission to fly to other cities than Moscow requires a political agreement between the EU and Russia, and this may take time to materialize. Access to other Russian cities would improve the national carriers' competitive position. The Baltic States' major airports – or one of them - could also develop transit hubs for east-west passenger and cargo movements.

**71. Air navigation charges in Vilnius are 30% higher than those in Tallinn.** Competition between airlines drives airports to lower their fees, as was done in Riga in June 2004. Lower landing fees reduce the income of the airport, but growing traffic is likely to compensate for it.

**72. Increasing price competition is occurring among airlines.** All three Baltic flag carriers have started to introduce low-fare tickets, including the possibility to purchase one-way tickets with no minimum stay restrictions. The first low-cost airline has also entered the Baltic market.

**73. Airfreight rates are competitive, but small size of the aircraft keeps rates high.** Over the past years competition has lowered the rates substantially. However, the relatively small size of the aircraft in scheduled traffic prevents the carriers to utilize economies of scale. Scaling up the fleet also requires additional investment in so-called high-loader equipment at around USD 0.5 million per airport. A number of investments projects are under way to develop aviation and airport infrastructure in order to meet the demands of increasing passenger and freight volumes.

### **3. RECOMMENDATIONS**

#### **3.1. BOTTLENECKS AT RUSSIAN AND BELARUS BORDERS**

**74. EU membership has significantly changed both border control and customs practices.** The Baltic States are now part of the common EU customs zone, but not yet part of the Schengen agreement. This means that the national border control check points still remain in operation, and passport checks and visa checks for non-EU residents continue on intra-EU borders. Before joining the EU, waiting times for trucks often exceeded 10 hours, especially at border crossing posts between Latvia and Lithuania, but these queues have practically disappeared. Due to the improved situation at the Intra-EU borders, only border crossing points (BCP) with Russia and Belarus are covered more detailed in the Facilitation Audit Report.

**75. Problems were detected especially at Terehova and Grebneva between Latvia and Russia,** where the waiting times for trucks are typically between 6 to 12 hours. At the time of the visit on June 2, 2004 there were 266 trucks (a 7 km queue) and 134 trucks at Grebneva (a 3.5 km queue) waiting on Latvian side for access to Russia. The bottlenecks are on the Russian side of the BCPs, whereas the capacity on Estonian and Latvian sides is not in full use. According to local Estonian and Latvian border officials, the throughput could in some case even triple without causing problems. The border congestions on Russian side are likely not to be resolved through technical IT projects due to the highly political nature of question. Negotiations between the EU and Russia are in key role, while some local issues could be resolved on sub-regional or even on a

bilateral level. One possible vehicle for sub-regional co-operation is TEDIM<sup>3</sup>, which is an international development forum of ministries of transport of the Baltic Rim countries and of which all the Baltic States and Russia are members.

76. The shortest route for Lithuanian exports to Russia especially from Vilnius is via the BCPs of Medininku and Salcininku through Belarus. However, road carriers are unwilling to enter Belarus because of numerous experiences of misconducts by Belarus officials: unofficial payments are required at the BCPs up to USD 500 per transit and shipments under TIR-transit are sometimes stopped and even confiscated for undisclosed reasons. Another reason to avoid Belarus as a transit country is the Russian customs (unofficial) practice at the Latvian-Russian border to customs clear trucks for a duty of USD 20,000 irrespective of cargo value. This urges shippers to load trucks with cargo way over USD 50,000, which is the limit for the use of TIR Carnet. Such cargoes can not be taken through Belarus without a convoy, causing extra cost and delay.

77. **Significant investments have been made to modernize EU's external border crossing posts between the Baltic States and Russia/Belarus.** In addition to the national funding, the European Union has allocated funds mostly through the PHARE program to develop the border control systems in accordance with the requirements of the Schengen acquis and facilitate implementation of the recommendations stated in EU's Integrated Border Management Strategy. The investments were made to upgrade the national BCPs, which became the EU's external borders in May 2004. The second milestone will be in 2007, when Estonia, Latvia and Lithuania are planned to join the Schengen agreement. As a result, the BCPs on Estonian, Latvian and Lithuanian sides are modern and the infrastructure poses no hinder for border crossing.

### **3.1. EXPEDITE DISSEMINATION OF INFORMATION**

78. **Implementation problems of New Computerized Transit System in rail transport.** As from the May 1, 2004 all new EU member countries were to be ready for accession to the New Computerized Transit System (NCTS). All three Baltic countries faced some difficulties during the first couple of weeks but these problems were temporary. In Latvia and Lithuania difficulties related to lack of information provided by the customs. It is suggested that in these countries special attention is put on disseminating information on the NCTS to the users. The NCTS system was originally designed for road transportation and thus it does not fully meet rail transport requirements.

### **3.2. EXPEDITE VETERINARY AND PHYTO-SANITARY INSPECTIONS**

79. **Veterinary and phyto-sanitary check points need EU approval.** All border checkpoints on railways in Estonia and Latvia stopped handling food imports from non-EU countries on May 1, 2004 because of the lack of certified facilities allowing authorities to conduct veterinary checks in accordance with EU requirements. Two veterinary checkpoints on railways in Latvia are to be certified by November, which forwarders regard as unrealistic. In Estonia a checkpoint in Narva is expected to be ready in summer 2004. Another checkpoint in Koidula is scheduled to be functioning in 2006. Railway veterinary checkpoints are constructed by railway operators whereas on the roads the expenses for building these kinds of checkpoints are carried by the state. The lack of sufficient number of veterinary check point facilities constitute a hinder for traders

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<sup>3</sup> Telematics, Education, Development and Information Management ([www.tedim.com](http://www.tedim.com))

but the problem is acknowledged by the governments and new facilities are under construction. It is suggested that the ongoing building projects are expedited.

80. In January 2005, there are five EU-approved veterinary checkpoints in Estonia<sup>4</sup>, eight in Latvia and 12 in Lithuania. Phyto-sanitary control can also be conducted at most checkpoints. A detailed list of the veterinary and phyto-sanitary control posts is shown in Attachments G.1. and G.2.

### **3.3. PORT COMMUNITY IT SYSTEMS NEEDED QUICKLY**

81. **Information technology solutions development in ports.** Increased unitization of cargoes together with the global trend of containerisation in ocean transport lead to situations where ports and especially port authorities must be able to handle large amounts of scattered cargo information. This information is needed not only for compulsory statistical reports and commercial market analyses, but in order to fulfil the new safety and security rules imposed by the International Maritime Organisation and European Union. These new regulatory frameworks, the International Ship and Port Safety (ISPS) Code and Container Security Initiative (CSI), require constant control of activities and cargo units in the port area.

82. **Port IT development needs to be accelerated.** In addition to the needs of security measures, information technology and developed software applications for handling cargo information can be used as tools to support strategic development and increase port throughput and efficiency. Especially all the ports in the Baltic States handling large amounts of unitized cargoes, i.e. trailers and containers, should accelerate their efforts in IT development.

### **3.4. EXPROPRIATION OF LAND FOR INFRASTRUCTURE**

83. **Inflexible land leases and operating concessions in ports.** In all three Baltic States major ports are landlord ports, where port authorities are responsible only for major infrastructure maintenance and development, and daily operations are handled by private companies operating under various land lease or rental agreements.

84. **Long land lease agreements pose problems in ports.** In most ports several stevedoring companies and terminal operators compete hard against each other. However, the fragmented and inflexible long term land lease agreements may hinder the development of modern terminal operations based on scale economy. Stevedoring companies seem to maximize the short-term return on the land area under their control.

85. So far the governments, municipalities and port authorities have been reluctant to use expropriation or termination of lease agreements as a tool of guiding port development in a wider public interest. The large number of small lessees and operators in Tallinn, Riga and Klaipeda ports is likely to result in operational inefficiencies in the long term.

86. Similar problems have hampered the construction of logistics centers in all three countries too. In the medium term, the problem will be accentuated in airport expansion, especially with

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<sup>4</sup> A critical evaluation report on Estonian border crossing posts by European Commission is available at: [http://europa.eu.int/comm/food/fs/inspections/vi/reports/estonia/vi\\_rep\\_esto\\_7238-2004\\_en.pdf](http://europa.eu.int/comm/food/fs/inspections/vi/reports/estonia/vi_rep_esto_7238-2004_en.pdf)

Tallinn airport, and to lesser extent with Vilnius airport. In Latvia expropriation has been used in some expansions of Riga airport and Riga port and in some road construction projects.

87. In all Baltic States there is a strong need to enhance administrative capacity in spatial planning and improve legal tools for expropriation. In particular, legislation should be amended so that the remuneration for expropriated land for infrastructure projects of national importance is less than market value.

### 3.5. PROPOSED KEY ACTIONS IN SUMMARY

88. **The main short term activities common to all three countries include** (a) enhanced IT systems for port and airport communities, and (b) regular monitoring of Customs and Supply Chain performance and costs of traders and the logistics providers. Common activities for the medium term include (c) continued capacity building of transport and trade related authorities, (d) enhancing public sector’s possibilities to expropriate land for infrastructure projects of substantial public. A solution to Russia’s current rail tariff policy should also be found soon.

89. The key findings of TTFBS are in line with those identified in the Parnu seminar, that is; the need for improvements to (i) border crossings, where excessive delays occur, (ii) data exchange systems between ports and Customs warehouses, and (iii) Customs relations between the Baltic States and Russia.

Table 2. High Priority Activities common to all three Baltic States identified in the TTFBS study.

High Priority Key Activities common to all three Baltic States	Ease of implementation	Horizon	Complementary Initiatives and other issues
<b>Enhance the public sector’s possibilities to expropriate land for transport projects of substantial public interest.</b>	Difficult	MT	Full compensation for land fosters rent-seeking; local policymakers reluctant to take action.
<b>Develop and establish an institutional solution to Russia’s current rail tariff policy</b>	Difficult	MT	Political solution between EC, Russia and WTO.
<b>Strengthen the administrative capacity of Ministries of Transport (MoTC, MEAC) and subordinate Administrations, including IT and language skills; as recommended by European Commission</b>	Medium	MT	Increased budget funding, training, remuneration, EU support.
<b>Improve the integration of border agency IT systems and processes especially in port and airport communities</b>	Medium	ST	EU and national funds, implementation as PPP
<b>Equipment in Tallinn, Riga and Vilnius airports for larger aircraft to handle aircraft containers</b>	Easy	ST	Private sector initiative with airports
<b>Introduce regular monitoring on Customs performance</b>	Easy	ST	EU; International indicators.
<b>Introduce regular monitoring on Supply Chain performance in transport and trade</b>	Easy	ST	EU; Local NGOs, MoTC initiative

Horizon: ST = Short Term (2004-2005) ; MT = Medium Term (2005-2009); Ease of Implementation : Given adequate funds, the estimated ease of implementation when considering the organizational, technological or legal barriers.

90. **A list of proposed activities is in Chapter I Matrix of recommendations.** The Matrix includes proposals for important short and medium term activities that apply to all three countries.

## **A Methodology of the report**

### **A.1 Strategic Context**

91. On May 1, 2004 Estonia, Latvia and Lithuania joined the European Union. This has had a significant impact on day-to-day business practices in trade both with other EU countries and in trade with non-EU countries, notably that of Russia. On a macroeconomic level, the three Baltic States have rapidly integrated to the world economy during the past decade, and from that point-of-view, the EU membership did not dramatically change the countries trade or Foreign Direct Investment patterns.

92. Overall, the traders and authorities interviewed for the TTFBS<sup>5</sup> study reported very few substantial problems with trade and border crossing practices in intra-EU trade, despite the fact that the interviews took place right before or after the EU accession. Also international firms that have established operations in the Baltic States maintain that the EU membership does not substantially affect their business in the short term, but it has reduced trade-related transaction costs and delivery times.

93. The main trade-related problems were encountered in trade with Russia, and to lesser extent with some other CIS countries. Solutions to these problems are often political, and thus beyond the means of individual firms or authorities.

94. Each of the Baltic States has experienced substantial growth in the volume of merchandise exports and imports. This trend is partly a reflection of the rapid growth of transit traffic. The foreign trade of the Baltic States generally shifted toward the EU during the 1990s. Roughly 70 percent of Estonia's foreign trade, both exports and imports was with the 15 EU countries in 2002. The corresponding figure for Latvia is 60 percent and for Lithuania is 50 percent.

95. The relative share of trade with Russia has declined, while its absolute volume has increased. While the overwhelming part of the Baltic States' trade is directed towards the EU, the trade with the non-EU countries still remains an area of potential source of prosperity for these countries.

96. Transport services trade is important for the Baltic States. Latvia has the highest net cash flow from trade in transport services, a situation mainly attributable to transit flow of oil and related products by railways and pipeline. By contrast, Estonia has the highest value of transport services sold to and bought from other countries, indicating the high degree of internationalization of the Estonian transport sector.

97. Among the notable transport trends in the Baltic States (i.e., Estonia, Latvia and Lithuania) is the rapid growth of demand for transport, at a faster rate than that of the gross national product. There has also been increasing demand for consolidated transport related support services. Moreover, privatization has been widely used as a vehicle to restructure transport and transport infrastructure markets. Public-private partnerships have been introduced as a mechanism for providing good quality transport and infrastructure services at a reasonable cost. Meanwhile, the Baltic States have made considerable progress leading to their EU accession.

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<sup>5</sup> Trade and Transport Facilitation in The Baltic States

98. The Second Seminar on Restructuring of the Transport Sector in the Baltic States, held in Parnu, Estonia, in November 2003, identified the need for improvements to (i) border crossings, where excessive delays occur, (ii) data exchange systems between ports and Customs warehouses, and (iii) Customs relations between the Baltic states and Russia. The proposed study would identify measures to improve the above areas, thus reducing non-tariff costs to trade and transport, and increase transparency of procedures at border crossings.

## **A.2 Objectives and Methodology of the Trade and Transport Facilitation Audit**

99. The Baltic TTF Audit provides a review of the situation pertaining to international transport and trade, in terms of transaction and transport costs and efficiency of the related services. It highlights in particular all difficulties that could be alleviated through streamlining and systematic rationalization of administrative procedures, while safeguarding the statutory and regulatory missions of the Governments in respect of domestic protection and defense of its basic national interests. The focus includes procedural and documentary requirements and quality of logistic services and infrastructure available to traders. The Audit also includes the development of a comprehensive set of remedial actions to be undertaken by the various agencies involved in international transport and trade.

100. The Audit also makes use of the work reported in the 2nd Transport Sector Restructuring in the Baltic States toward EU Accession, published in March 2004, which contains relevant useful material on the transport sector of the Baltic States (Ojala et al. 2004).

101. The audit was carried out following the methodology published by the World Bank under the umbrella of the Global Facilitation Partnership for Transportation and Trade. This methodology is articulated around a series of questionnaires addressed to all actors, public and private, participating in the process of international trade and transport transactions.

102. The data was collected from personal interviews of these key stakeholder groups as well as from a wide range of available secondary sources. In April-June 2004, over 300 representatives of traders, trade organizations, logistics providers and authorities were interviewed for the TTFBS study in the Baltic States and in other EU countries.

## **A.3 Diagnostic of the Existing Situation**

103. This task was carried out using the methodology published by the World Bank under the umbrella of the Global Facilitation Partnership for Transportation and Trade (GFP) Trade and Transport Facilitation: a Toolkit for Audit, Analysis and Remedial Action, available on the GFP Website. The diagnostic is based on a series of face-to-face interviews using the toolkit questionnaires. The interviews include various stakeholders, public and private, in the import/export transport chain, as listed in the Toolkit. Information obtained during the interviews was processed and result in the Audit Report, which provides a view of the prevalent situation in terms of transport and trade facilitation in Estonia, Latvia and Lithuania.

104. Ultimately the audit provides a comprehensive understanding of supply chain management constraints in the Baltic States and their causes: governance, regulation, private sector practices and organization. The audit identifies:

- a. The nature of existing constraints in regulatory, documentary and procedural requirements related to international trade transactions and corresponding transport operations;
- b. The availability and the organization of logistics services (e.g., transport, forwarders, brokers) in the country and the potential obstacle to their modernization and development;
- c. The existing shortcomings in terms of operational efficiency, and consequently, the remedial actions to consider, both in the short and longer term, with the critical path the overall remedial action plan should follow with its corresponding costs;
- d. The impact of transport and logistics barriers along the chain both in quantitative (time/money) and qualitative terms (e.g. handling packaging break-bulk);
- e. A breakdown between avoidable and unavoidable costs;
- f. An assessment of the costs reduction that various measures could bring to international trade transactions and associated transport operations, so that a priority ranking could be established for their implementation.

#### **A.4 Action Plan**

105. The findings of the existing situation are analyzed and shared with key stakeholders in the Baltic States and elsewhere to seek feedback and validation of the main results obtained. The TTFBS study provides a draft Action Plan identifying the steps to be taken to address the issues raised in the diagnostic (See Annex A), indicating for each element of the plan

- a) Who will be responsible for its implementation;
- b) The implementation timetable and method, as well as training needs; and
- c) The indicative cost estimate.

106. Every effort is made to check the feasibility of the proposed actions with major public and private stakeholders, to identify potential stumbling blocks and propose an approach to deal with them. The Action Plan identifies a few critical actions that could be readily implemented with a high impact.

107. Proposals to successfully implement recommended administrative and regulatory changes are spelled out in practical terms, including if need be the identification of draft new legislation to be submitted for Parliamentary approval. Action plans, budgets, timetables, implementation methods, and corresponding training needs are determined. Individual objectives are time-bound and linked to an agreed measurement process, with relevant performance indicators, so that progress can be assessed during and after implementation of recommended measures.

## B Macroeconomic overview of the Baltic States

### B.1 The Baltic States are the fastest growing acceding countries

108. **GDP growth.** The Baltic economies have grown rapidly during the last years. After the Russian economic crisis in autumn 1998, the annual growth rates have exceeded the EU's average growth rate by 4-5 percentage points. In addition, the Baltic economies have grown faster than other acceding countries. In 2003, the largest growth was observed in Lithuania and Latvia. In Estonia, after a short recession GDP growth accelerated again in the late 2003. According to latest forecasts, the strong growth is expected to continue within the next two years. (Figure B.1.)

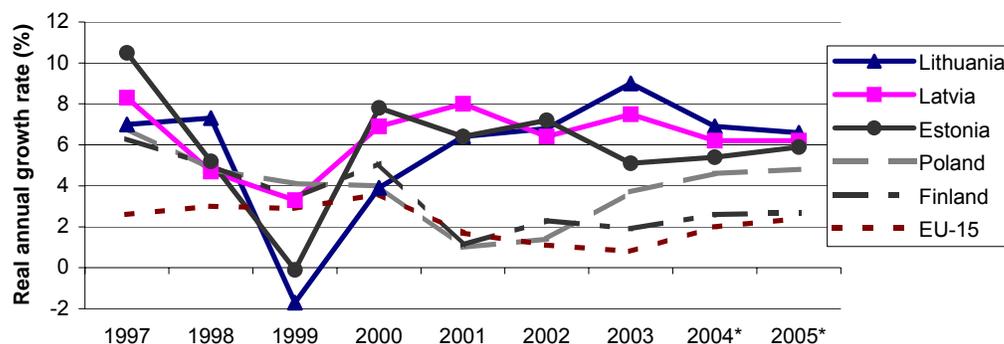


Figure B.1. Real GDP growth<sup>6</sup> in the Baltic States 1997-2003 and forecasts. Source: National statistical authorities; EU-15 and forecasts by European Commission, Spring 2004.

109. Generally, the growth has been generated by almost all sectors of Baltic economies, but there are also differences between the countries. In Estonia, the main contributor has been the growth of private investments and consumption supported by increasing lending. Also, industrial production and domestic trade have steadily grown. In the near future, economic growth is likely to increase due to EU-related grants and accelerating growth in the “old” EU countries. Annual growth forecasts for the years 2004-2005 vary around 5.2-6.0%. According to preliminary estimate, Estonia GDP grew by 6.8% year-on-year in the first quarter of 2004.

110. In 2003, Latvia's GDP grew by 7.5% compared to 2002. The growth rate has exceeded 6% annual level since 2000. As in Estonia, the growth has been based on the wide growth of private consumption and investments. According to forecasts, Latvian economy will grow a bit slower during the coming years. The growth will be still based on the growing private consumption and growing exports. On the other hand, rising prices will undermine purchasing power and generate uncertainty to the economy. However, Latvia's GDP grew by 8.8% year-on-year in the first quarter of 2004. The highest growth was observed in trade (11%), in manufacturing (11%) and in transport and communications (8%). The Bank of Latvia is concerned about the fast growth, which could cause overheating of the economy.

111. In 2003, Lithuania's GDP expanded by 9.7% from the previous year. A record-high growth was based on rising domestic demand in investments and growing exports. Although the

<sup>6</sup> GDP data has been revised recently.

growth was broad-based, the highest growth was observed in manufacturing, construction and wholesale and retail trade. According to recent forecasts, Lithuanian economy will keep its position as the fastest growing EU country in the enlarged EU. Estimates vary around 7% for the years 2004-2005. According to preliminary data, Lithuania's GDP grew by 7.7% in the first quarter of 2004. The fastest growth was observed in construction (10%) and in industry (9%).

112. GDP per capita. Despite the rapid GDP growth, the Baltic States (with Poland) are still the poorest new EU countries measured by GDP per capita. In 2003, according to Eurostat, GDP per capita expressed in terms of PPS<sup>7</sup> was below the 50% of average EU-25 level in the each three Baltic States. The index in Estonia was 48, in Lithuania 46 and the lowest in Latvia 42, when the enlarged EU (EU-25) was indexed at 100.

113. Structure of economy. The structure of the Baltic States' economy changed substantially during the transition period. Table B.1 presents the structure compared to average values of some country groups. Although GVA from primary sector has dropped notably, the share of GVA from primary sector is still larger than in the EU-15 countries and in most of acceding countries. In Latvia and Lithuania, over than 15% of employees are still working in the field of agriculture and forestry. At the same time, the foreign trade's share of GDP has grown rapidly. In Estonia the relative share of foreign trade is significantly larger than in Latvia and in Lithuania.

Table B.1. Structure of economy – the Baltic States compared to the EU-15, EU-25 and accession countries, 2002. Source: Eurostat 2004.

<b>Main components of GDP</b>	Estonia	Latvia	Lithuania	EU-15	EU-25	Acc-10
Private final consumption	57.3	62.7	63.4	58.3	58.4	60.6
General government consumption	19.7	19.4	20.1	20.6	20.6	19.9
Gross fixed capital formation	28.5	26.4	20.7	19.4	19.5	21.7
Changes in inventories	2.9	2.1	1.5	-0.1	0.1	1.1
External balance	-9.4	-10.6	-5.7	1.7	1.5	-3.3
<b>Gross value added by industry</b>	Estonia	Latvia	Lithuania	EU-15	EU-25	Acc-10
Agriculture, forestry and fishing	5.4	4.7	7.1	2.1	2.1	3.5
Industry, including energy, water	22.8	18.6	24.1	21.4	21.6	25.2
Construction	6.6	6.1	6.4	5.6	5.6	6.2
Trade, transport and communications	31.5	35.7	33.1	21.5	21.8	27.8
Business activities and financial services	15.8	15.7	10.8	27.4	26.9	17.2
Other services, incl. public services	18.1	19.2	18.5	22.1	22.1	20.1
<b>Employment breakdown by industry</b>	Estonia	Latvia	Lithuania	EU-15	EU-25	Acc-10
Agriculture, forestry and fishing	6.8	15.1	17.4	4.1	6.1	17.1
Industry, including energy, water	24.7	18.4	20.6	18.3	19.2	23.7
Construction	6.5	6.1	6.8	6.6	6.6	6.6
Trade, transport and communications	26.9	25.9	23.9	25.7	25.3	23.2
Business activities and financial services	8.9	7.3	5.1	15.1	14.1	8.5
Other services, incl. public services	26.1	27.3	26.3	30.3	29.1	21.8

114. Structural support from the EU. For the years 2004-2006, about EUR 45 billion (about USD 37 billion) in all will be available for the new EU countries. Roughly a half of this will come from the structural support funds, and others are earmarked for other purposes, e.g. for agriculture. The Baltic States as a whole will get a bit less than 15% of this structural support from EU. When measured per capita, the support is the largest in the Baltic States: Estonia will get EUR 505 per capita (USD 610), Latvia 494 euros (USD 590) and Lithuania 438 euros (USD 530) per head. Although these transfers are remarkable, in many cases they are less than normal influx of FDI. Also, structural transfers from the EU will cause heavy pressures for national budgets due to required public co-financing.

<sup>7</sup> PPS = Purchasing Power Standard, when EU-25 average is indexed at 100.

## B.2 Recent trends in industrial production

115. Industrial production has increased fast in the Baltic States. However, periodical fluctuations have been notable, especially in Lithuania. Lithuania's industrial output increased very fast within the last quarters of 2003, nearly 20% up from the corresponding period in 2002. The volume of industrial production has grown the most stably in Estonia (Figure B.2).

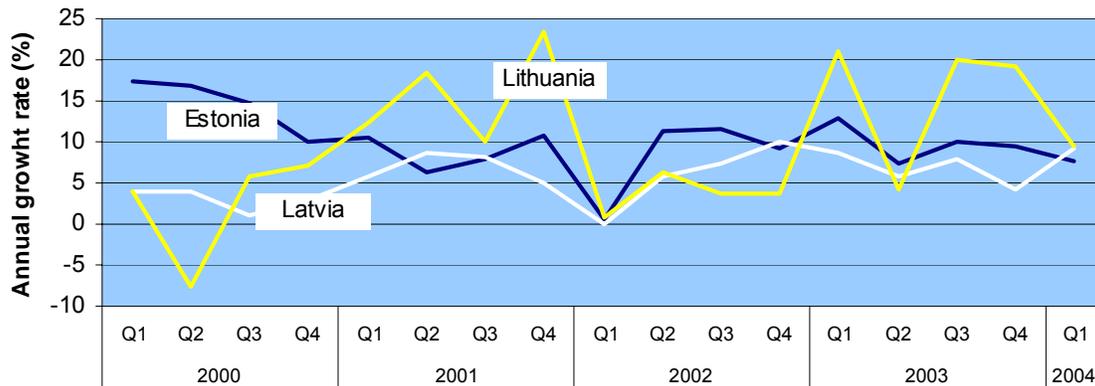


Figure B.2. The growth of industrial production, quarterly data. Source: National statistical authorities.

116. In Estonia, manufacturing covered 19% of total GVA in 2003. The share of manufacturing has been growing slightly during the recent years. The major groups in manufacturing are food products and beverages (21% of total manufacturing), wood and wood products (20%), machines and electric equipment (15%), textiles and related products (13%), and the manufacturing of chemical products (10%). During the past years, as described in Figure B.3., the growth rate of the manufacture of machines and equipment has declined sharply, whilst the manufacture of electric equipment is growing strongly again after the notable descent in 2001.

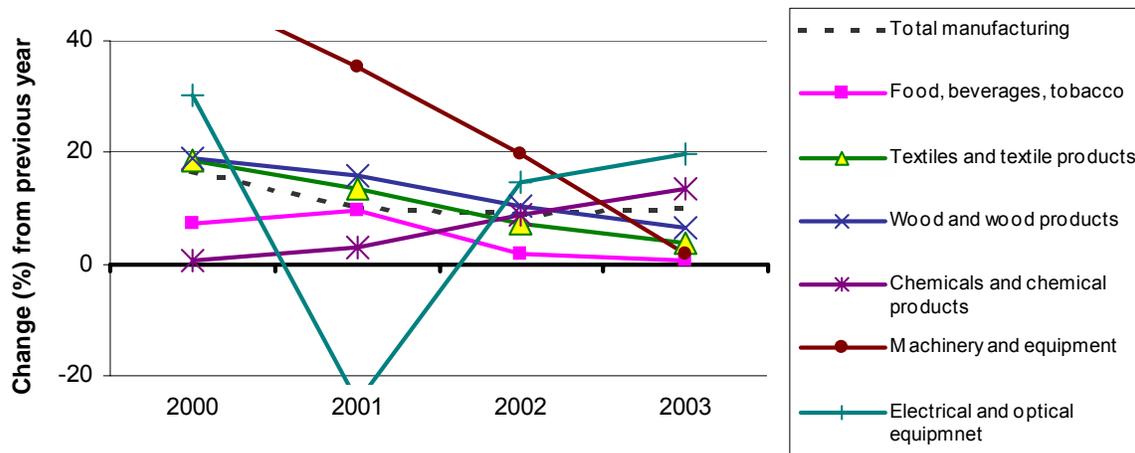


Figure B.3. Estonia – Manufacturing volume indices by selected branches, change (%) from previous year. Source: Canstat Statistical Bulletin 4/2003.

117. In April 2004, 58%-share of Estonia's manufacturing was exported. The largest export-share was observed in the manufacture of radio apparatus, nearly 97% of total production. Generally, when looking the share of exports in main industries the share of export is larger than

the average value. With regards to textiles the share was 88%, electrical machines 81% and wood products 67%. With regards to food products and beverages, 28% was exported.

118. In Latvia, manufacturing constituted 15% of total production in 2003, and the sector is smaller than that in Estonia and Lithuania. In Latvia's manufacturing (2002), food industry covered 28% of total GVA, wood and wood products 17%, machinery and equipment 12%, metal and metal products 11%, and light industry 11% (textiles and related products).

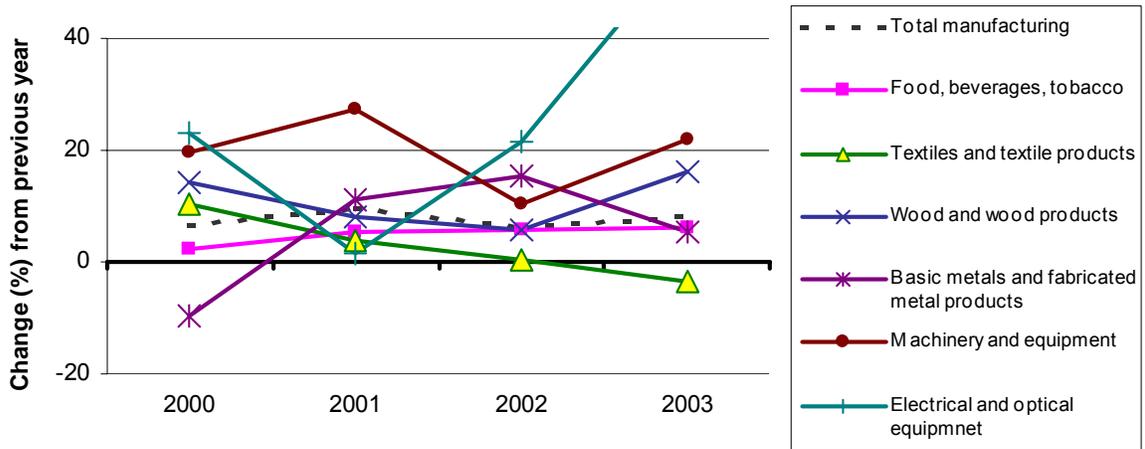


Figure B.4. Latvia – Manufacturing volume indices by selected branches, change (%) from previous year. Source: Canstat Statistical Bulletin 4/2003.

119. The share of exports is clearly smaller in Latvian industry compared to Estonia. In 2002, 52% of production was sold abroad. In light industry, the share of exports was 84% and with regards to wood and wood articles 70%. From the manufacture of food products, only 24% was exported. In Latvia, the manufacture of electric and optical equipment, wood and wood products and rubber and plastic products have grown outstandingly during the past years.

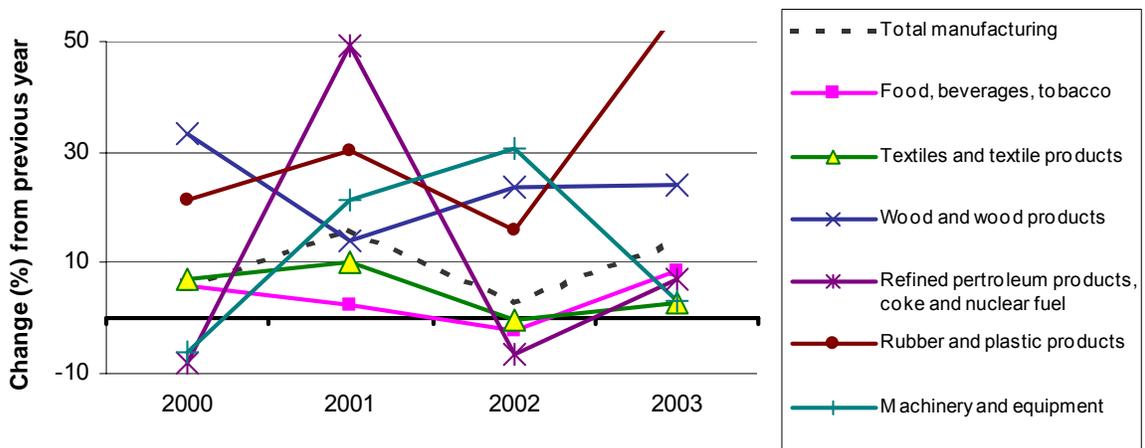


Figure B.5. Lithuania – Manufacturing volume indices by selected branches, change (%) from previous year. Source: Canstat Statistical Bulletin 4/2003.

120. In Lithuania, manufacturing covered 20% share of total GVA in 2003. Within the manufacturing sector, the most important industries are the manufacturing of food, beverages and tobacco (as in Latvia and Estonia), by its 24% share (data as of 2002), the production of wood and wood products (20%) and textile industry (17%). Contrasting with Estonia and Latvia, the production of refined oil products is one of the main industries in Lithuania. Refined oil products is the most important product group in Lithuania's exports, and its share of total manufacturing is over 6%.

Two traditionally important industries for the Baltic States, the manufacturing of food products and the manufacturing of textile products, have grown slower than other main industries. (Figures B.3, B.4 and B.5). This indicates a structural shift in production.

### B.3 Inflation, wages and unemployment

121. In the early years of transition period, the Baltic States suffered from high inflation as all transition countries in Eastern Europe. Since 1999, prices have risen moderately. In Lithuania, prices even went down in 2002 and 2003 due to deflation of dollar-related imports and decline of food prices. Lithuania recorded end-year deflation 1.3% in 2003. Within the last few months, inflation seems to be accelerating in all the Baltic States, especially in Latvia, which recorded the third fast inflation out of EU-25. In April 2004, the sharpest rise was observed in health costs, energy prices and some services' prices. Inflation is expected to accelerate in this year e.g. due to higher excise taxes (upon accession to EU). In May 2004, the global prices of oil products increased sharply, which caused rapid monthly-rise of prices in transport sector.

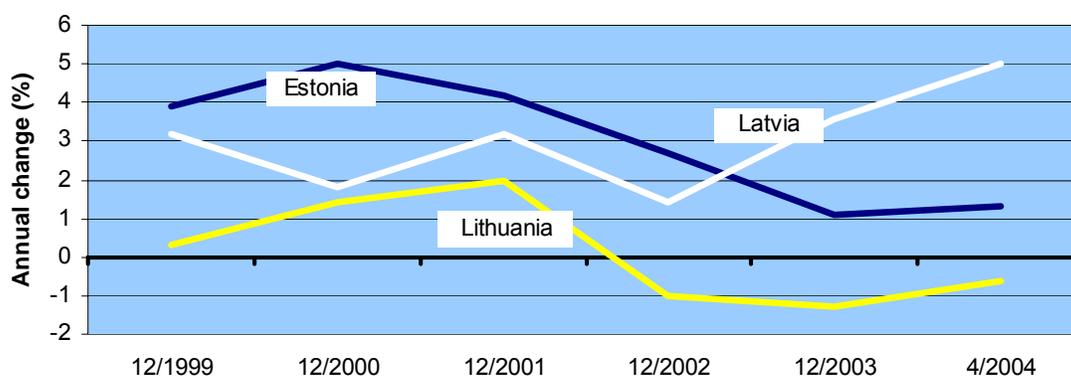


Figure B.6. Annual inflation rates 1999-2004, CPI at the end of period. Source: National statistical authorities.

122. Wages and salaries. In the first quarter of 2004, the average monthly wage in Estonia was EEK 6,748 (USD 516, rate as of 30.4.2004), in Latvia LVL 196 (USD 354) and in Lithuania LTL 1,146 (USD 392). In Estonia, average wages were 37% higher than in 2000 when measured in kroons. In Latvia, the rise in lats was 31% from 2000. Lithuanian's wages have increased slower. The average gross wage in litas within the first quarter of 2004 was only 18% higher than in 2000. Due to large shifts in exchange rates, these changes look very different when measured in US dollars or euros (See figure B.7).

123. Unemployment has been a major problem for all economies in transition. In the Baltic States, the unemployment rate has declined due to strong economic growth. The sharpest decline was observed in Lithuania, from 17.5% in the last quarter of 2001 down to 11.6% in the last quarter of 2003. Estonian and Latvian unemployment rates have declined about 2-3 percentage points within the same period. In comparison, unemployment rate in Poland has doubled during the past 5 years. However, unemployment rate differs notably between the regions in the Baltic States. The weakest developed rural regions still suffer from high unemployment rates.

124. Public finance. The public deficits have remained modest in the Baltic States despite the implemented structural reforms, and EU and NATO related costs. The balance of public revenues and costs is one criteria for the EMU, and thus under analysts' watch. In 2003, Estonia recorded a record-high fiscal surplus, by 2.6% of GDP. At the time Latvia's public deficit was 1.8% and Lithuania's 1.7% of GDP. During the recent years, the deficit has moved around 1.5-3.0% of GDP in Latvia and Lithuania, whilst Estonia has recorded surplus since 2001. In comparison, Czech Republic recorded a high public deficit, 12.9% share of GDP in 2003. Also, Hungary's deficit was nearly 6% and Poland's more than 4% of GDP. Public finance should be under tight control while countries are targeting towards EMU conditions within the next few years.

125. The relative share of public debt is one of the EMU criteria. In the Baltic States, public debt is the lowest in the enlarged EU (bar Luxemburg). The Baltic States started their regained independency without foreign debts, as Russia took over the public debts from its former member states. In Estonia, general government debt was only 5.8% of GDP in 2003. In Latvia, the corresponding share was 15.6% and in Lithuania 21.9%. Although the public debt is the largest in Lithuania, its share of GDP has narrowed during the last years. In comparison, the average level of public debt in Euro currency zone is more than 70% of these countries GDP.

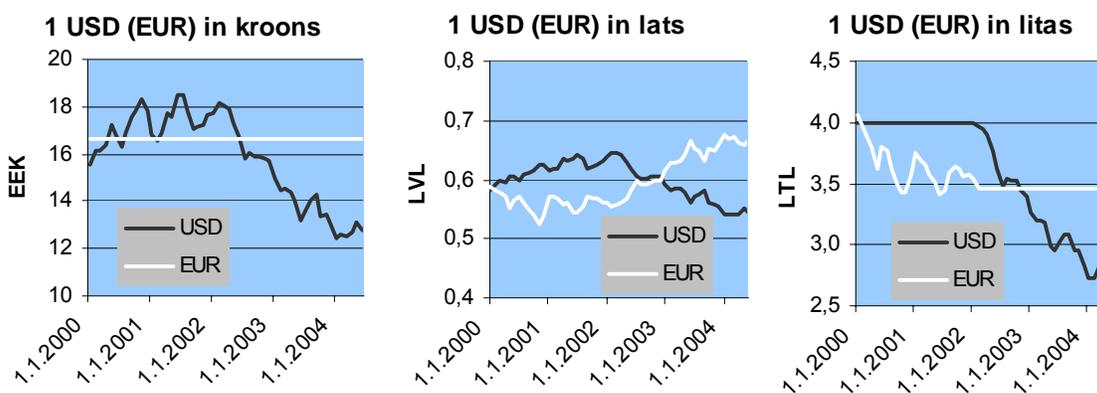


Figure B.7. Baltic currencies' exchange rates against USD and euro. Source: National Central Banks.

126. Exchange rates. Estonian krown is pegged to euro. Thus its value against USD has increased due to euro's appreciation. Latvian lat is still pegged to SDR and its ratio against USD and euro has remained quite stable. Since February 2002, Lithuania's lita is pegged to euro, thus replacing the earlier peg to USD. Litas ratio against USD has appreciated along with euro. The major part of the Baltic States trade takes place in the euro area. According to the World Bank<sup>8</sup>, Estonia intends to enter to the EMU in 2006, Lithuania in 2007 and Latvia in 2008. (Figure B.7.)

<sup>8</sup> Transition – The Newsletter About Reforming Economies, Vol. 14/15.

## B.4 External balance

127. The small and open Baltic economies are very sensitive for internal and external obstacles and fluctuations. The most serious structural problem has been the large external deficit. Due to continuous growth of domestic demand (investments and consumption), imports have grown much faster than exports. Trade deficits and current account deficits have widened year after year despite rapid economic growth. Trade deficit is relatively the largest in Latvia (Figure B.9). Figure B.10 presents the recent development measured by terms of trade ratio.

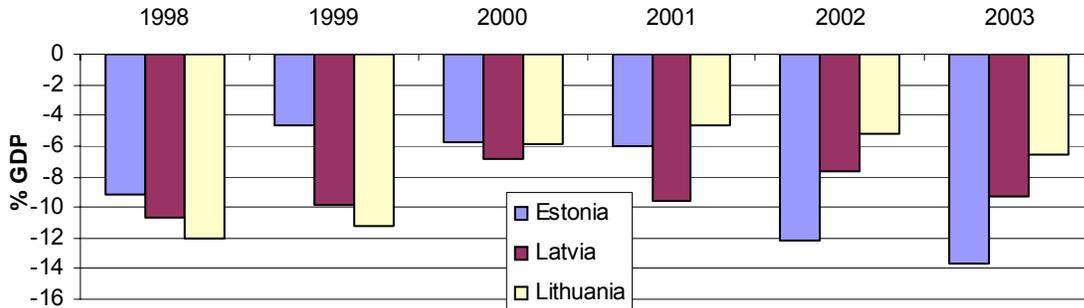


Figure B.8. Current account deficit, share of GDP. Source: National statistical authorities

128. Estonia made a record-high current account deficit in 2003 (Figure B.8). The deficit was significantly larger than in Latvia and Lithuania. The current account deficit is the lowest in Lithuania due to recent positive trend in its exports. Current account deficits of the Baltic States have been mainly financed by FDI, and the countries are very dependent on FDI inflows. In order to break the growth of current account deficit, exports should grow much faster than imports. However, domestic demand is expected to grow fast due to growing private consumption, supported by increasing real wages, and the need of investments, causing growth of imports.

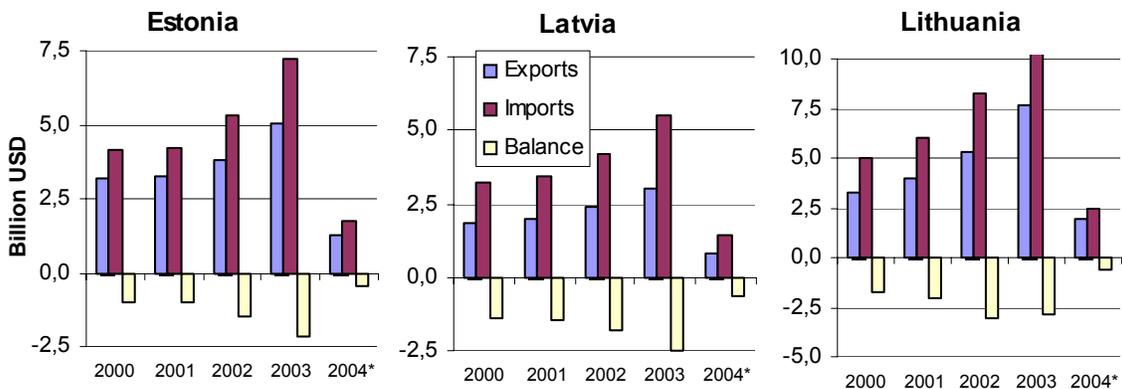


Figure B.9. Exports, imports and trade balance 2000-2003 and in the first quarter of 2004, billion USD. Values by special trade system<sup>9</sup>, end-of-period exchange rate. Source: National statistical authorities

<sup>9</sup> In special trade system, only the goods imported for inward consumption are counted. Exports excludes re-exportation from custom warehouses, and imports does not include imports of goods to custom warehouses.

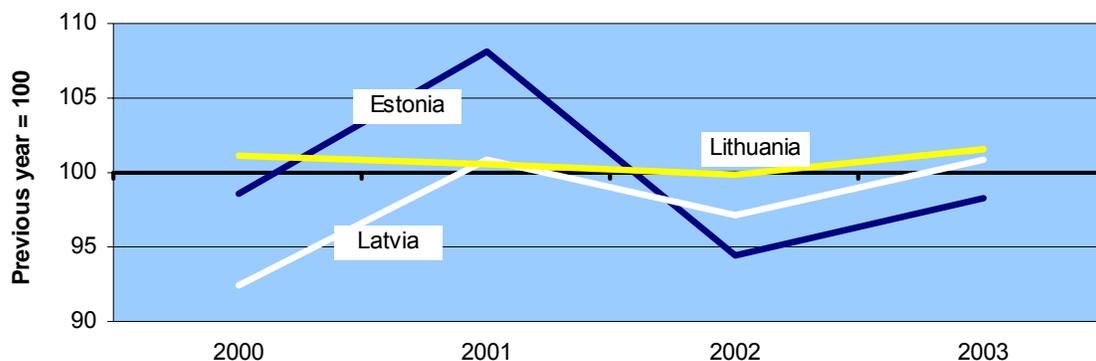


Figure B.10. Terms of trade 2000-2003. Source: Canstat Statistical bulletin 4/2003

## B.5 Structure of foreign trade

129. Although one can find many similarities when comparing the economies of the Baltic States, the structure of foreign trade differs significantly (see Figure B.11 and attachments B.1 and B.2). Also, the structure of trade by countries differs notably. In the first quarter of 2004, the share of EU-15 trade was the largest in Estonia. In exports, the share was 68% and in imports 52% of total. In Latvia, the corresponding share in exports was 61% in imports 49%.

130. In Lithuania, the EU trade covered only 43% of exports 41% of imports. The EU's share in Lithuania's exports has narrowed during the past two years due to the rapidly growing exports to Switzerland (oil products). When looking the structure of foreign trade in EU-25 area, In Estonia and Latvia the share of EU-25 exports is around 80%, whilst the share in Lithuania is about 60%. In imports, EU-25 covers nearly 75% of Latvia's imports, 65% of Estonia's and 56% of Lithuania's imports.

131. Generally, the structure by countries is more heterogeneous in imports than in exports. In imports, Russia's and China's significance has been growing. In Estonia, the Russia's share is visibly lower than in Latvia and Lithuania. Also, cross-trade between the Baltic States is growing, especially in the case of Latvia.

132. Estonia's economy is orientated towards the Nordic Countries. Finland's and Sweden's shares both in Estonian foreign trade and inward FDI are the largest. However, the significance of the Nordic Countries has declined during the last years, especially in Estonia's imports. Latvia's most important trade partners are Germany, UK and Sweden in exports, and Germany, Russia, Lithuania and Estonia in imports. Lithuania's main export countries are Switzerland (due to exports of refined oil products via Switzerland), Russia, Germany and Latvia. Main import countries are Russia and Germany, covering nearly 40% of total imports.

133. Figure B.11 describes the profile of the Baltic States' foreign trade by main product groups (SITC classification). In Estonia, machines and equipment is the largest group both in exports and in especially in imports. In Latvia's exports, crude materials (wood) cover nearly 30% of total exports, while machines and equipment is the largest group in imports. In Lithuania, the share of refined oil products is nearly 20% in exports. Correspondingly, crude material import (mainly crude oil from Russia) covers 17% of total imports.

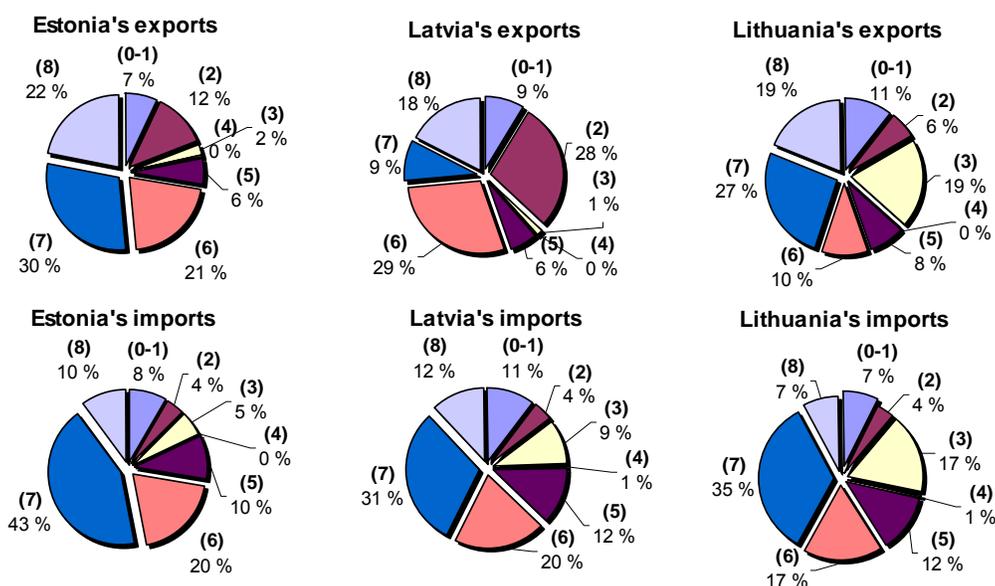


Figure B.11. The structure of exports and imports by SITC commodity groups, current prices, 2003.  
Source; Canstat Statistical Bulletin 4/2003.

SITC commodity groups: 0-1 = Food and animals, beverages and tobacco; 2 = Crude material, inedible, except fuels; 3 = Mineral fuels, lubricants and related materials; 4 = Animal and vegetable oils, fats and waxes; 5 = Chemicals and related products; 6 = Manufactured goods classified chiefly by material; 7 = Machinery and transport equipment; 8 = Miscellaneous manufactured articles

## B.6 Foreign direct investments (FDI)

### The FDI Development in the Baltic States<sup>10</sup>

134. In general, the reform programs carried out in the Baltic States led to the conclusion that the role of foreign investors seemed to be a remarkable cornerstone in the industrial restructuring process and their role was accentuated especially in the large-scale privatization. In the beginning of 2000s, the Estonian industry had three success stories: food processing, textiles and electronics. Conceivably, the human-capital intensive electronics contains the clearest opportunities for industrial integration with the foreign companies. As in Estonia, Latvia's success in competition and reorientation to the international markets rests on electronics but also industries such as machinery and wood industries. The metal industry is estimated to be one of the future industries in Lithuania.

135. When considering the industrial FDI to the Baltic countries, mostly these FDI belonged to the operations of the multinational companies and they have utilized the internalization advantage to expand their activities in the CEE markets, because it was more advantageous to produce near to consumers and hire high-skilled and low-wage Baltic employees. Moreover, the Baltic firms needed these core investors abroad who could be helpful in installing the new methods of corporate governance and managerial incentives as well as enclosing Baltic firms in market-based information, know-how and innovation networks (Hyvärinen 2004).

<sup>10</sup> Written by Dr. Jari Hyvärinen, Economist in National Technology Agency of Finland (Tekes).

136. The Baltic countries started to reap the fruits of the transition period when the FDI inflows began to grow steadily, even if at a slower rate than in the other CEE countries (EBRD 2000). However, in Estonia both the FDI inflows per capita and the ratio of FDI to GDP are among the CEE's highest. Based on the UNCTAD (2003) and the Baltic States' Central Bank statistics, Estonia's inward FDI stock has tripled in 1998-2003, reaching 6.5 billion USD in 2003 (figure B.12). The FDI inflows have been channeled mostly from Finland and Sweden to the finance, trade, transport and telecommunications sectors but also to labor-intensive manufacturing sectors such as the textiles, wood and food industries.

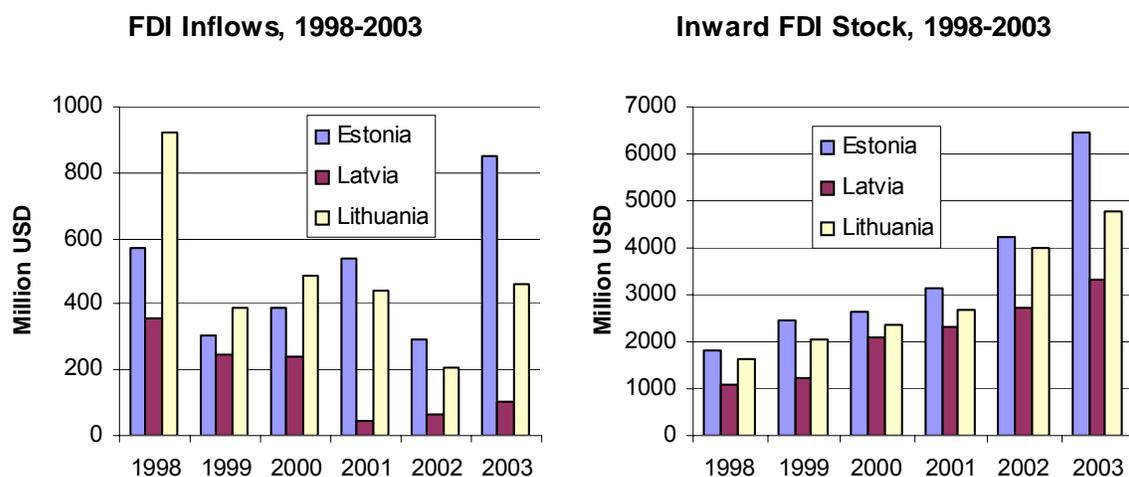


Figure B.12. FDI inflows and stock in the Baltic States during 1998-2003 Source: National Central Banks and Statistical Authorities in the Baltic States.

137. The FDI inflows to Latvia had an increasing trend from 1990 to 2000 but there was a dramatic slump in 2001, and an inward FDI stock has accumulated to 3.3 billion USD by the end of 2003. The FDI has been directed to trade, finance and business activities but also to the energy sector, especially to gas, and the main FDI countries are the United States, Germany, Sweden, Finland and Denmark.

138. In Lithuania, the FDI inflows have grown appreciably during the 1990s and reached a stock valued as 4.8 billion USD in 2003. The FDI stock is mainly directed toward trade, telecommunications and financial intermediation, and when considering the industrial sectors, the main targets are the fuel and chemical industry. The main FDI partners come from Denmark, Sweden and Estonia.

### Russian investments in the Baltic States

139. According to UNCTAD (2003), Russia's outward foreign direct investment stock (OFDI) amounted to USD 18 billion at the beginning of 2003. Russia covers only 0.3% of the whole world's OFDI stock and thus Russia is still a minor player in international comparison. Although OFDI stock forms only a fraction of the total Russian capital abroad<sup>11</sup> Russia makes almost 60% of the transition economies' total FDI stock. Also, about 90% of Russian FDI abroad has taken place during the last six years.

<sup>11</sup> A lot of Russian investment are made via other countries, e.g. via Cyprus. Russian FDI abroad is estimated to be around 10% of Russia's total capital outflow.

Table B.2. The Russian FDI in some new EU countries. Source: Vahtra & Liuhto (2004).

Country (data)	FDI stock (USD million)	Share of country's total FDI stock (%)	Russian FDI per capita (USD)
Czech Republic (31.6.2003)	28.5	0.1	3
Cyprus (1997-2002)	284.7	***	***
<b>Estonia (31.3.2003)</b>	<b>69.7</b>	<b>1.4</b>	<b>50</b>
Hungary (1.1.2003)	71.0	0.2	8
<b>Latvia (1.1.2003)</b>	<b>157.3</b>	<b>5.3</b>	<b>68</b>
<b>Lithuania (1.1.2003)</b>	<b>235.6</b>	<b>5.2</b>	<b>65</b>
Poland (1.1.2003)	1291.9	1.9	33

140. Approximately 50% of Russian outward FDI stock has been directed to EU-25 countries. Eastern part of the EU is clearly a preferential investment target for the Russian companies. In absolute terms, Poland is the leading destination. But when measured by relative terms, Latvia and Lithuania are the leading countries.

141. Russian firms have invested in Lithuania nearly USD 250 million. Especially Russian energy companies have been active. Yukos acquired a 54%-stake of Mazeikiu Nafta in 2002. Gazprom-led consortium won a privatization deal over the Kaunas Hydroelectric Power Station. In addition, Gazprom owns 34% of the Gas utility Lietuvos Dujos.

142. In Latvia, the biggest Russian investments are in Latrostrans (transit of oil products), in Latvija Gaze (gas supply) and in Lukoil Baltija (transit of oil products and their trade). Since 2002, the Port of Ventspils is considered as a possible target for Russian investors. The Port of Ventspils used to be the main port for Russian oil transits in the Baltic Sea. In January 2003, Transneft ended its crude oil pipeline-transportation to the port.

143. In Estonia, as in Lithuania and in Latvia, Russian energy companies are behind the major investments from Russia. The biggest investor in Gazprom, which holds almost a third of Eesti Gaas. Nitrofert is another significant Russian-owned company in Estonia.

## **B.7 Business environment in the Baltic States– International comparison**

144. International organizations follow the developments in business environments by monitoring and evaluating the current state, changes of background factors and indicators, as well as businessmen's experiences from doing business. Generally, in these international comparisons, Estonia has qualified significantly better than Latvia and Lithuania. Also, Estonia's ranking is often the highest among the transition economies and the EU acceding countries. Ranking by countries is presented in Figure 14 and in attachment B.4. Figure B.13 presents the latest results from some well-known reviews (related scores are presented in attachment B.6).

145. The Index of Economic Freedom aims to compare the most important institutional background factors for economic growth. This empirical study is based on the 50 variables, which are grouped into 10 categories (see Figure B.13). In the latest comparison, Estonia's rank was the best, 6th, while Latvia's rank was 29th and Lithuania's 22nd. Estonia's and Finland's overall score was below 2.00, which means "free". Latvia and Lithuania placed in the category "mostly free".

146. Transparency International's Corruption Perception Index charts levels of corruption in 133 countries. Finland has been the least corrupted country in this comparison. In 2000, Estonia was the least corrupted country among new EU countries, and in 2003 it was second after

Slovenia. Although Estonia's ranking is rather good, it has moved backward during the past years. Lithuania's ranking has been around 40, which is quite good rank among the acceding countries. On the contrary, Latvia has qualified weakly. In 2003 Latvia's ranking was 57th, and among new EU countries, only Poland placed after Latvia. Results from World Bank's study are very similar. Attachment B.5 presents interesting results, when comparing the two dimensions of corruption: administrative corruption and state capture.

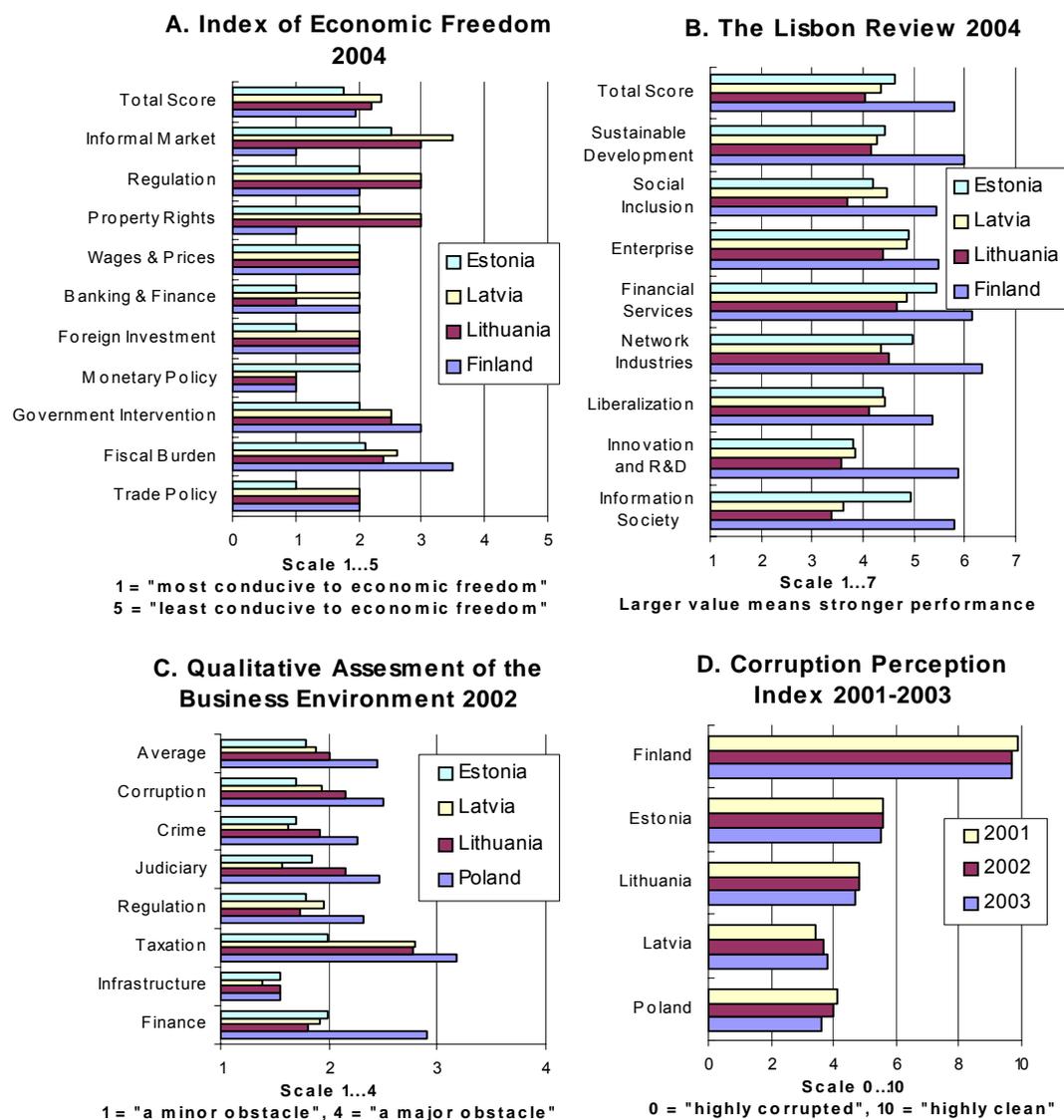


Figure B.13. International comparison of the business environment. Sources: A: The Heritage Foundation; B: World Economic Forum; C: World Bank; D: Transparency International.

147. According to The World Economic Forum's Growth Competitiveness Index 2003-2004, Finland is the most competitive country in the world and United States is the second best. Estonia's ranking was 22nd, Latvia's 37th and Lithuania's 40th among 102 countries. Correspondingly Finland was also the best in Business Competitiveness Index rankings, Estonia 28th, Latvia 29th and Lithuania 40th among 92 countries. Estonia was ranked the best among new EU countries in both of these comparisons.

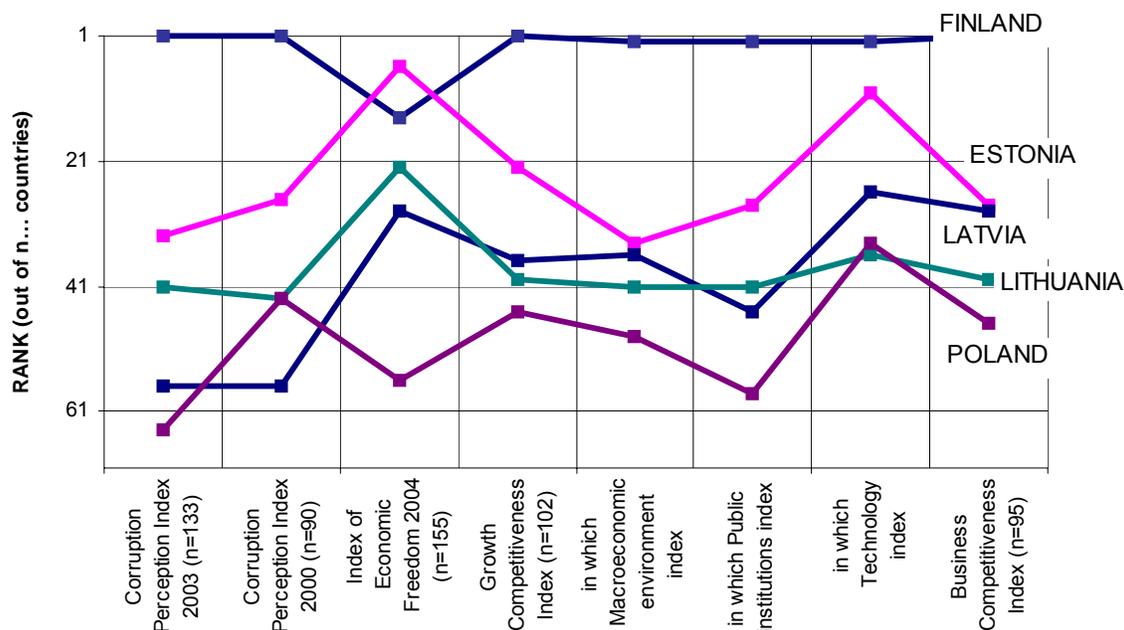


Figure B.14. Ranking of countries; selected development indicators. Sources: The Heritage Foundation (Economic Freedom), Transparency International (CPI), World Economic Forum (all others).

148. Table B.3 presents the most problematic factors for doing business in the Baltic States. We can summarize that the mentioned problems concerning Estonia as “inadequately educated workforce” are quite different compared to Latvia and Lithuania. On the other hand, for example, “inefficient bureaucracy” has been addressed in each of the three Baltic States (see details in attachment B.7).

Table B.3. Top 5 - The Most problematic Factors for doing Business in The Baltic States. Source: World Economic Forum, Executive Opinion Survey (2003)

Rank	Estonia	Latvia	Lithuania
1.	Inadequately educated workforce	Corruption	Tax rates
2.	Inefficient bureaucracy	Inefficient bureaucracy	Inefficient bureaucracy
3.	Access to financing	Tax rates	Tax regulations
4.	Inadequate infrastructure	Tax regulations	Corruption
5.	Poor work ethic	Access to financing	Access to financing

149. In connection to the Parnu seminar (see Ojala et al. 2004), a Logistics Friendliness Survey was conducted in November 2003 - January 2004 among international freight forwarders in order to illustrate how “easy” or “difficult” individual countries are perceived to be from a logistical point of view. The respondents answered on a 7-point scale according to whether they agreed with the statement (7 = totally agree...1 = totally disagree). The statements were formulated positively, such as “Overall, I consider these countries logistically easy to cope with”. Figure B.15. presents the survey results of the overall evaluation of “logistics friendliness” of countries against the data on Gross National Income per capita corrected for purchasing power.

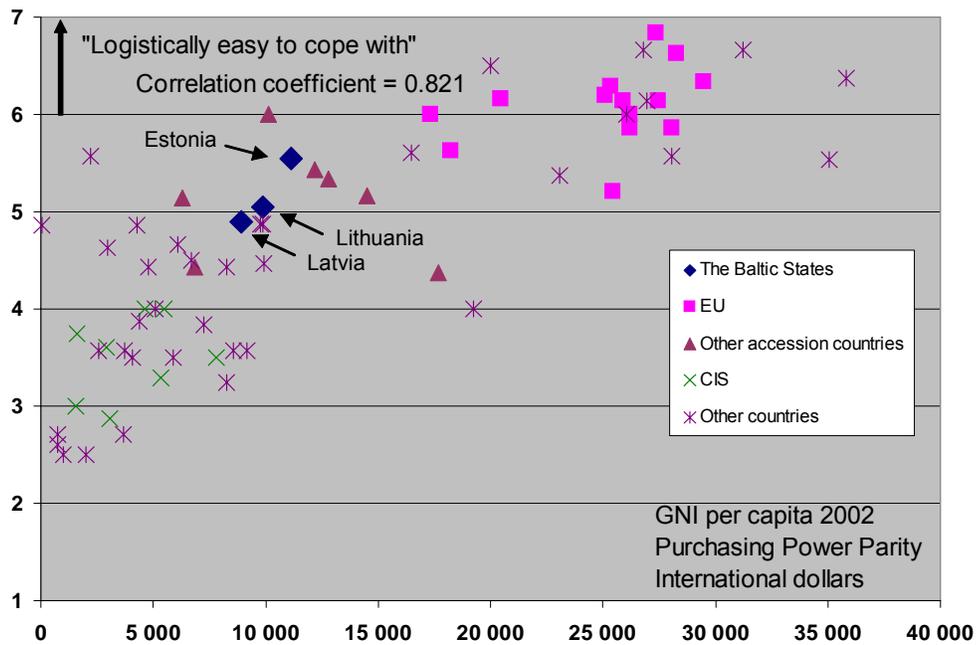


Figure B.15. The ranking of countries in the Logistics Friendliness Survey 2003 against their GNI/capita in PPP terms in 2002. Sources: The World Bank, Data and Statistics (GNI data); Naula and Ojala 2004 (survey data).

150. Despite the simplified concept used, the correlation between logistics friendliness and the GNI per capita is striking. The higher per capita GNI, the easier it is to arrange the logistical practicalities with that country. This is no surprise, but the strong correlation between the logistical friendliness and GNI/capita (0.821) is noteworthy.

151. The results are indicative since they are based on a small number of observations (68 responses, up to nine evaluations per country), which are subjective assessments by professional freight forwarders. According to the survey results, the Baltic States are perceived as fairly easy countries in a logistical sense. Compared against the GNI/capita data, the Baltic States show exceptionally good performance, and they have received substantially higher marks than other, say, former Soviet Republics. On the other hand, the Baltic States lag behind the typical EU countries.

## **C Infrastructures available for international trade**

152. As per membership of the Baltic States in the EU, bilateral agreements have been replaced by common external agreements of the EU. The discontinuation of the bilateral policies has caused some uncertainty especially in the trade relations with the CIS countries. All three Baltic States are members of the WTO.

### **C.1 Free Zones in the region**

153. Free port areas in **Estonia** are found, for example, in Tallinn, Sillamäe and Paldiski. In **Latvia**, licensed companies are according to law on tax application in Latvian free ports and special Economic Zones entitled to apply significant rebates of VAT, customs and excise tax. Companies are also entitled to receive income tax and real estate tax discounts of 80% until return of half of their investments.

154. Ventspils Industrial Park aims to develop infrastructure for unoccupied territories of Ventspils Free Port and build manufacturing facilities in order to allow small and medium sized companies to develop their operations. A territory of more than 1000 hectares has been designated for industrial projects by both Ventspils City Council and Ventspils free port. Land lease agreements offer long-term leases for period of 30 years, with possible prolongation for another 30 years. Lease agreement also allows future purchase of leased buildings.

155. Similar tax advantages are available also in ports of Riga and Liepaja. The complexity of the legislation and formalities may however turn out to be a negative factor in the long run, as some operators of regular transport already today would like their cargoes treated as intra-EU shipments. Transit trade operators are acknowledged to be in a position to take the most advantage of tax discounts.

156. **In Lithuania** the Klaipeda Free Economic Zone (FEZ) is an area occupying 205 hectares located close to the city. It is managed by the Klaipeda Free Economic Zone Management Company, which provides services in order to make the process of setting up easier and faster. Tax incentives available to companies in the Klaipeda FEZ are interpreted under European Union law as state aid for regional development. The incentives comply with European Union law and there should be no uncertainties regarding the functioning of the zone after Lithuania has joined the European Union. The law allows for tax incentives up to 65% of the capital sum invested for small and medium enterprises, and 50% for large enterprises. The economic performance of FEZ's has been mixed, but Klaipeda FEZ has been a rather successful one. For this reason, a short background is shown in Attachment C.1.

157. **Intergovernmental agreement between Lithuania and Russia (2K project) aims at improving cooperation between Klaipeda and Kaliningrad seaports.** The key goal of the 2K agreement is to ensure cargo flows to seaports of Klaipeda and Kaliningrad by coordinating the transportation and handling rates. Wording of the agreement and proposals for unification of railway tariffs were established in the draft agreement, which was discussed and approved at the meeting of the Transport Work Group in Lithuania in July 2003. Final agreement was to be signed in September 2003, but due to disagreements by both parties on the conditions of the contract, this never took place.

158. If realized, the 2K project could potentially be harmful for Estonian and Latvian ports since unification of tariffs to Kaliningrad and Klaipeda would mean reduced competitiveness of their own ports. On the other hand, due to new tariff policy and therefore, increased tariff incomes from Russian transport to Klaipeda port, Russia maybe less interested in the 2K project for the time being.

## **C.2 Banking, Finance, Insurance and legal services**

159. **Access to high quality banking services is good.** Commercial banks have undergone a rapid restructuring during the past few years and the market has been consolidated substantially. A handful of mainly Nordic and German-based banks dominate the financial markets. Insurance markets have also consolidated substantially during the past years, and the availability of commercial insurance services is good.

160. **The supply and quality of legal services in the Baltic States is very good and there are both international and national law firms offering these services.** According to the law firms interviewed for the TTFBS study, the legal environment and the court processes is not a substantial barrier to trade in the Baltic States. In domestic business practices, corruption was occasionally mentioned as an issue that needs to be considered especially in Latvia, and to a lesser degree in Lithuania.

161. Access to legal texts in English is very good in Estonia, but sporadic in Latvia and Lithuania. For example, Estonian legislation is available in full in Estonian and partly in English on the Estlex<sup>12</sup> website. Very good updates of legal development of commercial law in the Baltic States can be found at Sorainen law firm's website both in English and in national languages.<sup>13</sup>

162. **Law firms establish pan-Baltic presence through co-operation with firms in Estonia, Latvia, and Lithuania.** Pan-Baltic co-operation is triggered by especially Finnish and Danish law firms' need to expand their market and as a result of pressure from international clients who increasingly are looking to appoint a single firm for the region. At the same time Baltic States are considered to be too small a market for very big international law firms to enter.

163. The first half of 2004 saw two large Pan-Baltic mergers. Three law offices from Estonia, Latvia and Lithuania set up a strategic association called Lawin. The association brought together 68 attorneys and lawyers. Another merger was formed by four law offices of Finland, Estonia, Latvia and Lithuania under the combined name of RoschierRaidla, with some 150 advocates. In April 2004 another Pan-Baltic law firm Sorainen Law Offices announced a merger with the Latvian law office Petrovs & Taukacs of KPMG. The new firm is a leading law office in the field of mergers and acquisitions in the Baltic States. In addition to these three law firms, also Ernst & Young Baltic AS could be regarded as truly Pan-Baltic operator. Some 18 law firms offer legal services in Lithuania. The largest company is the newly formed Lawin. The Lithuanian legal market is gradually developing, and competition is intensifying for corporate and commercial work as foreign interest in the Baltics picks up. Some firms also report growth in telecoms following the liberalization of the sector at the start of 2003.<sup>14</sup>

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<sup>12</sup> [www.estlex.ee](http://www.estlex.ee)

<sup>13</sup> [www.sorainen.ee](http://www.sorainen.ee)

<sup>14</sup> For further information on consolidation of the legal market, see: [www.legal500.com](http://www.legal500.com)

### C.3 Access to business information

164. **During the past five years, access to business information has improved significantly in the Baltic States.** Information on development in transport and logistics is easily available. Transport issues are widely discussed in the major domestic business newspapers and magazines and well covered by a number of news agencies. In addition, a wide variety of specialized transport and logistics journals and periodicals are available, many of which are partly or wholly published in English too. (See Attachment C.1.)

165. Some specific transport sector data may be difficult to obtain, as is the case with air freight volumes (See Attachment C.2.). In general, transport statistics now conform to Intrastat's requirements, which is EU's statistical body. This has meant that some time-series may not be compatible with these data gathering or reporting principles. This affects all accession countries.

### C.4 Customs services

#### Organizational framework

166. In Estonia and Latvia the customs services and the tax collection authorities are incorporated into one administrative unit. In Lithuania the customs service is an independent unit under the Ministry of Finance. All customs services are members of the World Customs Organization.

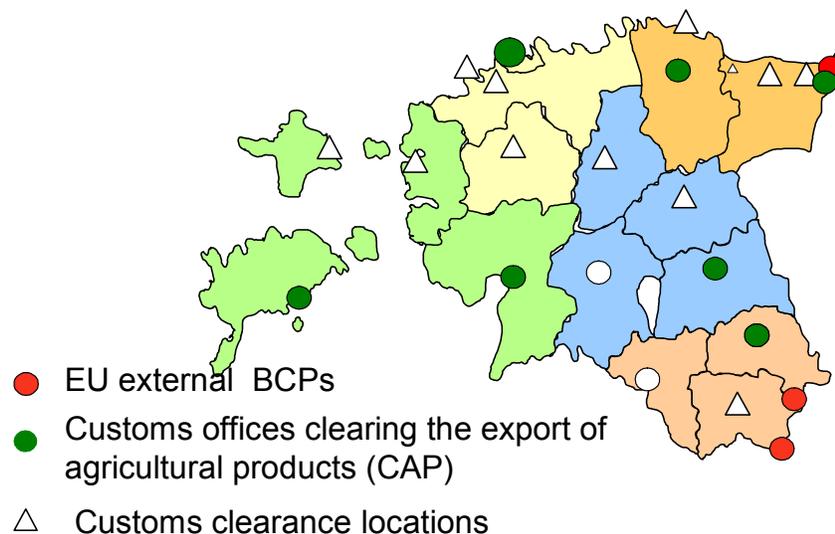


Figure C.1. Customs offices in Estonia as of May 1, 2004.

167. In Estonia, the incorporation of the tax collection and customs service has been successful. The main purpose of the merge was to increase cost-effectiveness and this way to change public attitude towards tax collection. With the investment of EUR 2 million the Government reports yearly savings of EUR 3.2 million. The reform improved operational efficiency and customers' perceptions of the functionality of the Estonian Customs. The number

of administrative areas and the customs clearance posts were reduced roughly into half. The administrative reform was supported by implementing a new IT system, which extended the synergic effects to the operational level.

168. In all three countries customs guarantees are in use for transit of non-cleared goods to inland customs terminals or to the border crossing points. In Estonia, the customs guarantee system was introduced in the early 1990's and in Latvia and Lithuania during the second half of the decade. Compared to the previous practices, which included complex administrative procedures, the customs guarantee system was a great improvement facilitating and expediting the flow of international trade. After the reform, the price level of customs related services quickly went down.

169. The customs guarantee system makes it possible for the shippers to outsource practically all international and domestic logistics activities. However, in Lithuania logistics service providers are not yet able to pay customs duties and taxes on behalf of a customer, although the regulatory environment basically allows it. The challenge is the lack of exchange of operational information between the customs and tax authorities. The Estonian way of joining the tax and customs authorities may be a workable solution to this issue although enhancing the co-operation between the two administrative units with a help of a common IT system could also fix the problem.

### **Key indicators**

170. During recent years the number of customs clearances has risen in all three Baltic States whereas the number of persons employed by the customs boards has remained constant. Simultaneously, the quality of customs services – as indicated by shippers and logistics providers - has clearly improved. Table C.1. presents short term key operational data before the EU membership. Figure C.2. indicates the main Border Crossing Points (BCPs).

171. From May 1, 2004, the number of customs clearances dropped sharply because of joining the common EU customs zone. Although the work load in actual customs operations decreased, the three Baltic States now control part of the EU Eastern border with Russia and Byelorussia. The lengths of the land borders between the Baltic States and CIS countries (Russia and Byelorussia) are as following:

- Estonia – Russia 290 km
- Latvia – Russia 217 km
- Latvia – Byelorussia 141 km
- Lithuania – Russia (Kaliningrad region) 227 km
- Lithuania – Byelorussia 502 km

172. In all three countries it is possible to make a customs entry in electronic format. In Estonia, roughly one third of all declarations are made electronically. Generally the usage of EDI is growing also in Latvia and Lithuania.



Figure C.2. The main international border crossing points in the Baltic States in June 2004. Source: Map: University of Alabama. Compiled by the TTFBS team.

Table C.1. Key operational data on customs services of the Baltic States 2003/I – 2004/I.  
Source: Customs services of Estonia, Latvia and Lithuania.

<b>ESTONIA</b>	<b>2003 /I</b>	<b>2003 /II</b>	<b>2003 /III</b>	<b>2003 /IV</b>	<b>2004 /I</b>
Import declarations (no.)	122 154	158 193	156 774	171 190	159 641
Export declarations (no.)	66 818	80 445	80 126	85 143	81 867
Import declarations made electronically (no.)	24 733	37 223	42 748	63 040	52 000
Export declarations made electronically (no.)	10 889	16 191	18 653	22 269	22 926
Import declarations made electronically (%)	20.2%	23.5%	27.3%	36.8%	32.6%
Export declarations made electronically (%)	16%	20%	23%	26%	28%
Import declarations subject to documentary controls (%)	5.4%	6.2%	5.5%	6.7%	4.0%
Import declarations subject to physical controls (%)	1.7%	1.6%	1.5%	1.4%	1.4%
Export declarations subject to physical controls (%)	0.6%	0.9%	0.6%	0.6%	0.6%
Physical controls subject to laboratory tests (% of imports)	0.1%	1.8%	0.5%	1.5%	0.7%
Physical controls subject to laboratory tests (% of exports)	0.1%	1.8%	0.5%	1.5%	0.0%
<b>LATVIA</b>	<b>2003 /I</b>	<b>2003 /II</b>	<b>2003 /III</b>	<b>2003 /IV</b>	<b>2004 /I</b>
Import declarations (no.)	n/a	n/a	n/a	n/a	n/a
Export declarations (no.)	n/a	n/a	n/a	n/a	n/a
Import declarations made electronically (no.)	n/a	n/a	n/a	n/a	n/a
Export declarations made electronically (no.)	n/a	n/a	n/a	n/a	n/a
Import declarations made electronically (%)	n/a	n/a	n/a	n/a	n/a
Export declarations made electronically (%)	n/a	n/a	n/a	n/a	n/a
Import declarations subject to documentary controls (%)	n/a	n/a	n/a	n/a	n/a
Import declarations subject to physical controls (%)	n/a	n/a	n/a	n/a	n/a
Export declarations subject to physical controls (%)	n/a	n/a	n/a	n/a	n/a
Physical controls subject to laboratory tests (% of imports)	n/a	n/a	n/a	n/a	n/a
Physical controls subject to laboratory tests (% of exports)	n/a	n/a	n/a	n/a	n/a
<b>LITHUANIA</b>	<b>2003 /I</b>	<b>2003 /II</b>	<b>2003 /III</b>	<b>2003 /IV</b>	<b>2004 /I</b>
Import declarations (no.)	175 858	220 160	224 202	234 270	202 207
Export declarations (no.)	86 768	104 726	103 426	103 862	98 420
Import declarations made electronically (no.)	0	0	439	14 960	18 233
Export declarations made electronically (no.)	0	0	67	4 144	5 561
Import declarations made electronically (%)	0 %	0 %	0 %	6,4 %	9.0 %
Export declarations made electronically (%)	0,0	0,0	0,0	0,0	6.0%
Import declarations subject to documentary controls (%)	76,3%	74,0%	78,9%	79,1%	66.7%
Import declarations subject to physical controls (%)	51,4%	33,4%	25,2%	24,6%	15.1%
Export declarations subject to physical controls (%)	59,4%	47,7%	37,9%	28,0%	18.0%
Physical controls subject to laboratory tests (% of imports)	0,5%	0,4%	0,9%	1,2%	1.3%
Physical controls subject to laboratory tests (% of exports)	0,0%	0,0%	0,0%	0,0%	0.0%

173. According to EU customs zone practice, risk analysis is used in all three countries. However, there are significant differences in the shares of physical inspections: in Lithuania the share ranges from 18% to 50% whereas in Estonia less than 2% of the declarations are inspected. It is also notable the less inspections were made towards the EU accession in May 1, 2004. One reason may be switching from pre-EU practices to the common EU standard inspections, which set considerably higher requirements to inspection facilities and equipment. Not all inspection facilities were yet taken in use at the time of EU accession and part of them were still under construction.

## **Organizational framework**

174. EU membership profoundly affects the customs. Extensive preparations have taken place in administrative processes, customs codes, statistics and the organization of the Customs. However, the changes have not always facilitated trade and transport. Before the membership, the Baltic States could simplify customs procedures further than is possible in the EU. This is the case of Estonia, in particular, where the Customs Board could co-operate with private firms by making separate agreements, which supported individual firms supply chains. In the EU, such practices are no longer possible.

## **IT systems**

175. Each of the countries has adopted the Automated System of Customs Data Management (ASYCUDA) Version 1.18, which corresponds to requirements of the EU. However, it is not used in intra-EU trade, so its main usage is in trade with non-EU countries.

176. In Latvia, the implementation of ASYCUDA started in 1998 and the first pilot office was in operation in June, 1999. Implementation was finished on 1 August, 2003, when all the customs offices were connected to the system. The main functionalities used are Import/Export clearance, transit control (T1 until 01.05.2004, and TIR Carnets), limited use of Cargo manifest control, accounting at the Customs office level.

177. According to Latvian experiences, the workability of ASYCUDA system varies by the version; the next version mostly solves the problems discovered in the previous ones, but the new functionalities in the new version not always are stable. Problems occur if major alterations must be introduced such as because of changes in the legislation.

178. In general, ASYCUDA is a good system for those purposes and functionalities, for which it is designed, but some significant problems were mentioned in the interviews. The main problems in maintenance and system improvement were:

- No access to the source code was available (apart from the last version v.1.18).
- The reaction from the developer's side (UNCTAD) to the reported problems and faults is slow and sometimes no responses are received.
- The available information about the improvements in the new versions not always is detailed enough to allow smooth implementation by the National Customs Board.

179. Post-implementation support of ASYCYDA system is also considered a problem, because for each consultation a separate agreement must be concluded between UNCTAD and national administrations. Allocating the necessary financing for each such contract is sometimes difficult through state procurement procedures.

180. Criticism of ASYCUDA pertain also to the system's technological level, which does not correspond to contemporary IT technology (e.g. ASYCUDA still uses DOS operative system for Client software, restrictions to integrate with Internet technologies). In 2003 UNCTAD announced ASYCUDA World, which is fully in accordance with today's IT environment. The development of the new system is now completed, and, for example, Latvian Customs Service plans to use it in the near future.

181. Figure C.3. presents the value chain of the Estonian Tax and Customs Board and how the IT systems are constructed to support the exchange of information between users on different levels of the organization and the customers.

182. The Integrated Tariff of the Community (TARIC : acronym for "Tarif Intégré de la Communauté") is an instrument which contains the 15,000 tariff lines in use in the EU common customs zone including all third country and preferential duty rates actually applicable as well as all commercial policy measures. The TARIC comprises the Community legislation and it constitutes an instrument for practical use and information, but does not have a legal status in itself. The TARIC serves as a direct basis for the preparation of the EU member states working tariffs. Another field for the application of TARIC codes is in automated customs clearance. The use of the TARIC codes is obligatory in customs.

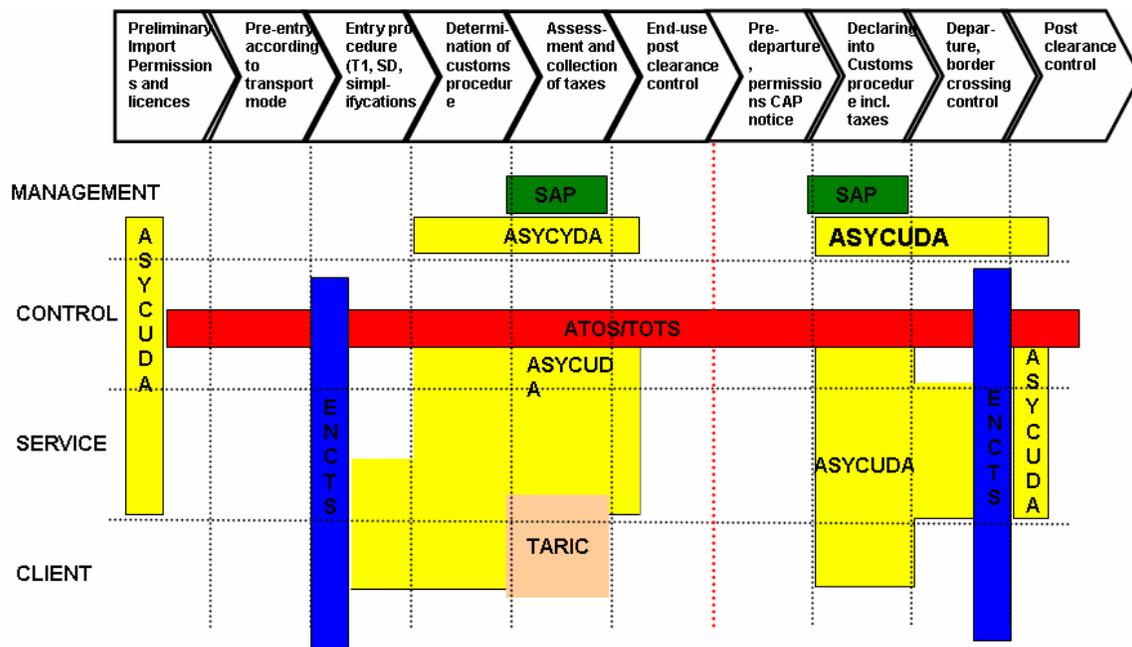


Figure C.3. The value chain of the Estonian Tax and Customs Board and the related IT systems (Source Estonian Tax and Customs Board).

183. In Estonia, a special Internet based application, Eesti Tollitariifistik – ETT (Estonian Master Tariff System – EMTS) has been created to facilitate importers' access to the TARIC database. The web tool calculates duties and taxes payable in Estonia for goods of different preferential status. Latvian State Revenue Service has bought the Estonian EMTS system to be implemented in Latvia but in May 2004 the system was not yet taken in use there.

184. The New Computerized Transit System (NCTS) was taken in use in all the three countries starting from May 1, 2004. The system makes possible to better control the movements of non-cleared shipments, which are transited through the EU customs zone. NCTS also significantly facilitates international trade because it allows electronic entries using the EDIFACT

standard. In Estonia there are 44 transit customs offices where the NCTS is in use. In Latvia there are 39 and in Lithuania 50.

185. The European Commission maintains a database, which includes information on all transit customs offices in the EU. The database includes details such as the code of the office, location and contact information.<sup>15</sup> The list is constantly updated.

186. A related database is available on veterinary and phyto-sanitary border inspection points in the EU. The most recent list of these is shown in Attachment G.1. and G.2. Since May 2004, especially the veterinary inspection issues have been a constant source of complications in the trade between EU and Russia.

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<sup>15</sup> The list of the transit customs offices in the Baltic States and in all other EU member states can be downloaded at: [http://europa.eu.int/comm/taxation\\_customs/dds/en/csrdquer.htm](http://europa.eu.int/comm/taxation_customs/dds/en/csrdquer.htm)

## D Transport infrastructure developments

### D.1 Roads and road transport

187. In road administration, there has been a shift towards more efficient working practices, and both organizational and institutional arrangements in the road sector in all the three countries. Whereas the maintenance of the road infrastructure is still mainly a public sector responsibility, the design and construction is today entirely carried out by the private sector (Figure D.1.). These contracts are increasingly being awarded through competitive bidding (or equivalent) procedures.

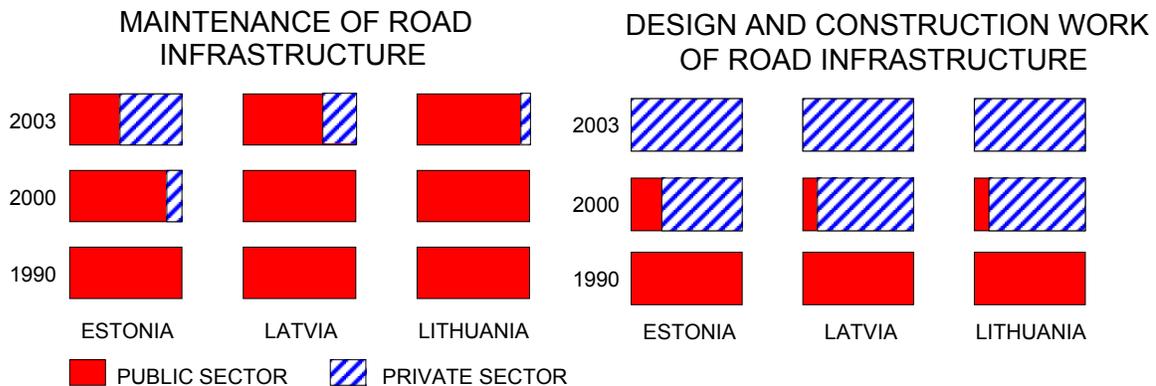


Figure D.1. The roles of the private and the public sector in road infrastructure management

188. In each country, approximately 20,000 km of roads is owned and maintained by the national road authorities, which are part of central government. Local government, which means primarily the municipalities, owns and operates 21,243 km of roads in Estonia, 38,968 km in Latvia and 52,097 km in Lithuania (Table D.1). Since 2002, the share of road maintenance that is contracted out to the private sector has increased rapidly especially in Estonia. The length of the road network and its reach is adequate but the quality of the road network is not. Rural and secondary roads and some access roads are in need of maintenance and upgrading.

189. **Traffic safety is a serious concern in all three countries** and the number of fatalities in road traffic is very high. Compared with other European countries, for example, Sweden and Finland, the number of deaths in road accidents per 1 million inhabitants is three to five times higher. Slight overall safety improvement can be seen when exploring the statistical data on traffic accidents in relation to traffic volumes<sup>16</sup>.

190. **Motorization of the Baltic countries has been rapid.** The number of vehicles grew by 60% - 80% in 1992-1998, and it has continued especially in Latvia and Lithuania (Table D.2.). In Estonia, the passenger car stock has actually declined after 2000, which is mainly attributable to the withdrawal of old cars from the vehicle stock

<sup>16</sup> For further reference, see eg. Chapter G. in Ojala et al. 2004

Table D.1: The ownership and maintenance of road network in Estonia, Latvia, and Lithuania by end of year 2002, by road length in kilometers.

	Ownership	Maintenance
	<u>km</u>	<u>km</u>
<b><u>Estonia</u></b>		
Central Government	16,443	7,778
Local and Town Government	21,243	21,243
Private Sector	7,622	national roads: 8,665 private owners: 7,522
Other roads (forest and land roads)	9,860	
All road network	55,168	
<b><u>Latvia</u></b>		
Central Government	20,279	20,279
Local and Town Government	38,968	38,968
State forest industry	6,320	6,320
Private Sector	3,500	3,500
All road network	69,067	69,067
<b><u>Lithuania</u></b>		
Central Government	21,335	21,335
Local and Town Government	52,097	52,097
Private Sector	< 1000 km	-
All road network excl. private sector	73,432	

191. The number of passenger cars has risen particularly fast in Lithuania. In 2002, there were 340 passenger cars per 1,000 population. This is close to the EU level: there were 350 cars per 1,000 population in Denmark, 380 in Finland and 420 in Sweden and over 500 in Germany. Also the absolute number of passenger cars in Lithuania has grown from less than 0.8 million in 1996 to almost 1.2 million in 2002. According to data gathered by ECMT, over 93,000 first registrations of brand new road vehicles were recorded in Lithuania in 2002. The figure for new registration in Estonia was 14,700 and 8,200 in Latvia in 2002.<sup>17</sup> Trends concerning the stock of commercial vehicles are mixed. The number of buses and coaches has actually declined from the peak of 1990, while the number of trucks and other goods vehicles has increased.

192. **Road construction companies have been privatized entirely in Estonia, Latvia and Lithuania.** Privatization of road administration has been a clear trend in the 1990s in the three countries. At the same time, the number of employees in road administration has declined (Figure D.2.). In Latvia and Lithuania, the structure has changed very dramatically. However, the effects of the improved efficiency of the personnel and higher competence in the road network administration can now be seen in better quality of the works done and more efficient planning and management instruments.

<sup>17</sup> ECMT Quartely statistics at: <http://www1.oecd.org/cem/stat/conjonct/3rdQ.htm>

Table D.2.: Vehicle Stock in Via Baltica countries 1995-2002, thousand vehicles. Source: Estonian, Lithuanian, Polish statistics offices and Latvian Road Transport Safety Directorate

		Thousand vehicles				
		Passenger cars	Buses	Lorries and special vehicles	Motorcycles	Trailers and semi-trailers
Estonia	1996	406,6	6,7	71,3	4,7	29,3
	1998	451,0	6,3	80,6	6,1	35,8
	2000	463,9	6,1	82,1	6,7	37,5
	2002	400,7	5,3	80,2	7,3	37,4
Latvia	1996	379,9	17,3	72,9	18,4	45,9
	1998	482,7	11,5	84,9	19,4	51,6
	2000	556,8	11,5	97,1	20,7	55,5
	2002	619,1	11,2	102,7	22,2	59,0
Lithuania	1996	785,1	15,5	* 104,6	19,4	-
	1998	980,9	15,2	* 114,5	19,3	-
	2000	1 172,4	15,1	* 110,4	19,8	-
	2002	1 180,9	15,4	* 115,8	21,0	-
*) Lorries, road tractors, special purpose vehicles						

193. Road maintenance in Estonia and Lithuania has been so far the responsibility of regional road administrations, whereas in Latvia, some municipalities also have their own maintenance enterprises for routine maintenance.

194. Competitive bidding in contracting out is used almost exclusively in rehabilitation, reconstruction and new construction in all three countries. In Estonia and Lithuania, international tenders are organized for projects bigger than 5 million euros.

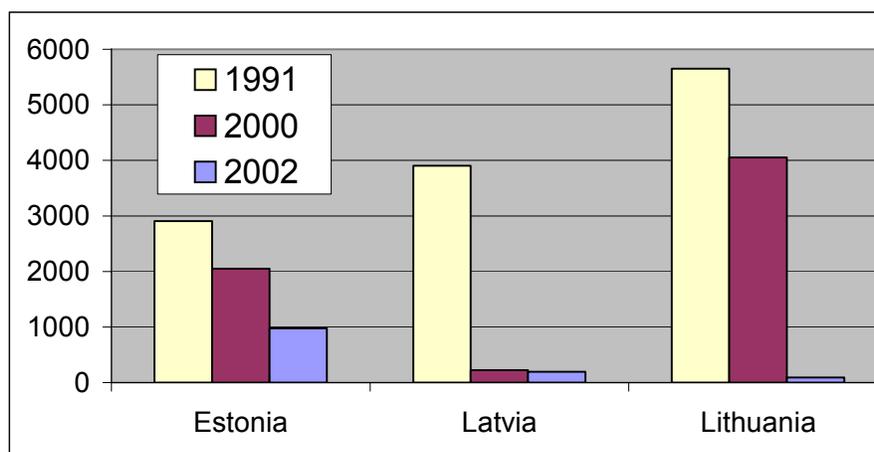


Figure D.2. The national road administration employees in Estonia, Latvia and Lithuania 1991-2002.

195. The force account has traditionally taken care of almost all maintenance, whereas contractors have carried out capital improvement. Contractors are selected by a process of international competitive bidding. The capacity of the local construction industry is reportedly adequate to ensure competition. In IBRD projects, the standard bidding documents are in

accordance with the policies and procedures laid down in the IBRD Guidelines. Procurement under PHARE or ISPA is carried out according to FIDIC rules.

196. In Estonia, the former 15 Road Districts (RD's) were consolidated into seven RDs as of January 1, 2003. In April 2003 the RDs were reduced to six. The RDs carry out summer and winter maintenance both by force account and contract with private contractors (and, in one case, a joint stock company). In mid-2003, about 58 percent of the national roads (in terms of km) have routine maintenance contracted out, but this share will reach 63 % in December 2003.

197. In Latvia, a 5-year contract for routine maintenance has been applied from 1998, based on unit cost (performance-based contract for the winter maintenance of main roads since the winter 1999/2000). In Latvia, contractors take care of both maintenance and capital improvement. The procurement of road works is made according to the law "On Public Procurement" and all contracts above 50,000 LVL using competitive bidding. The contract is normally awarded to the bidder who has passed the qualification criteria and who has offered a technically acceptable bid at the lowest price. Competition in 2000 has increased substantially due to the over capacity of industry in comparison to the annual budget for road rehabilitation.

198. In Lithuania, routine maintenance is mainly carried out by the force account of regional road administrations. In addition, for the performance of some works, regional road administrations have sub-contractors, selected on a tender basis using unit cost contracts. Road construction companies were privatized just after the restoration of independence, and at present they are private companies with fairly modern equipment and technologies. In competitive bidding, the Lithuanian companies often have a priority in that they are able to offer lower prices for sufficiently high quality works.

## D.2 Maritime transport and ports

199. The Government owns port administrations in the large ports, whereas smaller ports or harbors may belong to municipalities, or as in Estonia, they may be privately owned. Private companies carry out the port work (stevedoring, warehousing; Figure D.3). Private sector participation in port operations has increased significantly, driven by increased opportunities made available as the role of public authorities has become more limited. The major ports as well as the privately-run cargo handling operations in them have been very profitable. Liner shipping in the Baltic States area is to a great extent in the hands of international shipping companies.

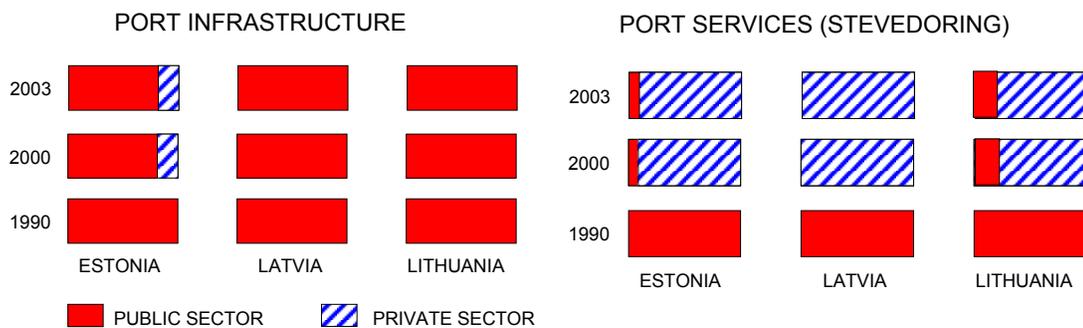


Figure D.3. The roles of the private and the public sector in port infrastructure management and cargo-handling services in ports. Source: Ojala et.al. 2004, 132.

200. In the maritime sector, the main regulatory issues include manning of the vessels, safety at sea and in ports, as well as keeping up with the inspection of the technical, safety requirements of vessels. The inspection involves both national and foreign vessels through Port State Control.

## Ports

201. The only ports with a cargo turnover of 1 million tons in 2003 are Tallinn, Kunda and Parnu in Estonia, Ventspils, Riga and Liepaja in Latvia, and Klaipeda and Butinge in Lithuania.

Table D.3. Cargo traffic in major seaports in Baltic States, and for reference the Ports of St. Petersburg and Kaliningrad in 1995-2003, millions of tons. Source: Estonian, Latvian and Lithuanian MoTC, Port statistics

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003
Port of Tallinn	13.0	14.1	17.1	21.4	26.4	29.3	32.3	37.8	37.6
Other Estonian ports	1.7	3.2	6.1	6.0	8.0	10.5	9.0	9.0	9.6
<b>Estonian ports Total</b>	<b>14.7</b>	<b>17.3</b>	<b>23.2</b>	<b>27.4</b>	<b>34.4</b>	<b>39.8</b>	<b>41.3</b>	<b>46.8</b>	<b>47.2</b>
Port of Ventspils	29.6	35.7	36.8	36.0	34.1	34.8	37.9	28.7	27.3
Port of Riga	7.5	7.5	11.2	13.3	12.0	13.4	14.9	18.1	21.7
Port of Liepaja	1.4	1.6	2.3	2.3	2.3	3.0	3.3	4.3	4.9
Other Latvian ports	0.5	0.3	0.4	0.7	0.7	0.6	0.8	1.1	0.9
<b>Latvian ports Total</b>	<b>39.0</b>	<b>45.0</b>	<b>50.7</b>	<b>52.3</b>	<b>49.0</b>	<b>51.8</b>	<b>56.9</b>	<b>52.2</b>	<b>54.8</b>
Klaipeda State Seaport	12.7	14.8	16.1	15.0	15.0	19.4	17.2	19.7	21.2
Butinge Oil Terminal	-	-	-	-	0.7	3.5	5.1	6.2	10.7
<b>Lithuania Total</b>	<b>12.7</b>	<b>14.8</b>	<b>16.1</b>	<b>15.0</b>	<b>15.6</b>	<b>22.9</b>	<b>22.3</b>	<b>25.9</b>	<b>31.9</b>
<b>Baltic States' total</b>	<b>66.4</b>	<b>77.1</b>	<b>90.0</b>	<b>94.7</b>	<b>99.0</b>	<b>114.5</b>	<b>120.5</b>	<b>124.9</b>	<b>133.9</b>
<i>St. Petersburg</i>	<i>17.1</i>	<i>16.0</i>	<i>20.6</i>	<i>21.6</i>	<i>28.2</i>	<i>32.4</i>	<i>36.9</i>	<i>42.7</i>	<i>42.0</i>
<i>Kaliningrad</i>	<i>4.6</i>	<i>5.4</i>	<i>5.9</i>	<i>4.4</i>	<i>4.1</i>	<i>4.3</i>	<i>5.8</i>	<i>9.5</i>	<i>12.7</i>

202. In 2003, around 50 percent of the cargo in Latvian ports comprised crude oil and oil products, but the share has shown a declining trend. In Estonia the corresponding figure was over 50 percent and increasing and more than 50 percent for Lithuania. (Table D.3.)

203. Only the Port of Tallinn has significant international passenger movements, with around 6 million passengers in 2000-2002. There are no other ports in the three Baltic States, which operate more than 300,000 passengers in international traffic per year.

204. In Estonia, the islands of Saaremaa and Hiiumaa generate domestic ferry traffic, where the travel distance is approximately 40 km. In 2001, 1.3 million passengers and 0.3 million tons of cargo was carried by the state-owned Saarte Liinid AS.

## Port organization and activities

205. The prevalent port management practice in the Baltic States is the landlord port, where the owner of land area is either the Government or the Municipality, whereas private companies

carry out cargo handling operations and other services related with port activities. The landlord type of port is the most common arrangement as 75 percent of EU ports also fall into this category.

Table D.4. Income statement data from major ports in USD million in 1999-2003. Source: Port statistics

		1999	2000	2001	2002	2003
Port of Tallinn	Revenue	52.6	55.1	51.2	66.0	79.4
	Costs	30.8	29.0	28.3	37.1	44.6
	Depreciation	8.9	7.5	7.5	10.6	12.7
	Tax	0.3	0.0	0.0	0.0	3.9
	Profit	19.0	28.1	24.4	29.0	18.2
Freeport of Riga	Revenue	12.9	16.6	24.8	33.2	-
	Costs	6.6	9.5	14.8	15.4	-
	Depreciation	1.6	2.4	6.0	6.6	-
	Tax	0.7	0.5	0.7	0.7	-
	Profit	3.4	2.2	0.3	8.5	-
Klaipeda SSA	Revenue	22.7	28.2	24.8	32.5	-
	Costs	8.0	11.7	14.3	15.1	-
	Depreciation	3.5	5.0	5.7	6.8	-
	Tax	0.0	0.0	0.0	0.0	-
	Profit	10.3	11.5	4.8	10.6	-

206. Independent stevedoring companies, shipbuilding and ship repair yards operate within the port area on the basis of land lease contract agreements with the Port Authority. The Port companies own and use the superstructure.

207. The port authorities in major ports have shown very good economic results in 1999-2002, and the preliminary data for 2003 is also very good. (Table D.4.) Labour costs account, on average in 1999-2002, 19 per cent of revenues in Riga, 16 per cent in Tallinn and 12 per cent in Klaipeda. In 2003 the economic result in Tallinn port decreased as a result of increased competition between ports in the eastern side of the Baltic Sea. Revenue increases in 2003 are largely due to change in USD exchange rate.

208. **Estonian ports.** There are a total of 101 ports in Estonia both publicly and privately owned, 31 of which provide operations related to international merchant marine. There are two public limited companies, which operate public ports: the Port of Tallinn and Island's Lines, and the state is the sole shareholder of these two companies.

209. Saarte Liinid AS (Island's Lines) operates small ports of Roomassaare, Virtsu, Kuivastu, Rohuküla, Heltermaa, and Sviby, which maintain coastal traffic and ferry connections between the mainland and islands of West-Estonia.

210. The Port of Tallinn consists of four constituent harbors: the Old City Harbor, the Muuga Harbor, the Paljassaare Harbor, and the Paldiski South Harbor. In the Port of Tallinn, the Old City Harbor is the main port for passenger traffic with about 6 million passengers per year. It also provides Ro-Ro and Lo-Lo services, and has a container and general cargo terminal. Muuga Harbor handles liquid and dry bulk, general, and reefer cargo, and has facilities for Ro-Ro and

container handling. It also has storage areas for vehicles and timber. Vessels with a draft of 15.3 meters, i.e. largest to sail on the Baltic Sea, can be accommodated at the port.

211. Construction of both a new container terminal, with the capacity of 250,000 TEU per year, and of a new coal terminal is under way. Paljassaare Harbor has terminals for both liquid and dry bulk and for general cargo, including a reefer complex. The Paldiski South Harbor handles mainly scrap metal, timber, dry bulk, peat and Ro-Ro cargo. A new quay for peat handling is being constructed.

212. The Port of Tallinn operates as a classic landlord port owning only the infrastructure. The superstructure and equipment are owned and operated by private firms. Other ports and their facilities are privately owned. In some ports, of which the biggest are Parnu, the north western port of Paldiski and the Miiduranna port, municipal authorities together with private companies have shareholding interests.

213. A container terminal in Muuga was financed jointly by Port cash flow, and by financial instruments from the operators, which include Rotterdam-based Europe Containers Terminals (ECT) and Estonian logistics group Transiidikeskuse AS. The two-berth terminal has been in operation since 2001.

214. **Latvian ports.** Latvia has three large ports – Ventspils, Riga, and Liepaja – and seven small ports that handle mainly timber and timber products. Port land may be a property of the state, local government or other legal entities or physical persons. Only the state and local government are entitled to buy port land and it is forbidden for the Port Authority to sell the port land. Port waters are the property of the state and both these and state land is assigned into the possession of the respective port authority. This excludes that state land which serves as railroad infrastructure: these areas are administered as part of the state public railroad infrastructure.

215. Quays at the ports of Riga, Liepaja, and Ventspils are the property of the state or local government, but port superstructure and equipment (warehouses, cranes, forklifts etc.) are privately owned. The land belonging to the state or local government is normally let or leased to private companies on the basis of contract agreements concluded with the Port Authority. In 2003, the Government has wanted to take a stronger position in the management of the ports of Riga and Ventspils, which has caused some unrest between the port management and the Government.

216. Ventspils port deals mainly with oil and chemical cargo. Maximal draught in the river navigation channel is 15.0 m. Riga port handles mainly general cargo and bulk cargoes, but it also turns over oil products and reefer cargoes, and caters for passenger ships and RoRo cargo units. Maximal draught in the river navigation channel is 10.6 m. Liepaja port handles transhipment of timber, metals, bulk and liquid cargo, Ro/Ro, and fish. Maximum draught in the river navigation channel is 9.5 m. Seven small ports handle small tonnage ships and commodities such as timber.

217. Port Authorities in Latvia are non-profit organizations. The financial resources at the disposal of the Port Authority may be used only for the maintenance and development of the port and its infrastructure and for performing its functions. Port Authorities finance new public investments in Latvian ports.

218. Neither the Port Authority, the state nor local Governments publicly subsidize ship or cargo handling activities in the port. Within the framework of the Public Investment Program, Government has provided sovereign guarantees for loans aimed at the development of the

infrastructure. The Port Authorities repay the loans. At certain occasions the Port Authorities however treat shipping companies operating in the port unequally and varying interpretations regarding port due rebates have caused harm to foreign-owned shipping companies. Port of Riga and Riga municipality are also major owners of a RoRo-passenger line which has received both large scale port due rebates and public loan guarantees in order to finance vessel purchase.

219. **Lithuanian ports.** In Lithuania, the land territory, port waters, hydrotechnical equipment, quay-walls, navigation channels and routes, aids to navigation and other infrastructure objects belong to the State. Under control of Ministry of Transport the Klaipeda State Seaport Authority is responsible for the management of state-owned objects that are within the territory of the port and the Port Authority is responsible for the reconstruction and modernization of the port infrastructure. In Lithuania, the operation of port infrastructure generates a profit, which is invested in port facilities. Revenues from port activities (mainly from port dues and land leasing) balance the financing of new public investment in Port of Klaipeda. Most of income is derived from port dues and the share of land lease income is marginal. After reconstruction of quays and large-scale dredging works Klaipeda port can accommodate oil tankers with a maximum draft of 14.5 metres and 90.000 tons as well as Panamax dry cargo vessels of 70.000 tons cargo capacity.

220. Independent stevedoring companies, as well as shipbuilding and ship repair yards, operate within the port area, on the basis of land lease contact agreements concluded with the Port Authority. The Port companies use the superstructure - handling and ship repair equipment, warehouses and etc. – and all stevedoring companies are private, except j/s “Klaipedos nafta”

221. There are 14 stevedoring companies in Klaipeda Seaport. Klaipeda Stevedoring Company (KLASCO), owned by concern Achema Group, is the largest in Lithuania, handling more than half of the cargo through the port. The KLASCO comprises of a general cargo port, an international ferry terminal and a container terminal opened after 1999. Lithuanian Government is the main shareholder of J/S Klaipedos Nafta, which handles some 7 million tons of cargo. Hence the stevedoring field in Figure D.3. is partly shaded in red. Other big companies in Klaipeda Seaport include J/s Klaipedos smelte and j/s Bega, which specialize in general and bulk freight.

### **D.3 Railways**

222. Railway restructuring has been prepared in all three countries, including privatization in Estonia. In Latvia a small part of freight and passenger transportation on state owned infrastructure has been performed by newly established private companies. Railway services in Lithuania are owned by the public sector. (Figure D.4.)

223. Estonia has privatized its railways in a process where Edelaraudtee was transferred to private ownership by February 2001. Eesti Raudtee (Estonian Railways) was eventually privatized in 2001, with the Government retaining a 34% share in Estonian Railways Ltd. Both processes were problematic, and the developments seriously affected the working of the Government and the Estonian privatization agency. The political debate at that time was close to reversing the anticipated privatization of Estonian Railways. Railway restructuring has been a politically problematic process also in Latvia and Lithuania.

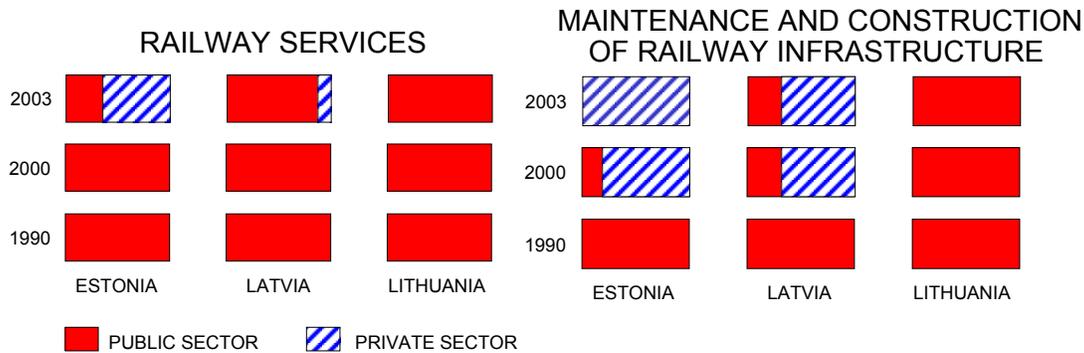


Figure D.4. The roles of the private and the public sector in rail transport services. (left: freight and passengers) and in maintenance and construction of rail infrastructure (right). Source: Ojala et.al. 2004, 121.

### Rail infrastructure maintenance

224. In Estonia, major maintenance and reconstruction works on the track are carried out by outside contractors. For overhauls and repairs of the rolling stock, the railway companies have their own depots but those works are partly contracted out as well. According to the Latvian Railways, LDz(spell out): “Regulation on ordering works, supplies and services”, all works, supplies and services, the value of which exceed 5,000 LVL (USD 8,350), should be ordered through tender.

225. Lithuanian railways (LG) perform track replacements and maintenance as well as track relaying and upgrading. Own labor force at the depots repairs LG rolling stock: the same applies to assemblies, whenever possible, but certain types of repairs are contracted to local and foreign contractors. Separation of rail services from infrastructure maintenance is near the finish; the creation of a unit of infrastructure maintenance and management and a unit of infrastructure property took place on December 31, 2003.

### Freedom of access to the railway infrastructure within the EU

226. One of the main concerns for railways in the Baltic States is the interoperability with other European railways. The so-called second railway package<sup>18</sup> set by the European Commission aims at putting end to the physical and technical barriers in the European freight railway transport, and thus, accelerating the integration of the European railway sector. The objective is to extend infrastructure access rights to services within a member state and open up the market for new railway operators. The agreed date for complete opening of the rail freight markets, including cabotage, is January 1, 2007. The second railway package also outlines a proposal for a directive on railway safety concerning the definition of the essential features of safety systems for infrastructure managers and railway undertakings.

<sup>18</sup> See: European Union press release on April 22, 2004 at: <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/516&format=HTML&aged=0&language=EN&guiLanguage=en>

227. The motive behind the second railway package is the continuous decline of rail freight's share of the total transported goods. At the moment only 8 % of cargo in the Europe is transported by rail, whereas in the United States the share is nearly 40 %. Also the opening of the railway freight market has been very slow and new entrants share only 3 to 4 % of the market.

228. In March 2004, European Commission also presented the third railway<sup>19</sup> package proposing to continue the reform of the railway sector by opening up international passenger services to competition to passengers. It is proposed that as from 1 January 2010, railway undertakings which have a license and the required safety certificates should be able to operate international services in the European Union area.

229. According to the Rail Liberalization Index 2004<sup>20</sup>, conducted by the EC, all the Baltic countries lag behind the original schedule for interoperability (Figure D.5.). From the EU's point of view, rail liberalization means that competition is allowed in rail transport services. Latvia has made the greatest progress in this respect and belong to the second category together with countries such as Norway, Austria, Poland, Czech Republic, Finland, Luxembourg, Belgium, Slovakia, Hungary, Slovenia and France. Latvia has already harmonized parts of its railway legislation with EU directives. However, the process of restructuring the railway sector has not been completed. Above all, the split of the competences on the issue of licenses and safety certificates can be considered an obstacle for external railway undertakings that enter the Latvian rail market. However, there are first signs for competition in Latvian rail freight transport as two new railway undertakings have entered the market.

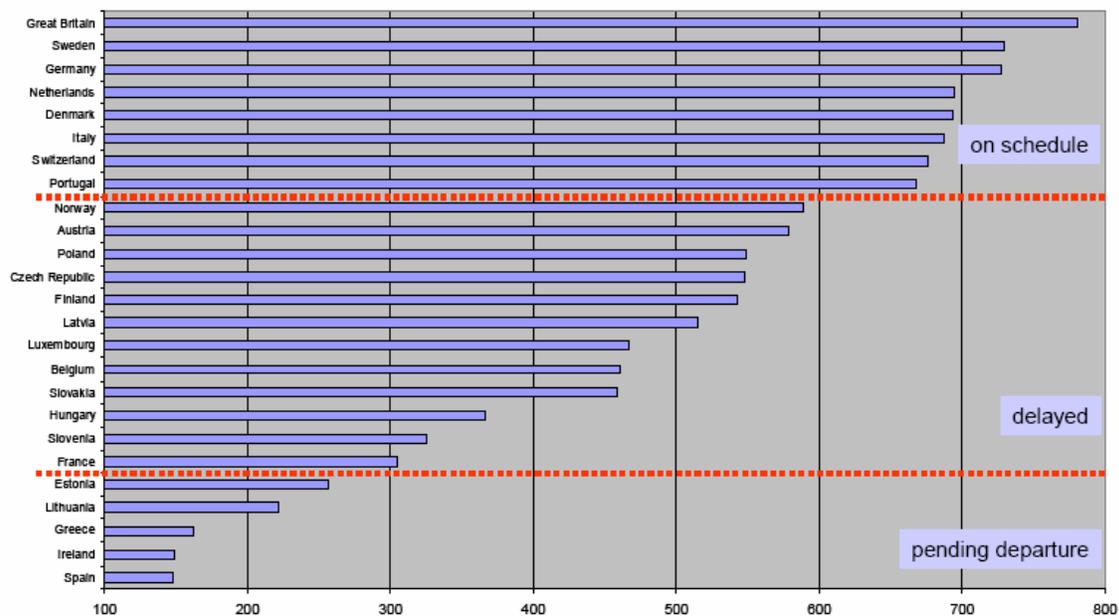


Figure D.5. Results of the Rail Liberalization Index. Source: IBM Business Consulting Services and Kirchner (2004)

<sup>19</sup> See: European union press release on March 3, 2004 at: <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/516&format=HTML&aged=0&language=EN&guiLanguage=en>

<sup>20</sup> Rail Liberalisation Index 2004, Comparison of the Status of Market Opening in the Rail Markets of the 25 Member States of the European Union, Switzerland and Norway. IBM Consulting Services. Complete report available at: [http://europa.eu.int/comm/transport/rail/research/studies\\_en.htm](http://europa.eu.int/comm/transport/rail/research/studies_en.htm)

230. Lithuania and Estonia, on the other hand, belong to the last category “pending departure”. The Lithuanian railway is currently undergoing a development process in connection with accession to the EU. At the moment, there is no competition on rail in Lithuania and the share of rail passenger transport has lost substantial ground to intermodal competitor, road transport, as is the case in many Central and Eastern European Countries (CEEC). At the moment, Estonia is still in the process of adjusting its railway system to the regulatory framework of the EU. However, it is interesting to note that by means of a privatization concept which is unique in Europe, Estonia has achieved one important objective of the EU Commission’s transport policies: an improvement of the modal split share of rail freight transport.

231. The total length of railway lines in Latvia amounts to 2269.8 kilometers with 302.8 kilometers of double-track sections and 257.4 kilometers of electrified lines. In Lithuania the total length is 1775.3 kilometers with 557 kilometers of double-track and 122 kilometers of electrified sections. In Estonia the corresponding figure are 968 kilometers of which 105 km of double track and 132 km of electrified track. The track gauge of the Baltic States is of Russian standard 1,520 mm. However, In Lithuania there is a 22-km European-gauge line from the Polish border to Lithuanian Sestokai railway station. Preparation of a European-gauge project from the Polish border to Kaunas is under way.

232. There are altogether 71 freight railway stations in Estonia and 43 passenger stations. In Lithuania the corresponding numbers are 118 (freight) and 76 (passenger). In Latvia there are 169 freight stations but only 1 railway station (Riga) is registered as a passenger station. However, the Latvian railways offer passenger transportation to the main towns in Latvia.

233. Compared to other European Union countries the proportion of electrified lines of the total length of lines is rather low. The European average is over 50 %, while in Estonia the corresponding figure is 13.6 %, in Latvia 11.3 %, and in Lithuania 31.4 %. Rail network density in Latvia is 37.4 km per 1,000 km<sup>2</sup> of land area, which is a fairly high figure for a European country. The corresponding figure for Lithuania is 26.0 and for Estonia 21.4 km per 1,000 km<sup>2</sup>. (See Attachment D.1.)

234. Transit traffic generated 84 per cent of cargo volumes for Latvian railways in 2002. In Latvia most of the annual cargo volumes transported on railways flows in East-West direction, mainly from Russia (48.2 % of total transit shipments in 2002) and Belarus (37.4 % in 2002) to ports. There exist two main corridors – one from the Belarusian border to Riga port, and another from the Russian border to Ventspils (main part of the cargo) and Liepaja port (see Attachment D.2.) At the moment, most of the cargo traffic is situated on the route Belarusian border – Krustpils – Ventspils port. This is also expected to be the busiest route in the future.

235. Cargo flows in the two corridors are expected to be 2-3 times higher by 2015. The greatest increase is expected to be experienced on the line Belarus border – Krustpils. Currently, the turnover on this route is around 22 ton-kilometers (from East to West) while by 2015 this turnover is forecasted to grow to 68 ton-kilometers annually (Table D.5.). In Latvia 90 % of transit traffic goes solely to ports.(See Attachment D.3. for complete route scheme of Latvian railways)

Table D.5. Railway cargo flow intensity in 2002 and forecast for 2015 in East-West direction on the main routes

<b>Route</b>	<b>Volume 2002 (Million ton-km)</b>	<b>Forecast 2015 (Million ton-km)</b>
Russian border - Krustpils	11.2	24.9
Krustpils - Jelgava	18.3	51.5
Jelgava - Ventspils	16.5	46.7
Jelgava - Liepaja	3.2	7.4
Belarussian border - Daugavpils	22.4	68.9
Daugavpils - Krustpils	22.2	68.5
Krustpils - Riga	15.4	42.3

236. In Lithuania, the main rail transport corridor is situated on the route Russian mainland – Kaliningrad, and also along the Corridor IX from Klaipeda through Kaunas to Belarus. In 2003, 65 % of Lithuanian railways' transit traffic was transit to or from Russia, and 21 % to or from Belarus. Lithuania has a much higher percentage of domestic, import and export rail transport than Latvia or Estonia (see Attachment D.4.). In 2003, freight volumes transported via Sestokai railway station, where the wide gauge (1520 mm) is connected with the European standard gauge (1435 mm) saw a boost of 18.8 % from 293.3 thousand in 2002 to 348.4 thousand tons in 2003. (See Attachment D.3. for a route scheme of Lithuanian railways)

237. In Estonia the major cargo volumes also flow in East-West direction, mainly from Russia through Narva border crossing further to Muuga port near Tallinn. Another important corridor for especially oil trains is the route Petseri-Valga-Riga. For Estonian Railways Ltd. 83 per cent of traffic volume in 2002 was transit traffic, and 75 % of its turnover was geographically related to Russian Federation (Estonian Railways Ltd Annual Report 2003, 48). Estonian transit traffic from Russia and other CIS countries goes solely to ports. (See Attachment D.5. for a complete route scheme of Estonian railways)

Table D.6. Railways rolling stock in the Baltic States in 2003. Source: Annual reports of Estonian Railways Ltd., Latvian Railways and Lithuanian Railways

<b>Rolling stock</b>	<b>Estonia</b>	<b>Latvia</b>	<b>Lithuania</b>
Freight carriages	3643*	5,348	9,248
Box wagons	475	1,340	1,737
Flat cars	259	109	1,826
Open wagons	1,163	1,194	465
Tank cars	484	1,222	1,870
Refrigerator	14	116	271
Other	1,248	1,367	3,079
Passenger carriages	266**	593***	242
Locomotives	178	242	223
Incl. diesel	178	242	223

\* Data regarding only Estonian Railways Ltd

\*\* Data regarding Edelaraudtee Ltd., Elektriraudtee Ltd., and EVR Express

\*\*\* 43 passenger carriages belong to State Joint Stock Company Latvian Railways, 352 carriages of multiple unit trains -to the subsidiary Pasazieru Vilciens and 144 carriages used for international passenger traffic, belong to a private -L-Eksprasis company.

238. **Rolling stock.** Rolling stock owned by the Baltic States, CIS-countries and Russia is used jointly by these countries' railway operators. In addition to the main railway operators, also private companies have their own rolling stock. The proportion of the private ownership in e.g. Estonia is rather high; Estonian Railways Ltd. has a fleet of 3,643 freight carriages, the corresponding figure under private ownership is 13,788. The Baltic States have the possibility to track down the location of their rolling stock at any given time.

239. Lithuania possesses the biggest fleet of freight carriages (Table D.6.), most of which are open wagons and tank cars. Both Lithuania and Estonia own approximately 250 passenger wagons, whereas Latvia 593. All the locomotives in the Baltic States' railways are diesel-driven.

#### D.4 Aviation

240. Air infrastructure management remains in the public sector in all three countries, but the ways in which civil aviation administrations and airport administrations have been organized differ to some extent among the three countries. The provision of air transport services has been partially privatized in Estonia and Latvia, where the airlines have been transformed to joint ventures with established international carriers and other investors. (Figure D.6.)

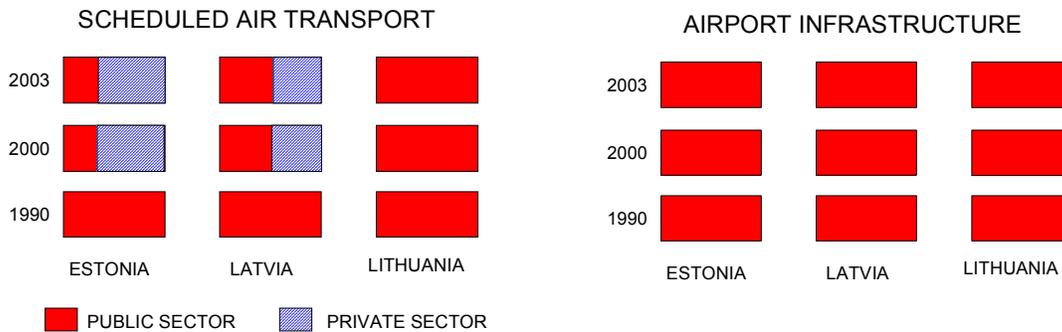


Figure D.6. The roles of the private and the public sector in airport infrastructure and scheduled services (freight and passengers). Source: Ojala et.al. 2004, 156

#### Organization of civil aviation administration

241. Civil Aviation Administrations (CAA) execute the aviation policy at the national level and the co-operation with other states and international aviation organizations. CAAs are under the authority of Ministries of Transport (MEAC, MoTC) in the Baltic States. The main tasks of the CAAs are to ensure aviation safety and execute aviation policy at the national and international level in co-operation with other states and international aviation organizations. This also applies to the three Baltic States.

242. An evaluation commission of the Joint Aviation Authorities (JAA) established in early April 2004 that the activities of the Estonian Civil Aviation Administration meet the requirements in Europe and proposed to accept the Estonian agency as a member of the JAA. Estonia is due to be admitted as a member of the JAA in late June 2004. (Table D.7.)

Table D.7. Membership of Civil Aviation Administrations (CAAs) and Air Navigation Service (ANS) Providers in international organizations in 2004. Source: CAAs, ECAC, ICAO, JAA, CANSO, IFATCA

<i>CAA's</i>	<i>Estonia</i>	<i>Latvia</i>	<i>Lithuania</i>
ECAC - European Civil Aviation Conference	x	x	x
ICAO - International Civil Aviation Organization	x	x	x
JAA - Joint Aviation Authorities	candidate	x	x
<i>ANS provider</i>			
CANSO - Civil Air Navigation Services Organisation	x	x	x
IFATCA - International Federation of Air Traffic Controllers' Associations	x	x	x

243. The bodies that manage air traffic are in government ownership in all three countries. In Estonia and Latvia these services are provided by state owned companies, whereas in Lithuania the provider is a state enterprise.<sup>21</sup>

### **Freedom of access to the EU market and Bilateral Air Service Agreements**

244. After EU accession, Baltic airlines with operating licenses issued by the national authority benefit from the traffic rights currently available to Community carriers.<sup>22</sup> As of May 1, 2004 they will not require permission for flights wholly within the territory of the European Community as well as Iceland, Norway and Switzerland. Taking advantage of the benefit of free access, Latvian carrier Air Baltic became the first flag carrier of a European Union member state to establish a hub in another member country by starting service from Vilnius in Lithuania starting June 2004.

245. Bilateral Air Service Agreements are agreements between two countries where one country admits traffic rights over its territory for their designated airlines. These air service agreements regard mainly scheduled flights and are usually oriented at the nine freedom of the air<sup>23</sup> or their combination. The agreements define on a mutual basis of issues such as market access, transport capacity and tariffs. Bilateral agreements regulating unscheduled and charter flights are unusual and rare. According to the Chicago Convention (Article 5, Section 2) a country is allowed to impose regulations, demands and restrictions it views necessary. These regulations are usually defined in national legislation.

246. In late 2002, the Court of Justice of the European Communities delivered its judgment in cases, which the EU Commission had brought against eight Member States regarding these countries' signing bilateral air service agreements with the United States. The court ruled that the Member States concerned violated exclusive external competencies of the Community by making commitments in areas where competence had been transferred to the Community, such as computerized reservation systems (CRS), intra-Community fares and rates and airport slots. Further the Member States had ignored one of the basic principles of the EU Treaty, namely the

<sup>21</sup> (i) Estonian Air Navigation Services Ltd.; (ii) in Latvia: State Joint-Stock Company of Air Space Utilization and Air Traffic Organization (LGS); (iii) in Lithuania: State Enterprise Oro Navigacija.

<sup>22</sup> For further information see: European Communities - Directorate-General for Energy and Transport, [http://europa.eu.int/comm/transport/index\\_en.html](http://europa.eu.int/comm/transport/index_en.html)

<sup>23</sup> For further information see: ICAO - Manual on the Regulation of International Air Transport (Doc 9626, Part 4), <http://www.icao.int>

principle of non-discrimination. In bilateral air service agreements it is often agreed on that the operating airline has to be in ownership or effective control of the signing state, i.e. in general national flag carriers. These nationality clauses in the agreements discriminate on grounds of nationality, which limits the freedom of establishment of Community companies.

247. In summer 2003, the European Commission was granted a negotiation mandate with all third countries concerning the revision of clauses relating to the ownership and control of airline companies and all matters coming under the exclusive external competence of the Community. In order to facilitate the necessary and continuous updating of air service agreements, which are almost all in breach with Community law, Member States are allowed to continue negotiations with third countries. The Member States can negotiate in their own areas of competence as well as on matters, which are subject to the negotiation mandate of the Commission. In these matters, however, they cannot deviate from standard clauses defined at Community level.

248. The current air service agreement between Estonia and Russia allows the designated carrier only to offer services between Tallinn and Moscow. However, the national flag carrier has reportedly stated its interest to open a route to St. Petersburg. A similar situation existed in Lithuania, where routes were restricted between Vilnius and Moscow. In 2003, an agreement between Lithuania and the Russian Federation allows also flights to St. Petersburg. Other destinations in Russia can also be applied for. As soon as current bilateral agreements are investigated for conformity with EU legislation and possibly renegotiated, the possibility to negotiate access to other major Russian cities for carriers operating in the Baltic countries could follow. Access to other Russian cities than Moscow would considerably improve national flag carriers' competitiveness. At the same time, the Baltic States major airports could develop transit hubs for east-west passenger and cargo movements as they now have only one connection to Russia (see Figure D.8.).

## **Airports**

249. **Estonia has five international airports and one heliport.** Tallinn Airport Ltd. is situated approximately 4 kilometers south-east of the city center and is the most significant airport for international passenger and cargo transport. Kärđla and Kuressaare airports are both situated on two different islands. Both airports have only very modest passenger volumes, but are for the islands' population during some part of the year the only connection to the mainland (see Box E.1.). The other airports are in Pärnu and Tartu with no scheduled services. The heliport is located at the harbor of Tallinn and serves mainly a helicopter connection for passengers between the capital cities Tallinn and Helsinki in Finland. Further there are two airstrips in Kihnu and Ruhnu offering regular services on domestic routes. Both airports are situated on islands west of Estonia at the Baltic coast. (Figure D.7.)

250. All five Estonian airports are government-owned public limited companies. The main airport Tallinn received state subsidies until 1999, but after that, it has operated with income finance and shown profits since 2001. Recently, there have been made suggestions by the Ministry of Transport and Communications to merge the four smaller airport companies with Tallinn Airport Ltd. as one company.

251. **Latvia has three international airports.** Riga International Airport Ltd. is situated 11 kilometers west of the city center and is Latvia's major airport for international passenger and cargo transport. Latvia's other two airports are in Liepaja and Ventspils. Although Ventspils Airport handles only non-scheduled and private type of traffic it is used as a gateway to Ventspils

harbor and the surrounding region. At present the airport is restricted to visual flight procedure (VFR), but will soon be certified for international instrumental flights (IFR) enabling the operation of flights in limited weather conditions as well as regular scheduled flights.

252. Riga International Airport Ltd. is operated as a government-owned Joint Stock Company, but Ventspils and Liepaja airports are owned by Ventspils City Council and Liepaja City Council respectively. Riga airport is not subsidized by the Government and operates at a profit whereas Liepaja airport is subsidized by the local government to support an absolutely essential level of operations and certain development.



Figure D.7. Sites of Baltic States International airports. Source of the Map - University of Alabama 2004

253. **Lithuania has four international airports.** Vilnius International Airport is the most significant for passenger transport and is situated 7 kilometers south of the city center. Kaunas International Airport is the most important cargo airport with the highest cargo volumes of all three Baltic States. Kaunas airport has mainly non-scheduled, but also scheduled all-cargo traffic. Palanga airport and Šiauliai airport are regional airports with modest traffic figures. However, from Palanga airport there are scheduled passenger flights available to a number of regional airports in Northern and Central Europe. Šiauliai airport has increasingly attracted some airfreight, but is also an important military airport and serves currently as an air base for NATO fighter aircraft.

254. Three Lithuanian international airports (Vilnius, Kaunas, and Palanga) are Government-owned companies. The Lithuanian Government owns 67 percent of shares in Šiauliai airport and the remaining 33 percent of shares are owned by the Šiauliai municipality. Vilnius, Kaunas and Palanga airports operate at a profit, but Šiauliai airport operates at a loss. Airports are not subsidized by the Government.

## Airports' infrastructure development

255. **Tallinn airport's current passenger terminal reopened after reconstruction in 1999 and has a capacity of 1.4 million passengers annually.** From Tallinn airport 10 airlines (offer 20 domestic (2) and international (18)) destinations in 15 countries with a total of 182 flights per week (not incl. Tallinn/Heliport). The highest frequencies of flights per week are offered to Helsinki, Stockholm and Copenhagen. In 2003, the terminal handled 715,859 passengers of which the national flag carrier transported some 408,000 passengers, accounting for 57% of all passengers. The airport expects passenger throughput to reach 950,000 in the year 2004.

Table D.8. Number of international destinations, countries and flights per week served from the Baltic States airports Sources: Palanga, Riga, Tallinn and Vilnius airport June 2004

	ESTONIA	LATVIA	LITHUANIA
No. of destinations:	18	22	24
No. of countries:	15	19	17
No. of flights per week:	182	246	260

256. In the years 2003–2008, Tallinn Airport Ltd. plans to invest USD 50.5 million in passenger terminal extension (estimated USD 12.5 million), but also taxiway extension & apron expansion (estimated USD 17 million), de-icing platform, construction of a new maintenance center, construction of a second cargo terminal and landing guidance system CAT II. These projects are financed from the Instrument for Structural Policies for Pre-Accession (ISPA) funds as well as Tallinn airport funds and other loans. The airport is ISO 9001 certified and ISO 14001 is expected to be achieved by the end of 2004. Tallinn airport's runway is 3,070 m long and 45 m wide and is suited for aircraft with a tolerable maximum take-off weight (MTOW) of 250 tons.



Figure D.8. International scheduled passenger destinations from Tallinn, Riga and Vilnius airports. For abbreviations see Attachment D.7. Source: Airports

257. **Passenger terminal reconstruction of Riga airport began 2000/2001.** The old terminal was torn off and a new two-level building 5 times exceeding the size of the former terminal has been built. The former departure area was also reconstructed and a new pier with 5 passenger bridges was built. In June 2004, the airport offers 20 international destinations in 19 countries, through 9 operators with 246 flights per week. The destinations with highest number of flight per week are the Scandinavian cities Helsinki, Copenhagen and Stockholm. The number of passengers increased significantly from 2002/2003 by over 10 percent to a total 712,000. In 2004, passenger numbers is expected to reach 900,000 and by 2010 to surpass 1.5 million.

258. In autumn 2002 reconstruction works of the 3<sup>rd</sup> level of the airport terminal were completed offering restaurant facilities to passengers and office space to airlines. The passenger terminal is equipped with 16 check-in desks, 11 gates, 5 airbridges and 2 baggage claim belts

capable of handling 2 million passengers per year. The airport is also ISO 9001 certified. Riga International Airport complies fully with the international civil aviation standards. The landing guidance complies with CAT I requirements of the International Civil Aviation Organization. In mid June 2004, the airport announced an open tender on reconstruction of the North Terminal.

259. **Latvian other airports in the focus of interest.** Concerning Latvian other two international airports, Latvian flag carrier Air Baltic is reportedly investigating the airport facilities of Liepaja and Ventspils in order to evaluate the possibility to open flights from these airports later in 2004.

Table D.9. Passenger throughput (in thousands), cargo handled (tons) and number of aircraft movements in Tallinn, Riga, Vilnius and Kaunas airport Sources: 1997-2003 Airport Council International; 2003 Airports

Passengers (in thousands)	1997	1998	1999	2000	2001	2002	2003
Tallinn (TLL)	503	565	552	560	574	606	716
Riga (RIX)	535	555	563	575	623	634	712
Vilnius (VNO)	411	462	481	522	584	635	720
Kaunas (KUN)	36	27	26	19	20	20	22

Cargo handled (tons)	1997	1998	1999	2000	2001	2002	2003
Tallinn (TLL)	4 888	5 185	4 295	3 453	3 524	3 355	4213
Riga (RIX)	3 650	4 090	3 428	3 618	4 073	5 384	13534
Vilnius (VNO)	5 164	4 430	4 061	4 613	3 812	4 069	5206
Kaunas (KUN)	4 662	3 873	4 612	6 771	9 130	7 995	6669

Aircraft movements	1997	1998	1999	2000	2001	2002	2003
Tallinn (TLL)	21 455	24 951	23 590	23 358	23 633	26 226	25294
Riga (RIX)	16 964	19 483	19 387	18 070	18 910	18 676	19504
Vilnius (VNO)	13 792	16 711	18 185	17 277	18 362	17 124	18336
Kaunas (KUN)	4 552	5 090	5 592	4 190	2 207	3 957	4078

260. **The Vilnius airport terminal complex consists of two buildings.** The old terminal built in 1954 is used for arrivals and the departure terminal opened in spring 1993. The new building has two passenger boarding bridges, check-in counters, shopping facilities, and business lounge available. The annual passenger capacity of the airport is 1 million passengers per year. From the airport 10 airlines offer scheduled flights to 21 domestic (1) and international (20) destinations in 17 countries. Based on the number of flights in June 2004, the major destinations are Copenhagen, Frankfurt and Helsinki. In 2003, passenger throughput of the airport reached 719,850 an increase of 13 percent compared to the previous year. For the year 2004, passenger figures are expected to reach 740,000 and by 2010, the number of passengers is estimated to reach 930,000 passengers. More detailed statistics are available through the Lithuanian CAA Air transport division or ICAO digest of statistics.

261. Planning for the construction of a new passenger terminal building is on its way. The new terminal facilities will be able to serve 2.5 million passengers p.a. and is estimated to cost USD 14.5 million. Construction is planned for 2005–2006 and a call for tender is intended for

December 2004. The old passenger terminal will be modified to fulfill Schengen border requirements and reconstruction is partly funded by the European Union. Currently the airport's landing guidance system is CAT I classified. The airport's perimeter lighting system is to be reconstructed in 2005, costing an estimated USD 0.9 million. For 2007, there are intentions to extend the runway from currently 2,500 meters to 3,000 meters. This project has no formal design project yet, but costs are estimated at USD 7–9 million.

### **Financing of airport infrastructure development**

262. **The main international airport in Estonia**, Tallinn Airport, has financed the reconstruction costs from EBRD and EIB loans, from its net assets, from PHARE assistance and from assignments from the state budget.<sup>24</sup> Regional airports mainly use state budget allocations for their construction and improvement activities. The Development Plan of Regional Airports for 2000–2006, on the assumption that the number of passengers will rise, provides for the gradual diminution of state support to the regional airports, while investments from their net assets will rise, together with private investment and assistance from EU funds.

263. **In Latvia**, the main source of funding for the construction and improvement of the infrastructure at Riga International Airport is a Passenger Departure Tax introduced by the Cabinet of Ministers' Decision, devoted solely to developing the infrastructure of the airport. This tax is part of the special state budget. The financial resources of the Riga International Airport are a further source of funding. Loans from international financial institutions and commercial banks are used to secure the funding during project implementation. For Liepaja airport subsidies from the local government are the main source for the maintenance of the facilities.

264. **In Lithuania**, airport construction and improvement is funded mainly through the airports' own means. Construction of facilities related to border-crossing requirements of the Schengen agreement is partly financed through the Schengen Facility fund.

## **D.5 Ongoing and planned infrastructure projects**

265. International Financial Institutions (IFIs) and other international organizations such as the EU have had a substantial role in Transport Sector Projects in the Baltic States. The main IFIs in this respect include EBRD, EIB, NIB, and the World Bank (in alphabetical order). The total transport sector funding in the Baltic States through loans from the four institutions amounts to approximately 780 million euros (Table D.10; a more detailed account is given in Ojala et al. 2004, section D.4). The role of private sector finance has increased substantially in projects involving transport operations.

266. The World Bank transport sector portfolio in Europe and Central Asia (ECA) is dominated by road projects (approximately 65 percent), followed by urban transport (approximately 20 percent) and rail projects (approximately 8 percent). In the Baltic States, the Bank's transport sector involvement is mainly in the road subsector, where the Bank has had projects in all three countries. Other important subsectors are ports and rail. The Bank has also

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<sup>24</sup> For additional information on financing airport infrastructure: ACI (Airport Council International) Europe guide to finance instruments for European airports. October 2003, <http://www.aci-europe.org>

been an advisor or facilitator in a number of small projects on Trade and Transport Facilitation or urban transport in all three Baltic States. (Table D.11.)

Table D.10. Approved EBRD, EIB, NIB, and World Bank loans in Transport Sector in the Baltic States. Sources: EBRD, EIB, NIB, and The World Bank.

	Loans	Period
EBRD	158 m EUR	By end-year 2003
EIB	365 m EUR	1994-2003
NIB	156 m EUR	By November 2003
World Bank (IBRD)	111 m USD	1993-2005

Table D.11. World Bank/IBRD loans in the transport sector in the Baltic States in million USD. Source: The World Bank

Country	Subsector/ type	Project period	IBRD loans in m USD	Total project cost in m USD
Estonia	Highway maintenance	1993-1997	12.0	26.9
Estonia	Transport	2000-2005	25.0	49.5
<b>Total Estonia</b>			<b>37.0</b>	<b>76.4</b>
Latvia	Highways	1995-2000	20.0	54.4
<b>Total Latvia</b>			<b>20.0</b>	<b>54.4</b>
Lithuania	Highways	1994-2000	19.0	44.2
Lithuania	Klaipeda port	2000-2002	35.4	56.9
<b>Total Lithuania</b>			<b>54.4</b>	<b>101.0</b>
<b>Baltic States</b>		<b>Total</b>	<b>111.4</b>	<b>231.9</b>

### D.5.1 Road infrastructure development

267. There are two other underlying factors determining why certain transport intensive export industries prefer truck transports as export pre-carriage instead of transports by railways: high price and complexity of the supply chain when rail transport is used. The price difference is approximately 20 % in favor for road transport. Partly the higher costs in rail transports are caused by pre-carriage, which may include 12 different steps whereas in road transports there are only seven steps.

268. Estonia, Latvia and Lithuania now have access to EU's Marco Polo's funds. Baltic firms however seem to lack information of the program's possibilities. Preparing proposals for EU projects is also perceived as difficult and time consuming. (See Attachment D.7.)

### D.5.2 Port infrastructure development

#### Estonia

269. In Tallinn investment priorities lie in Muuga Harbor and Paldiski South Harbor, with the need for additional territory acquisitions in these areas to add new terminals and attract industries.

Old City Harbor (mostly used for the servicing of passengers) and Paljassaare Harbor will have fewer investments directed at more efficient use of the existing infrastructure. Real Estate development in Old City Harbor will create a unique city environment that invites tourists and residents to spend more time in the port. A new small cruise harbor in Saaremaa will be built during 2004-2005. (Table D.12.)

Table D.12. Port of Tallinn 5-year Investment Program 2004-2008. Source: Port of Tallinn 2004.

Year	Million USD
2004	96.6
2005	92.8
2006	87.0
2007	104.7
2008	49.0
TOTAL	430.2

270. **Expansion Plan of Muuga Harbour.** The planned expansion of Muuga Harbour will provide new territories and facilities for the development of international distribution centers or manufacturing sites. Port strategy foresees the development of a logistics and industrial park. The territory of 57 hectares will be prepared according to the needs of investors and lessees. The new territories can also be applied effectively for terminals for handling cargo flows from Russia and the CIS countries targeted at European markets.

271. **Construction of the 2nd phase of Container Terminal and a new Coal Terminal** The existing container terminal has the handling capacity of 120,000 TEU. To enlarge the annual handling capacity to 250,000 TEU, an additional quay of 200 meters of length is required. The 2nd phase of the container terminal includes the construction of two new quays and a basin between the quays. The extension of the terminal is planned to be in operational by the end of 2004. A contract has been signed with Russia's second largest coal mining company Kuzbassrazrezugol to build a coal terminal with a size of 50 hectares and a capacity of 5 million tons per year. The terminal construction will be completed in 2005.

272. **Extensions of Muuga Railway Station and marshalling yards** are needed to accommodate transit cargo carrying trains with a total length of close to one kilometer. The extension of the railway station is also needed for new terminals in the eastern part of the harbour. Also, a new direct railway line connecting the main line with Muuga Harbour (passing the existing railway station) is needed. The construction period extends well over 2004-2005.

273. **Construction of breakwater.** In order to improve the nautical safety and manoeuvrability of vessels in the Muuga port area, two breakwaters with a total length of approximately 3.5 km are needed. Breakwaters are to be built in several stages. The breakwaters are planned to be ready by 2008. Co-financing from Cohesion Fund will be applied.

274. **Construction of a General Cargo terminal** A new General Cargo Terminal will be built to the eastern side of Muuga Harbor in order to serve increasing cargo flows of general cargoes. Besides transit flows the terminal will also serve Estonian export-import cargoes and cargo flows to/from Muuga Industrial Park. New territory will be prepared for future development of the Muuga Harbor in 2005-2007. Co-financing from Cohesion Fund will be applied.

**Box D.1. Construction of breakwaters – a facilitation issue with low direct yields on invested capital**

A Breakwater is an offshore structure protecting the harbor and vessels using it from the force of waves. As part of the basic physical infrastructure, the construction of breakwaters is commonly seen as the responsibility of the port authority in landlord-type ports.

The Port of Tallinn council has been somewhat reluctant to point investment funds to the construction of breakwaters in Muuga port, as it is expected to tie large amounts of capital and is not directly profitable. The current problems arising from the insufficient nautical safety come out in form of higher insurance premiums, which ultimately are being covered by shippers in the form of higher freight rates.

The construction of breakwaters in Muuga port is not expected to considerably increase the number of operational days in port and therefore no direct increase in port revenues is foreseeable either. Despite this, the construction of breakwaters would enhance the competitiveness of the whole port community and Estonian economy in a wider perspective, as the total logistics costs would decrease.

275. **Construction of two viaducts** is needed to make the entrance to and exit from the harbor safer and quicker. Today's intense traffic in the harbor, caused by trains carrying transit cargoes, interrupts truck traffic too often, which then causes queues. With the construction of two viaducts the transport logistics problems inside Muuga Harbor will be solved. The construction period is 2004-2005.

276. **Old City Harbor** Port Strategy on Real Estate development is being carried out. Residential and commercial areas are planned onto territories, which cannot be used for cargo handling activities any more. The port sees great potential in the real estate development in the Old City Harbor as to make the harbor more attractive for tourists and Tallinn citizens. The project includes commercial as well as residential development. After the Detail Plan of Old City Harbor will be approved by the City Council, the first sites will be developed in 2005.

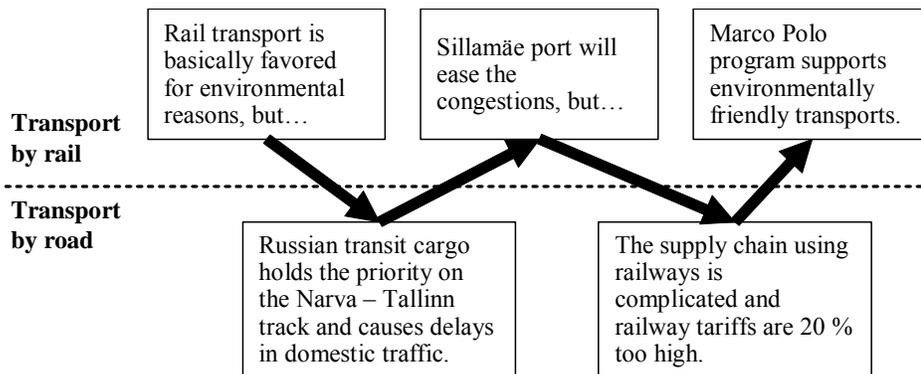
277. **Paldiski South Harbor** Development projects under way in Paldiski South Harbor include construction of two berths able to accommodate oil tankers with a maximum size of 50,000 dwt, new terminals and enlargement of the possibilities to serve containerized goods. A new general cargo terminal with an area of 4 hectares is planned on reclaimed land in the western part of the existing port facilities. The 300 meter long berth allows 30,000 DWT vessels to enter the harbor, making the terminal annual capacity around 1 million tons of general cargo

278. **A new dry bulk terminal (with a 300-meter berth for 40,000 DWT ships) with the yearly capacity of 2 million tons is planned.** A Grain Quay will be built in 2004-2005, which enables Paldiski South Harbor to accommodate grain vessels. Grain is a new cargo type for Paldiski South Harbor, and this will generate new increased flows of grain for the port. The construction and dredging works will be ready in 2004. A new ramp for RO-RO vessels will be built in 2004. A new Timber Terminal will be built in 2004-2005 with necessary rail and road connections. The terminal enables to increase timber flows and concentrate timber handling into one port area. A new Cargo Terminal together with a breakwater is planned to be constructed to the acquired land in the western part of the existing port facilities. After design works in 2004-2005 the construction of the extension could start in 2006.

279. **Saaremaa Harbor** Construction of a new harbor in Saaremaa to host cruise and passenger traffic will start probably in 2005 after completion of all necessary design and planning documents. The harbor will receive vessels of up to 300m long.

Box D.2. Transit cargo affects Estonian timber export pre-carriage by rail

In Estonia, transit trade is of great national importance. The overall contribution to Estonian GDP is 8 % on estimate. For railways, transport of oil products from Russia via Tallinn port is clearly the priority business area. In terms of transport work, transit volumes through Estonian ports account for 83 % of the total volume of the Estonian railways. During 1997 – 2003 the transport volumes of oil and oil products via Port of Tallinn tripled, which has led into congestions in the main rail transit corridor Narva – Tallinn. As a consequence, transport intensive export industries now suffer from limited access to the railroad leading to Port of Tallinn. The railway junction in Tapa is the point through which the transit traffic from the East and export traffic from the South are routed to the direction of Tallinn.



The ports of Sillamäe and Kunda are located East of the railway junction Tapa and therefore the volumes handled in these ports do not have to be transported via the most congested railway part from Tapa to Tallinn.

The future capacity of the Port of Sillamäe will provide an alternative routing option for approximately one fifth of the transit cargo volumes (in 2003) currently transported via Port of Tallinn. It can be expected that the traffic congestions will decrease, which should allow more Estonia's own export cargo to access the route to Tallinn. Again, if the volume of the transit cargo continues to grow at the pace five recent years (17 % yearly average), the relief may be of brief duration. The step taken in Sillamäe is however likely to have an important facilitating impact for export industries. Further, if Sillamäe port project turns out successful, it will probably attract new port investments in North-East Estonia.

280. AS Sillamäe Sadam (Port of Sillamäe Ltd.) was established in 1997 with the aim of recovering the original port of Sillamäe which started as a trading port in the 1900-ies and was destroyed and closed down in the 1940-ies. Half of the port company's stock is owned by an Estonian multi-industry firm AS Silmet Group (turnover in 2001 USD 40 million). Other stakeholders are Russian investors Mr. Andrej Kalkov (25 %) and Mr. Jevgeni Malov (25%).

281. Sillamäe's yearly capacity is planned to be seven million tons. When finalized, the port will compete with the Port of Muuga for transit of oil, oil products and liquid chemicals from Russia. As advantage to Sillamäe, the geographical location of the port will reduce the need for rail transports approximately 200 km. The cost reduction of the shorter route to the port is estimated 1.5 USD/ton (estimate by AS Silmet Group). The future cargo flows are expected to come from St. Petersburg and Moscow and to be shipped further to European Union and to United States via the ports of Hamburg and Rotterdam.

282. The Sillamäe Port construction is carried out in two phases. The first phase (USD 39 million) includes the construction of the basic infrastructure in the port area, the transshipment complex for oil and oil products. A capacity of five million tons is expected to be functional by the end of year 2004. The port channel's water depth will be 14.5 meters and later, 16.5 meters, which would allow vessels of 100,000 DWT to enter.

283. The second phase of USD 39 million includes construction of a berth for container vessels and a container terminal. Berths for tankers are located in the western part of the harbor. Jetties A1 and A2 are intended for tankers up to 100,000 DWT (depth 16.5 meters), and jetties A3 and A4 for tankers of up to 60,000 DWT (depth 15.0 meters). Jetty A5 will be constructed for tankers and dry bulk carriers up to 15,000 DWT (depth 11.0 meters). Quays B1 and B2 are meant for dry bulk and timber container ships (15,000 – 40,000 DWT) and C1 and C2 for multipurpose carriers. Berthing structures D1 and D2 will be constructed for Ro-Ro and passenger vessels.

284. Kunda port is owned by AS Kunda Nordic Tsement, which is part of a globally operating Heidelberg Cement Group. In 1994 the firm invested USD 16 million into the reconstruction of the port, of which USD 6 million was lent by the International Finance Corporation (IFC). IFC also made an equity investment of USD 4 million. In 2003, Kunda port managed over third of Estonian wood and paper export and 77% of cement export.

285. The depth of the port of Kunda is up to 9.5 meters depending on the quay and ships of freight-carrying capacity up to 8,000 tons can be processed. The port has 4 quay berths and mobile cranes and loaders for loading and discharging. In 2003 the goods turnover of the port was 1.4 million tons. The largest customers of the port are exporters of timber and other wood products. Main export articles are timber and pulp logs, cement and cement clinker, sawn timber, sawdust, peat and fiber boards. AS Kunda Nordic Tsement uses the port for cement and cement clinker export and import of gypsum and solid fuel required for cement manufacturing.

### **Latvia**

286. Riga. In recent years, Riga's freeport has been reconstructed and put several berths into operation. The development program aims at dredging the port area and navigational channel into depth of 15 meters. Reconstruction of breakwaters is undergoing. By 2006 the port authority plans to invest close to USD 160 million in port infrastructure development.

287. The largest challenges in port development are related to the removal of the central terminal and its operations to a more favorable location closer to sea and away from the inhabited areas. This may also cause disputes with municipality, as much speculation is connected to the land development schemes - the location is noted by many parties as the capital's most interesting area for real-estate development and building of exclusive department houses.

288. Also in Riga Freeport there exist long term plans of moving most of cargo handling to a newly constructed deepwater port by seashore. The realization of these plans lies still far a way in the future, but with current traffic volume growth rates the first step might be taken rather soon. An enlargement of oil transshipment terminal has been planned for some time but plans are still being analyzed by municipal authorities. Riga freeport has large undeveloped land reserves on the left bank of river Daugava. Another long-term development need is the construction of a new communication tunnel across the river.

289. Port of Liepaja plans to invest close to USD 100 million into new facilities, which would include both basic port infrastructure improvements as well as building a complex of value added services in the port area.

## **Lithuania**

290. In Klaipeda port, transit traffic has fundamental significance for the development despite the increasing importance of domestic cargoes. Direction of cargo flows is however slowly but surely moving from east to west towards west to east operations.

291. With the growing traffic volumes, extension of port carrying capacity is the priority of all port development. During the last years major reconstruction of port infrastructure has taken place. Strengthening of quay walls and dredging works have allowed bigger vessels to call at the port and reconstruction and extensions of breakwaters have considerably increased the number of operational days in Klaipeda port.

292. Klaipeda State Seaport Authority is conducting a major port reconstruction and deepwater port feasibility study, tentatively due in 2005, with help from the Japan International Cooperation Agency. The preliminary results indicated that within 20 years the current port area will suffer from traffic congestion and vessel waiting times on the road will increase substantially. Main cause for this is narrow port entrance, which cannot be widened due to environmental and cultural values.

293. A new deepwater port would also provide facilities to handle new cargo groups, such as coal, which currently is not handled in Klaipeda because of dust problems. These facilities could also be used to import coal with large ocean carriers and would also give the country another alternative when decisions regarding future electricity production strategy are taken. All parties in port, however, are not in favor of large scale investment in deepwater ports and are promoting development in the current inner port, which handles unitized cargoes.

294. High growth rates especially in container and RoRo traffic set large requirements for development of port facilities. A new Ro-Pax terminal is being planned and rebuilding of the cargo handling facilities at the old ferry port are considered. This is also subject to the future of train ferry traffic to Germany, since despite the favored idea of moving cargoes from road to rail in European Union, the traffic figures have been somewhat a disappointment to operators. If the space consuming double-level railway wagon loading ramps were removed, large land areas would be available for trailer fields or storage and re-loading facilities. The current volumes of wagons transported by ferry are not justifying any large-scale investments in new vessels, after today's generation of ferries built in the middle of 1980's eventually are phased out.

295. Reconstruction and development of roads and railways leading to the port is seen as a vital instrument in port development. According to many port users, investment is very much needed especially in the southern part of Klaipeda port. Railroad access is to be rebuilt and this is expected to help reduce congestion in Klaipeda central railway station.<sup>25</sup> A lot of co-operation between state authorities, port, municipality and railways is needed in order to reach a well working solution. These questions are also handled in the port development council, which has representatives from port users, service providers and different authorities.

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<sup>25</sup> The Klaipeda Port Railway Hub Development Programme for years 2003, 2004-2006 to the year 2015 is approved by the Minister of Transport and Communications. Its cost is estimated at some 357 million Lit. These activities are a part of this programme.

296. The most recent investment program in Klaipeda State Seaport Authority, agreed with the Government of the Republic of Lithuania, is to be implemented during the period from 2002 until 2005. The total cost of is estimated to amount to USD 130 million.

### **D.5.3 Rail infrastructure development**

297. **Estonia** In terms of quantity, the Estonian railway transport system is quite well developed and comparable to that of Scandinavia in terms of spread and density of the railway networks. However, major investments are still required to improve the quality of rail infrastructure and rolling stock. Since 66 percent of the shares of Estonian Railways Ltd are privately owned, a suitable form for partnership between private and public sectors must be found in order to modernize railway transport. According to Estonian Railways Ltd. the current situation, where the Estonian Railways Ltd. do not have possibility to apply for EU funds, creates an unfair competitive position against the Lithuanian and Latvian railways. This is because Latvian and Lithuanian railways, since being publicly owned, can apply for EU finance. However, the government of Estonia is currently looking over the plan and there are some possible rail projects in the Cohesion fund pipeline.

298. As railways handle a major part of rapidly increasing international cargo transport and transit, the main problem is insufficient capacity of main railway lines and border stations and serious backlog in the technical condition of infrastructure and rolling stock. This results in very low speeds on railway lines as well as problems with traffic safety and environmental protection.

299. One of the projects intended to be partly financed with the Cohesion funds, is the construction an reconstruction of the Tallinn bypass on the line between Paldiski port (in the north-east) and Narva border station (in the north-west). The aim of the project is to connect Paldiski port to the Tallinn-Narva railway line and form Tallinn railway bypass, which creates sufficient connection to Tallinn and allows trains running on the Tallinn-Narva line to run towards Paldiski passing Tallinn. Project is estimated to cost USD 70 million. Also planned to be co-financed from the Cohesion fund is the project related to construction and reconstruction of electrical railway network connecting Tallinn with suburbs. The aim of the project is the expanse the network of electric lines to the cities and small settlements in the northern regions of Estonia. Estimated cost of the project is USD 55 million. (Swedish Trade Council Report 2003)

300. In 2004, Estonian railways plans to invest USD 53.5 million; of this 15.7 million will be spent to buy new tank cars. Its investments into infrastructure would total USD 26 million in 2004, while repair of rolling stock would require USD 7 million of investments. Purchase of other fixed assets will require USD 4.7 million.

301. The planned volume of repair works in the main tracks for the year 2004 is 116 kilometers. In 2005 and 2006, altogether 200 kilometers of tracks are to be repaired. The volume of renewal works in the tracks is rather substantial compared to the target level set at the time of privatizing Estonian Railways Ltd. At that time it was planned to renew in average 36 kilometers of track per annum. (Estonian Railways Ltd., Annual Report 2003).

302. Most of the investments that came up in the interviews with the Estonian Railways Ltd. and different rail freight forwarders are already included in the list of projects to be realized in the near future (within a time frame of 2004-2005). Such projects include the construction of Tallinn railway bypass and Koidula railway border station construction. Additionally, other infrastructure priorities that are to be tackled in the near future include renewing and renovating the tracks in the

Tapa-Tartu-Koidula and Tartu-Valga routes. These routes are situated in the southern part of Estonia. At the moment the speed on these routes is only 60-80 km/h, and thus, the speed should be dramatically increased. As the volumes in Paldiski port are growing at a high rate, one investment target is to build another track on the line between Paldiski and Keila. As a member of the European Union, Estonia's Eastern border is also a European Union border with Russia. Therefore, it is necessary to reconstruct and enlarge the existing railway border station in Narva.

303. **Latvia** The density of rail roads in Latvia is reasonably adequate compared to other European countries. The current railway infrastructure corresponds to the current amount of shipped cargo, as well as can ensure larger amount of cargo shipping (with exception of some sections and stations). The main problems that have to be solved are connected with the deterioration of infrastructure, as a result of safety and throughput capacity decreases. On the 30 % (605 km) of the main railways, the amount of cargo exceeds the normative 500 million tons gross, which means that they need to be reconstructed. Due to the deteriorated condition of railways, the technical speed of trains decreases each year. If in 1995 the technical speed of trains was 46.0 km/h, in 2001 it was 43.1 km/h. For example, currently the speed on the line to Ventspils can be only increased to 35 km/h, which also prohibits any passenger transport on the route. (Single Programming Document for Latvia 2004-2006)

304. In addition, over 25 % of the total length of railway lines is not equipped with traffic control systems that correspond to the safety standards of the EU. Due to inadequate railway infrastructure, the rail infrastructure does not ensure direct connections with countries of Western and Central Europe, which is defined as further area for improvement.

305. Between the years of 1996 and 2002, investments of USD 320 million were invested in the Latvian railways, the biggest figure for the country's entire transport sector. Most of the funds have been invested by the state railway company Latvijas Dzelzceļš, while loans and EU PHARE funds have also been used. Investments have been mainly directed to the infrastructure on main transit corridors (see Attachment D.2.). Money for the development of these corridors comes both from the Latvian Railways' funds and the Latvian state budget as well as from bank loans and other available EU funds. Investments to railway infrastructure in 1999 totalled 25.393 million lats. The most significant future railway investments are the following:

- Renovation of the Latvian part of the East-West railway corridor
- Renovation of a technological line at the Riga Rail Track Welding Centre
- Construction of the Juras parks terminal and cross-over tracks at the Ventspils rail junction<sup>26</sup>.
- Installment of a microprocessor-based centralized communication system at the Riga passenger station and the Tornakalns station.

306. Under technical development plan for infrastructure improvement in 2003 to 2007, a number of projects totalling USD 437 million will be carried out. The necessary funding will come from the Latvian Railways' funds (USD 72 million), Latvian state budget (USD 62 million), EU ISPA fund (USD 117 million), other loans (USD 63 million), and the EU Cohesion Fund (about USD 122 million). The projects to be implemented in the near future include construction of a new receiving facility at the Rezekne-II railway station, construction of the second set of rail tracks on the stretch Riga-Krustpils, further upgrading of telecommunications, information systems and electric power installations. ([www.baltkurs.com](http://www.baltkurs.com)) Of these projects, the construction of the Rezekne II freight junction started in June 2004. Latvian railways expect to increase Rezekne's freight handling capacity from 26 million tons to 38 million tons a year.

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<sup>26</sup> Construction of the Juras parks terminal built in 2000-2003 has been one of the biggest investment projects by Latvijas Dzelzceļš in recent years. The implementation of the project has increased the annual turnover capacity of the Ventspils rail junction to 33 million tons from the previous 19 million tons.

307. In addition to these investments in the infrastructure, the interviewees pointed out that as the volumes of the ports of Riga and Ventspils keep increasing construction of double tracks to these ports will become necessary.

308. **Lithuania** The present railway transport sector of Lithuania is rather backward in technical, economic, technological and organization terms in relation to the modern interacting railway transport systems of EU Members States. The projected speed of passenger trains on the main railway lines of Lithuania is 120 km/h and that of freight trains 100 km/h. However, due to the poor state of infrastructure (delayed capital reparation of railways, telecommunications, signaling and electricity equipment that has been in use for 30 years) the speed in some stretches is limited to 40 km/h. The existing density of the railway network (26 km per 1,000 km<sup>2</sup>) would allow handling up to 50 million tonnes of freight per year but this level cannot be reached mainly due to the unsatisfactory condition of the railway infrastructure: there is a need to renovate the tracks and to modernise the signalling and telecommunications systems. Infrastructure should be modernized to such extent that average speed on the Lithuanian railways could be increased to at least 120 km/h. (Single Programming Document for Lithuania 2004-2006)

309. In 2003, major repairs on 61.9 kilometres of the railways were completed. This is almost twice as much as in 2002. Investments of the company rose by 45 % to 350 million litas last year.

310. Altogether, USD 787 million are to be invested in the railway sector in the coming years (2004-2006). These are co-financed by national and EU funds. The main investment projects for the Lithuanian Railway Administration in the coming years include:

- Rehabilitation of Kaunas tunnel (Corridor IX)
- Development of Klaipeda railway hub (first stage)
- Construction of grade intersections on the line Vilnius - Kaunas
- Modernization of train radio system
- Prolongation of tracks in marshalling yards (Corridor IXB)
- Modernization of hub stations on the Corridor IX (Radviliskis - Vaidotai)
- Modernization of power supply and signalling systems on the routes Kena - Kybartai and Radviliskis - Siauliai (Corridor IX)
- Track renewal for design speed of 160 km/h on the route Kena - Vilnius - Kaunas Kybartai / Reconstruction of the upper structure of the line Vilnius – Kaunas
- Construction of European Gauge Railway Rail Baltica (1st stage)

311. **Rail Baltica, a joint project between the Baltic States and Poland, has received priority status by the EU.** Rail Baltica is a joint project between the Baltic States and Poland to connect Warsaw and Tallinn via Kaunas and Riga by a western gauge rail line. (Figure D.9.) So far the project has been at the planning stage and a limited pre-feasibility and primary environmental assessment is now being conducted. If realized, Rail Baltica will be one of the biggest projects ever in the region. Preliminary estimates including construction works on the territory of Poland amount to USD 4.96 billion.



Figure D.9. The tentative railway line for Rail Baltica.

312. The works of the project are tentatively divided into three phases. The first section of this international route (Warsaw-Kaunas) should be completed in 2010. It is planned to commence the construction of railway line of 1435 mm-gauge from the Polish/Lithuanian state border to the intersection of Railway Corridors I (Helsinki-Warsaw) and IXB (Klaipeda-Kaunas-Vilnius-Medininkai), and to establish an intermodal transport by 2006 (Swedish Trade Council report 2003, 41). This part of the Rail Baltica project is estimated at USD 342 million, of which 290 million are covered by the European Cohesion Fund and the remaining 52 million by Lithuanian railways. The second section (Kaunas-Riga) will be finished in 2014, and the third section (Riga-Tallinn) - in 2016. Rail Baltica route corresponds to or is compatible with European standards.

313. The European Commission has given Rail Baltica the status of a priority project<sup>27</sup>, and the Baltic States – especially Lithuania – expect that a majority of the funds will be allotted by the EU. The Commission however, was rather reluctant to include Rail Baltica among its priority project.

314. At the moment only two percent of the cargo flows in the Baltic States on the South-North (North-South) direction. Passenger traffic using public transportation along the intended path of the rail is very small, as is the number of private cars transiting two or more countries.<sup>28</sup> By the time the rail link would be completed, the average income per capita in the Baltic States will have risen substantially. Thus the cost of travel time will be higher for individuals. On the other hand, the emergence of low-cost airlines have already transformed the time-cost budgets of

<sup>27</sup> See European Union Press release on April: <http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/04/515&format=HTML&aged=0&language=EN&guiLanguage=en>

<sup>28</sup> Based on data from Via Baltica Monitoring Committee Secretariat, 2000 (Ojala and Queiroz (2001, eds.), page 146)

business and leisure travelers. In addition to mere rail construction, feasible operations require international agreements on access to operate the services and the infrastructure itself.

315. Actual financing decisions are still subject to the outcome of the feasibility study of the whole project. The tendering process for the feasibility study was initiated in spring 2004. Results of the feasibility study are expected in late 2005.

#### **D.5.4 Airport infrastructure development**

316. **The three major airports in Tallinn, Riga and Vilnius expect an increase in passenger throughput from 10–30 % in the year 2004.** In the first half of 2004, there has been an increase in frequency of flights to available destinations, new destinations are offered and also new airlines have started operating from airports in the Baltic States. At present all these airports are planning to expand their passenger terminal capacity in the following years in order to be able to handle the increasing number of passengers. Also they wish to be able to offer proper facilities when in the medium-term future the Baltic countries join the Schengen agreement<sup>29</sup>. This agreement requires the airports, among other things, to have physical boundaries in place, which separate passengers traveling within the Schengen area, other non-Schengen EU countries and third countries. Although in general the passenger terminals capacities are sufficient to handle the current annual amount of passengers, peak hours already cause bottlenecks at check-in counters, waiting areas and handling facilities.

317. Another significant issue becoming relevant in the medium-to long-term future is the location of the airports very close to the city centers, especially in Tallinn. The distance is relatively short also in Vilnius, but there is more available space around the airport. Environmental issues regarding aircraft noise and emissions may make it necessary to relocate these two airports. For instance, Tallinn airport is situated very close to housing areas as well as the city's drinking water reservoir – Lake Ülemiste. The lake is situated west of the airport in direct extension of the runway, underneath the flight path of arriving and departing aircraft. The next closest airfield is Ämäri, some 20 kilometers south-west of Tallinn. Its development would require extensive investments in airport and land transport infrastructure. (Figure D.10.)

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<sup>29</sup> Schengen agreement: Travelers can cross the internal borders of the implementing member countries at any point without checks.

For further information see: European Commission – Justice and home affairs, <http://europa.eu.int/scadplus/leg/en/s22000.htm>

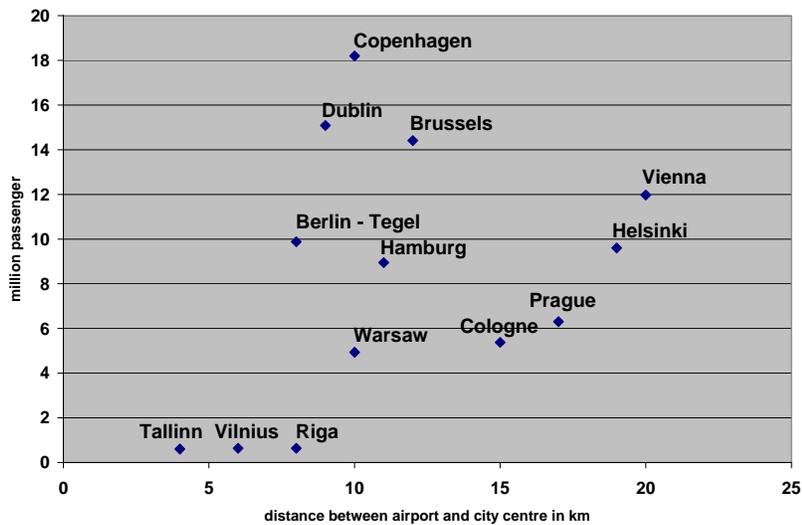


Figure D.10. Passenger volumes of selected airports in relation to the distance from the airport to the city center. Sources: Distances: Finnair 2004; Passenger numbers: ACI-Europe 2002

318. In Lithuania, it has been suggested to merge Vilnius and Kaunas airports at a new location between the two cities. Nevertheless, at the time no definite planning is in process and ideas are only being exchanged. The following table shows the distances of selected European airports from their respective city centers in relation to annual passenger volumes. Planning and building a new airport is a very long process with many issues to solve like finding a suitable location. First steps towards these possible projects should be taken rather sooner than later.

## E Markets for Transport and Logistics Services

319. This Chapter analyzes the availability, price mechanisms and business practices of transport and logistics services by mode of transport. Warehousing and other logistics services, such as freight forwarding are discussed in separate sections.

### E.1 Structure of the supply and demand by mode of transportation

#### E.1.1 Road transport

320. In most countries, the demand for domestic and especially for international road freight transport tends to grow faster than GDP. This has definitely happened in the Baltic States. Especially in Lithuania, the performed transport work in international road transport has grown substantially since 1999. (Figure E.1.) While domestic transport work has grown more modestly in Latvia and Lithuania since 1999, it has grown extremely rapidly in Estonia since the third quarter of 2002.

321. Road freight companies in all EU and EU accession countries are typically small or micro firms having one or a couple of trucks. They are often run by entrepreneurs employing a handful of people in addition to themselves. The cost and market structure in road transport is such that the most efficient size of the firm occupied in pure road haulage is often limited to what a single entrepreneur can operate. If a firm has ten to fifteen trucks, that number may not be enough to sustain the administration and office staff needed to run the firm of that size. The necessary economies of scale are often reached with a fleet of 30 or more trucks.

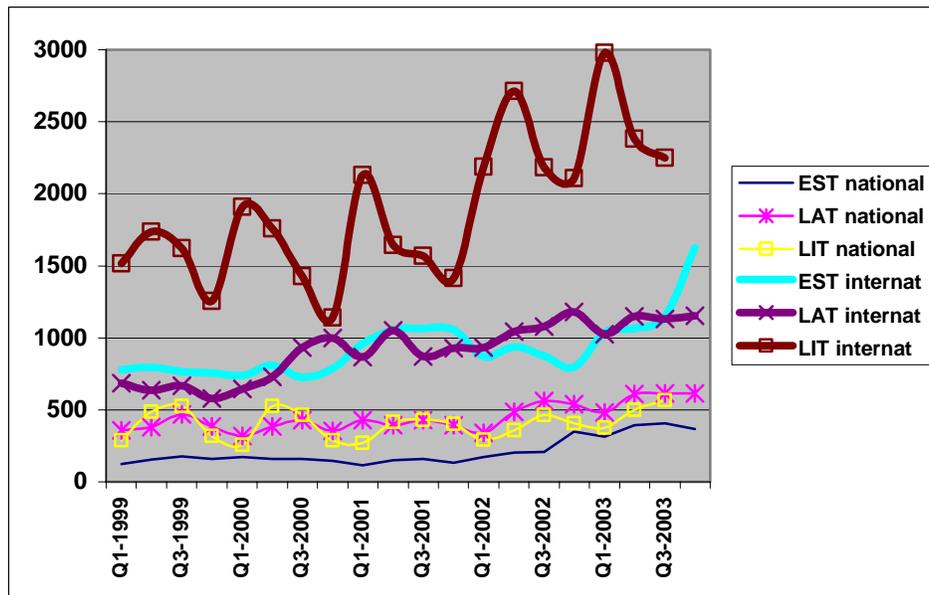


Figure E.1. Transport work in national and international road freight transport in million ton kilometers by quarters in 1999 - Q3/2003. National transport excluding international transport includes cabotage. Source: ECMT.

322. In Estonia, companies own 6.1 trucks on average, which is well above the average in the other EU accession countries (4.4) and in the EU (5.2) (see Table E.1). In 2003, about 1,600 road freight companies were active in Estonia, and they employed 9,700 people.

323. In Estonian passenger transport market there were 306 private and 3 municipal-owned companies, 162 of which operate internationally (IRU 2003).

Table E.1: Trucks, buses and coaches in international and national traffic. Source: IRU (2003)  
Road Transport Fact Files: Estonia, Latvia and Lithuania

	<b>Estonia</b>	<b>Latvia</b>	<b>Lithuania</b>
Trucks in international traffic	4 600	5 455	12 707
Trucks in national traffic *)	3 200	3 868	131 801
Trucks, average per company	6,1	4,4	3,4
Buses/coaches in international	435	693	895
Buses/coaches national traffic	2 155	1 093	16 404
Buses&coaches, average per	2,0	2,9	1,8

\*) The definition used in Estonia and Latvia differs from the one in Lithuania; data is not comparable.

In Latvia, road freight companies are of the same average size as in other EU candidate countries. Small companies operate especially in the domestic market (IRU 2003). In 2003, 1,100 firms were licensed for international and 1,300 for domestic road freight transport.

Over 200 Latvian firms were licenses for international bus transport and over 110 firms for domestic transport. In 2002, the Latvian road transport sector employed 24,800 persons, of which 10,700 in road freight transport.

Lithuania's truck fleet in international traffic is almost three times the size of Estonian and over two times the size of Latvian fleet. In 2003, there were 2,490 road freight firms, which employed 19,900 persons in Lithuania. At the same time, there were 48 public bus transport firms that employed 6,500 persons.

The regional market is characterized by a majority of small and medium size carriers with a high level of competition. Baltic road freight carriers face fierce competition especially from Polish, Russian and other CIS carriers.

There is a clear differentiation of services and equipment between firms that are engaged in western traffic and the firms that are engaged in eastern traffic. Technical regulation in western traffic requires up-to-date and more expensive equipment. This constitutes a cost differential that typically makes the most modern trucks uncompetitive in eastern trades.

## **E.1.2 Maritime transport and ports**

### **Maritime transport services**

324. In all the Baltic States access to maritime transport sector is fully open to international competition. Rapid changes take constantly place in the shipping markets and the ownership of several major companies has changed hands during recent years. During the past years the national tonnages have been decreasing, which partly reflects the limited means of Governments

to hinder flagging out of vessels. Another reason is that the overwhelming majority of cargo consists of liquid crude oil and oil products for which a highly competitive supply of international shipping exists. The majority of liner shipping is mainly controlled by large international shipping companies. One notable exception is the Estonian fleet of passenger ships operating between Estonia, Finland and Sweden.

325. All three countries inherited a part of the former Soviet Union's commercial fleet. Having first been organized as state owned enterprises in 1991 they remained as an important part of each country's national seafaring. The Baltic States are relatively small shipping nations. In 1998, their tonnage ranked between 73 and 77 in the world measured by total tonnage under national flag, but since then their rank has fallen to around the 100th by 2002<sup>30</sup>.

326. The national fleet in Lithuania has remained relatively stable till 1999. In Latvia, the national tonnage was radically transformed in 1998/1999, when the bulk of the competitive tonnage was flagged out, as a result of which the remaining fleet is very old. In Estonia, the national fleet was substantially reduced in 1999. In both countries, that development has continued till 2002 and 2003.

Table E.2. Merchant fleet by flag of registration of the Baltic States as of December 31, 2002 by their gross tonnage (1,000 grt). Source: Review of Maritime Transport 2003, UNCTAD

in 1000 grt	Total fleet	Oil tankers	Bulk carriers	General cargo **)	Container ships	Other types
Estonia	357	9	33	117	..	199
Latvia	89	4	..	3	..	82
Lithuania	435	7	80	196	..	153
CEE & CIS *)	16,028	2,055	2,178	5,588	326	5,880

\*) Central and Eastern Europe and former USSR

\*\*) Including passenger/cargo ships

### The most important shipping companies

327. **Estonia.** Tallink Grupp AS is the major passenger and ferry shipping operator, with net sales of 191.5 million euros and 1,900 staff in FY 2002/2003. Its net profit has been at or over 10 % of turnover during the past four years. Its main business is the ferry traffic between Tallinn<sup>31</sup> and Helsinki, but it has also lines to Stockholm and Kapellskar in Sweden. Its fleet comprises eight ships, of which four are fast ferries and two Ro-Ro ferries.

328. The Estonian Shipping Company (ESCO) is the oldest shipping company in Estonia. It was privatized in July 1997 and acquired by American, Norwegian and Estonian investors, and the privatization was completed in 1999<sup>32</sup>. In 2003, ESCO divested the business operations but not the vessels of its daughter companies ESCO Eurolines OÜ and ESCO RORO Line As. In 2004 ESCO fleet consists of 11 managed vessels. ESCO's container operations were re-organized under the name TECO Lines in February 2004. TECO Lines AS is jointly owned with Samskip hf of Iceland. TECO Lines AS currently operates short sea container lines with 4 ESCO owned container vessels linking the ports of Antwerp, Rotterdam, Felixstowe, Bremerhaven and Hamburg with Stockholm, Helsinki and Muuga/Tallinn in the Baltic Sea<sup>33</sup>.

<sup>30</sup> Shipping Statistics Yearbook 1998, ISL, Bremen

<sup>31</sup> The group's website is found at: [www.tallink.ee](http://www.tallink.ee)

<sup>32</sup> Tschudi Shipping Company AS, [www.tschudishipping.com](http://www.tschudishipping.com)

<sup>33</sup> TECO Lines, see [www.teco.ee](http://www.teco.ee)

329. **Latvia.** Latvian Shipping Company (LASCO; Latvijas Kugnieciba) owns and/or operates a largely out-flagged fleet of approximately 40 vessels - tankers, reefers, gas carriers, and dry cargo vessels<sup>34</sup>. The company's turnover in 2003 was USD 194 million, of which tankers accounted for 155 million, reefers 25 million, gas tankers 9 million and dry cargo 5 million USD. In 2003 LASCO made a net profit of 15 million USD.

330. In 2001, Latvian Government owned the majority stake and terms for privatization were accepted. This fourth privatization round of LASCO was problematic, but it eventually succeeded. The three previous attempts to sell the company contributed to the collapses of governments. After privatization, the Latvian Shipping Company was registered as a joint stock company on June 5, 2002. The largest shareholder is Ventspils Nafta with 49.9% of the shares. Recently the company has entered into a major fleet renewal program.

331. **Lithuania.** AB Lisco Baltic Service (LBS), a major line operator in the Baltic States, was established June 27, 2001 following the reorganization of AB Lithuanian Shipping Company, which had commenced its operations in 1969. The major shareholder with 86.9 % of LBS stock is the Danish shipping company DFDS A/S, also the parent company of DFDS Tor Line.

332. LBS's principal business is carriage of cargo and passengers by ferries and ships. It has six Ro-Ro/pax ferries and six multipurpose vessels. The company operates cargo and passenger ferry lines between Klaipeda-Kiel (GER) and Klaipeda-Sassnitz (GER) in co-operation with Scandlines, Riga (LAT)-Lubeck (GER) together with DFDS Tor Line and another route between Klaipeda-Karlshamn (SWE). The main cargoes carried are trailers, containers, and general cargo. In 2004, LISCO BALTIC SERVICE owns the major share capital in nine subsidiaries. The company and its subsidiaries employ more than 700 persons<sup>35</sup>.

333. The Public Stock Company Limarko Shipping Company, registered in Lithuania under the name "AB Limarko laivininkystes kompanija" counts its history from the 1 January 1987, when the company was established by order of the Minister of Fisheries of the former USSR. In 1993, 20% of the state capital was privatized to the employees and in 1995 it registered its name as Klaipeda Transport Fleet Ltd. Since the 1st June 1998 the company is publicly listed and its shares are traded in the current trading list of the National Stock Exchange of Lithuania. In April 2004 the company was renamed the public stock company Limarko Shipping Company.

334. In 2003 strategic investors Limarko UAB and Vilnius Bank Venture Capital Management participated in the privatization of Klaipeda Transport Fleet. 50.17 % of the company's shares belong to Limarko UAB, 42.5% to VB Venture Capital Management, 5.97% to East Capital fund in Stockholm and 1.72% to small shareholders. Limarko Shipping Company AB specializes in refrigerated cargo transportation services. The company fleet consists of 12 reefers and it employs more than 400 people.

335. Lithuanian shipping company is the eldest shipping company in Lithuania, which presently possess 18 bulkers. The companies fleet runs world-wide. Nevertheless a several attempts to privatize the company it still belongs to State. The privatization process is interrupted a court cases and already last over 3 years. Unclear, indefinite situation stops natural development of the company.

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<sup>34</sup> See also: [www.latshipcom.lv](http://www.latshipcom.lv)

<sup>35</sup> See [www.lisco.lt](http://www.lisco.lt)

## **Dry bulk shipping in the Baltic States**

336. The dry bulk flows in the entire Baltic Sea amount to approximately 150 million tons<sup>36</sup>. In a rough estimate, about 40 per cent of these volumes are transported within the Baltic Sea, another 40 per cent is traded within Europe, and the remaining 20 per cent involves deep-sea transport.

337. The main commodities in the Baltic dry bulk market are iron ore, coal, grain, fertilizers and limestone. These are also suitable for large bulk ships up to 100,000 tons. The largest shipments in the Baltic Sea do not exceed 150,000 tons, because draught restrictions in the Danish straits and lack of appropriate berths and handling capacity limit the maximum size of ships.

338. A considerable part of Baltic States' bulk trade is carried on spot basis on small bulk vessels, generally in the 1,000 to 5,000 dwt range. Especially steel or energy plants also use ships or barges up to 10,000 tons in intra-Baltic trade on a long-term basis. This micro-bulk market for small ships is a mix of numerous commodities<sup>37</sup>. Also limestone and coal/coke are sometimes transported in small quantities. In this market factors such as fairway and berth depths, availability of cargo handling equipment and rather short distances mean that economies of scale of ships is not as important as in dry bulk markets in general. This partly explains why such a large number of small ports exist in Estonia, and relatively many also in Latvia.

## **The main liner shipping routes in the Baltic Sea**

339. The ferry services between Tallinn and Helsinki have expanded rapidly during the last years. There were relatively very few ferry services to and from Latvia and Lithuania in the 1990s. In 2002 and 2003, a number of new liner shipping routes or route configurations have emerged that better connect Baltic States' ports to port in southern Baltic Sea and European continental ports.

340. The significance of Ro-Ro ferry lines has become greater since each Baltic State is clearly oriented to the European Union in foreign trade, and Baltic transport companies operate widely in the European Union area. Intermodal transport connections facilitate both accompanied transport units and trailer traffic. For example, the Tallinn-Helsinki route carries about 150,000 cargo vehicles or units per year. The traffic is generally well balanced in both directions. Over 60 % of the units are trailers accompanied by a tractor and driver. Unaccompanied trailers and other units make up the remainder. Most of the traffic is between Finland and the Baltic States or Hungary. This means that transit cargoes to or from Poland, Germany or Italy in the south or Russia in the east do not use this route.

341. In 2004, liner shipping connections are well developed especially in Estonia and Lithuania, and routes have relatively high frequency. Vessels on the routes have successively been renewed, and sub-standard vessels have been phased out from the market. (See Attachment E.1.)

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<sup>36</sup> The total seaborne trade in the Baltic Sea in 2002 was approximately 350 million tons including liquid bulk and general cargo. Approximately 30 % of this is handled in the Baltic States' ports.

<sup>37</sup> Such as raw wood, pulp and sawn logs, wood chips and saw dust, granite blocks, crushed stone, gravel and sand, steel and non-ferrous scraps, grain, malt, fertilizers, feldspar and blasting grit.

342. The passenger shipping route Tallinn-Helsinki describes Estonia's transformation from a Soviet republic to a thriving market economy. The development of the route is also a testimony of competition in transport services and by 1997 the volume had surpassed 5 million passengers. Over half a dozen competitors have entered the route and in the 2004 summer months, there are over 65 passenger ferry departures a day, and in the wintertime at around half that figure.

### **E.1.3 Rail transport**

343. Railway restructuring has been prepared in all three countries, including privatization in Estonia. In Latvia a small part of freight and passenger transportation on state owned infrastructure has been performed by newly established private companies. Railway services in Lithuania are owned by the public sector

344. Estonia has privatized its railways in a process where Edelaraudtee was transferred to private ownership by February 2001. Eesti Raudtee (Estonian Railways) was eventually privatized in 2001, with the Government retaining a 34 % share in Estonian Railways Ltd. In Estonia, rail operators pay track access charges, unless they own the rail network. Operating licenses for the management of railway infrastructure or for the provision of railway transport services have been granted to ten enterprises<sup>38</sup>, the most important of which are the following:

- Estonian Railways Ltd. (Eesti Raudtee Ltd.) owns track to the Eastern, South-Eastern and Western direction and operates freight traffic on that infrastructure.
- Edelaraudtee Ltd. operates passenger traffic on Eastern and South-Eastern direction and pays fees to Estonian Railways Ltd. It also has freight traffic over its own infrastructure from Tallinn to Viljandi and to Moisakula on the Latvian border.
- Elektriraudtee Ltd. mainly operates local passenger commuter traffic in the Tallinn area and it pays fees to Estonian Railways Ltd.
- EVR Express which operates passenger traffic to Moscow and St. Petersburg; 49 per cent of its share belong to Estonian railways, and the remaining 51 per cent to private investors.

345. Latvian Railway (LDz) is the state joint-stock company, the Government of Latvia owning all shares; ownership rights are exercised via the Ministry of Transport, Shareholders Meeting and the company. Since 2002, a small part of passenger transportation has been performed by a private company "Gulbenes-Aluksnes banitis" and from January 1, 2002 "Pasazieru vilciens" was established as a subsidiary of the state railway corporation to take over the functions related to domestic passenger transportation by rail. Since February, 2003 freight transportation has been performed also by private operators "Baltijas ekspresis" in Ventspils, "Liepajas tranzita ekspresis" in Ventspils and "Baltijas tranzita serviss" in Riga (<http://www.sprk.gov.lv>).

346. JSC Lithuanian Railways (LG) is a joint stock company, and all its shares belong to the State. The ownership rights are exercised via the Ministry (MoTC), Supervisory Board, and Managing Board of the Company. In spring 2004 operating license was granted to a private

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<sup>38</sup> Only enterprises, which are providing infrastructure management or transport services are railway undertakings in the sense of the Estonian Railway Act.

railway operator “Transachema”. However, at the moment the company still lacks safety certificate. In the future, following the anticipated liberalization of system of cargo carriage by rail, the number of private railway operators is expected to grow.

Estonian Railways, LDz and LG are members of UIC<sup>39</sup>. Because they have limited combined transport of road units by rail, none of the railways belongs to UIRR<sup>40</sup>.

## Freight traffic

347. **Transit traffic has been the backbone of rail operations in all three countries.** The main commodities transported are crude oil and oil products (see Attachment E.2.). The demand for rail transit of these products over Baltic States’ territory is, however, determined by the developments in Russian oil exports and the routes suitable for that traffic. This has also caused substantial variations in Latvia rail volumes.

348. Cargo traffic showed a downward trend for both Latvia and Lithuania for the period 1997-1999. From year 2000 on, both the volumes and the transport work performed have picked up and have clearly exceeded the record levels in 1997. In 2003 Latvian railways carried a record of 48.3 million tons of cargo, whereas in Lithuania the corresponding number was 43.5 million tons, which is also the record volume of the freight transported during the entire years of Lithuania's Independence. Freight volumes of Latvian Railways presented an increase of 20.6% in 2003 compared to year 2002. In Lithuania, railways recorded an 18.6% increase in 2003 in annual freight traffic compared to 2002.

349. In Estonia, cargo traffic has increased continuously from 1996 until 2002 when the peak volume of 42.6 million tons was reached. The increase in freight traffic comes solely from transit traffic. Domestic and other international rail traffic has declined during the same period. (See Attachment D.4.) In 2003 freight volumes carried by Estonian railways reached only the 2002 level. However, it is worth noticing that although freight volumes remained at the 2002 level in 2003, the net profit of Estonian Railways Ltd. soared 65 % in 2003 compared to year 2002.

350. In the first five months of 2004 (January-May) Lithuanian Railways carried 12 % more freight than in the same period in 2003. The corresponding figure for Latvian Railways is 6.1%, and for Estonian Railways +3.4 %.

## Passenger transport

351. **In 2003, passenger traffic measured in passenger kilometers reached its lowest levels in Lithuania and Estonia since 1996.** However in 2003, Edelaraudtee Ltd., Estonian operator of domestic long and medium route passenger trains, carried 1.59 million passengers during 2003, which marks an improvement of more than four percent over 2002. In Latvia, year 2003 indicated some improvement in this respect - both the amount of passengers and passenger transport work improved slightly compared to 2002.

352. In Estonia and Latvia, passenger traffic is almost entirely domestic traffic. 20 % of passengers in Lithuania have traditionally been international traffic. However in 2003, the number of international passenger traffic went down by 30% compared to 2002. This decline was

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<sup>39</sup> International Union of Railways <http://www.uic.asso.fr>

<sup>40</sup> International Union of combined Road-Rail transport companies, [www.uirr.com](http://www.uirr.com)

determined by more exact transit procedures applied to the citizens of the Russian Federation for their transit through Lithuania to Kaliningrad. The downward trend in passenger traffic is caused by a combination of factors. In most interurban routes, bus and coach transport offer more departures at affordable prices, while private car ownership has increased in all countries. The level of rail service in terms of schedules, wagon quality and speed of transport is inferior to road-based alternatives. Especially in Estonia, a number of lines have been also closed after the railways were privatized.

353. **Compared to other European countries both annual passenger traffic volumes as well as passenger turnover in the Baltic countries are very low.** In Latvia passenger turnover is the highest with 744 million passenger-kilometers in 2002, while in Estonia and Lithuania the corresponding figure is approximately 9,500 million ton-kilometers. (Attachments D.1. and D.4.)

354. **The railways in all three Baltic States have turned profitable** (see Attachment E.4.). Since privatization in 2001 the net profit of Estonian railways has improved dramatically: from 2.2 million US dollars in 2000 to 27.9 US dollars in 2003. Net profit of Estonian Railways Ltd. in 2003 presents an improvement of 65 % compared to 2002. At the same time also Lithuanian and Latvian Railways have turned profitable. The corresponding number for Lithuanian railways is 5.1 million US dollars in 2003, which indicates 25 % increase compared to 2002. In 2003, Latvian railways produced a net profit of 11 million US dollars – a decrease of 23 % compared to the year before.

#### E.1.4 Aviation

355. **Very High increase in passenger traffic.** All three major airports and airlines have reported a high increase in passenger traffic during the first months of 2004. Air Baltic Ltd. reports an increase of more than 50 percent over the first five months of 2004. The increase can partly be explained by Air Baltic Ltd. new corporate strategy of offering cheaper tickets and one-way trips. The growth of passenger throughput at Tallinn and Riga airports reached above 30 percent. In May 2004, Riga airport handled 87,000 passengers compared to 65,000 a year earlier and Tallinn airport 85,000/63,000 respectively.

Table E.3. Passenger numbers of Baltic States major airports and airlines in Jan-May 2004 Source Airport and airlines

	passenger throughput Jan-May 2004	change % (‘03-‘04)		passengers Jan-May 2004	change % (‘03-‘04)
Tallinn airport	352,769	+32	Estonian Air	182,755	+36
Riga airport	330,225	+31	Air Baltic	177,895	+51
Vilnius airport	310,182	+30	Lithuanian Airlines	123,300	+21

356. The International Air Transport Association (IATA) reports for the first five months of 2004 on all international routes a passenger traffic increase of 19.4 percent compared to 2003. In May 2004, the change percentage was 38 percent as compared to May 2003. International freight

traffic improved by 12.2 percent for the same period. The association is optimistic that the industry has recovered the impact of the SARS outbreak in the Far East and the war in Iraq.

357. A contributing factor to increasing passenger numbers in the Baltic States is EU membership. A substantial increase in business and leisure travel to, from and between the new Member States can be expected. Statistics of the Association of European Airlines (AEA) showed a 20 percent jump in passenger numbers to and from Finland and a 12 percent increase to/from Sweden after Finland, Sweden and Austria joined the EU in 1995.

358. **Air freight traffic is still modest.** Air transport to the Baltic States is mostly performed by relatively small short-range aircraft, which have very limited space for cargo. Apart from express couriers, dedicated scheduled air freight services do not exist. Typical monthly volumes of air freight is around 500 ton is each of the three capital airports, where practically all air freight is concentrated (Figure E.2.). Official statistics on air freight are, however, easily misleading for reasons described in more detail in Attachment C.2.

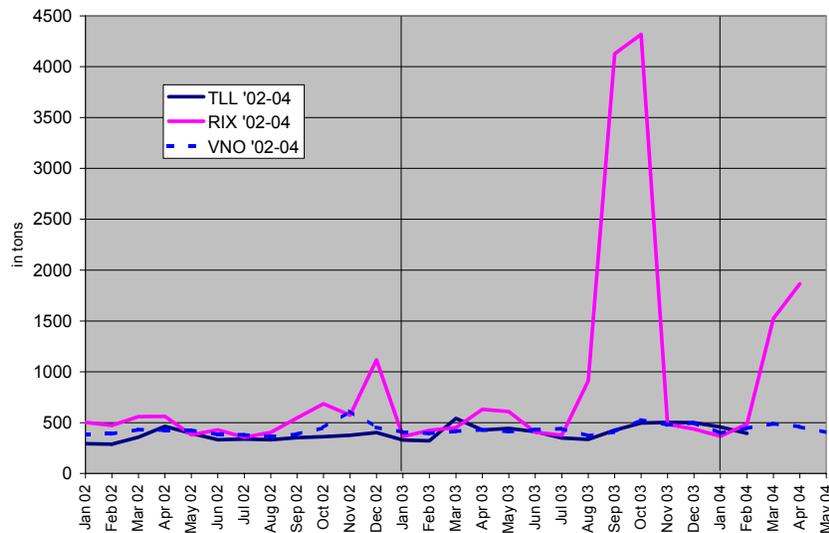


Figure E.2. Monthly cargo volumes in tons at Tallinn, Riga and Vilnius airport (2002–V/2004) Source: Tallinn, Riga and Vilnius airport 2004

359. Some remarkable freight volumes have been recorded in Riga in 2003 and 2004, as shown in Figure E.2. According to our information, this cargo has mostly been high valued consumer goods such as textiles, shoes, apparel and electronics originating in China. The operations relied on very large CIS-registered freighter aircraft, which can load entire ISO containers that can be swiftly loaded to a truck for further transport. There are indications that the goods have been intended for CIS markets, using Latvia as an intermediate country. There are no data from May 2004 onwards, but it is likely that the current EU transit rules and customs regulations have complicated such operations.

### Tallinn airport

360. In 2003, a total of 5,080 tons of cargo was handled at Tallinn airport, excluding direct transit cargo and airfreight carried by road feeder services (RFS). Ramp handling is performed by the airport, while cargo handling is taken care of by three companies: Estonian Air Ltd., Cargo

Handling Ltd. and Schenker Ltd. Express couriers handle mainly their own flights. The current cargo terminal was built in 1998. It is owned by the airport, which leases warehouse (2,910m<sup>2</sup>) and office space (1,830 m<sup>2</sup>). The terminal houses airline sales agents, express couriers, customs and cargo handling companies. Works to enlarge the cargo terminal by approximately 600 m<sup>2</sup> began in summer 2004 and are conducted by the airport. After completion, express courier TNT Ltd. will be one of its main operators.

361. Two private companies supply aviation jet fuel: Naftelf Eesti Ltd., a subsidiary of Air Total Ltd., the civil aviation division of the French oil group Total Fina Elf. Estonian Aviation Fuelling Services Ltd. is owned by Estonian Air Ltd. and Air BP Ltd., which is part of the global BP Group (British Petroleum).

362. The airport suffers from several restrictions, which could hinder development in the medium and the long term. Land area of the airport is very limited in regard of further expansion. Some cargo service providers are outside airport's territory, either right next to the airport or in the surrounding areas. North of the airport, an unused land area of approximately 0.5km<sup>2</sup> comprising several small plots belongs to a number of private owners. This area could be suitable for further development of the airport's facilities, but there is no spatial development plan for it.

### **Riga airport**

363. **The airport has two locations where airfreight is being handled.** In 2003, total cargo volumes reached 13,534 tons an increase of 206%. Most of this cargo handled especially in the months September and October is carried by unscheduled freighter services and is charter cargo traffic from China destined to Russia. On a regular basis, there is the normal airfreight on aircraft and road feeder service, a scheduled freighter aircraft to Copenhagen, used by DHL Ltd. and SAS Cargo Ltd., as well as another freighter to Tallinn used by UPS Ltd.

364. **The airport has two areas for cargo handling.** Baltic Cargo Center, a modern cargo-handling terminal, is owned by a joint venture between German ground handling company GlobeGround Berlin Ltd. (45% share), SAS Cargo Ltd. (45% share) and Air Baltic Ltd. (10%). The terminal was opened in summer 2001 and has a yearly capacity of 5,000 tons cargo. The company offers packaging, security checks and screening, checks of dangerous goods, cargo status reports to airlines and preparing manifests. Regular clients are SAS Cargo Ltd., Air Baltic Ltd., Lufthansa Ltd., Aeroflot Ltd. and on an irregular basis, mainly RFS, Air France Ltd. and Maersk Air Cargo Ltd.

365. Another cargo terminal area is owned by the airport and leased to airlines and cargo handling companies. The facilities are rather old and only insufficiently equipped and unheated. The airport initiated a public tender for a new cargo terminal in 1999. Three bids were made, but the airport approved none of them. However, a new cargo area for the airport remains in planning. Ramp handling is performed by the airport and jet fuel supply by two private companies ELF Ltd. and Neste Ltd.

### **Vilnius airport**

366. Cargo-handling as well as ramp handling is offered by two companies, Lithuanian Airlines Cargo and Litcargus Ltd. Contrary to Tallinn and Riga airport, Vilnius airport is not involved in ramp handling.

367. Lithuanian Airlines Cargo is a subsidiary of state-owned Lithuanian Airlines and operates a cargo terminal at Vilnius airport offering warehouse and office space. The terminal has an area of 1,500m<sup>2</sup>, with an annual capacity of up to 10,000 tons. For special goods the terminal has available a cold store, a safety store for valuable goods and a special store for radioactive materials. All export cargo is screened with an X-ray machine that is also able to detect radioactive materials. The machine has a tunnel opening of 1m x 0.6m and it is thus insufficient for larger shipments or containers. A new screening system is estimated to cost USD 0.6 million.

368. Litcargus Ltd. is the only private owned ground-handling company at Vilnius airport. The company offers a complete range of cargo handling and sales services passenger like baggage handling, ticketing, cargo and mail handling, full/partial General Sales Agent (GSA) services, and ramp services. Litcargus Ltd. operates a cargo terminal equipped with cold store, refrigerator, safe, dangerous goods storage and customs control point.

369. The airport that has ownership of the airport's fuel tanks is the only supplier of aviation gas to the airlines. Lithuanian Airlines is the only airline that has leased tanks from the airport and is buying its own aviation gas. There have been attempts to privatize fuel supply, but so far without success. The access to the ground handling market at EU airports is regulated by EU legislation<sup>41</sup>. In this legislation ground-handling consists of ground administration and supervision, passenger handling, baggage handling, freight and mail handling, ramp handling, aircraft services, fuel and oil handling, aircraft maintenance, flight operations and crew administration, surface transport as well as catering services. At airports, where infrastructure is centralized, the management of these airports is required to be transparent, objective and non-discriminatory. The access of suppliers of ground-handling services or self-handling airport users should not be hindered within the limits of the directive.

## **Airlines**

370. **In Estonia**, there are 9 registered airlines. These airlines offer commercial scheduled and non-scheduled passenger and cargo services as well as flight training. On scheduled basis two airlines (Air Livonia Ltd. and Avies Ltd.) offer domestic services to five destinations and two airlines (Estonian Air Ltd. and Aero Airlines Ltd.) international flights to 14 destinations within Europe. In May 2000, a Finnish company Copter Action Ltd. (Copterline) opened a helicopter line between heliport Tallinn/City Hall and Helsinki with 14 regular flights per day from Monday through Friday.

371. **In Latvia**, 11 airlines have an operating license. The biggest airline is the national flag carrier Air Baltic Ltd., offering scheduled services to European cities. Raf-Avia Ltd. operates scheduled freighter flights to Copenhagen for SAS Ltd. and DHL Ltd. Others operate on charter basis.

372. **In Lithuania**, 10 registered airlines offer scheduled and unscheduled services. Lithuanian Airlines is the national flag carrier offering destinations in Europe. In May 2004 Lithuanian Airlines sold its subsidiary Air Lithuania, which operates scheduled passenger services mainly from Palanga. The new owner Arijus Ltd. is a Lithuanian freight forwarding company. Arijus Ltd. was founded in 1992 and offers a variety of freight forwarding and logistics related services in sea, road, rail and air transport. The company employs over 80 people in offices in Kaunas, Vilnius and Klaipeda.

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<sup>41</sup> Council Directive 96/67/EC of 15 October 1996 on access to the ground handling market at Community airports.

Table E.4. Baltic airlines offering scheduled domestic and international passenger services Source: Airlines

<i>In</i>	<i>Airline</i>	<i>Destinations</i>
Estonia	Aero Airlines	Helsinki, Tallinn (all international)
	Air Livonia	Kuressaare, Pärnu, Ruhnu, Tallinn (all domestic)
	Avies	Kuressaare, Kärdlä, Tallinn (all domestic)
	Estonian Air	Amsterdam, Berlin, Copenhagen, Frankfurt, Hamburg, Kiev, London-Gatwick, Moscow, Oslo, Paris Riga, Stockholm, Tallinn, Vilnius (all international)
Latvia	Air Baltic	Amsterdam, Berlin, Brussels, Cologne, Copenhagen, Dublin, Hamburg, Helsinki, Kiev, London, Manchester, Milan, Minsk, Moscow, Oslo, Prague, Stockholm, Tallinn, Vienna, Vilnius, Warsaw
Lithuania	Air Baltic	Berlin, Cologne, Copenhagen, Dublin, Hamburg, Helsinki, Oslo, Riga, Vienna, Warsaw
	Air Lithuania	Billund, Hamburg, Kaunas, Malmö, Oslo, Palanga
	Lithuanian Airlines	Amsterdam, Barcelona, Berlin, Brussels, Copenhagen, Frankfurt on Main, Hannover, Helsinki, Kiev, London, Madrid, Moscow, Paris, Prague, Stockholm, Warsaw

373. **Two of Estonian airlines offer international scheduled services: Estonian Air Ltd. and Aero Airlines Ltd.** Estonian Airlines Ltd. is owned by airline SAS Ltd. 49 percent, the Estonian state 34 percent, and an Estonian investment company Cresco Ltd. SAS Ltd. bought its stake from Danish airline Maersk Air Ltd. in September 2003. Estonian Air Ltd. is the country's flag carrier and has an alliance with the SAS Group. Aero Airlines Ltd. is a subsidiary of Finnish airline Finnair Ltd. Starting from June 2004, Aero Ltd. doubles its flights if Finland based on agreement with Finnair Ltd. and operates routes mainly in southern Finland with destinations in Tampere, Turku, Joensuu and Kruunupyy. Aero Airlines Ltd. intends to acquire two more of Finnair's ATR-72 type aircraft in August 2004 and the remaining three of Finnair's ATR fleet by the end of the year 2004.

374. **Avies Ltd. and Air Livonia Ltd. offer domestic passenger services.** Avies Ltd. offers domestic services to the islands of Kuressaare and Hiiumaa based on a Public Service Obligation. Air Livonia Ltd. used to offer on the same basis services from Pärnu to Kihnu, Ruhnu and Kuressaare. Avies Ltd. also operates regular cargo flights for DHL Ltd. from Tallinn to Helsinki. The Let-410 aircraft has a maximum payload of approximately of 1,300–1,500kg.

375. **Unscheduled services offered by Enimex Ltd. and Airest Ltd.** Enimex Ltd. operates a variety of Russian type aircraft and has been flying mail and supply for military troops from Germany and the United Kingdom to Afghanistan. Its largest aircraft, the An-72, has a maximum payload of 7,500kg. Airest Ltd. offers regional unscheduled passenger and goods transport.

Table E.5. Estonia's, Latvia's and Lithuania's flag carriers' financial performance (in million USD)

	2001	2002	2003
<b>Estonian Air</b>			
Net revenue (in million USD)	64,4	68,8	71,3
Profit/loss (in million USD)	1,2	3,2	6,6
No. of passengers (in thousand)	273	298	389
<b>Air Baltic</b>			
Net revenue (in million USD)	51,8	52,9	62,0
Profit/loss (in million USD)	0,1	0,9	2,0
No. of passengers (in thousand)	249	262	336
<b>Lithuanian Airlines</b>			
Net revenue (in million USD)	N/A	79,3	73,1
Profit/loss (in million USD)	N/A	14,5	0,8
No. of passengers (in thousand)	304	258	286

376. **Latvia's flag carrier, Air Baltic Ltd., operates a total of 12 aircraft.** Founded in 1995, Air Baltic Corporation is a joint stock company with two major shareholders. The Latvian state owns 52.6 percent of the shares and Scandinavian airline SAS Ltd. 47.2 percent. The airline has been able to increase steadily its passenger volumes in the past few years. In June 2004, it started to operate flights from Vilnius to Berlin, Cologne, Copenhagen, Dublin and Hamburg. Further destinations from Vilnius are planned to Helsinki, Oslo, Vienna and Warsaw later in autumn 2004.

377. **Several smaller airlines offer scheduled and unscheduled passenger and freighter services. Raf-Avia Ltd.** operates, among other types, five An-26 type of aircraft with a payload of 6,300kg or three pallets of goods. These are used for a daily freighter service for DHL Ltd. and SAS Cargo Ltd. from Riga to Copenhagen. The aircraft's payload is usually split 2/3 DHL Ltd. and 1/3 SAS Cargo Ltd. In summer 2004, the airline plans to acquire a regional passenger jet BAe RJ-85. This aircraft's passenger capacity is 85 passengers. **Inversija Ltd.** has three IL-76T type of aircraft registered. These aircraft have a payload of 45,000kg and are globally favored for special transports because of its high payload and low costs. **Concors Ltd.** offers passenger and cargo charter flights to European and C.I.S. countries with Let-410 and Yak-42 type of aircraft. Unscheduled passenger services to tourist destinations like Spain, Greece, Turkey, Egypt, Tunisia, or the Canary Islands are operated by airlines **LatCharter Ltd.** and **Latpass Aviolinijas Ltd.**

378. **Lithuanian Airlines and its former subsidiary, Air Lithuania, offer scheduled flights to European destinations.** In early 2004, Lithuanian Airlines announced it would sell its stakes in several subsidiaries. These include Vilnius airport-based catering company Aero-Chef-LAL Ltd. (50.8%-owned), tour operator Aviaturas & Partners Ltd. (52%) and regional airline Air Lithuania. In May 2004, Lithuanian Airlines sold its 100 percent stake in Air Lithuania to Arijus Ltd. a local freight forwarder and logistics service provider based in Kaunas. For the fiscal year 2003, Lithuanian Airlines reported a net profit of USD 0.8 million compared to the profit of USD 14.5 million in 2002.

379. In 2003, the State Property Fund tried unsuccessfully to privatize Lithuanian Airlines, but initial bidders withdrew one by one, SAS being the last to pull out. A new privatization tender is in preparation and may possibly be issued in 2004/2005. Earlier in 2004, SAS Ltd. was still interested in the airline; it took also part in Air Lithuania's tender. However, in summer 2004, SAS's subsidiary airBaltic has opened a number of new routes to Vilnius as a direct competition to the national flag carrier. Lithuanian Airlines has a 45 percent market share in terms of passenger transport. SAS Ltd. has reportedly a 17.3 percent share. Both airlines offer scheduled services to domestic and international destinations. Lithuanian Airlines home base is at Vilnius airport, while Air Lithuania operates mainly from Palanga airport.

380. High number of employees at Lithuanian Airlines. The following figure illustrates the number of passengers served in correlation to the number of employees of the respective airline. Looking at the position of Lithuanian Airlines, the figure shows that the number of employees is approximately three times higher than respective airlines serving similar passenger volumes.

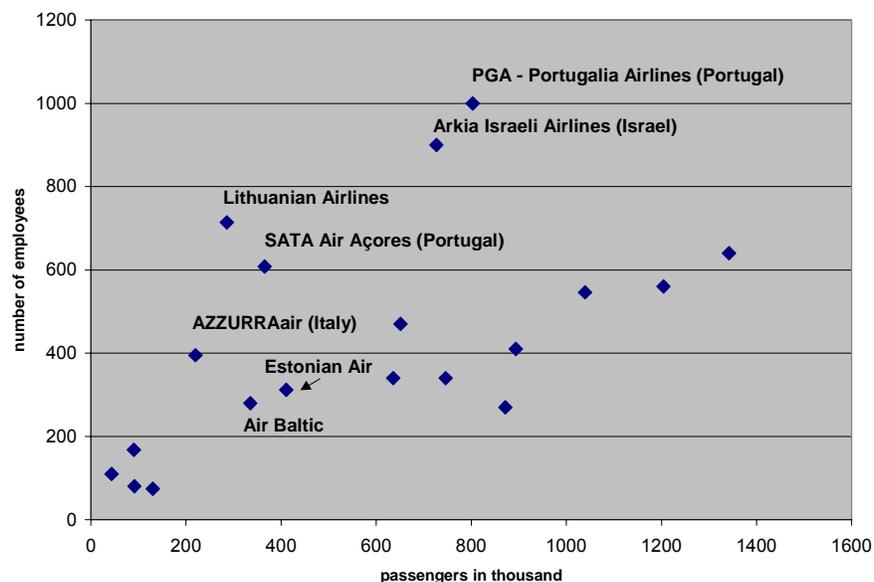


Figure E.3. Passenger volumes of 2003 in relation to the number of employees of selected European airlines. Sources: European Airlines Association, Estonian Air

381. **Smaller airlines offer unscheduled passenger and freight services.** Aurela Ltd. is a joint-stock company operating worldwide tourist charter flights as well as VIP flights. The company recently added a Boeing 737 passenger aircraft to its fleet. Apaptas Ltd. offers air taxi, passenger charter and cargo flights and is based in Kaunas. Aviavilsa Ltd. and Aviapaslauga Ltd. are both cargo freighter operators. Aviavilsa Ltd. flies daily scheduled cargo flights for courier mail company DHL Ltd. between Vilnius and Copenhagen. Aviapaslauga Ltd.'s aircraft TU-204C has a maximum cargo capacity of 27 tons and is operating from Kaunas. At this airport the company offers also ramp- and cargo handling as well as other related services. The company has also a highloader available with a lifting capacity of 25 tons.

382. **Scandinavian airlines major actors in the Baltic airline market.** SAS Ltd. and Finnair Ltd. have been active in the market starting early 1990's. SAS Ltd. bought stakes in Estonian Airlines Ltd. and Air Baltic Ltd. and it has been recently reported that the airline wants to increase its 49 percent in Estonian and 47.2 percent in AirBaltic to majority holdings. Finnair Ltd. established a subsidiary in Estonia Aero Airlines Ltd. that operates the routes between Tallinn and

Helsinki and is soon to take over a majority of Finnair's domestic network in Finland. Lufthansa Ltd. has had regular flights from Frankfurt to Vilnius starting mid 1990's. The company was also heavily involved in founding the Vilnius airport based cargo handling company Litcargus Ltd. From Riga, British Airways Ltd. was among the first foreign airlines present offering flights to the United Kingdom. CSA Czech Airlines Ltd. is offering scheduled flights between Prague and all three Baltic States capital cities.

383. **Airline's market share in the Baltic States.** The following table illustrates the market share of airlines present in the Baltic States based on number of flights, available seat capacity and available cargo volume capacity per week from each major airport. Cargo volume capacity figures are only indicative, because they vary significantly depending on the luggage carried by passengers. Available cargo weight capacity changes even more depending on number of passengers, fuel on board and characteristics of the aircraft and thus here not taken into consideration.

Table E.6. Airline's market share (%) in the Baltic States based on flights, available seat capacity and available cargo volume capacity per week

Airline	Tallinn (TLL)			Riga (RIX)			Vilnius (VNO)		
	Flights per week	Available seat capacity	Available cargo capacity in cubic meters	Flights per week	Available seat capacity	Available cargo capacity in cubic meters	Flights per week	Available seat capacity	Available cargo capacity in cubic meters
Total	206	17 106	1 921	241	17 975	2 247	179	15 333	1 713
Estonian Air	40	55	69				3	4	5
Air Baltic	7	4	1	66	60	59	17	19	20
Lithuanian Airlines							44	41	43
Aero Airlines	18	15	6						
Aeroflot				2	2	4			
Air Lithuania							1	1	
CSA Czech Airlines	5	6	8	5	7	9	6	8	10
Finnair	5	4	2	8	10	9	2	1	1
LOT Polish Airlines	3	2	1	2	2	2	6	4	2
Lufthansa	3	3	7	6	6	11	6	7	9
SAS	6	5	2				12	13	8
Others *)	12	6	4	11	13	6	4	2	2
	100	100	100	100	100	100	100	100	100

\*) Austrian Airlines, Avies, British Airways, Israil, KLM, Volareweb

384. **National flag carriers show a strong presence in their home countries.** In their neighboring countries the airlines are only very little present except for Air Baltic Ltd. which started to offer flights from Vilnius to European destinations. At Vilnius airport, Air Baltic has a market share of almost 20 percent on all three indicators compared to an approximately 40 percent share by Lithuanian Airlines. The high cargo volume capacity of Estonian Air Ltd. at Tallinn airport can partly be explained by the type of aircraft operated. Estonian Air flies only with Boeing 737 type of aircraft, which has a significantly bigger cargo compartment compared to smaller aircraft operated by Air Baltic and Lithuanian Airlines. For further information see also Table E.6 and Attachments E.4. and E.5.

385. **Freight forwarders and General Sales Agent's (GSA).** Most of the foreign airlines operating in the Baltic States use the services of General Sales Agent's (GSA). GSA's act as the airlines representatives in the region and sell e.g. cargo capacity on behalf of the airline. Through a GSA an airline gets fast any easy access to a market. GSA's have good local knowledge and market intelligence available and are able to offer airlines service within a short period of time. In the mid-90's when foreign airlines started to operate in this area, local GSA's did not exist and

airlines turned to local freight forwarders who became the airlines' representatives. Currently many of these arrangements are still in place, however, in some instances the services have been separated from the freight forwarding business and subsidiaries have been founded for the GSA activities. Establishing independent companies became necessary, because other freight forwarding companies had to contact their competitors in order to get cargo rates from the airlines. Although these new established companies are own entities they often still have strong associations with the freight forwarding company that owns the GSA subsidiary. With other freight forwarders, who do not want to disclose their business volumes and activities to their competitors, this situation still creates some concern in regard of the neutrality of the GSA.

386. **Scheduled flights suffer from low cargo capacity.** The types of aircraft operating scheduled passenger flights from/to the Baltic States are either turboprop, regional jets or narrow-body type of aircraft. These types have only very limited or even no capacity to transport airfreight and can often take shipments weighing no more than 250kg or a volume of 5–8m<sup>3</sup>. Cargo capacity depends on the passenger load factor as passengers' luggage has priority. Sometimes the decision whether an airfreight shipment can be accepted on a flight is made within the hour before scheduled take-off. In the following table, the figures of cargo weight capacity are only indicative and depend among others on passenger load factor, luggage volume and the flight destination. Some carriers have decided on certain flights not to accept any cargo at all. The lack of capacity is either compensated by the use of small freighter aircraft or trucks so-called road feeder services, which have a capacity of approximately 25 tons and are operated by the airlines.

387. **Local air freight carriers have a strong market position.** The freighter aircraft operated by local airlines have a cargo capacity ranging 1,500–7,500kg. Especially courier companies use freighter aircraft for their express shipments. DHL Ltd. and SAS Cargo Ltd. share freight capacity on daily flights from Riga and Vilnius to Copenhagen. The scheduled routes of the freighter aircraft are usually flown once per day, but if needed they are able to fly also additional flights. The revenues from the contracts with the courier services account for a major part of the airline's turnover. The airlines are very flexible with regard to ad hoc charter. Charter inquiries come usually through airfreight brokers and if a contract is closed the aircraft are able to take-off at best within a couple of hours.

Table E.7. Cargo capacity of selected aircraft operating in the Baltic Source: Airlines - \*) Finnair, \*\*) SAS, \*\*\*) Lithuanian Airlines

<i>airline</i>	<i>aircraft type</i>	<i>max payload in kg</i>	<i>volume m3</i>
Aero Airlines/Finnair	ATR 72 *)	500	3
SAS	AVRO RJ70 **)	3,000	18
SAS	Boeing B737-500 **)	1,000	6-16
Lithuanian Airlines	Boeing B737-500 ***)	1,500	13
SAS	de Havilland Q400 **)	200	3
SAS	Fokker 50 **)	100	2
Lithuanian Airlines	SAAB-2000 ***)	600	6

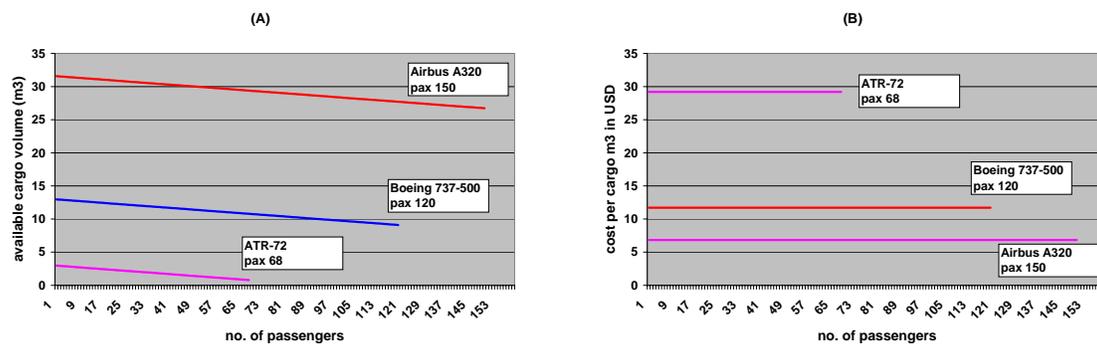
Table E.8. Selected freight airline operators operating from the Baltic States Sources: Airlines

airline	aircraft type	max payload in kg	volume m3	route	shipper
Aviavilsa	An-26	6,300	35	Vilnius-Copenhagen	DHL
Avies	Let-410	1,300	18	Tallinn-Helsinki	DHL
Raf-Avia	An-26	6,300	35	Riga-Copenhagen	DHL
Apatas	Let-410	1,500	18	Kaunas-Warsaw	UPS
Apatas	Let-410	1,500	18	Kaunas-Minsk	UPS
West Air Sweden	ATP/HS748	7,500/6,300	74/55	Tallinn-Turku	TNT

Note: DHL co-operates and shares capacity with SAS Cargo

388. Figure E.4. illustrates how cargo capacity of an aircraft decreases as the number of passengers increases (A), when using an ATR-72, Boeing 737-500 or an Airbus A320 aircraft<sup>42</sup>. The introduction of an aircraft type like the Airbus A320 to the Baltic market could be the next step if passenger numbers continue to increase. This type of aircraft would significantly increase the available cargo volume and weight capacity and airlines would also benefit from lower operating costs (B). Technical details for the analysis is given in Attachment E.8.

Figure E.4. (A) Available cargo volume capacity in m<sup>3</sup> and (B) cargo compartment unit cost in USD/m<sup>3</sup>. by type of aircraft. Source: Air Transport Association, ATR; see also Attachment E.8.



Note: The figures are only indicative as actual values depend on many different variables.

389. **Road Feeder Services play a significant role in airfreight transport.** Many airlines like SAS Ltd., Finnair Ltd., Lufthansa Ltd., Austrian Airlines Ltd. or LOT - Polish Airlines Ltd. offer road feeder services (RFS) on a scheduled and unscheduled basis for oversized shipments. Trucks have payload capacities of up to 25 tons or approximately 70–90m<sup>3</sup>. Also so-called off-line carriers like Air France Ltd. or Singapore Airlines Ltd., who actually operate no flights from/to the Baltic States, offer airfreight services with trucks in this region. These goods are transported under air waybill and are charged according to airfreight tariffs. The cities Copenhagen, Helsinki, Stockholm are connected on a daily basis operated by SAS Ltd. and Finnair Ltd. Truck services are also available between the Baltic capitals a daily basis. Other destinations are served on a weekly basis or on demand. It is estimated that 60–70 percent of all airfreight to the Baltic States is carried on trucks. On import, the RFS is used for some 80 percent of total shipments and on export, for some 20 percent of total shipments.

## **E.2 Other logistic services available to exporters and importers**

390. **Renting of rail wagons to Russia on the rise in Estonia.** Renting rail cars is profitable business, and thus, in recent years banks have become very interested in this alternative in Estonia. A new rail tank costs about USD34,500. Renting it to a shipper in Estonia brings the owner about USD20 daily. Since the increased oil exports resulting from the high world market price for oil have caused a shortage of rail tanks in Russia, the rental per day may rise sometimes as high as to USD40 in that country. Roughly 150,000 rail tanks are being used on Russia's tracks in 2004, and an estimated at least 100,000 more would be needed.

391. By renting out the rail tank the acquisition price can be paid back within four to five years at the latest, after which the entire revenue with the exception of maintenance costs will be the owner's profit. A rail tank can be used during up to 30 years if properly maintained. It also needs to be pointed out that the price of rail tanks has been rising at a rate of 25 % annually over recent years.

392. As many as 6,000 new rail tanks were registered in Estonia in the second half of last year alone. Hansabank, the largest banking group in the Baltics, sees the rail car leasing business as having so good prospects that it set up a leasing subsidiary in Russia, which brought the bank nearly 6.5 million US dollars profit already during the first year. The bank has lent more than 240 million US dollars for the acquisition of some 8,000 rail cars. Also Uhispank and Latvia's Parex Bank are active in the business.

393. A Russian-owned plant began to assemble rail cars in north-eastern **Estonia** last year. The plant is expected to make up to 3,000 rail cars annually in the future.

## **E.3 Governance and regulation of transport services**

### **E.3.1 Road transport**

394. The so-called CEMT permits allow trucks to engage in international transports in ECMT countries. These permits are issued by European Conference of Ministers of Transport, which is organized under OECD. ECMT comprises all European and CIS countries, with Armenia being an observer member.

395. CEMT permits are needed to engage in international road transport between the member countries of the ECMT. This does not apply to road transport of EU carriers within the EU, since intra-EU road transport has been liberalized for member countries. However, cabotage traffic will not be allowed for new members for a period up to five years. The permits are mostly used in traffic between EU and non-EU countries.

396. The CEMT permits are issued either for one year or as a short-term basis for single roundtrips. The permits are either multilateral, which allow for traffic within the entire ECMT area, bilateral for traffic between two specified countries, or for transit, which allows for passage through an ECMT country to another country.

### **E.3.2 Maritime transport and port operations**

397. Private sector participation in port operation has reached a significant dimension over the last decade. This has been driven by broader trends within the transport sector as well as by a new understanding of the general role of the public sector in the provision of infrastructure services.

398. The countries that have led this reform process have been able to attract significant private capital investment to refurbish infrastructure assets and to modernize cargo-handling equipment. Under private management, ports have significantly improved performance with regard to service quality and reduction of handling costs. Whether these initial achievements - largely driven by competitive tendering of concessions - can be sustained in the long term, will depend heavily on the ability of port authorities to stimulate effective intra port competition. Driven by the emergence of multi-modal transport networks, regional competition will gain relevance and thus the need for regional and multi-modal assessments of competitive structures will require port authorities to coordinate on a broader scale.

399. Furthermore, increased globalization of the port, terminal, and shipping industry means that new competition conditions appear which require governments and public port authorities to monitor the market across national boundaries. In such a context, the role of an effective public regulation of the sector will become critical to optimize the efficiency of the new partnerships developing between the public and private sectors on the one hand, and between ports, terminal operators and shipping lines, on the other.

400. In the maritime sector, the main regulatory issues include manning of the vessels, safety at sea and in ports, as well as keeping up with the inspection of the technical requirements of vessels. The inspection involves both national and foreign vessels through Port State Control. According to the Paris Memorandum of Understanding (MOU), the percentage of vessels registered in the Baltic States detained following Port State control was over 6 % in 2002. This compares with an average for EU-flagged vessels of 3.5%. However, there are strong indications that the situation is deteriorating, in that the number of Baltic States' vessels being detained is rising sharply. The countries need to urgently address this issue with a view to reversing this trend of deteriorating detention rates. In 2003, both Lithuania and Latvia have now been moved from the black list to the grey list of the Paris MOU.

401. The main international maritime standards on safety, manning, loading and cargo inspection are in place. Since 2001, regulation on security issues in ports and at sea has been initiated mainly by the United States. The measures include, among others, the International Ship and Port Facility Security Code (ISPS) and the Container Security Initiative (CSI). The Baltic States ports have started to implement these, as all ports had to comply with ISPS by July 2004.

402. The maritime authorities of Russia, Finland and Estonia decided to establish a VTMISS in the Gulf of Finland, which is scheduled for start-up in July 2004<sup>43</sup>. The system resembles the one used in air traffic. The traffic is under constant surveillance, since the VTS centers do not only

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<sup>43</sup> The Finnish Maritime Administration at: [www.fma.fi/e/functions/vts/vtmis.php](http://www.fma.fi/e/functions/vts/vtmis.php) ; The acronym VTMISS (Vessel Traffic Management and Information Services) is used for the various telematics and information systems developed to enhance the safety and effectiveness of the maritime traffic. Also the term Offshore VTS has been used in the same context (VTS = Vessel Traffic Service).

receive ships' reports but they also monitor their movements in the passages, and instruct them in danger situations.

403. The relevant administrative structures in the maritime area are in place, but management systems of Maritime Administration need to be strengthened in all three countries. The training of seamen and officers and their availability for national vessels and for the landside duties requiring nautical expertise is a problem in all three countries. Even if the wages paid to seamen are high compared to the national level, they are far below salaries in similar international jobs. Especially for officers it is fairly easy to take employment on foreign-flagged vessels.

### **The International Ship and Port Facility Security Code**

404. **ISPS code** is an international agreement approved by International Maritime Organization (IMO). It provides a comprehensive set of measures to enhance the security of ships and port facilities. In essence, the code takes the approach that ensuring the security of ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

405. The purpose of the code is to provide a standardized framework for evaluating risk, enabling governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures. Detailed implementation of the ISPS code is a matter for individual national governments.

406. The ISPS code contains detailed security-related requirements for implementation by governments in legislation, port authorities and shipping companies. The code requires a ship security plan to be drawn up for all vessels and the plan to be approved by the flag state administration. Each ship must also have a designated ship security officer and each shipping company must appoint a company security officer. Similarly, port facilities are also required to have an approved security plan and to appoint a designated security officer.

407. In many countries commercial ports have until now been more or less open access areas. After the implementation of the new regulation, free movement in port areas will no longer be possible. In many ports ensuring port integrity and establishing appropriate surveillance methods in order to control flows of people and cargoes means radical changes to the port infrastructure. One visible example of this is many port areas are new fences and gates.

408. In most of the three Baltic States' ports the basic physical infrastructure is already in compliance with the code's requirements. As a legacy of the past Soviet system ports have always been areas restricted from public with fences and gates. A lucky coincidence is that the fence structures have not been removed and entrance to port area is usually through specifically constructed and controlled gates.

409. The process of implementing the ISPS code within short notice has set a real challenge to the responsible authorities all over the world. The most significant reforms needed are changes in attitudes of individuals towards improved security measures.

410. **Estonia.** In Port of Tallinn large share of the measures for increased security were trusted in hands of private operators i.e. international companies providing security services. During the implementation this caused anxiety among interviewed transport operators, as the names and other contact information for Security officers was not available until at a very late point of time. One day before the implementation of new security measures at least ports and port operators in Tallinn and Pärnu were in compliance with the new regulations.

## **Latvia**

411. Maritime Administration has been responsible for implementing measures towards increased ship safety and ports together with port operators have carried major responsibility over their own operations. International co-operation especially with Germany and the United States has taken place. The government of Latvia has provided no extra funds for the purpose but according to Maritime administration financial matters have not set limitations to the process. The main emphasis and task has been to implement the new regulations in the three largest ports; Ventspils, Riga and Liepaja.

412. In Riga Freeport the terminal facility security assessments were planned to be completed only until July 10th. In May 2004 Latvian Maritime Administration had assessed 75 port facilities and 68 of those needed enforcing of safety measures. Just days before implementation of the ISPS code there are no Latvian ports complying with the new regulations.

## **Lithuania**

413. Ministry of transport has been responsible for the implementation of the ISPS Code in Lithuanian port facilities. Klaipeda State Seaport Authority was commissioned to carry practical responsibility for preparations, including listing of the Port Facility Security Officers in the port's 18 terminals and appropriate security plans for later approval. Port of Klaipeda and the terminal facilities now fulfill the new international safety requirements and are thus able to provide undisturbed service for international trade. Lithuanian Maritime Safety Administration has been responsible for implementing the ISPS code in vessels carrying Lithuanian flag together with international classification societies.

### **E.3.3 Rail transport**

414. **Cross-subsidies from freight traffic to passenger traffic still a problem in Lithuanian railways, but Latvia has already solved it.** One of the most difficult transition problems is the use of cross-subsidies to support passenger transportation with the profits derived from railway cargo transportation. In the EU such cross-subsidies are not allowed. In 2002, the Latvian Ministry of Transport and Communication began subsidizing two new passenger railway companies as pilots or experiments. There was subsidies from state budget amount to around USD 150,000 and USD 300,000 in 2002. ([www.worldbank.org](http://www.worldbank.org)) Passenger rail transport in Latvia was subsidized by USD 3.2 million in 2002. In 2004 state budget there are **LVL** 4.7 million for cross-subsidies removal.

Table E.9. Infrastructure charges of Latvian railways

Train categories	Category of Rail infrastructure		
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Domestic passenger electric	2,32	1,73	-
Domestic passenger diesel	1,86	1,39	3,10
International passenger	0,05	0,05	0,05
Freight	4,47	3,87	2,89

415. In Latvian railways since August 2004 the discounts for passenger train infrastructure costs are cancelled. Infrastructure charge (in LVL) is shown in table E.9. The remaining discounts for international passenger traffic do not affect the whole level of prices, due to small amount of such trains and are necessary to support this business. More than – it is necessary to restore some discounts as discounts encouraging the use of considerably underutilized lines, for 3<sup>rd</sup> category infrastructure users for passenger traffic, in order with Article 9 part 3 of the directive 2001/14/EC, otherwise it will result in cancellation of passenger traffic on this category infrastructure and the subsequent increasing of the charge for freight railway undertakings.

416. At the moment Lithuanian railways is in a transition period. According to EU principles from May 1, 2004 passenger transportation by rail should be separated from any other activities and should not be cross-funded from freight transportation. In Lithuania's budget for the year 2004 the funds for Public Service Contract (PSO) contract are not foreseen and changes that are set in legal framework are expected to be implemented during the upcoming few years. After the PSO contract with Government or MoTC will be set up, JSC 'Lithuanian Railways' will stop cross-subsidizing its passenger operations on unprofitable lines with its freight transport. As in Latvia, it is not in the interest of the Lithuanian Railways' freight operations to support passenger transportations because they also need investments and has no stimulus to develop more attractive services and seek higher profit. In 2003, USD 1.52 million was allocated to passenger services from the state budget, while remaining part (approximately USD 61.5 million) was financed from the railway company's profits gained from freight transport.

417. In Estonia situation is different since the railways operate under private ownership. However, the government subsidizes passenger transport in Estonia with over USD 10 million annually. In 2002 subsidies amounted to approximately USD 14 million, or the same amount as Eesti Raudtee paid in dividends to the state.

### E.3.4 Aviation

418. **European aviation requirements.** The European Commission specifies requirements applicable to products, parts and appliances of aircraft<sup>44</sup>. Most aircraft types operated in the EU benefit from the so-called grand-fathering provisions on pre-existing aircraft type certificates and can be certified by the European Aviation Safety Agency (EASA). The aircraft that do not benefit from these grand-fathering provisions remain under national administrations' oversight. Among these aircraft are many types, which are operated by smaller airlines in the Baltic States. Aircraft not under EASA responsibility are among others the An-26, An-28, An-72, Let-410 or Yak-42D type of aircraft. The EASA has to make a final decision on certification of these aircraft by spring 2007.

<sup>44</sup> For further information see: Regulation (EC) 1702/2003

419. Further, in connection with the ECAC/JAA program for safety assessment of foreign aircraft (SAFA<sup>45</sup>), aircraft inspections in the ECAC member countries were conducted including aircraft registered and operated in the Baltic States. In the report's inspection findings, most issues regarding aircraft equipment relate to the Ground Proximity Warning System (GPWS) and the Airborne Collision Avoidance System (ACAS II). ICAO Annex 6 requires aircraft to be equipped with a Ground Proximity Warning System. This system warns a flight crew should the aircraft come unintentionally too close to the ground below. The Airborne Collision Avoidance System indicates the flight crew other aircraft in its vicinity and allows for vertical escape maneuvers. Reported findings relate to no or outdated ACAS II installed.

420. Some CIS-built aircraft types (Tupolev, Ilyushin, Antonov, Yakovlev) either have no ACAS systems installed or they have a system installed that is either outdated or does not fully meet the ICAO Standard. Installation of such an ACAS II system into a Let-410 type of aircraft is estimated to cost approximately USD 240,000 per aircraft. The purchasing cost of an aircraft LET-410 ranges from USD 200,000–500,000. Acquisition of the ACAS II for these aircraft is very expensive considering the value of the aircraft and overall operating costs.

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<sup>45</sup> For further information see: ECAC/JAA programme for safety assessment of foreign aircraft. SAFA Report. (01 January 2002 to 31 December 2002)

Table E.10. Airlines operating aircraft over 5,700kg maximum take-off weight (MTOW) Sources: National CAA, airlines, manufacturers

<i>Estonia</i>	<i>Airline</i>	<i>Type (over 5,700kg MTOW)</i>	<i>Original manufacturer</i>	<i>Nro. of aircraft</i>
	Estonian Air	Boeing 737-500	Boeing Corporation/USA	5
	Aero Airlines AS	ATR-72-201	Aérospatiale/Aeritalia France/Italy	2
	Enimex	AN-28 *)	Antonov/Ukraine	3
		AN-72-100 *)	Antonov/Ukraine	5
	Avies	Let-410 *)	Letecke Zavody/Czech Republic	4
		Learjet 60	Bombardier Aerospace/Canada	1
		Learjet 50	Bombardier Aerospace/Canada	1
		Jetstream 3100	BAE Systems/United Kingdom	1
	Air Livonia	AN-28 *)	Antonov/Ukraine	2
	Airest	Let-410 *)	Letecke Zavody/Czech Republic	1
		Let-410 *)	Letecke Zavody/Czech Republic	1

other operators: AS Pakker Avio, OÜ Avio Foto, AS Aerosport, Villeron OÜ

<i>Latvia</i>	<i>Airline</i>	<i>Type (over 5,700kg MTOW)</i>	<i>Original manufacturer</i>	<i>Nro. of aircraft</i>
	Air Baltic	Boeing 737-505	Boeing Corporation/USA	3
		Avro RJ70	BAE Systems/United Kingdom	3
		Fokker 50	Fokker/the Netherlands	6
	Raf-Avia	AN-26 *)	Antonov/Ukraine	5
		AN-74TK 100 *)	Antonov/Ukraine	1
	Konkors	Let-410 *)	Letecke Zavody/Czech Republic	1
		Yak-42D *)	Yakovlev/Russia	1
	Latcharter	A320-211	Airbus Corporation	1
		Yak-42D *)	Yakovlev/Russia	2
		Tu-134M *)	Tupolev/Russia	2
	Inversija	IL 76T (TD) *)	Ilyushin/Russia	3
	Latpass	Tu-154B-2 *)	Tupolev/Russia	1
	VIP Avia	HS 125-700B	Hawker Siddeley/United Kingdom	1
		Bae 125 800B	BAE Systems/United Kingdom	1

other operators: SIA Baltijas Helikopters, SIA Baltijas Meridians, Latgales Avio

<i>Lithuania</i>	<i>Airline</i>	<i>Type (over 5,700kg MTOW)</i>	<i>Original manufacturer</i>	<i>Nro. of aircraft</i>
	Lithuanian Airlines	Boeing 737-200	Boeing Corporation/USA	2
		Boeing 737-500	Boeing Corporation/USA	2
		Saab-2000	Saab Aircraft/Sweden	3
	Air Lithuania	ATR-42-300	Aérospatiale/Aeritalia France/Italy	2
	Aurela	Boeing 737-300	Boeing Corporation/USA	1
		HS 125-700B	Hawker Siddeley/United Kingdom	1
		Yak-42D *)	Yakovlev/Russia	1
	Apatas	Let-410 *)	Letecke Zavody/Czech Republic	5
	Aviavilsa	AN-26B *)	Antonov/Ukraine	2
	Aviapaslauga	Tu-204C *)	Tupolev/Russia	1
	Danų oro transportas	ATR-42-300	Aérospatiale/Aeritalia France/Italy	1

other operators: Air Klaipėda, Transaviabaltika, Gintarinės avialinijos

\*) Aircraft types currently not benefiting from the grand-fathering provisions of Commission Regulation (EC) 1702/2003. Status as of 30.4.2004  
Source: European Aviation Safety Agency

421. **The new European aviation requirements cause uncertainty to smaller airlines.** Many of them operate Eastern European manufactured aircraft that do not benefit from the grand-fathering provisions. At present, it is not certain whether these airlines will be able to continue operating their aircraft in other European countries. In connection with the application for landing slots in other EU countries, airlines have to present JAR (Joint Aviation Requirements) certificates of airworthiness and maintenance. As these certificates do not exist for all aircraft types it is unclear whether they will be access approved. Large airlines have already modified their aircraft fleets corresponding EASA type-certificates or they benefit from so-called grand-father provisions. To small airlines the modification or renewal of aircraft and the related investment is a major financial burden. The disappearance of cargo capacity provided by these carriers would at least temporarily harm the air freight market.

### **Box E.1. Estonian islands Hiiumaa and Saaremaa**

Public transport services to the islands Hiiumaa and Saaremaa are regulated by the Public Transport Act. Air passenger routes from the mainland to the island of Saaremaa, Hiiumaa and the smaller islands belonging to the territory of Saare county are subject to Public Service Obligation (PSO). These connections can be subsidized from the state or local government. Public service contracts for carriage of passengers are issued for the routes Tallinn-Kärdla-Tallinn, Tallinn-Kuressaare-Tallinn and Pärnu-Ruhnu-Kuressaare-Ruhnu-Pärnu. Especially to the islands the links are essential for the local economy reducing transport times to the capital from 5 hours to 40 minutes. The operating expenditures are financed by the state in form of general subsidies and by service fees charged from the passengers. The busiest period is the summer time for these routes. The number of turnarounds per week for these routes is 9–11 with a minimum aircraft seating capacity of 15.

EU legislation allows on routes within the Community PSOs for air services to airports that serve peripheral or developing regions, on its territory or on a rarely used link. A PSO means an obligation assumed by a carrier to organize public regular services for compensation based on the carriers' commercial interests in such volume and conditions as requested by the state or local government. Under Estonian legislation a public service contract may be entered into for a term of up to ten years. In order to be authorized, these PSOs must be vital to the economic development of the region. In the future, public tenders for these routes have to be published in the Official Journal of the European Union<sup>1</sup>.

The island Hiiumaa has a population of 11,335 (2003) and a total area of 1,023 km<sup>2</sup>. Distance to the capital Tallinn is 139 km. The airport, Kärdla Airport Ltd. is 100 percent owned by the state. In 2003, Kärdla airport handled 7,214 passengers. The Public Service Contract to operate the route Tallinn-Kärdla-Tallinn was given in 2002/2003 to Estonian company Air Livonia Ltd. Other operators who participated in the public tender for this agreement were Airest Ltd. and Enimex Ltd., both Estonian airlines. The operating company was chosen by the lowest bidder. In autumn 2003, Avies Ltd. won a new public tender for this route. The contract was signed for five years with an annual compensation of USD 0.39 million. Avies Ltd. and Air Livonia Ltd. made bids for the right to operate the route. For these above mentioned destinations currently Estonian companies Avies Ltd. and Air Livonia Ltd. hold operating licenses issued by the Estonian Civil Aviation Administration.

Saaremaa is an island south of Hiiumaa and has a population of 39,231 (2003) on a total area of 2,922 km<sup>2</sup>. Distance to the capital Tallinn is 217 km. The main airport Kuressaare Airport Ltd. is 100 percent owned by the state and had a passenger volume of 12,156 in 2003. A second airport on Ruhnu, another island south of Saaremaa, is owned by Kuressaare Airport Ltd. with a passenger volume of 3,080 in 2003. The Public Service Contract is subject to air traffic between Tallinn and Kuressaare operated by Avies Ltd. and the route Pärnu-Ruhnu-Kuressaare-Ruhnu-Pärnu operated by Air Livonia Ltd. in 2002/2003, both Estonian companies.

The transport fees charged cover approximately 2/3 of the actual operating costs operated with the current type of aircraft. The Public Transport Act foresees no provision for subsidies for acquisition or reconstruction of aircraft as public transport vehicles.

Both types of aircraft, the Antonov AN-28 and the Letecké Závody LET-410 operated by the airlines are currently not in full compliance with Joint Aviation Requirements (JAR). The unclear issue on aircraft certification of these kind of aircraft may cause, at worst, disruptions in the air link to the islands.

<sup>1</sup> The Office for Official Publications of the European Communities publishes in its journal legislation and information from institutions and other bodies of the EU.

For further information see: Office for Official Publications of the European Communities [http://publications.eu.int/index\\_en.html](http://publications.eu.int/index_en.html)

## E.4 Price mechanisms

### E.4.1 Road transport

#### Cost competitiveness in road transport

422. Cost competitiveness is a crucial issue for road haulage firms, and competition has reduced cost differentials to a minimum. This is seen in Table E.11. , which indicates operating costs for carriers from the Baltic States, CEE and the EU. For reference, data for Moldovan carriers is also shown, as their operational costs are among the lowest in Europe because of the very low wages. However, the lack of finance, equipment and transport permits effectively hinders Moldovan carriers to utilize their cost advantage.

Table E.11. Annual cost of operating a 20 ton truck in international traffic for 200,000 km per year in 2001 (2002 for Moldova) in euros. The figures do not include overhead costs as they vary a lot from one firm to another. Sources: IRU and for Moldova: Ojala 2003.

Costs in euros/year	Estonia	Latvia	Lithuania	Moldova	CEE	EU
Personnel	11 500	13 000	12 000	6 400	16 000	56 600
Depreciation	14 000	16 000	14 700	14 000	16 200	11 500
Tax/toll/licenses	6 600	7 500	7 000	10 600	4 100	2 400
Insurance	2 100	2 300	2 200	3 600	2 400	3 000
Interest	2 500	2 800	2 600	7 000	3 200	3 600
Fuel	20 600	23 500	21 700	18 000	18 600	21 700
Tires	2 100	2 800	2 200	3 000	1 200	1 800
Repair/Maintenance	1 700	1 900	1 700	3 000	2 100	4 800
Other	20 600	12 200	13 900	3 400	16 200	15 600
<b>Total (less overheads)</b>	<b>81 700</b>	<b>82 000</b>	<b>78 000</b>	<b>69 000</b>	<b>80 000</b>	<b>121 000</b>

423. As carriers from EU accession countries enjoy a distinct cost advantage over EU carriers, the accession treaty bans carriers from accession countries from entering in cabotage traffic in old member states for a period of up to five years.

424. The Baltic States, along with Poland, enjoy the lowest taxation of heavy goods vehicles in the European Union. The latest available comparison (Saurento and Pekkarinen 2004) suggests that the total amount of taxes and charges for a 10-ton lorry<sup>46</sup> in the Baltic States is around 2,500 euros per year, whereas the EU average is around 4,500 euros per year. For a 25-ton lorry<sup>47</sup>, the annual taxes and charges equal 6,000 euros, while the EU average is around 9,000 euros. For a 40-ton articulated vehicle<sup>48</sup>, the annual taxes and charges in the Baltic States amount to approximately 12,000 euros, while the EU average is around 18,000 euros.

425. In a rough simplification, the trucking industry in CEECs – including the Baltic States - comprises four types of operator: (i) operators with multilateral permits in European trades with equipment complying to higher EURO standards; (ii) operators with aging equipment in non-EU

<sup>46</sup> With 2 axles, and an annual mileage of 50,000 km, and a fuel consumption of 10,000 liters.

<sup>47</sup> With 3 axles, and an annual mileage of 80,000 km, and a fuel consumption of 24,000 liters.

<sup>48</sup> With 3+2 axles, and an annual mileage of 125,000 km, and a fuel consumption of 50,000 liters.

The report is also available at: [http://www.mintc.fi/oliver/upl107-70\\_2004.pdf](http://www.mintc.fi/oliver/upl107-70_2004.pdf)

trades using bilateral permits; (iii) domestic operators with modern equipment for efficient distribution or heavy transport; and (iv) domestic operators with old equipment.

426. Competition is intense in all groups, and overcapacity is persistent at least in groups (ii) and (iv). Despite low operational costs, profitability is usually poor. Operators in group (i) are often subcontractors to major international logistics firms.

427. **Logistics markets are in turbulence after joining the EU.** The market imbalance is notable especially in Lithuania, where investments in the road transport industry have partly been based on over-estimations in transit traffic demand. Another underlying factor is the effect of EU membership. Compared to the pre-EU time, a typical round trip from Lithuania to Central Europe takes now roughly one fifth less time because of the time saved at border crossings especially when crossing Poland. The time saved materializes in overcapacity of the transport service supply, which forces service providers lower their prices.

428. The Baltics States road haulage market seems to be in great turbulence after joining the EU. Many small carriers have cash problems because of the low price level and therefore rates per kilometer can now be found even 30% lower than before the EU membership. It is fair to expect that the situation will be temporary as the overcapacity is likely to decrease in time.

429. Table E.12. indicates current prices of Baltic hauliers in national and international road transport markets. The levels are somewhat the same within the Baltic carriers. At the moment Latvian prices are approximately 10 % lower than the prices in Estonia and Lithuania. This is caused by the beneficial currency rate of Latvian Lat, which is pegged to the SDR basket of currencies and therefore partly affected by changes in the US Dollar value. Estonian Kroon and Lithuanian Lita are pegged directly to Euro.

Table E.12. Indications of Baltic road haulage prices in summer 2004, Euros per kilometer for a laden road trailer.

Haulage type	Estonian haulier	Latvian haulier	Lithuanian haulier	German haulier
Domestic haulage	0.50	0.45	0.50	-
Haulage in the Baltic States	0.50	0.45	0.50	-
Haulage in Russia	0.45	0.45	0.45	-
Haulage in the EU		0.76		1.3

430. The lower haulage prices in Latvia can also be explained by another factor caused by EU membership, which relates to interpretation of EU directions on customs guarantee, excise tax and value added tax. Of all the three countries, the Latvian way of interpreting these directions seems to be the most unfavorable for logistics buyers and service providers, causing a drastic decrease of 40% - 50 % of transit cargo volumes moving via Latvian bonded warehouses to the Russian market. The decreased demand for road haulage services to Russia pushes the prices down.

431. In road transport, Baltic hauliers can reach Central European destinations either by choosing the Via Baltic route, which goes all the way by land through Poland, or RORO ferry service from ports such as from Tallinn, Riga or Klaipeda. The cost difference of choosing either land or the sea route is relatively small in Estonia and Lithuania but in Latvia by ferry cost is about 20% higher. Tables E.13 – E.15. show cost indications of a large freight forwarder, which operates in all the three countries.

Table E.13. Full trailer load freight indications: Netherlands – Baltic capitals.

Full unit trailer load from the Netherlands (Free Carrier, FCA) delivered to:	By land (Via Baltica)			By ferry		Transport time, days
	Km	Rate, EUR	Rate EUR/km	Rate, EUR	Via ports of:	
Tallinn	2,050	1,700	0.83	1,600	Lübeck - Paldiski	4 -5
Riga	1,750	1,600	0.91	1,900	Rostok - Liepaja	4
Vilnius	1,700	1,400	0.82	1,450	Kiel - Klaipeda	3 - 4

432. Road freight in CIS traffic is much higher than in traffic between EU countries. This is partly caused by the imbalance of CIS traffic and hauliers have to include the costs of empty returns. Second, border crossings to CIS countries cause a delay of 1-3 days, which costs USD 300 on average.

Table E.14. Full trailer load freight indications: Netherlands – Russia.

Full unit trailer load from the Netherlands (Free Carrier, FCA) delivered to:		Km	Rate, EUR	Rate, EUR/km	Transport time, days
		Moscow	EE trucker	2,500	2,600
	LV trucker	2,500	2,700	1.08	6
	LT trucker	2,500	2,550	1.02	6
St Petersburg	EE trucker	1,450	2,200	1.52	6
	LV trucker	1,450	2,500	1.72	6
	LT trucker	1,450	2,200	1.52	6

433. Road freight to CIS countries is very high in less than trailer load (LTL) traffic (Table E.13). LTL transport services to Russia and Byelorussia are far less developed than to main EU destinations, where large firms keep their European distribution centers.

Table E.15. Less than trailer load freight indications.

LTL cargo in scheduled traffic, 1000 kg (Free Carrier, FCA – delivered)	Km	Rate, EUR	Rate, EUR/tonkm
Tallinn - Milan	2,750	350	0.13
Riga - Milan	2,600	330	0.13
Vilnius - Milan	2,550	300	0.12
Tallinn - Moscow	1,050	455	0.43
Riga - Moscow	1,000	470	0.47
Vilnius - Moscow	1,000	420	0.42

434. LTL freight in CIS traffic can be up to 4 times higher than in EU traffic. One underlying reason for this is the unpredictable and time consuming customs clearance in Russia. Hence, it is better to ship the goods in large lot sizes in order to minimize the number of customs clearances.

As a consequence, demand for LTL services is much less than under “normal” conditions, which keeps freights high. A further implication is that Russian importers have to maintain oversized inventories, which adds to transaction costs in trade. The only way to break this vicious circle is to make Russian customs practices transparent and predictable.

### **Warehousing services**

435. In warehousing and other value added services, Latvian and Lithuanian service prices are currently approximately 10% lower than in Estonia. In Estonia, the underlying factors relate to different market characteristics in terms of outsourcing logistics activities. The outsourcing trend in logistics services gained speed earlier than in Latvia and Lithuania and still today the demand for domestic 3<sup>rd</sup> party logistics services is stronger, which keeps the service prices high. In Lithuania, transit cargo has been the backbone of the demand.

### **E.4.2 Maritime transport and ports**

436. **In Estonia** port dues have remained stable since 1995 (except for some additional discounts for liners, last changes have been introduced in 2002, when tariffs were calculated in EUR. Port dues are based on GT of ships and they are non-negotiable. For liners discount is offered based on the number of calls and vessel type. Discounts are valid for one calendar year. Additional discount up to 65% is offered for container- and Ro-Ro vessels on a regular line. Charges for reception of bilge water are according to international rules included in port dues.

437. Port of Pärnu in south-western Estonia is a relatively important port for exporting timber and many forest products. Because the ports administrative function and stevedoring operations are in the hands of same entities, the pricing has turned out to be comparatively high, leading many operators to consider other alternatives such as Latvia’s smaller ports. During the winters the port is also the one in Estonia suffering most from ice-related traffic restrictions.

438. **Latvian** port fees and charges are regulated by the Law on Ports, according to which 88.5% of tonnage and canal dues belong to port authority; 1.5 % to Latvian port development fund and 10% to municipality. There are state (only navigation dues) and Port Authority fees. State navigation dues and port dues are non-negotiable and especially in Riga the latter have been reviewed at irregular intervals, which make long-term planning very difficult for shipowners. Since 2002 ice due is levied by Port Authority of Riga, who is also responsible for the ice-breaker operations. Since 2002 discounts are offered for passenger vessels only from tonnage and canal dues. Riga Port Authority Board has been treating different shipowners in an unequal way when giving rebates only to certain operators.

439. At Riga Free Port liner discounts depend on fulfilling annual performance indicators. If the pre-calculated growth rate is not achieved, the Port Authority may cancel the liner status of a shipping company, which means large-scale increases in port dues. Also if the vessel for one reason or another is delayed from its schedule the liner status may be cancelled.

440. Changes in Port of Riga’s passenger fees have been heavily criticized by shipping companies during the first months of 2004. The final resolution is still under negotiation, and the introduction of those multiple times higher fees has been postponed. According to passenger and cruise shipping companies the biggest problem with the new fees is that they are being introduced with a very short notice in the middle of an ongoing travel season. With trips planned well in

advance and already sold to passengers, companies are not able to charge the higher passenger fees from their customers nor can they change the itinerary of vessels to avoid extra costs.

441. Port of Ventspils charges most of its dues and fees according to vessels gross tonnage. The only exemptions are dry bulk and general cargo ships with GT less than 10.000 GT (excl. ships loading fertilizers) are charged a cargo fee of 0.75 USD per each loaded/discharged ton of cargo. Various discounts are available especially vessels in liner traffic. In special occasions, the Free port Authority has the right to change the basic rates for port charges within 30% limits, which makes the system less transparent. Port charges are to be paid prior to the vessel's departure of a vessel. Unpaid disbursements authorize the Harbour master to detain the vessel in port.

**Box E.2. Cruise passenger expenditures vs. Port Authority revenues**

Port authorities are often willing to collect high passenger fees in order to increase their revenues. Short-sighted increases in fees may however prevent the evolution of large scale cruise tourism and cause harm to country's tourism industry as a whole. Despite the short duration of visits, usually only one day, cruise passengers' total expenditure tends to be relatively high. Wider co-operation between all parties involved in port operations and tourism industry is needed to better understand the possibilities for long term development. In 2004, Helsinki expects over 260 cruise vessel visits and over 200,000 cruise visitors.

Average cruise passenger expenditure in Helsinki (Finland) summer 2003	USD
Shopping	80.6
Pre-purchased sightseeing and travel	45.6
Restaurants	9.9
Other	8.8
Cafe's	8.0
On-location purchased sightseeing and travel	3.3
Public transportation	1.3
Entrance fees	0.9
Taxi	0.9
<b>Total</b>	<b>159.6</b>

Source: Risteilymatkustajatutkimus 2003 (Cruise passenger survey), Taloustutkimus Oy, 2003.

442. **In Lithuania** all maritime dues ports are the responsibility of Klaipeda State Seaport Authority. Butinge offshore oil terminal does not have port dues, terminal dues are collected by the terminal operator. Maritime dues are reviewed at irregular intervals, the latest major changes took place in 2002 and some minor changes took place in early 2004. No state maritime dues are levied. The port due legislation and the resulting basis for port call cost calculations are complicated. Various discounts are offered for vessels in regular liner traffic depending on vessel type and cargo, as well as for tramp vessels carrying certain cargoes and making sufficient number of port calls per year.

443. Port dues consist of obligatory non-negotiable parts such as: vessel dues, navigation dues, berth dues, tonnage dues, sanitary dues and passenger dues. In Klaipeda all port dues are payable by the ship's operator usually via local agent after vessel's departure. Some ships' agencies request an advance payment from ship's operator prior the ship's arrival.

## Cost comparison of Baltic Sea ports

444. Baltic Ports Organization (BPO) compared vessels' dues and charges in a number of Baltic Sea ports in 2002. According to the study, comparing the total cost for vessel port calls in different countries is very difficult. Reasons for this are differences in the revenue structure and form of ownership of the ports, different pricing system in different countries and differences in tariffs, which are in some cases negotiable and in other cases totally non-negotiable.

445. For this reason, the results do not show which port is the most expensive and which port is the cheapest in the Baltic, but it gives valuable indications of cost differentials. For the objective comparison of transport costs, the total cost of the logistical chain of different transport corridors, not its separate components, must be compared.

Table E.16. Costs for one port call in euros in 2002 in selected Baltic Sea ports for different types of traffic.  
Source: Port Pricing, Working Group Final Report, BPO Communication Committee 2002

Vessel type	Tallin	Riga	Venstpils	Klaipeda	St.Petersburg	Helsinki	Stockholm	Swinousjje	Wismar
Bulker (1)	5 080	8 216	7 785	7 732	10 173	16 871	6 730	6 283	5 006
Bulker (2)	30 889	63 583	59 705	60 023	60 222	117 878	40 520	60 265	n.a.
Container	1 964	2 216	2 337	1 777	6 669	2 394	2 286	n.a.	1 771
General cargo	3 210	3 987	3 745	4 508	6 251	10 604	3 961	3 792	3 950
RO-RO	10 122	13 159	14 304	7 912	14 008	5 934	8 659	21 258	3 981
Tanker (1)	78 888	87 618	81 893	102 327	n.a.	126 653	n.a.	n.a.	n.a.
Tanker (2)	22 662	21 379	20 446	26 558	29 213	52 647	15 997	28 855	15 165
Passenger	4 714	5 350	n.a.	n.a.	6 098	6 674	6 624	n.a.	n.a.
Cruise (1)	14 074	25 556	n.a.	n.a.	43 434	41 342	16 680	16 946	22 682
Cruise (2)	9 311	n.a.	n.a.	n.a.	10 842	16 048	8 628	n.a.	n.a.

Vessel type	Gross tons	Net tons	No. of calls per year	No. of pax per call	Ice class	Cargo tons	Flag
Bulker (1)	5 381	2 626	1		1B	6 700	non EU
Bulker (2)	41 643	23 068	1		1B	55 000	non EU
Container	2 658	1 256	52		1A	190 TEU	non EU
General cargo	2 900	1 533	2		1B	3 000	non EU
RO-RO	18 205	5 462	52		A		EU
Tanker (1)	72 120	36 268	1		1B	110 000	non EU
Tanker (2)	17 521	9 371	5		1B	29 000	non EU
Passenger	10 002	4 851	363	1319 *)	1B		
Cruise (1)	59 652	29 017	5	1 600			
Cruise (2)	28 258	9 144	3	350			

\*) in & out per 363 calls: 478,669 incl. 23,933 children and 8,290 drivers

446. However, the study concluded that in landlord type of ports the share of port dues in total revenue is larger than the share of cargo charge, rental fee and other charges. In that case the port authority uses its own equity to invest into the construction and reconstruction of new quays, terminals etc. In municipal and state –owned ports the town or the country covers the larger part of the investments into the development of the port infrastructure.

### **E.4.3 Rail transport**

447. **Estonia is a member of the CIS- Countries' Railway Administrations' Tariff Agreement, while Latvia and Lithuania are not.** Provisions of the common tariff policy with CIS-countries that Estonia has signed are applied for cargo on railways by the parties of the agreement in foreign traffic including participation of various modes of transport and irrespective of carriage documents. Railway administrations-parties have, though, the right to increase carriage and additional fees rates level of the tariff policy concerning:

- Transit traffic through own railway, no more than twice a year
- Export-import traffic

In addition, railway administration of the participating countries have the right to reduce the carriage and additional fees rates level of the present tariff policy for cargo traffic on own railways within freight year. However, the importance of being a member of the CIS- Countries' Railway Administrations' Tariff Agreement is reportedly not a big issue for the Baltic States. This is exemplified by the fact that both Riga and Tallinn ports are used for containerized traffic by the CIS-countries, such as Uzbekistan and Kazakhstan.

448. Estonian Railways Ltd. applies common tariff calculation principles to all freight categories: transit, export, import and local freight operations. All freight transportation tariffs, procedure for calculating and additional payments have been assembled to one legal document. The basic carriage charge rates of the Estonian Railways Ltd. have not been changed for the past six years (1998-2003).

449. Latvian railways have adopted a flexible and stable pricing policy, which according to the company has had a positive impact on the development of freight volumes. In Latvia railway tariffs for passenger transport and infrastructure are defined by the Public Utilities Commission. Although, tariff policies in Latvia have become more flexible and stable, there is still a need for more transparency – especially as regards infrastructure charges. In addition, in the future freight tariffs may have to be increased in order to cover the future investments related to electrification of lines and purchasing power stations

450. Lithuanian railways have also adapted a flexible tariff policy. The tariffs for passenger transportation are not based on specific recognition of costs, and thus, passenger transport is highly unprofitable and has to be heavily subsidized by profitable cargo business. In the future, there is pressure for increasing passenger tariffs as cross-subsidies will be stopped.

### **E.4.4 Aviation**

#### **Airports**

451. **On average, in Tallinn, Riga and Vilnius airport, the local airline carries approximately 46% of all passengers.** This means that all the airports are very much depending on these operators for revenues from airport landing fees, passenger fees and other charges. Any of these airlines facing financial difficulties would very likely cause serious difficulties to the respective airport as well.

Table E.17. Total passenger volumes at major airports and share of national flag carriers Source: Tallinn, Riga, Vilnius airport; Estonian Air, Air Baltic, Lithuanian Airlines

	2001	2002	2003
Tallinn airport	573 000	606 000	716 000
Estonian Air	48 %	49 %	54 %
Riga airport	623 000	634 000	712 000
Air Baltic	40 %	41 %	47 %
Vilnius airport	584 000	635 000	720 000
Lithuanian Airlines	52 %	41 %	40 %

452. **Air navigation charges in Vilnius are 30% more expensive than those in Tallinn.** The comparison of air navigation charges shows lower differences for small type of aircraft, but much higher on bigger aircraft. Air navigation charges comprise navigation charges and airport charges. Route charges are calculated based on a standard formula considering a distance factor, flown in a countries airspace, an aircraft weight factor and the Unit rate established by the countries (Unit rate: Estonia USD 30.3; Latvia USD 35.5; Lithuania USD 79.7)

Table E.18. Air Navigation Charges (in USD) of the Baltic States major airports Source: Estonian, Latvian and Lithuanian Aeronautical Information Publication (AIP)

Type of aircraft Airport	ATR-72			Boeing 737-500		
	Tallinn	Riga	Vilnius	Tallinn	Riga	Vilnius
<b>Navigation charges</b>						
Route Charge (unit rate)	30,27	35,51	79,65	same	same	same
to airport	29,77	34,93	78,34	46,75	54,84	123,01
from airport	29,77	34,93	78,34	46,75	54,84	123,01
Terminal navigation charge	64,40	70,00	128,20	101,11	175,00	201,28
sub-total	123,95	139,86	284,89	194,60	284,68	447,29
<b>Airport charges</b>						
Landing charge (unit rate)	13,69	13,90	18,83	13,69	13,90	18,83
Passengers charges	294,34	298,85	404,85	725,57	736,70	997,99
sub-total	796,84	1 188,00	1 051,25	1 340,14	1 998,00	1 768,01
<b>Total</b>	<b>1 091,18</b>	<b>1 486,85</b>	<b>1 456,10</b>	<b>2 065,71</b>	<b>2 734,70</b>	<b>2 766,00</b>
<b>Total</b>	<b>1 215,12</b>	<b>1 626,71</b>	<b>1 740,98</b>	<b>2 260,31</b>	<b>3 019,38</b>	<b>3 213,29</b>

Aircraft specs: ATR: MTOW 21,5tons, pax 44 at 65% load factor; Boeing: MTOW 53tons, pax 74 at 65% load factor

Route charges depend on the distance flown in a country's airspace. An aircraft flying from Tallinn, situated at the coast, to the north will stay in Estonian airspace only for a short distance, when again flying to the south the distance will be much longer. In order to compare the charges of all three countries the distance was assumed the same at 150km.

No parking charge for less than 3 hours; Airport charges incl. At Riga USD 25/pax terminal development charge; at Vilnius security charge 10 % of landing charge

453. **Airport charges were reduced at Riga airport June 2004.** On average landing charges were cut by 30 percent (not incl. in the table). The fee reduction for flights within the Baltic States and neighboring countries (< 350km) will be larger than 30 percent and the reduction for flights to further destinations will be slightly less than 30 percent. However, it is being reported that the reduction of fees will not have an immediate effect on the pricing structure of airline tickets. The reduction of landing fees will lower the income of the airport, but increasing passenger numbers are likely to compensate. It is not uncommon to offer reduction on airport charges and other fees to a new airline that is interested starting flights from an airport. Although

this is an understandable practice to attract new customers, in general, provided services should be charged more or less equal from all carriers.<sup>49</sup>

## Airlines

454. **Increasing fare competition among airlines.** All three Baltic flag carriers have started to introduce low-fare tickets including the possibility to purchase one-way tickets with no minimum stay restrictions. Tickets can be bought over the phone or via the internet and with the confirmation number the customer can collect the ticket from the airlines counter or proceed directly to check-in. The following table shows the rate charged per kilometer from the Baltic's major airports. (see Attachment E.7. for fares charged)

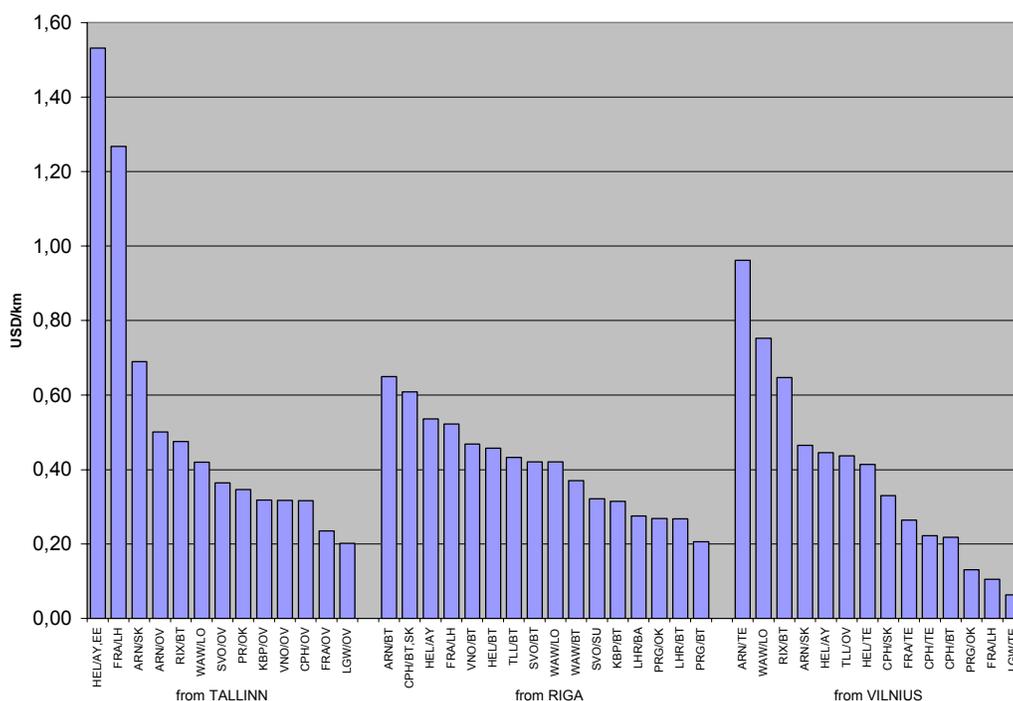


Figure E.5. Indicative tourist class air fares for roundtrip tickets on June 7, 2004, USD per kilometer

455. **First low-cost airline serving the Baltic.** Europe has a number of low cost airlines, the largest being EasyJet Ltd., Ryanair Ltd., and Air Berlin Ltd. These airlines have significantly influenced air travel within Europe by dramatically cutting fares. The no-frills airline phenomenon is still growing and revolutionizing air travel in Europe. Starting spring 2004, VolareWeb Ltd. became the first low-cost airline to offer services twice a week from Tallinn. The first Italian low-cost airline was established in 2003 and operates a large network out of Venice, Milan, Rome and Bari. The Latvian transport minister has recently proposed that Riga's airport should work towards attracting low-cost airlines and implementing an airport charges reduction scheme for airlines bringing the most passengers to Riga.

<sup>49</sup> Corresponding figures for selected other European airports in USD: Helsinki; ATR: 990, B735 1,896; Copenhagen; ATR: 1,237, B735 2,290; Frankfurt/Main; ATR: 1,498, B735 2,583. For further information see: Eurocontrol – Air Navigation Charges at <http://www.eurocontrol.int>

456. **Fuel and security surcharges pump up the cost of air freight.** Airlines operate with tariff or market based air freight. The first is called The Air Cargo Tariff (TACT<sup>50</sup>), which is offered to the general public. The other set of rates is offered to freight forwarders and high volume shippers. The latter rates are substantially lower than the TACT rates, and they may change on irregular basis. In the Baltic States, a large shipper can get 20–60 percent off the TACT rates. Unit rates for a 100kg shipment to European destinations range around USD 2.0–2.5 per kg; USD 3.5–4.0 per kg to the United States and USD 4.5–5.0 to the Far East. These rates are only indicative and may vary drastically from case to case. Freight carriers of the Baltic States do usually charge there flights based on distance and total weight of the shipment per flight. A feasible distance to operate a freighter aircraft, which are available in the Baltic States, would be 500–2,000km.

## **E.5 Business Practices and Operational Efficiency**

### **E.5.1 Road transport**

457. Baltic hauliers The road carriers are organized under national member organizations of International Road Transport Union. Estonian International Road Carriers (ERAA) was founded in 1991 and in it has 450 members. Latvian Association of International Road Carriers (Latvijas Auto) was founded in 1990 and it has 785 members. Lithuanian National Road Carriers' Association (LINAVA) was established in 1991 and it has 1,500 members.

458. In international road transport, operational efficiency is strongly affected by traffic balance. Fifty to 80 % of the trucks that enter CIS countries return back empty. The market between the Baltic States and Central European is relatively well in balance.

459. In domestic transport, operational efficiency has gradually increased to the level of a typical EU country. In capital areas, delivery vehicles make on average 15 – 20 deliveries, which is about 5 deliveries fewer than in Helsinki. The difference is mainly due to three factors. First, rapidly growing vehicle stock has caused congestion especially in Riga and Vilnius. Second, delivery trucks spend more time with loading/unloading because of hampering transport documentation. This is the case in Latvia and somewhat in Lithuania. Third, clients are not used to sending and receiving shipments outside the working hours, which is a relatively common practice in Nordic countries.

460. In Latvia and Estonia, domestic cargo volumes are strongly concentrated in the capital regions, which lowers efficiency in rural areas. Small cargo volumes outside the capitals lead to higher transportation costs.

461. A typical business for a small road haulier is to work as a subcontractor of a freight forwarding company, more than half of which are foreign owned. Some of the larger road haulage companies have expanded their own services into international freight forwarding and provide services also in other areas such as in customs clearances and warehousing.

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<sup>50</sup> For further information see: International Air Transport Association (IATA) <http://www.iata.org/ps/publications/tact/index>

462. During the early 1990's buyers of logistics services such as manufacturing and trading firms gradually started to outsource their logistics activities. However still in 2004, a great part of firms produce the logistics services themselves. Overall, the development of logistics management in Baltic firms lags behind from the old EU member countries with respect to implementing logistics systems that cover the whole supply chain.

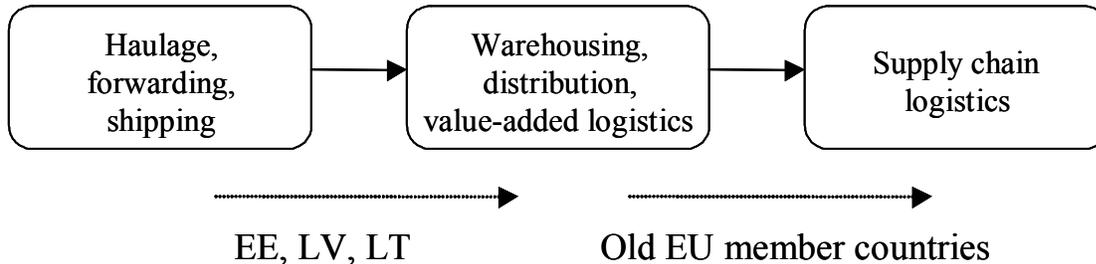


Figure E.6: Baltic Logistics market is approaching EU practices

463. Unlike firms in EU15 countries, Baltic firms prefer to purchase logistics services on a spot basis, instead of making annual service agreements. The trend is however towards longer customer relationships and deeper partnerships in logistics.

## E.5.2 Maritime transport and port operations

### Port services available 24 hours a day seven days a week

464. In comparison to most Western European countries ports in all the Baltic States offer their customers very flexible service with regard to schedules in loading or discharging cargoes. Many stevedore working time restrictions and trade union conflicts unnecessarily hindering effective shipping operations elsewhere in Europe have so far been virtually unknown in the Baltic States.

465. **Competition and efficiency of stevedoring companies.** In all the major Baltic ports there are several stevedoring companies competing against each other in the local market. Prices of stevedoring work have been under pressure especially in Klaipeda, where profits of largest stevedoring companies have declined during recent years. Operational efficiency is usually on a relatively high level. Compared to many western European countries, service levels provided to customers is extremely high because of flexible working times. Scheduling of shipping operations is eased also by the possibility of loading and discharging vessels during weekends.

466. **Estonia.** Availability of and competition in the port services market is good. Port services, especially loading and discharging of vessels and supporting functions, such as agency services, are available for traders seven days a week. Docking and dwell times at ports are normally not hindering trade. Dockers have flexible working hours. At some ports customs services are available 24 hours. In most ports customs clearances can be done also during weekends - this is applied at least in intra-EU trade, if copies of documents are received in advance. Some problems with customs have earlier occurred with changes of working shifts. In

these cases vessel's departure may have been delayed until all formalities related to changes in personal have taken place.

467. **Latvia.** Availability of and competition in the port services market is good at least in handling of general cargo in Port of Riga, where a large amount of port operators, stevedoring companies and agencies compete for customers. In other Latvian ports the situation is not as competitive and access to market may be more limited. In all ports loading and discharging of vessels and supporting functions, such as agency services, are available for traders seven days a week. Docking and dwell times at ports are normally not hindering trade. Dockers have flexible working hours.

468. In some cases the port authorities have demanded shipowners (vessels crew in this case) to present their port costs and agency fees Disbursement Account before the vessel has been allowed to sail. This is not a standard procedure and has been criticized by ship agents, whose invoicing and business practise details have thus become public. The port authorities have defended this rare practise by shippers and ship owners' interest, as too high agency fees are expected to harm ports' competitiveness.

469. In port of Riga container lines' regular traffic rebates have been cancelled if the vessel has been delayed from schedule for more than 12 hours, even when the delay has been caused by harsh weather conditions. These kind of sudden actions have made long term development an even more challenging task for operators.

470. **Lithuania.** Availability of port services is good and competition intense. Port services, especially loading and discharging of vessels and supporting functions, such as agency services, are available for traders 7 days a week. Docking and dwell times at ports are normally not hindering trade. Dockers have flexible working hours. Customs services are available 24 hours/day and clearances can be done also during weekends at Klaipeda port. On vessels arrival and departure, different authorities board the ship usually simultaneously, and unnecessary delays are mostly avoided. Earlier some delays have been caused by officers' shift changes.

471. Delays are also caused by documentary errors and their interpretation. As usual the cargo owners and operators are usually of different opinion than the customs regarding the tightness of possible interpretations and speed of corrective measures. All in all the customs office has however showed ability to markedly improve their operations and efficiency in changing environment.

472. Customs in Klaipeda have admitted that unofficial payments to custom officers have taken place from time to time. The situation has developed very favourably and number of cases has dramatically decreased. Salaries of customs officials are still very low taken into account the demands of work in rapidly changing environment. According to transport operators the rare unofficial payments are usually demanded from truck drivers in order to speed up the declaration process at port gates. The customs office's openness and the development achieved in this matter must be highly appreciated.

473. **Information technology solutions development in ports.** Increased unitization of cargoes together with the global trend of containerisation in ocean transport lead to situations, where ports and especially port authorities must be able to handle large amounts of scattered cargo information. This information is needed not only for compulsory statistical reports and commercial market analyses, but in order to fulfil the new safety and security rules imposed by the International Maritime Organisation and European Union. These new regulatory frameworks,

International Ship and Port Safety (ISPS) Code and Container Security Initiative (CSI) require constant control of activities and cargo units in the port area.

474. In addition to the needs of security measures, information technology and developed software applications for handling cargo information can be used as tools to support strategic development and increase port throughput and efficiency. Especially all the ports in the Baltic States handling large amounts of unitized cargoes, i.e. trailers and containers, should consider accelerating their efforts in IT development.

475. International shipping companies and freight forwarders have developed specialized internal computer systems in order to control the information in the transport chain and offer better customer service. Most of those companies would be ready to interchange obligatory vessel and cargo information with ports and authorities electronically.

476. **In Estonia** many port users complain that port authorities have not taken IT system development seriously enough. Use of EDI between ports and different authorities is still not common. IT system development to enable this was started some years ago at the Port of Tallinn, which handles most of the unitized cargoes in the country. Organizational and technological difficulties have put the project on hold. Well-functioning port community systems should be a top priority in port development, especially when unitized traffic is increasing.

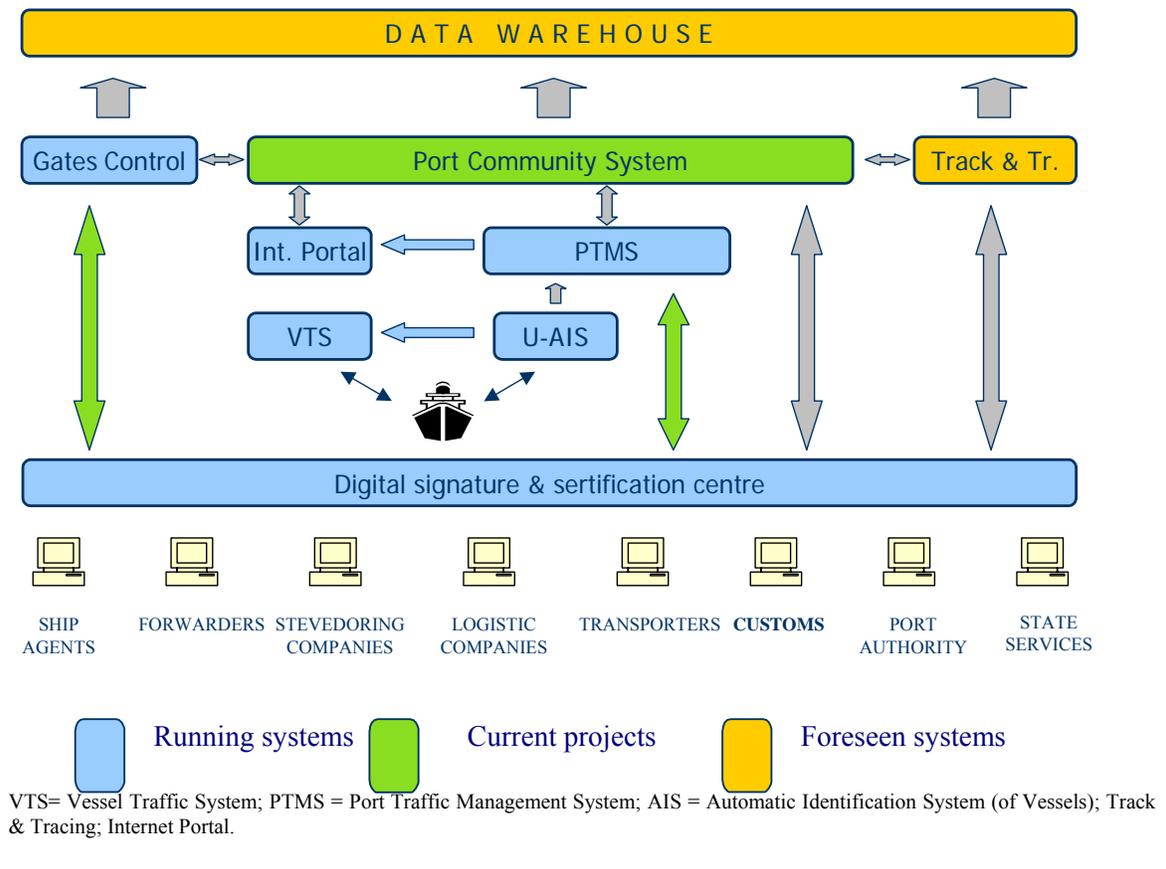
477. **Latvia's** largest unitized cargo port Riga also lags behind in EDI development. A port representative reported satisfaction with the current situation and no particular need for accelerated IT development was anticipated. According to shippers and agents, the situation is not satisfactory, and they see use of EDI a top priority in port development, where port authority should carry the main responsibility.

**Box E.3. Parties in Klaipeda Port have reached a mutual understanding regarding development of integrated port information system**

In 2003 on the initiative of Klaipeda State Seaport Authority a quadruple covenant concerning co-operation in developing a common information system to be used in Klaipeda port was signed. The parties involved in this important IT-system project include the representatives of both governmental entities (Customs Department under the Ministry of Finance and Klaipeda state seaport authority) and private companies operating in the port (Association of Lithuanian Stevedoring Companies and Association of Lithuanian Shipbrokers and Agents).

The objective of the co-operation between parties is to create a cargo information database for the purposes of port users and customs. The establishing of this system is an additional step towards the implementation of information systems' development plan in Klaipeda State Seaport. Best practices from EU seaports have been evaluated in order to find the best possible solution for the specific operating conditions in the Klaipeda port.

A very important factor is the parties' realization that the true value of IT development lies in the indirect return of investments. As an example of this the Port Authority is solely financing the IT integration of customs goods declaration procedures into the port community system. This will in the long term increase also the throughput and efficiency in port, thus making it a more favourable trading partner in the eyes of customers.



478. **Lithuania.** Among the three Baltic States' large ports Klaipeda has so far achieved the best development in information management and technology sector. With the currently ongoing project, with an estimated cost of 1-2 million USD, the port should have an operational cargo information system within two years. Certain caution must be taken however, since no matter

how good the co-operation between involved parties, large-scale port community IT projects include risks and may turn out to be time-consuming.

### **E.5.3 Rail transport**

479. **Operational efficiency in the Estonian and Latvian railways is rather good compared to other European railway operators.** Typical performance indicators of the Estonian and Latvian railways are high mainly because the freight operations includes almost entirely handling of transit traffic with very little actual cargo handling. (See Attachment D.1.)

480. **Container transit on the railways is expected to grow heavily in the Baltic States.** In 2002 Estonian railways carried 36 per cent less of 20-foot containers (3,966 containers in 2001), but the share of 40-foot containers increased by 60 per cent (503 containers in 2001). The decrease in total amount of container traffic could be explained by the fact that cargo transported in 20-foot containers was directed to Russian ports as a result in the Russian tariff policy. With respect to other freight categories transported in containers, the transport volume increased by 8.3 per cent.

481. In Latvia, container transit shipments in the West-East direction increased by 28.8 per cent and in the East-West direction by 89.1 per cent in 2002. It should be noted however, that this increase was caused to a considerable extent by 3,000 containers loaded in Riga and Ventspils ports with provisions to be sent to Afghanistan in accordance with the aid program. In 2002 container turnover in Kaliningrad increased by 30 % and in Klaipeda - by 40%. Taken together, in 2002, the two ports reloaded about 100,000 TEU.

482. Annual growth in container freight traffics through the ports in the Baltic Sea is forecasted to increase by 10-12 percent annually, and by 2013 the container freight traffic will increase by 2-2.5 times compared to the present situation. Thus, interest in shipment of loaded and empty containers by both block container trains and block wagon groups is high among Baltic railway companies. In Lithuania demand for especially 40 foot containers in on the increase. This adds pressure to renew the just recently modernized reloading equipment at the terminals.

483. **There exists strong demand for scheduled block train services from both Russia and CIS-countries.** On February 6, 2003 a combined train called “Viking” was launched on its first trip. The train provides a shorter and much faster route from the Baltic Sea to the Black Sea. May 6 marked the setoff of another project: the container train Baltic-Transit transporting cargo via the ports of Estonia, Latvia, Lithuania and Kaliningrad. (see the Box E.4.) Also Estonian railways are planning similar kind of transport mode on the Muuga – Moscow Line. The main problem lies, however, in finding suitable stations of destination and terminals in Moscow, which would ensure trouble-free performance of customs formalities and freight delivery to clients. Due to the increase in containerized cargo in recent years, there is a great need for appropriate rail platforms for transporting containers.

484. Currently Lithuania is planning together with Kazakh railways to study the possibility of launching a container train from Klaipeda via Moscow to Kazakhstan. The train would carry cargo from seaports in Russia's Kaliningrad as well. Proposals for launching the train should be submitted by 15 August 2004.

#### **Box E.4. Combined transport trains gaining ground in the Baltic States**

The combined transport train **Viking** travels on the route Klaipeda and Paneriai in Lithuania - Kena/Gudagoy at Lithuanian-Belarus border – Slovechno/Berezhest at Belarus/Ukrainian border – Odessa and Illichevsk in Ukraine. There is a possibility to load and unload cargo in intermediary stations. The train runs once a week and covers the distance (approximately 1500 km) in about 50 hours – 18 hours faster than planned. The three countries - Lithuania, Belarus and Ukraine - have agreed about the rate reduction on the route, and thus, Viking can offer significant savings in transport costs when compared to road transport on the same distance. The transportation of one cargo unit is approximately 400 US dollars from Klaipeda to Illichevsk, whereas road carriers charge 1100-1200 US dollars for the same trip. Simplified customs procedure is established for the Viking. This means that only one declaration is prepared for the whole train and its processing takes only 20-30 minutes, which is approximately 1.5 hours less than in the case when separate declarations are presented for each consignment.

The train carries various types of cargo in 20' and 40' foot containers including electrical and consumer goods, toys, haberdashery, automobiles and their spare parts, sawn timber, glass. A total of 258 articulated vehicles and 120 large containers were carried by the Viking in 2003. Lithuanian railways expect Viking to gain even more popularity among customers and for this reason plans include extending the Viking's route all the way to Turkey.

Three months after the start of Viking another combined transportation train Baltic-Transit (Baltijas-Tranzits) started its first trip from Rezekne (Latvia) to Moscow. It was a joint Latvian, Lithuanian, Estonian and Kaliningrad region project initiated by Latvian Railways. Russian, Kazakhstan and Uzbekistan railways joined later. The train is formed in Riga once a week from containers imported in Latvia's ports to which containers arriving from Estonia and Lithuania are added. Operator of the train is Trans-Siberian Intermodal Service. Baltic Transit is a branch of the Russian priority route Trans-Siberia. Thus, the Baltic Transit train stands for good chances for steady increase in the cargo flow.

In June 2004, Railway administrations of the Baltic States as well as Kazakhstan, Uzbekistan and Russia agreed to further develop and speed up the container transportations by the train. The officials also agreed on a united cargo transportations tariff rate alongside the entire route, which will allow not just faster delivery of goods but also will simplify settlement of formalities as no separate agreements with railway administration of each state will be needed. In eight months of 2003 altogether 1,297 containers were transported on the route while in five months of 2004 the corresponding figure is 2,069.

Source: Jura Magazine Issues 2003/1, 2003/3, 2003/4, Lithuanian Railways Annual Report 2003, BNS June 16, 2004

485. **Trans-Siberian route offers Baltic rail operators a possibility to strengthen their position in the Far-East.** Trans-Siberian Route (TSR) that starts in Moscow and ends on the other side of the continent in Vladivostok offers an interesting possibility for Baltic railways to extend their operation – especially in containerized cargo (see Attachment E.7. for the map of the route). The route covers approximately 9,000 kilometers, which makes it the world's longest railway route. After crossing Siberia the TSR divides into three different routes: 1) The Trans-Siberian Route (Moscow – Vladivostok), 2) the Trans-Mongolian Route (Moscow – Ulan-Bataar – Beijing), and 3) the Trans-Manchurian Route (Moscow – Beijing).

486. The TSR offers the shortest transit way from Asia to Europe – the route is almost three times shorter than the shipping route through the Pacific and Indian Oceans and the Suez Canal. Compared to sea transport, the TSR is 1-3 weeks faster. As an example, transport of cargo from the Russian port of Vostochny to Finland can take as little as twelve days, but takes typically 14-15 days. For a Japanese exporter sending goods to Finland, for example, TSR can cut weeks off

transport time at roughly the same total transport cost at around USD 3,000 per container compared to sea transport.

487. Cargo volumes transported on the Trans-Siberian route indicate continuous growth. The most rapid growth has been seen in the Grodekovo (in Primorye, Russia's Far East) – Suifunhe (China) corridor. In 2003, 5.7 million metric tons of cargo was transported via this corridor in both directions, which is five times more than four years ago. In 2004, 7 million metric tons of cargo is expected to be transported on this route. The amount of international containers carried on the Trans-Siberian railroad from Asia to Europe is growing at a high rate as well. The railroad freight schedule for 2004 envisages seven routes for freight container trains from the port station of Nakhodka Vostochnaya (eastern Nakhodka, 90 kilometers east of Vladivostok). There will be four routes to Finland, one to Brest, situated in Belarus on the border with Poland, one to Central Asia and one to Moscow. The main cargo carried on the route consists of high value goods, such as textiles and consumer goods.

488. A good example of successful container operations in the Trans-Siberian route can be found with the Finnish railways. In 1998, the Finnish railways carried approximately 10,000 TEUs annually that derived from the Trans-Siberian Railway, while in 2002 over 100,000 TEUs were transported on the route. (see Attachment E.7.) The cargo comprises mostly consumer goods, such as electronics and textiles that are stored in Finland for distribution to Russian markets.

489. In recent years, many new regional railway operators have emerged in the Russian railway sector (such as Lokotrans, Railway Center of Transport Service on October Railways, and STRAZH-NN). These kinds of operators are interested in networking internationally and finding suitable partners – especially in Europe. This would also create opportunities for Baltic railway operators to strengthen their position in transit traffic by using the Trans-Siberian route.

#### **E.5.4 Aviation**

490. **Existing cargo handling equipment at the airports is insufficient for future development.** Ramp handling equipment used is limited to conveyer belts, forklifts, baggage/freight trailers and airport-tractors. At the major airports, no ramp or cargo handling company operates special trucks, called “high-loaders” with hydraulic lifting devices. They are used to load and unload containers and cargo palettes from larger type of aircraft. Currently all cargo and luggage is handled manually or with conveyer belts at the Tallinn, Riga and Vilnius airports. However, in Lithuania, Kaunas airport’s cargo handling company is operating a high-loader with a lifting capability of up to 25 tons and a lifting range of 5.6 meters. An investment of approximately USD 450–600,000 is needed for purchasing respective used equipment, including one small and one large high-loader (USD 150,000 + USD 250,000), palette/container dollies, towing tractors and additional equipment.

491. **Operators and clients of all airports are in general satisfied with the level of efficiency.** Throughput time for import goods range from 50 minutes to 2 hours from touchdown of the aircraft to the release of the goods for further transport, assuming that all documentation is correct for customs clearance. On imports, the handling time from the touch-down of the aircraft until the goods can be released for further transport is 30–60 minutes for goods originating from another EU country or express shipments. Imports from non-EU countries take on average 1–3 hours, if the documentation is correct, but times vary among and within airports caused by the

transition period related to EU accession. On the European level these times are excellent and offer only little room for improvement. In comparison the respective time for imported goods at Frankfurt airport can be up to 7 hours. However these times will increase if bigger aircraft enter the market, which have to be handled with the same ground-handling equipment currently available.

492. **For export, goods have to be delivered to the cargo handling company approximately two hours before scheduled departure of the aircraft.** Cargo terminals have a very high standard in regard of terminal security and acts of unlawful interference. All passengers, passenger luggage and cargo are 100 percent screened according to European Civil Aviation Conference (ECAC) requirements and other international standards. In Vilnius, the screening includes the detection of radioactive materials. These times do not significantly vary between Tallinn, Riga and Vilnius airport.

493. **Shippers demand reliable transport and delivery in the agreed time.** The most important requirement of shippers is for their products to arrive in good condition at the agreed time and place. These requirements are addressed by freight forwarders as they offer time definitive services, which include flexible service offerings and pricing. All involved parties like airlines, ramp- and cargo-handling companies, customs, freight forwarder have to work well together in order to deliver goods fast and reliable. In the past major delays were caused by customs procedures that delayed deliveries for days or even weeks. Not always this was caused by improper documentation on the side of the shipper, but mere arbitrariness of the customs officials. Sometimes unofficial payments were the only way to speed up declaration of goods. Unfortunately this in individual cases the case.

494. The 'known shipper' supply chain security concept promotes seamless movement of international freight and has become a central factor for air cargo security in international aviation. A known shipper is essentially one that has an established reputation and thus is 'known' to the industry and security related administrations. This concept allows an air carrier to transport a package from a known shipper with no more screening than an examination of its exterior. Packages from unknown shippers are 100 percent screened by X-ray or physically inspected before being placed on aircraft. In the Baltic States, this concept is yet not able to exploit its full advantages.

## **E.6 Traders' views on EU enlargement**

495. This chapter summarizes the findings of three recent studies in order to highlight how logistics users evaluate the logistics environment in the Baltic States and in the enlarged EU. The first study concerns international manufacturing and trading firms that have established operations in the Baltic States. The second one presents the key results of a survey on Baltic wholesaling and retailing firms. The third study covers the impact of the EU enlargement on European firms' operations.

### **International firms' logistics operations in the Baltic States<sup>51</sup>**

496. In the early phase of market entrance, international firms preferred to operate from outside the Baltic States when distributing their products to the Baltic States markets. Exporting

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<sup>51</sup> "Advanced Logistics Services in the Baltic States – ADLOG (Naula & Ojala, 2002)

individual shipments via customs terminals seemed to be a suitable pattern for market entry, but much less used in later business stages.

497. When establishing market position, some of the case firms moved slightly more into warehousing on Baltic regional and country level. In the EU time the case firms prefer direct physical distribution often directly from factories and central European warehouses. Such patterns have significantly increased in the very recent years.

498. Faster border crossing enabled firms to distribute from one Baltic regional stock in the mid 1990'. In the pre EU period, customs documentation made this option very complicated and expensive to operate and therefore it was little used. Customs rules in intra-EU trade reduced the steps in this process from 15 to eight.

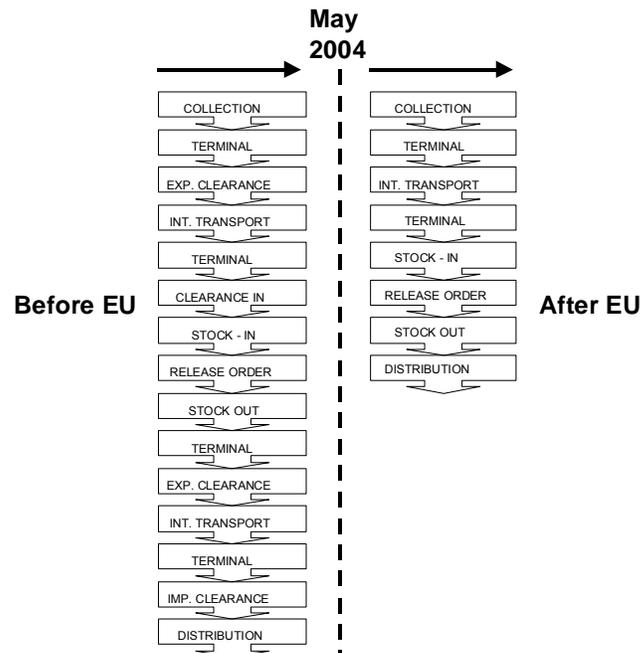


Figure E.7. Distributing goods via a warehouse in one of the Baltic States serving all three countries. Comparison of the steps of the process before and after EU membership. Source: Naula and Ojala 2002

499. Import cargo volumes are highly concentrated in the capital regions in Latvia and Estonia. Harju region around Tallinn is the most important cargo destination in Estonia for all the case firms (70 % on average) followed by Tartu and Parnu.

500. Riga's dominance is striking: roughly 80 % of the case firms' Latvian import volumes are destined here. The next most important regions are Daugavpils and Ventspils. Lithuanian volumes are distributed more evenly between Vilnius, Klaipeda and Kaunas. Their volumes average 49 %, 23 % and 18%, respectively.

501. The high concentration may lead to inefficiencies in domestic distribution. The case firms have typically outsourced domestic transportation to logistics service providers. These consolidate several consignments in one transportation unit. Especially in Estonia and Latvia the

volumes destined outside the capitals Riga and Tallinn may not be sufficient to offer affordable and frequent distribution services.

502. Already prior to the EU membership international firms tended to centralize their logistics organizations into regional and European distribution centers (RDCs and EDCs, respectively). The motives were mostly business driven, such as altering business culture of the firms, changes in market demand and efforts to reach cost efficiency.

503. At the market entrance stage (for many firms during 1994 – 1996), all business functions (sales, administration, warehousing, logistics) were typically present locally. Very often, a local agent was used. This is feasible when entering a small, new market. A shift towards a more centralized organization followed. Nine out of the 15 case firms considered centralizing all functions other than operational sales outside the Baltic States in the anticipated EU time.

504. The development of the logistics organization was also closely linked to the distribution channel in general. In some cases a firm needed to have certain functions present locally because of a relatively fragmented customer base with large number of customers.

### **Baltic Wholesaling and Retailing firms<sup>52</sup>**

505. EU membership was not anticipated to change respondent firms' first priority marketing channels. More changes were mentioned as to their second priority marketing channels. However, these shifts are incoherent and do not follow any specific pattern. As a conclusion of results reported in Ojala et al. 2004 (section M1 and M2), EU membership may well increase the share of Baltic regional warehousing compared to country based warehousing. In such cases, Latvia would offer the ideal geographic location, but a number of other criteria naturally affect decision making in firms.

506. Some of the firms that currently distribute directly from a factory or a distribution centre outside the Baltic States expected to expand distribution to other Baltic States. This indicates a move towards a multinationally integrated logistics configuration. This is a likely solution for multinational firms, for which the Baltic States comprise only a small proportion of the firms' European market.

### **Shifting Focus from Transport Infrastructure to Efficient Logistics**

507. The level of transport and telecommunications infrastructure is no longer a hindering factor for logistics buyers. In the early 1990's the key issues in logistics was to find the access to transportation capacity and how to cope with border crossing formalities. Today, the focus is clearly on adopting efficient logistics solutions in accordance with corporate policy - powered by reliable and high-quality logistics services.

508. The international logistics users still perceive the regulatory environment somewhat hindering logistics in Latvia and Lithuania but not in Estonia. Small and medium sized firms also

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<sup>52</sup> Ojala and Naula and Queiroz, (2004): Sections M1 and M2.

see these issues more as an impediment to their business than the internationally operating ones; two thirds of the studied SMEs considered the regulatory environment still as hindering<sup>53</sup>.

509. The results suggest that joining the EU facilitates logistic operations and favors firms that are already familiar with doing business in the EU. However, EU membership substantially increased regulation and bureaucracy for domestic firms. Firms in the Baltic States have been accustomed to very low level of regulation in, for example, social, health, safety and competition issues.

### **The impact of EU enlargement on European firms' operations – ELA 2003 Survey<sup>54</sup>**

510. European Logistics Association (ELA) and A.T. Kearny, a consultancy, have conducted European logistics surveys every 5 years since 1982. The 2003 study<sup>55</sup> included a section on firms' views on EU enlargement, which is briefly summarized here. The bottom line is that the survey respondents expect little impact from the EU enlargement on their logistics. Furthermore, the potential impact of Poland, Hungary, Slovakia and the Czech Republic is far larger than that of the Baltic States. Pfohl and Mayer (2004) cite:

- "...this opportunity was realized already by tier 1 suppliers, but now smaller companies and suppliers, e.g. tier 2 and 3 will go east as well...overall no big change expected."
- "We don't anticipate any significant impact or changes as we already have long-standing ties with Eastern [European] countries."
- "Transport handling and organization will be easier, and some transport price reduction is likely, but no quantum leap is expected."
- "This is only of relevance to our suppliers; they have to take advantage and have to realize the effects/potential in sourcing."
- "Our competition is already there."
- "This is not seen as something new, but expectation is that dealing with these countries will be much easier [than before]."

511. Twenty percent of respondents in the ELA 2003 survey had plans to significantly increase business activities in Eastern Europe within one year, and another 16 percent had plans to do so in 1-3 years. Twenty-eight percent had no such plans, while 36 percent anticipated such a development in 3 to 5 years. Three-quarters of the respondents identified (i) new markets and (ii) new suppliers as the most significant opportunity that the EU enlargement will bring about.

512. Many respondents believed that local logistics service providers (transport, warehousing etc.) will provide cost advantages, but relatively few (31 %) were planning to restructure their

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<sup>53</sup> The reasons for hinders of SME development in Lithuania, for example, are studied by Aidis (2002) in: <http://www.inomics.com/cgi/repec?handle=RePEc:dgr:uvin:20020038>; The analysis of 332 SME owners reveals that formal barriers (taxes, frequent changes to and ambiguity of tax policies) and environmental barriers (low purchasing power, lack of funds for business investment) form the most significant barriers for SME businesses. Informal barriers (late payment to clients, corruption, government interference) were secondary in significance. The results suggest that the effect of business barriers is intensified by corruption, lack of information and inadequate business skills.

<sup>54</sup> Pfohl, H-C, and Mayer, S. (2004)

<sup>55</sup> The results of the 2003 survey will be released in autumn 2004, but initial findings were reported by Pfohl and Mayer in June 2004. The respondents comprised 100 firms; 43 % from Central Europe, 22 % from South Europe, 10 % from Eastern Europe and 8 % from UK and the Nordic countries. Industry breakdown is as follows: Consumer goods and media (29 %); Process industry (23 %); Machinery (19 %); Automotive (12 %); Retail (7 %); Telecom (5 %); Pharmaceuticals (4 %); and other (1 %).

logistics infrastructure through establishing new warehouses in the new member countries. This is in line with results of the AdLog study, which indicated that many western firms will streamline their existing supply chains, and try to centralize distribution to existing distribution centers, which are often outside the Baltic States.

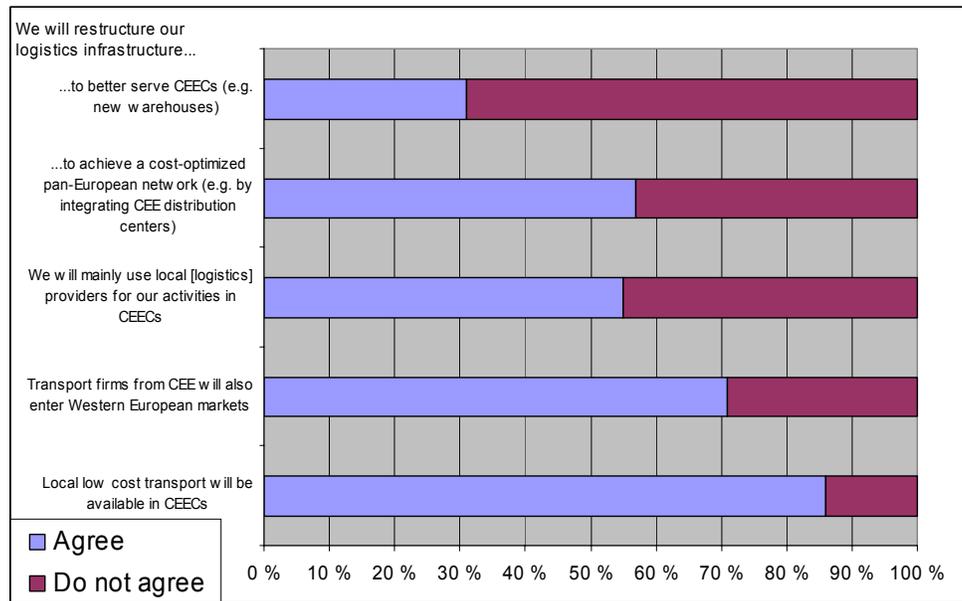


Figure E.8. Anticipated changes in logistics services due to EU enlargement in ELA 2003 survey, N=100 (Based on Pfohl and Mayer 2004)

### From transport infrastructure to advanced logistics

513. Freight transport is often presented as a multi-layer model that illustrates the hierarchical nature of a transport system. The layers are in interaction through market relations involving demand and supply sides. The lowest level, the transportation *infrastructure*, provides capacity to traffic markets. Market operators, such as shipping lines, form the demand side of the traffic market by using the infrastructure and operating the *transport flow* with vessels, vehicles and other transportation units. The *materials flow* of individual logistics buyers forms the demand on the transportation market.

514. The model is added with a fourth layer - logistics concepts. The materials flow, the information flow, the logistics organization and the distribution channel are integral parts of these concepts. Market conditions prevail also between the upper two layers. An advanced logistics solution typically requires active involvement of a third party logistics provider together with firms' internal resources.

515. Infrastructure issues and availability of logistics services were not any longer seen as problematic issues for the logistics users in the Baltic States. The key issue now is the possibility to integrate logistics operations into their European-wide supply chains. EU membership will make this task much easier.

516. The removal of customs borders in EU trade enables firms to centralize physical distribution activities and connect their supply chains better. The results indicate that major logistics buyers in the Baltic States are in process of implementing major changes in the EU time. Direct distribution from European logistics centers by using cross docking concepts is a likely model in the near future for large firms. Fewer products will be kept available in country specific warehouses. See also Box E.5.

#### Box E.5. Locating European Distribution Centers after EU Enlargement

A recent study by Cap Gemini Ernst&Young, a consultancy, analyzed the effects of EU enlargement on the location of European Distribution Centers (EDC) in several industries.

Based on the location decision criteria for distribution centers used in the study, the countries that provide the best locations for investing in distribution centers included Belgium, Germany and the Netherlands. These leaders were followed by countries such as Bulgaria, Czech Republic, Denmark, France, Hungary, Ireland, Luxembourg, Poland and the United Kingdom. The Baltic States and Finland come only after these, and for example Sweden, Austria and Romania ranked among the last-in-line.

Northern Europe is an area that usually cannot be covered by a central European distribution centre. Traditionally Finland is the country where most distribution centre investments have gone. Part of Finland's attractiveness is that it can be easily used for export to Russia. In terms of attractiveness in locating regional distribution centers in Northern Europe the following ranking applied in the study: 1. Denmark; 2. Lithuania; 3. Latvia; 4. Finland; 5. Estonia; 6. Sweden.

Based on this ranking the authors expected that Lithuania and Latvia will be the preferred locations for Northern Europe regional distribution centers. Latvia was also seen as an excellent starting point for export to the Russian market. Finland however is likely to keep an important position since (1) Sweden and Norway are not easy to reach from Estonia, Latvia and Lithuania and (2) Finland has a better ranking than Sweden regarding distribution centre attractiveness. Although Denmark has a good ranking it will hardly be used as Northern Europe regional distribution centre since the other Northern European countries are hard to reach from Denmark.

Source: European Distribution Centres on the move? Cap Gemini Ernst&Young 2003, Utrecht. EDC investments of following industries were covered: Chemicals; Automotive; Pharmaceuticals & Biotech; High Tech & Electronics Industry; Consumer Products Industry; as well as Research & Development Centres and Distribution Centres covering all industries.

517. The presented trend exhibits the overall positive development in the logistics environment of the Baltic States. Today's situation is challenging for policymakers, because many of the actions that further improve the logistics environment seem to be out of the immediate sphere of political influence. Active involvement and co-operation with non-governmental organizations on industry level is therefore likely to be the fruitful way to maintain the connection to the end users of advanced logistics services. A concrete co-operation project could be to start systematically monitoring firms' logistics efficiency. A periodically conducted survey would serve as a valuable source of information for identifying needs for further improvement.

518. The EU membership is likely to increase intra-Baltic trade and regional cooperation in distribution. It is yet unknown to what extent firms will centralize their logistical business activities to be managed from distribution centers outside the Baltic States.

## E.7 Obstacles to the development of service quality

### E.7.1 Road transport

519. A significant obstacle to efficient domestic distribution in Latvia is the combined Delivery Note and Invoice, or the so-called PPR document (See Box). Firms operating in Latvia have developed different ways to deal with Delivery Note / Invoice. The return of the signed document to the selling firm is very important and therefore it can be handed over to a trustable party. When selling firm's warehouse and accounting activities are at the same premises, then the documents are just attached to the cargo when shipping out. The task is more difficult if a firm uses logistics providers' warehouses located elsewhere.

520. The use of PPR hinders logistics buyers from moving into the most cost effective models of physical distribution: one case firm had arranged a possibility to print out the document contents onto a ready-signed and stamped Delivery Note / Invoice. For another firm, the logistics provider first picks up the documents the sales office - and delivers the signed documents back to the firm separately. Such additional arrangements and extra work caused also increase logistics providers' costs and price level of services.

#### Box E.6. "Delivery Note / Invoice", or PPR document in Latvia

"Delivery Note / Invoice" or "Precu Pavadzime Rekins" (PPR) - is a document, which carries two roles as an official commercial invoice and transport inland waybill in Latvia. The standard and numbered forms are in use for all domestic transactions of products in free circulation, excluding international shipments. Different form types are 15 in number. The used type depends on the commodity.

The original, signed and stamped document must follow the products during transportation and the document must be signed by consignees. The signed piece is to be returned to seller's accounting. Latvian State Revenue Service controls proper handling of the document to ensure lawful VAT payments to the Government. The document must be stored for 5 years of which 1 year at the location of the goods. The owner or the director of the legal entity may only sign the document. This right may be transferred to another person by a written authorization. The person who signs the document is responsible for possible discrepancies or failure to return the document.

The PPR document is issued by the State Revenue Service (under the Ministry of Finance), which sells it at 0.09 lats (USD 0.17) per piece.

521. The cumbersome PPR procedure has been applied from at least the mid-1990s. The procedure is still used despite the EU membership, even though it is an impediment to free movement of goods<sup>56</sup>. No plans to abolish the system were reported to the TTFBS team in summer 2004. One reason for the reluctance could be the revenue that the State Revenue Service gets from issuing the document. It is almost certain that the extra cost caused by it along the supply chain is many times higher than the revenue stream. Although dealing with the PPR is more a source of inconvenience rather than a major obstacle for business, the problem should be addressed promptly.

<sup>56</sup> In the pre-seminar questionnaire for the 2<sup>nd</sup> Transport Minister meeting held in Parnu in November 2003, the Latvian response on waybills and invoices was as follows: "The use of invoices and waybills is regulated by the norms set in Commission Regulation (EEC) No 2454/93 of 2 July 1993 laying down provisions for the implementation of Council Regulation (EEC) No 2913/92 establishing the Community Customs Code."

### E.7.2 Transit warehousing services

522. There are significant differences in practices how customs and tax authorities regulate procedures for goods, which are temporarily stored and further sold to mainly Russian markets. The differences are caused by different interpretations of the EU directives, which are norms set by the EU but legislated by the member states.

523. The differences in interpretation lead into unequal positioning of the logistics operators depending on in what Baltic State a firm is located. Following is a commentary of a major freight forwarder in Latvia.

- “In Estonia, the authorities follow the example of Finland. Customs and tax regulations are streamlined, taking into account the point of views of businesses. Goods in transit warehouses are considered as *goods in transit* which is a light procedure and it helps attracting new transit cargo business.”
- “In Latvia, the goods in transit warehouses are considered *goods in storage*, which causes that three different guarantee systems must be applied: a) customs guarantee, b) VAT guarantee and c) excise guarantee, depending of the goods. The system is difficult and roughly 50% of this type of business has left the country since the EU accession.”
- “In Lithuania, the authorities continue exactly as before the EU membership. It is only a question of time when the EU authorities interfere. “

### E.7.3 Maritime transport and ports

524. **Inflexible land leases and operating concessions in ports.** All major ports in the Baltic States are landlord ports, where port authorities are responsible only for major infrastructure maintenance and development, and daily operations are handled by private companies operating under various land lease or rental agreements.

525. In most ports there are several stevedoring companies and terminal operators competing hard against each other. In this sense the port authorities and officials in the ministries of transport have all reasons to feel satisfied about the current situation.

526. However, in the long run the fragmented and inflexible long term land lease agreements may turn out be an obstacle to development of modern, economy of scale terminal operations. Stevedoring companies are sometimes seen considering investments from their own point of view only, thus possibly maximizing the return on investment on the land area under their control. So far the governments, municipalities and port authorities have been very reluctant to use or even consider expropriation or termination of lease agreements as tool of guiding port development in the long run.

527. Large number of small lessees and operators may, despite hard competition visible today, result in operational inefficiencies in the long term. Economies of scale may not be reached and the ports may loose their competitive edge. In all the Baltic States there is a strong need to enhance administrative capacity in spatial planning and political strength for expropriation in the name of common good.

528. **Latvia.** Long term land lease agreements in ports have led to situation, where construction of much needed RoRo-ramps and quays has been neglected and is now badly delayed. Only one port operator offers suitable facilities for RoRo-cargo handling, but the service level it currently provides is poor, partly because of the operator's insolvency. The other currently available ramps are located by passenger terminal and cannot be utilized by large modern RoRo-vessels, because access roads and trailer fields have a too limited capacity. One more ramp is located at the container terminal, but cannot be utilized due to insufficient quay length, which leaves no space for handling simultaneously both container and RoRo vessels.

529. In Riga Freeport numerous small stevedoring companies operate within very limited land areas and they may have very limited storage facilities. Vessels calling at port are often forced to shift between two or even more loading berths to be able to load full cargoes. Especially often this takes place with timber cargoes. Shifting between berths is problematic also because port fees only allow one shifting inside port area without high extra costs.

**Box E.7. Motorway of the Baltic Sea and obstacles hindering development in short-sea shipping**

Short-sea shipping provides a possibility to decrease congestion on land based transport infrastructure. Essentially, the "Motorways of the Seas" concept means making maritime transport more competitive vis-à-vis road transport. This requires better connections between ports and rail/road networks together with improvements in quality of port services.

One of the main problems is the costly and time-consuming transshipment in ports. A smooth change of transport mode from sea to road or vice versa is vital to successful trade and transport operations. Difficulties are also found in document processing, organization of stevedoring work, coordination of authorities' actions and in customs operation.

Unitized traffic grows rapidly, which means that ports need high quality information systems. Tracking, tracing and monitoring cargoes both in ports' own management systems and sharing valid cargo information effectively with other players has already become a prerequisite of successful port business.

530. **Lithuania.** Container operators in Klaipeda port are suffering from inadequate containers handling and storage facilities. Currently there are two independent container terminals and handling rates are competitive. As the land area in the southern part of the port is restricted and long-term leased to various entrepreneurs, there is not enough available space for appropriate container storage fields or reloading facilities. This issue together with inadequate water depth for bigger container vessels is likely to become a serious threat for port and trade development in the nearest future.

#### **E.7.4 Rail transport**

531. **The condition of the rolling stock (especially that of other than tank wagons) is rather poor in all the Baltic States** and all the interviewees agreed that more investments are required. Insufficient funding for the maintenance and development of the rail system has led to the obsolescence of the rolling stock, as well as inability to timely renovate it. Thus, aged rolling stock is a major concern for the railway operators in the Baltic States.

532. All the Baltic States have invested heavily in renewing their rolling stock. In 2002, Estonian railways invested 37 million US dollars into buying 74 new second-hand General Electric locomotives. This has been so far the biggest project in the Estonian Railways history. In 2003, Estonian Railways Ltd. made another large investment (24 million US dollars) by purchasing 850 new rail cars. Investment was made to ensure sufficient capacity to handle

increased volumes of freight in the future. The purchase included 500 tank wagons, 300 fertilizer hoppers and 50 flat cars. 400 of the tank wagons are expected to arrive in 2004, thus increasing the total number of Estonian Railways Ltd. rolling stock to 4000. The purchase was financed by lease. Estonian Railways Ltd. is planning to continue wagons purchases also in the future to be able lease even more wagons. Wagon renting provides Estonian railways with additional revenues and helps to ensure that guaranteed volumes of freight are moving in Estonia's direction. It is estimated that about 40 % of Estonian Railways' wagon pool is rented out to the customers.

533. Estonian rail freight forwarders reported that wagons are often in very poor condition, other than tank wagons. Due to shortage of freight carriages, new wagons are often hard find in short time, and thus the forwarders have to carry the cost for repairing the wagons in poor condition. On average the repair costs about 30 dollars per rail car.

534. A major project for Latvian Railways in the coming years may be the electrification of all the main railway routes in Latvia. The company plans to replace all the diesel trains currently used for cargo transportation by using electric trains as the costs in using the latter will be lower. The existing diesel trains are all outdated and the production of new diesel trains has almost ceased due to the strong global trend of electrification.

535. Close cooperation with Russia requires Latvia to plan the electrification efforts, because at present about 60 % of Russian railways lines are electrified and the percent grows with every year. The project will not begin any earlier than in five years because a thorough study of the situation and cost estimates has to be made before. Project is expected be very costly, and thus, financing from the EU may be claimed. At the moment only about 11 % of the Latvian railway lines have been electrified. At the moment Latvian Railways has hired German consulting Agency "DE-Consults" to carry out a study on whether to purchase electric or diesel locomotives.

536. In general the freight wagons used in Latvia are reported to be in bad condition, and there is a lack of specialized wagons for transporting bulk, such as sugar and grain.

537. In addition to the freight wagons, the condition of the passenger trains in Latvia is reportedly very poor. Two thirds of all electric trains used for passenger transportations stand idle because they are worn out. Situation regarding diesel trains is even more critical. Electric passenger trains will go to a halt in 2008 if no investments are made in renovation of railway car stock, while for the diesel passenger trains the dead line is year 2009. Investment of 9.5-19 million US dollars is needed over the coming 3-5 years (2004-2009) to retain the number of trains at present level.

538. Modernisation of the rolling stock is a real headache for the Lithuanian railways. The average age of the freight locomotives is 25 years. Their capacity is insufficient and they do not comply with the environmental requirements of the EU. Specialists of the company have worked out a programme for replacement and renovation of the locomotive stock until 2008. It provides for modernisation of 29 and purchase of 34 new locomotives. The programme is estimated to cost about USD145 million. In May 2004, a tender was announced by the Lithuanian railways for acquiring the 34 new locomotives and four foreign locomotive manufacturers are bidding for the contract. The European Investment Bank (EIB) is expected to provide one third of the financing for the project, and the rest of the money is contributed by the Lithuanian railways.

539. Lithuanian Railway Company also has a strategy for renewal of its freight wagons. Now it owns 9040 freight wagons, about 30% of which have an outdated usage time. By 2015 the company expects to renew half of the present wagon fleet assigning for this purpose about 105

million US dollars. Stevedoring companies and forwarders are planned to be invited to contribute the project. Lithuanian railways have already started this project by modernizing 500 of its freight wagons.

540. Apart from the age of the freight wagon fleet, the passenger carriages in all the Baltic States are in need of renewal. The number of passenger cars in the Baltic States has decreased annually due to poor condition. For example, in Latvia 16 trains with eight passenger cars in each need to be renewed or replaced in the near future.

541. **Readiness for multimodal transport between rail and road, such piggy bag type of solutions, is modest in the Baltic States.** Transfer between modes is the weakest links in the intermodal transport systems. One reason is inadequate technical interoperability between modes and loading units. Another is that terminals rely extensively on heavy engineering and manual processes, and they are not managed efficiently with appropriate telematics support.

542. However, as now part of the EU, the Baltic States are also showing interest towards developing better multimodal solutions between different transport modes. Multimodal transport has been a topic on the European transport and infrastructure agenda for some years now, since the EU transport policy is facing three major challenges:

- Enlargement to Central and Eastern Europe and to the Mediterranean area
- Environment and sustainable development
- Congestion and bottlenecks

543. In Lithuania, the intention is that Kaunas (in Central Lithuania) should be developed as a freight handling/reloading centre where the interface between broad gauge, European standard gauge and road transport will be located, integrating the most modern telematics concepts. The establishment of such a logistics center will provide an opportunity to serve road transport cargo units transported by long distance railways, and thus, develop combined transportation in Lithuania. ([www.eutp.org](http://www.eutp.org))

## **F Characteristics of the Russian market for EU traders**

### **F.1 Overview of trade barriers**

The most important obstacles to trade in goods with Russia can be divided into fiscal obstacles (customs duties and other taxation) and other obstacles to trade (technical norms, standards and certification). There are also problems due to: (i) inadequate and inappropriate customs legislation; (ii) the functioning of the customs administration; and (iii) connection with transportation.

Russian customs duties are very high. Technical requirements and standards complicate the marketing of goods. The certification procedures to prove conformity with requirements and standards retard deliveries and cause extra costs. This problem has diminished since January 1, 2004, when the Russian certification system was simplified and the number of product groups for which certification is required was dropped from 250 to 22.

If Russia joins the WTO it will have to conform to the Technical Barriers to Trade Agreement (TBT), which tries to ensure that regulations, standards, testing and certification procedures do not create unnecessary obstacles. The agreement recognizes countries' rights to adopt the standards they consider appropriate — for example, for human, animal or plant life or health, for the protection of the environment or to meet other consumer interests. Moreover, members are not prevented from taking necessary measures to ensure their standards are met. For Baltic exporters, Russia's WTO membership would be an improvement although trade facilitation in important areas like border crossing and customs clearance remains uncertain.

### **F.2 Perception of the Russian business environment in a TEDIM survey**

544. TEDIM<sup>57</sup> (Telematics, Education, Development and Information Management) is an international development forum structured on the ministries of transport of the Baltic Sea area including Estonia, Latvia and Lithuania. A number of projects have been implemented under the TEDIM umbrella. The main development areas of the program are: (1) Supply Chain Management, (2) Logistics Services, (3) Logistics Corridors (4) Logistics Information Management and (5) Public Contribution and Participation. One of the key tasks of the organization is to promote co-operation in logistics between in the EU and Russia.

545. In November 2003, TEDIM launched a study with a view to identify problems in logistics information exchange in trade between the European Union and Russia. The study comprised interviews with 39 importers, exporters and logistics service providers in Finland, in the Netherlands and in Russia. The project (ELOG-RUS) was completed in June 2004.

546. Figure F.1. presents the perceptions of logistics problems of EU and Russian firms in the EU-Russia trade. The most serious problems relate to administrative procedures which involve Russian authorities such as: customs clearance, goods inspections and border crossings. For example international transport between the EU and Russia was perceived far less hindering.

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<sup>57</sup> [www.tedim.com](http://www.tedim.com); Attachment F.1. highlights the relevant TTF projects by TEDIM in the Baltic States.

547. Problem perception between EU and Russian firms differs substantially. This is likely to result from a relatively common business practice, where Russian trade partners control the whole transport chain. Traders in the EU often perceive Russian business environment as difficult and are reluctant to take unnecessary liabilities in Russia. As a consequence, supply chains often lack visibility. The EU exporters only rarely know how their shipments are transported to the final customers in Russia and what the distribution channel consists of.

548. Russian customs clearance procedures were generally perceived as a major hinder. It is complicated, time consuming and expensive. The costs of a customs clearance vary from USD 200 to USD 3000 depending on the complexity. Hindrances in customs clearance affect the whole supply chain. Firms prefer to clear goods in large quantities in order to limit the number of clearances to the minimum. Clearances are typically centralized in major Russian cities such as Moscow and St. Petersburg. As a consequence, goods must often be redistributed long distances.

549. Hindrances in customs clearance have an indirect negative impact for development of logistics services. In modern logistics management, stocks are usually limited to the minimum for cost reasons, which generates demand for frequent transports of small shipments. In the case of Russia however this type of service provision is relatively poorly developed because logistics buyers prefer full unit loads in order to centralize the customs clearances and to minimize their number. In the Baltic States for instance only very few logistics firms provide less than trailer load (LTL) transport services to and from Russia.

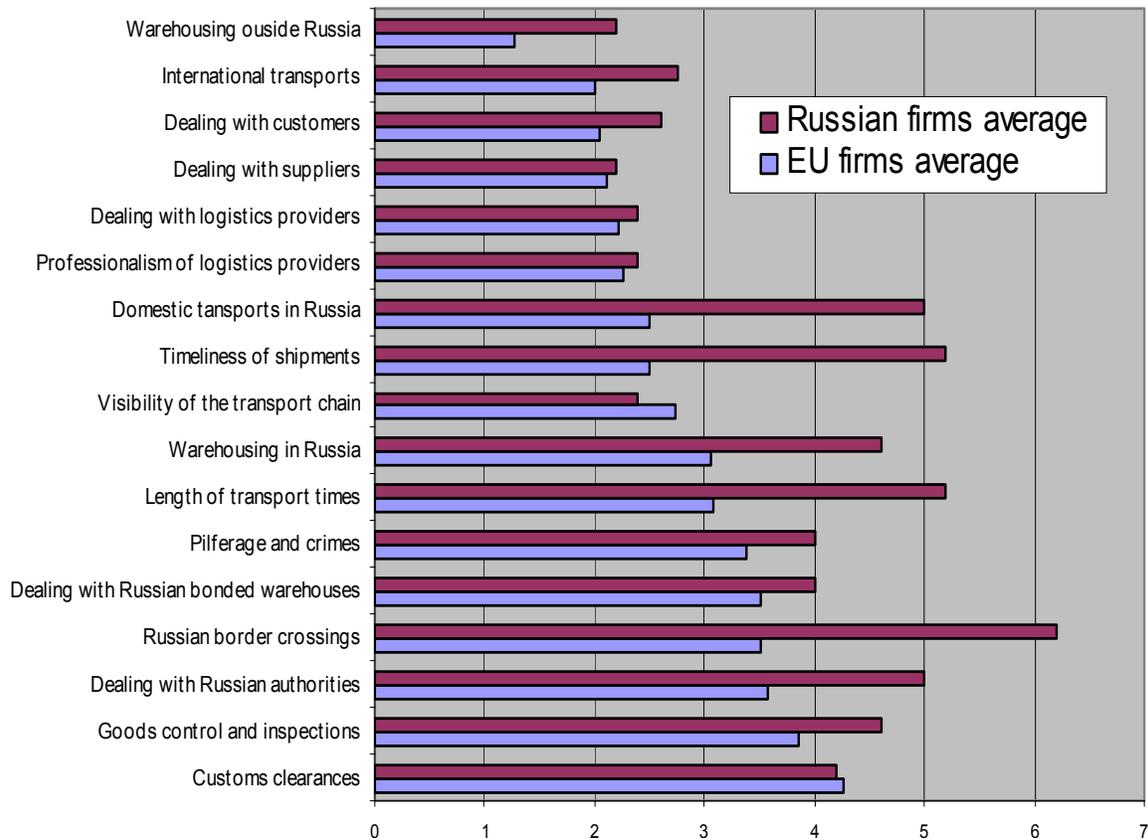


Figure F.1. The degree of problems perceived in early 2004 by EU and Russian firms in different areas of EU-Russian logistics, 1= not at all a problem ... 7= a major problem, averages of scores by EU firms and Russian firms (N=29).

550. There is a lack of information on the efficiency of different types of supply chains in Russia. For example delivering certain type of consumer durables from Central Europe to Central Russia may require as many as 15 different physical handlings of the goods. Firms in Russia often have to configure their logistics according to factors that originate from customs practices.

551. The most often mentioned problems concerning logistics information exchange were weak transparency of information within the supply chains, errors in the content of logistics information and lack of responsibility of these errors, numerous documents required by different officials, and lack of exchange of information between different authorities and their systems.

552. Following proposals for development projects were identified in the TEDIM study on logistics information between EU and Russia:

- Develop an electronic service portal, which would provide up-to-date information on logistics related legislation and general circumstances for business in Russia.
- Conduct a study on electronic systems, which are currently used or under development in Russia
- Conduct a study on Russian business practices and processes
- Conduct a study on development possibilities of international small cargo (LTL, LCL) transports, define the needs for information systems, investments and distribution models
- Promote Russian awareness of international ICT developments and logistics information management
- Extend the “Green Line” pilot project to a larger number of companies
- Conduct a case study of landed logistics costs on few selected types of supply chains between the EU and Russia
- Increase usage of electronic documentation and electronic signature
- Increase usage of electronic data interchange between the EU and Russian authorities
- Increase co-operation at border crossing points between the EU and Russia
- Develop a system that provides real time information on situation at border crossing points
- Develop a information system at border crossing points to increase operational efficiency
- Increase compatibility of information systems used in ports
- Create a “contact forum” for Russian and EU firms to promote networking

553. The development proposals suggested by the TEDIM study cover the most critical issues identified also in TTFBS interviews. The proposals also relate to more efficient electronic data interchange to avoid problems in border crossings and customs clearances.

### **F.3 The new customs code of the Russian Federation<sup>58</sup>**

554. During the last four years, a number of reforms have been made in the Russian legislation, mainly to create more favorable circumstances for international and Russian investments. The reforms mainly relate to the Russian taxation system, the court system, real estate and labor codex. Another motivator for reforms is meeting the preconditions to become a member in the WTO. Modernizing the legislation and practices related to customs procedures is one of the key issues in this respect.

555. In May 2003, the Russian Parliament accepted a new customs codex, which came into force January 1, 2004. Before the reform, Russian customs was clearly a fiscal organization,

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<sup>58</sup> Based on Memorandum by the Finnish MoTC available at <http://www.eurorussia.fi/file/lid29049/files/attachment/>

which accounted for an important part of the Government's income. The new codex emphasizes customs role as a regulator and facilitator of the international trade.

556. The new customs codex was under preparation for five years. The purpose was to create an easily understandable codex, which takes into account the central factors in respect of development of the private sector. The new codex is based on Kyoto International Convention on Customs Simplification and Harmonization. The key reforms of the new customs codex are:

- The previous five-step customs clearing system has been removed
- The owner of the goods or the representative has the right to name the destination customs point and the route used. Customs officials have no longer rights to change the route.
- Previously, all customs fees had to be paid prior to the final clearance. According to the new practice customs fees can be paid afterwards.
- Customs clearance time must not exceed three days. If it does, shipper may claim for compensation.
- Previously customs procedures were regulated by 3500 directions set by different ministries and the State Customs Committee (GTK). The new customs codex is replaced them as the single law to be applied.
- The new customs codex includes only statutes that relate to border crossing and customs clearance. Other related themes are covered in separate codes such as in the tax code.
- The old licensing system was removed. Previously a license was required in certain fields of trade such as bonded warehousing services, customs brokerage, exercising re-import / re-export and trading on customs free zones.
- The required documents for customs clearance are described in details. The purpose of this reform is to avoid unclear interpretations.
- Customs authorities do not have the right to stop transportation without a specific court order to confiscate the goods for customs inspection.
- In case of conflict, the new customs code over-rides ministerial decisions.

557. From the view of logistics providers, the new customs code provides a framework for modern provision of services in respect of border crossings, transiting goods under customs bond, bonded warehousing services and customs clearance services. Companies are free to apply for the status of customs related service operator provided that the business is covered by a customs guarantee. The minimum requirements of customs guarantee are as following:

Customs broker	1,600,000 USD
Customs terminal and bonded warehouse	80,000 USD + USD 10-30 / m <sup>2</sup>
Customs carrier	65,000 USD

558. There are 16 different customs procedures, which are divided into four main groups (Table F.1.) Commercial documents (such as an invoice) no longer have to be submitted in Russian. Formally, any language may be used, but in practice Russian is the preferred one.

559. Temporary storage in customs terminals is allowed up to 4 months, which is a relatively long period. After this time goods must be cleared into a customs warehouse. A temporary import can be made for a maximum duration of 34 months.

Table F.1. Customs procedures in Russian Federation effective from January 1, 2004.

Principal customs procedures	Import of goods Export of goods International customs transit of goods
Economical customs procedures	Processing in a customs zone Processing for Russian markets Processing outside customs zone Temporary import Customs storage
Final customs procedures	Re-import Re-export Extermination Rejection in favor of the Government
Special customs procedures	Temporary export Customs free trade Transfer of goods Other special customs procedures

560. The control of implementation and applying the new customs codex in practice has been entrusted to the private sector. A particular company Draganov & Partners has been established for the purpose.

561. The new customs codex improves exporters' and importers' position. In case the customs officials misinterpret to the detriment of a shipper, the codex stipulated the Government to pay compensation. Another substantial improvement is the decrease of maximum time needed for customs clearance from ten to three. The new limit may however be unrealistic when reflecting it to traders' experiences from recent years. According to the BEEPS 2002<sup>59</sup> survey clearance times were much higher: roughly one third of the clearances took more than ten days in practice.

562. Overall, the new customs code seems to fulfill the basic requirements for transparency, predictability and legal protection. It is however yet to be seen thoroughly the reform will be implemented considering the large size of the Russian Customs Service organization, which employs approximately 63,000 customs officers.

#### **F.4 Documents required in trade with Russian Federation<sup>60</sup>**

563. European firms trading with Russia commonly experience documentation requirements and various restrictions a major challenge. This Section presents an overview of the current requirements. It is however important to acknowledge that in practice the regulations change frequently often unexpectedly. Exporters and importers should therefore frequently communicate to avoid mistakes.

<sup>59</sup> Business Environment and Enterprise Performance Survey 2002, 41 observations.

<sup>60</sup> Source: Finnish Business Solutions Worldwide (FINPRO) [www.finpro.fi](http://www.finpro.fi)

## **Import and currency restrictions**

564. The central bank of Russia and the Russian customs committee control all the import transactions, which are paid in other currencies than Russian Rubles. The control is carried out using a specific license, so called “Import passport”, which is obtained from a commercial bank. A Russian importer needs to have this document prior to importing the goods in the country. Import license is required for certain products such as alcohol, tobacco, nuclear/radioactive material, military products, precious metals and pharmaceuticals. In 2002, the Russian Customs Committee has published a list of “risky” types of merchandise that are under special control. In practice it means that customs clearance for these products is slower than normally.

## **Customs fees and value added tax**

565. The Russian customs tariff mainly includes value-based duties, are usually calculated from the CIF value. The tariff is based on the Russian national TN VED tariff nomenclature, which again is mostly built on HS-nomenclature. In documentation, the tariff codes should be consistently declared using either TN VED, HS or CN codes.

566. The value added tax (Nalog na Dobavlennuju Stoimost - NDS) was lowered from 20% to 18% starting from January 1, 2004. Information in Russian import tariffs and other taxes are available at “Applied Tariffs Database”<sup>61</sup>, which is a free Internet-based service for traders maintained by the EU.

## **Commercial invoice and certificates**

567. Russian or English languages are recommended to be used for issuing commercial invoices. The details to be included are basically the same as in international trade with any other country. It is however important that special attention is paid to the accuracy of the information. A smallest discrepancy in the declared documents or between the documents and the goods imported may lead into major delays in customs clearance.

568. Particularly, the number of the sales contract, the date of the contract should be mentioned in the commercial invoice as well as the numbers of the transport waybill and the purchase order. The exporter should sign the document in blue color. Russian customs accepts only original invoices or *pro forma* invoices, which are stamped by the owner of the transport vehicle or the exporter. Other required certificates/documents are:

- Packing list – required for each shipment separately
- Certificate of origin – required for MFN treatment. Accepted forms are:
  - A separate certificate issued by exporter’s Chamber of Commerce
  - Exporter’s own certificate
  - A mention in the commercial invoice
- Goods certificate – EUR.1 may be used when material is exported to Russia for processing and re-imported back to the EU.
- Certificate of conformity (with goods of Russian origin) – for specific list of goods types
  - an anti-certificate may be used to prove that the certificate of conformity is not required

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<sup>61</sup> Applied Tariffs Database is available at: <http://mkacdb.eu.int/cgi-bin/wtdtar/wtdtar.pl>

- Veterinary certificate- mainly for foodstuff and products of animal origin
- Phyto-Sanitary certificate- mainly for foodstuff and products of animal origin
- Radioactivity certificate - mainly for foodstuff and products of animal origin
- Security and fire security certificate
- Ozone certificate
- Specific certificates – for electronic and telecommunication products
- Sanitary-epidemiology certificate – required for number of goods types. This document is required to certify that the goods meet the requirements of the Russian health protection legislation. A particular certificate of quality is required to be attached when the Sanitary-epidemiology certificate is applied.

569. Transport documents are issued according to the information in the sales agreement. In truck transport the necessary documents are CMR waybill and TIR carnet or T1 customs transit document.

570. If TIR carnet is not used a specific transit document issued by Russian customs is required. In addition, following documents are needed: commercial invoice, payment guarantee by the receiver of the goods or receipt for paid taxes and duties, certificate of origin and certificate of conformity or other specific certificate. Due to the high complexity the option of using T1 document as the transit document, TIR carnet is largely favored because of the simple practice. The new customs codex introduces the customs guarantee system, which should in time simplify the T1 transit practice.

## **F.5 The “Green Line” customs project**

571. “Green Line” is a development project between Finnish, Swedish and Russian customs services, which started in February 2003. The objective of this pilot project is to 1) expedite border crossings, 2) expedite the customs procedures at destination customs point in Russia and 3) facilitate international shipments for processing. Customs data is transferred electronically between customs of the two EU countries and Russian countries.

572. A limited number of pilot firms were selected to participate. Experiences from the Green line project vary. Finnish exporters reported that the system expedites border crossings to Russia, but declarations are still required as hard copies at destination customs posts. This effectively undermines the original purpose of the Green Line.

573. Despite certain deficiencies of the Green Line, the project is progressive as it is the first concrete step to create an electronic link for operational customs data between the EU and Russia. The Green Line is still at an initial stage, but there are plans to enlarge the group of pilot companies. However, political will is needed to reach the scale that would have real significance to traders.

## **G Facilitation issues with non-EU countries**

### **G.1 Visas**

567. Response from the Latvian Logistics and Customs Brokers' Association indicate that Russian professional drivers and seamen have difficulties to obtain visas to Latvia, which has caused operational problems. Estonian logistics association has also expressed similar concerns. This is clearly a political issue that can only be solved through multilateral negotiations between the EU, the Member States and Russia, also involving Belarus.

568. Visa problems are associated with picking up and leaving transport units (trailers) at border crossing points (BCP), which often require short movements across the customs or national border; this causes operational problems at BCPs.

569. Russian drivers' visa problems are a concern also for liner shipping industry. Box G.1. shows the point of view of an Latvian executive.

#### **Box G.1. Difficult visa procedures for Russian drivers hinder road transit in ferry business**

The situation affecting all three Baltic States in Autumn 2004 is interestingly highlighted by a quote of a Latvian liner shipping executive:

*"One of the things that definitely do not foster the development of ferry business and transit are the problems, which Russian hauliers encounter when trying to obtain a Latvian visa. Unfortunately, the so-called compact procedure for obtaining a visa exists only in theory. In reality, hauliers from Russian regions have to go to Moscow or Saint-Petersburg, where quite often they become entangled in the far-from-simple visa proceedings. As a number of large Russian haulage companies believe, the situation is made even worse by bureaucracy and arrogance of Latvian officials. That is why sometimes the flaws in visa policy make Russian hauliers refrain from using the short and convenient transit routes via Latvia."*

Source: Transport Weekly, #41 (308), p. 25

### **G.1 Border crossing of goods**

#### **G.1.1 Road transport**

570. The EU membership has significantly changed both border control and customs practices. Since May 1, 2004 the Baltic States have been a part of the common EU customs zone, which facilitated considerably the Intra-EU trade. The Baltic States are not yet part of the Schengen agreement which means that the national border control check points still remain in operation.

571. The impact of the EU membership is particularly noticeable at border crossing points within the Baltic States. Before joining, waiting times for trucks often exceeded 10 hours, especially at border crossing posts between Latvia and Lithuania. Since May 1, 2004, these queues have practically disappeared. Due to the improved situation at the Intra-EU borders, only border crossing points with Russia and Belarus are covered more detailed in the Facilitation Audit Report.

572. Altogether eight border crossing points (BCP) were visited: Narva and Luhamaa (EST-RUS); Grebneva and Terehova (LAT-RUS); Medininku and Salcininku (LIT-BLR) and Panemune and Nida (LIT-RUS, Kaliningrad). In general, all the visited border crossing points are modern and relatively recently built or reconstructed. The facilities include proper office premises for customs and border guard personnel, customs inspection posts and veterinary/phyto-sanitary control points. Services for traders such as customs brokerage, insurances, customs guarantees and money exchange are well available.

573. There were significant differences in the functionality of the border crossing points. Problems were detected especially at Terehova and Grebneva between Latvia and Russia, where the waiting times for trucks are considerably long. At the time of the visit on June 2, 2004 there were 266 trucks (a 7 km queue) and 134 trucks at Grebneva (a 3.5 km queue) waiting on Latvian side for access to Russia.

574. Terehova and Grebneva BCPs are geographically located on an advantageous route for transit cargo from Central Europe to two major cities in Russia: Terehova for Moscow and Grebneva for Saint Petersburg. Foreign transport companies favor Latvia as a road transit passage to Russia. In June 2004, approximately 80% of the truck units/drivers were non-Latvians: 50 % of the units are Lithuanian and 20% Polish.

575. The shortest route for Lithuanian exports to Russia especially from Vilnius is via the BCPs of Medininku and Salcininku through Belarus. Road hauliers are however unwilling to enter Belarus because of numerous experiences of misconducts by Belarus officials: unofficial payments are required at the BCPs, and shipments under TIR-transit are sometimes stopped and even confiscated for unknown reasons.

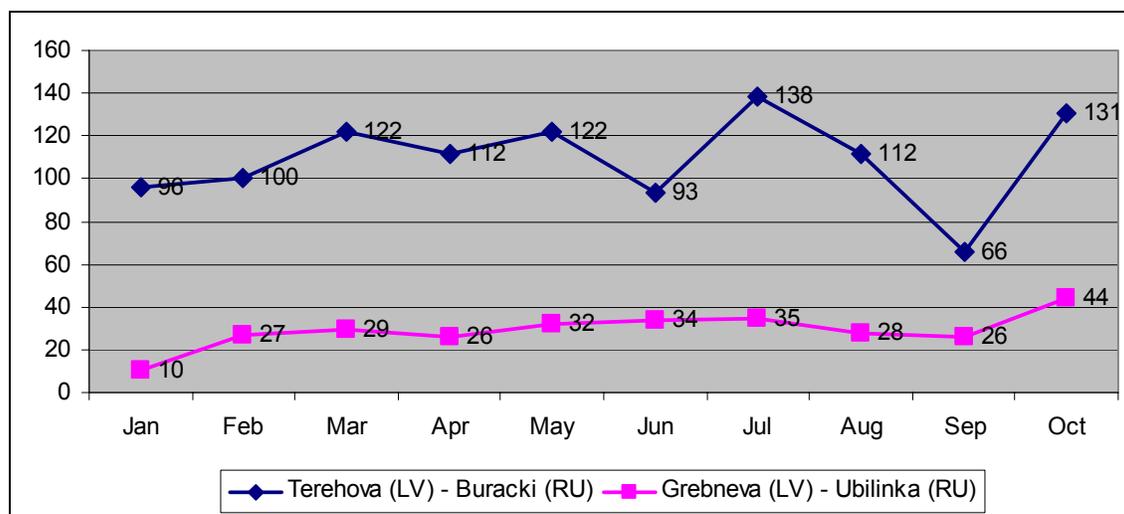


Figure G.1. Daily average waiting times for trucks to access the border control at Terehova and Grebneva border crossing points (Source: Latvijas Auto).

576. Another underlying factor behind hauliers' unwillingness to use Belarus as a transit country can be found indirectly in Russian customs practices. Some Russian importers prefer using an unofficial method of clearing goods through customs by paying a fixed amount of USD 20,000 for a truck load of goods as customs payments. For shippers, it is therefore important to

load the transport unit as full as possible. If the tax value of the transported goods exceeds the limit of USD 50,000, which is covered by TIR-insurance, the Belarus customs requires the unit to be transited in a customs convoy through Belarus. For a road haulier, a customs convoy means an extra cost of USD 500, which may be up to one third of the total transport cost (Vilnius – Moscow). To avoid the extra costs road hauliers prefer a longer transport route via Latvian BCP, which provides a direct access to Russia. This practice has been reported by numerous independent sources from shippers, freight forwarders and the EU customs executives in EU countries. The procedure was widely used for import of high-value cargoes such as consumer electronics before year 2004. According to multiple independent sources, this practice, illegal under the current customs code, seems to be used even today on a regular basis. It is clear that this type of illegal arrangements are likely to cause a far more negative impact on Russian Government in decreased income from taxes and duties. At Baltic borders the impact can be seen in high concentration of traffic on Latvian BCPs of Terehova and Grebneva.

577. The high concentration of international transit traffic into two BCPs seems to overload especially the Russian side, where technical facilities are not on as high level as on the Latvian side: particularly the Russian side lacks proper premises for customs inspection posts.

578. No significant queues were detected at other four Eastern border crossing points in Estonia and Lithuania: Narva (EST-RUS), Luhamaa (EST-RUS), Medininku (LAT-BLR) and Salcininku (LIT-BLR). Occasionally there is congestion at these borders too. This is mostly caused by seasonal peaks of export to Russia and Belarus. Queues are formed also when a large number of trucks from major seaports arrive at the borders simultaneously, such as from the Port of Klaipeda.

579. Significant investments have been made to the new EU external border crossing posts between the Baltic States and Russia/Belarus. In addition to the national funding, the European Union has allocated funds mostly through PHARE program. The overall target of the PHARE funding to in the Baltic States has been to develop the border control systems in accordance with the requirements of the Schengen acquis and facilitate implementation of the recommendations stated in the Integrated Border Management Strategy. Table G.1. exemplifies the case of Latvia.

580. Total length of the State Border of Latvia is 1864 km including 933 km of the future EU external border: 437 km of Eastern land border with Russia and Belarus and 496 km of sea border. There are altogether 78 border control/crossing points on Latvian State border including 31 on the external border: 18 – on Eastern border, 9 seaports, 4 airports.

581. Due to several large seaports consists of several terminals (e.g. passenger port, trade port, oil terminal, fishery port) at present the total amount of border crossings on external borders are 42 belonging to six regional boards of the State Border Guard: Vilaka and Ludza board (Russian border), Daugavpils board (Belarus border + 1 airport), Riga, Ventspils and Liepaja board (sea border, airports) with a total staff up to 2200 persons.

Table G.1. Phare program's fund allocations to Latvia's border crossing points

<b>PHARE program year</b>	<b>Allocation target</b>	<b>PHARE funding (m EUR)</b>
1993-2004	Building of Terehova BCP	2.90
	Building of Paternieki BCP	1.35
	Building of Grebneva BCP	1.55
	Building of Silene BCP	1.30
1998	Training of 1 200 border guards	1.00
1999	Building of 3 simplified BCP with Belarus	4.50
2003	Building of 2 border guard stations with Russia	1.75
2000	Improving co-operation between state officials	1.20
2001	Veterinary/Phyto sanitary control at rail/sea BCPs	7.13
	Asylum and Migration Management System	2.27
<b>Total</b>	<b>Million euros</b>	<b>24.95</b>

### **Bilateral Agreement between Finland –Latvia border guard services**

582. The Baltic States have received also considerable material and training assistance through bilateral agreements int. al a number of courses on document checking using modern control equipment (such as Bilateral Agreement between Finland –Latvia border guard services). Likewise, the USA has provided the border guard services with radiation control equipment in order to improve the radiometric control on the Baltic-Eastern borders.

### **G.1.2 Rail transport**

583. **Veterinary check points in railways functioning only in Lithuania.** All border checkpoints on railways in Estonia and Latvia stopped handling food imports from non-EU countries on May 1 because of the lack of certified facilities allowing authorities to conduct veterinary checks in accordance with EU requirements. So far only Lithuania has been able fulfill these requirements as regards railways checkpoints – the inspection point at the Pagegiai border to Kaliningrad and Kena checkpoint at the Belarus border were completed, certified and announced at the EU official journal in spring 2004. Veterinary checkpoints on railways in Latvia (in the towns Daugavpils and Rezekne) are scheduled to be completed by August-September of 2004 and to be certified and announced at the EU by November. Latvian rail freight forwarders, on the other hand, expect the rail checkpoints to be ready for inspections by the end of the year.

584. In Estonia a checkpoint is currently being constructed in Narva (North-East border) and is expected to be ready in the summer 2004. A new veterinary checkpoint is also being built in Koidula border station (in the South-East) and is scheduled to be functioning in two years' time. Railway veterinary checkpoints are to be constructed by the private railway operator whereas on the roads the expenses for building these kinds of checkpoints are carried by the state.

585. According to the Lithuanian railways there exists an unfair situation among EU countries as to where the veterinary controls related to rail transport should be conducted. In Latvia control procedures are allowed to be carried out at the Daugavpils and Rezekne railway stations, which for year have served as border stations (BNS March 20, 2003). However, in Lithuania such an arrangement is not allowed, but veterinary inspections are to be conducted on boundary stations. Thus, as a result, another intermediate control link is appearing where trains might as well stand for at least three hours. If veterinary and biological control services find some infringements, then the whole train structure should be over-loaded and reformed at once. According to the Lithuanian railways boundary stations are not ready for such controlling duties, and all of these procedures should be thus performed at distributive stations. Nothing of this kind is required by the EU from any other of the new EU members, including Estonia and Latvia.

### **G.1.3 Aviation**

586. **Phytosanitary inspection facilities required for the import of food and animals from non-EU countries is only available at Vilnius airport since mid-April 2004.** In Tallinn, the closest inspection post is located at the harbor, (distance 10km) and in Riga there are no facilities available at all. However, these shortcomings were not seen as a major obstacle. Airfreight imports from non-EU countries are usually imported via a major hub in Central-Europe where these facilities are available and goods can be inspected.

## **G.2 Transit issues**

587. **Problems faced at the implementation phase of the New Computerized Transit System in rail transport.** As from the May 1, 2004 all new EU member countries were to be ready for accession to the New Computerized Transit System (NCTS). All three Baltic countries faced some difficulties during the first couple of weeks but these problems are expected to be only temporary by nature. In Latvia and Lithuania difficulties were related to lack of knowledge and information provided by the national customs to the railway operators and rail forwarders. In addition, the NCTS system applied to transit on the railways was apparently originally designed for road transportation and thus poorly meets the requirements for rail transport.

588. **Interoperability of two legal systems (CIM and SMGS) is one of the greatest concerns in rail transport.** The Baltic States are at the junction of these two legal regimes. All Western countries as well as some African countries are working under COTIF (Convention concerning International Carriage by Rail) convention and using CIM Bill of Lading, while Russia, China, and CIS and some Eastern European countries are working in SMGS (International Goods Transport by Rail) system. Lithuania joined COTIF convention in 1995 and Latvia in 1999, whereas Estonia has not yet joined the convention ([www.otif.org](http://www.otif.org)).

589. The Baltic States still operate mainly in the SMGS regime while after accession to the EU they should be ready to operate in COTIF system too. On full integration to the COTIF system the cargo shipped to Western Europe will use COTIF system, and cargo shipped eastwards will be presented in the SMGS. Still most of the cargo is transported from/to east using SMGS Bill of Lading – for example in Lithuania almost 99 % cargo is transported by SMGS. Estonia and Lithuania are at the moment ready for applying both systems (Box G.2.), while

Latvia was granted a transition period by the EU until July 1, 2004. In Lithuania the problem with interoperability of these two systems is that the SMGS waybill should be changed into CIM waybill at the entry/departure border station although the trains do not stop at the actual borders. At the same time the general opinion is that due to the time delay of converting SMGS into CIM (or vice versa) replacement of way bills should not be necessary in short distances. In addition, there exists a great deal of confusion on issues related to ownership of cargo and liability.

**Box G.2. Facilitation of freight traffic by using CIM railway bill on the ferry line Klaipeda-Mukran**

According to the agreement of Lithuanian railways and German railways since July 1, 2003 transportations through the line Klaipeda (Lithuania) and Mukran (Germany) have been carried out solely by the CIM. Renewal of documents to the CIM in Klaipeda instead of Mukran should be acceptable both for the western and for the eastern parties.

E.g. as of July 1, 2004 the Lithuanian railways and Stinnes AG, a large German logistics group owned by German Railways, have agreed to apply the uniform rules concerning the CIM to the railroad ferry line between Mukran and Klaipeda. Currently cargo transported on the ferry line is subjected to the SMGS (International Goods Transport by Rail) system. The CIM waybill will initially apply up to the railroad station in the Lithuanian town of Draugyste (situated close to port of Klaipeda). At the railroad station the consignments will then be re-registered by the Lithuanian railways in accordance with SMGS provisions, which is similar to the procedure applied to goods carried by land. This procedure will provide a clear legal foundation, both for the customers and for the haulage contractors involved, which particularly important against the background of Lithuania's accession to the EU

Traffic on the ferry line declined considerably in the 1990's. Thus the purpose of this new procedure and of other measures that have been agreed between the two parties help recapture transportation volumes for the ferry line.

Source: Stinnes AG at: [http://www.stinnes.de/english/press/newsFolder/2004\\_04/litauen.html](http://www.stinnes.de/english/press/newsFolder/2004_04/litauen.html)

590. **Russia's implementation of new tariff policies in August 2001 aimed at channeling more cargo towards Russian ports has hindered transit by rail through the Baltic States.** Since autumn 2001, Russia has adopted new tariff policy that prefers domestic ports handling and shipping. The aim is that Russia's own port capacity will allow to handle up to 85% of the total foreign trade (in 2003 – 75%), while the remaining part will be transported through international ports. New tariff policy had an immediate impact on the volumes transported by Baltic railways as well as through Baltic ports. (Dudarev 2004)

591. The new tariff system adopted by Russian railways means that tariffs to Baltic ports are approximately three to four times higher than the tariffs applied to shipments going to Russian ports. For example, when oil transported by rail from Kirishi in Russia to the boarder of Estonia (a distance of approximately 300 km) applied tariff is five times lower than for the distance Estonian border – Muuga port (a distance of approximately 200 km).

592. For Lithuanian port Klaipeda, increase in rail tariffs has resulted in threefold decline in the flow of Russia' cargo to Klaipeda port in 2003 compared to 2002. Thus, in February 2004, Lithuania raised tariffs for rail transit of Russia's cargo to Kaliningrad by 11 %. According to the Lithuanian railways, tariffs were raised merely with the aim to ensure profitable operations of the company. However, Lithuanian stevedoring companies claim that tariffs for transit trade should be increased even further to ensure cargo future cargo flows to the port of Klaipeda.

593. At the moment European Commission (EC) considers ways for eliminating Russia's discriminatory railway tariff policy. The EC is considering legal solutions, within the World

Trade Organization (WTO), to call Russia accountable on the behalf of the European Union member states over discriminatory railway tariff policy. According to the EC, Russia's current tariff policy creates conditions of unequal competition in the ports of the EU member states and Russia. (BNS June 15, 2004)

594. **Long Russian cargo trains create pressure for the Baltic marshalling yards.** It is very difficult for the Baltic countries to influence on the transporting politics of Russian railways. Russian railways tend to prefer to transport as long trains as possible and as long distances as possible. This has at least in the past created problems for the marshalling yards in the Baltic States. However, at the moment situation looks somewhat brighter: Estonia has extended the marshalling yards and is able to receive even trains as long as 72-75 cars (normally the maximum length of a train is 66 cars). In Latvia, the new reception yard along with the construction of the Rezekne II freight junction is being built.

### G.3 Customs clearance efficiency

#### G.3.1 Road transport

595. The trade of the Baltic States is highly concentrated in the EU markets and the EU membership consequently reduced the number of customs clearances in all three countries.

596. Table G.2. shows the number of declarations per employees in customs services. This figure indicating the overall efficiency is highest in Estonia and lowest in Lithuania. Compared to countries in Southeastern Europe, the Baltic States are placed above average but the efficiency is lower than in countries like Bulgaria (561) and Croatia (447).<sup>62</sup>

Table G.1: Number of declarations per customs employee in 2003

	Total number of declarations in 2003	Number of customs employees	Declarations /employee
Estonia	608,311	1,276	477
Latvia	654,499	1,548	423
Lithuania	854,490	2,700	316

597. In road transport customs points, clearance times are short varying from 20 minutes to two hours. Implementation of the ASYCUDA systems has facilitated and speeded up the procedure.

#### G.3.3 Rail transport

598. **Customs procedures on the railways are reported to be functioning well.** The respondents that represented major shippers seemed rather satisfied with the customs release times and overall functionality. On the other hand, transport by rail is dominated by a very small number of shippers and it comprises a very large share of goods transported in the Baltic States. Furthermore, traffic consists almost entirely of full wagonloads; consolidated cargoes use road

<sup>62</sup> According to Trade and Transport Facilitation in Southeast Europe

transport. This means that if problems or delays occur, they will be dealt with as fast as possible. Small shippers, such as small sawmills, have difficulties accessing rail transport in the first place.

599. Starting from January 1, 2004 Latvian railways started to perform the functions of the principal of transit procedure (responsible for the compliance with customs regulations during the transit procedure), allowing the use of railway shipping note as transit declaration. As a result, the clearance through customs was facilitated and train delays in delivery stations were reduced. Latvian railways also offer its clients a simplified customs procedure.

600. In 2004, Lithuanian railways started to apply simplified customs procedures for freight transit at 45 stations. As there will no more be need to fill in customs declarations the passage of trains in the borders will significantly speed up, which on the other hand, allows the freight stations to handle more freight trains.

### **G.3.4 Aviation**

601. **Customs process time at the airports is very short.** In late 1990's, early 2000, customs processing time could last 2–3 days before imported goods have been declared. Prior EU accession, processing time was reduced within 1 day on average. After EU accession and transition period it is expected that customs procedures will become even easier. In all three countries customs declaration with ASYCUDA is available. ASYCUDA is a computerized customs management system, which handles manifests and customs declarations, accounting procedures, and transit and suspense procedures. At Tallinn and Vilnius airport the system works well. At Riga airport, IT problems hinder the full exploitation of the system and customs declarations have to be filed via the ASYCUDA system, but also in writing at the customs office. Customs personnel at Riga airport was cut by 50 percent as from May 2004, which caused some congestion at the customs office. However, it is reported that these problems relate to EU accession transitional difficulties and that the system will be running within a couple of months.

602. Physical inspections of shipments by customs officials are rare (1–3% of all shipments) and are usually triggered by the electronic customs declaration system or tip-offs. In all three countries, the general co-operation between freight forwarders and customs officials is satisfying, although there have been in some instances significant delays prior and shortly after May 1st, 2004, when the Baltic countries joined the European Union.

### **G.4 Other qualitative issues**

603. **Handling of rail cargo at ports.** As most of the cargo carried by railways in the Baltic States is transported through ports, the cooperation between these two transport modes is very important. In general, the cooperation seems to be rather effective. However, In Estonia rail forwarders claimed that quality of service received at the port of Tallinn is often very poor and the rates are very high.

604. In Latvia, machinery in the ports for handling cargo coming by rail is according to the rail freight forwarders is old and in bad condition. Container terminal at Riga port can currently handle only eight wagons at the same time, and thus, as the cargo volumes on rail increase annually, there is a need for increasing the capacity of handling cargo at the terminal. According

to the respondents there is also lack of personal at the Riga port, since when a vessel arrives to the port all the staff that is involved in reloading rail wagons are moved to unload the vessel instead. This will cause unnecessary detention of rail wagons, and the cost of this detention has to be paid by the rail forwarders.

605. In the port of Riga the main problem related to railways' functionality is the current location of the railhead in the center of the city. According to the forwarders' the current location of the railhead poses a bottleneck for rail transport to the port, and better location would be moving the railhead about 7-8 kilometers ahead to the second container terminal in Kundzisa. Moving the railhead to the center of the city would also allow the trains to enter the port area without having to enter into the city.

606. Fees for using private railway tracks at the Riga port are reported to be very high. For example, a load of goods by rail may cost 2.80 dollars per ton for transporting it from the Latvian border to Riga, while the cost of using the private railways track from the city center to a terminal (approximately 3 km) costs 0.60 cents per ton. There is no space for building extra tracks to the port. Thus, forwarders and other users are forced to pay the fee for using the private tracks. According to the respondents, the rail tracks in the port area should be owned by the Latvian railways or by the port as is the case in, for example, Ventspils port.

607. In Lithuania, respondents' opinion was that port administration should own the tracks at Lithuanian ports. Companies with their own terminals at the ports tend to look only after their own interests and construct e.g. only one reloading track to the terminal. For example, originally only Mazeikiiai oil was reloaded in one terminal, but currently more than thirteen types of oil products are handled in the same terminal.

## H Matrix of recommendations

The Prospective Intervention Matrix – Addressing the physical and institutional impediments in The Baltic States – ALL THREE						
COMMON ISSUES FOR ALL THREE BALTIC STATES				Tentative Impact and time horizon		
Proposed Components and Activities	Subsector	Responsible Bodies	Ease of implementation	Impact	Horizon	Complementary Initiatives and scope for WB involvement
<b>Policy and regulatory reform issues</b> - Enhance the public sector's possibilities to expropriate land for transport projects of substantial public interest.  - Digital signature introduced commercially  <b>Strengthen the administrative capacity of Ministries of Transport and their subordinate Administrations</b> (strongly endorsed also by the European Commission in the Accession Monitoring Reports in November 2003)	All	Parliament, Gov:t , private sector,	Difficult	High	MT to LT	EU support for capacity building; WB scope limited
	All	Gov:t, trade organizations	Difficult	Medium	MT	TA from WB possible
	All	Government	Medium	Medium	LT	Increased state budget funding, Training and remuneration; Much scope for TA from WB
<b>Railway rolling stock</b> - Perform a feasibility study to define the needs of: - Renewal of existing rolling stock - Purchasing of container platforms and specialized freight carriages	Rail transport	Railways, private companies , freight forwarders	Easy	Medium	ST	Cost dependent on the number and type of wagons purchased. One wagon costs USD 30,000-80,000. WB lending or TA, if investment feasible.
<b>Develop and establish an institutional solution to the prevailing concern of Russia's new rail tariffs</b> -Continued EU-Russia discussions and Russia's WTO negotiations	Rail transport, Ports	Gov:t, EU	Difficult	High	ST	High-level political solution. WB's work in Russia important.

Proposed Components and Activities	Subsector	Responsible Bodies	Ease of implementation	Impact	Horizon	Complementary Initiatives and scope for WB involvement
<b>Interoperability of railways in the EU region</b> - Continue the reform of the railway sector in order to meet the requirements for free passenger and freight transport by the member states in the EU area.	Rail transport	Railways, MoTC, EU	Difficult	High	MT	EU's transport policy and related actions. Limited scope for WB action.
<b>Cargo handling equipment in Tallinn, Riga and Vilnius airport.</b> Acquisition of new high loaders and related equipment capable of handling aircraft containers (ULD's)	Air transport	Cargo/ramp handling companies; Airports.	Easy	High	ST	Need identified in user statements. Private sector investment. IFC type of lending possible.
<b>Bilateral Air Service Agreements</b> Access to other Russian airports than Moscow (Sheremetyevo)	Air transport	Gov:t	Difficult	Medium	MT	Agreements need to be in compliance with EU legislation. WB's work in Russia.
<b>Improve cooperation between Natl. CAA's and local airlines</b> - uncertainty about JAR aircraft certificates	Air transport	NCAA's and local airlines	Medium	High	ST	Limited scope for WB involvement
<b>Broaden airfreight data gathering</b> - Airfreight carried on trucks is not included in available statistical data	Air transport	Statistical offices	Easy	Medium	ST	Limited scope for WB involvement
<b>Introduce regular monitoring on Supply Chain and Customs performance using logistics performance indicators in trade and transport in each country and in the region using comparable sets of data</b>	All	Gov:t Industry associations, Research entities	Medium	High	ST	In connection with EU's research and policy programs and TA from other sources.

**Legend and explanations to abbreviations:**

Ease of Implementation: Given funds, the estimated ease of implementation when considering the organizational, technological or legal barriers.

Impact The estimated total welfare impact of the action or project in TTF both for the private and public sector

Time Horizon ST = Short Term (approx. 2005-2006); MT = Medium Term (approx. 2006-2009); LT = Long Term: 2010 and beyond

IFC International Financial Corporation

TA Technical Assistance

TTFSE Trade and Transport Facilitation in South Eastern Europe, a World Bank program

WB The World Bank

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**Attachment B.1. Main trading partners in 2000, 2002 and in the first quarter of 2004. Source: National statistical authorities; author's own calculations**

ESTONIA'S Exports to	Rank			Share (%)			ESTONIA'S Imports from	Rank			Share (%)		
	2000	2002	2004*	2000	2002	2004*		2000	2002	2004*	2000	2002	2004*
Finland	1.	1.	1.	32,3	24,8	25,0	Finland	1.	1.	1.	27,5	17,1	14,9
Sweden	2.	2.	2.	20,5	15,3	17,9	Russia	4.	4.	2.	8,5	7,4	11,1
Germany	3.	3.	3.	8,6	9,9	9,3	Germany	3.	2.	3.	9,5	11,2	11,0
Latvia	4.	4.	4.	7,0	7,4	7,2	Sweden	2.	3.	4.	9,8	9,5	9,0
Denmark	6.	6.	5.	3,5	4,4	3,7	China	6.	5.	5.	3,5	5,2	4,6
Netherlands	8.	8.	7.	2,5	3,4	3,4	Japan	5.	7.	6.	6,1	3,8	4,2
United Kingdom	5.	5.	6.	4,4	4,8	3,4	Lithuania	15.	8.	7.	1,6	3,3	3,3
Norway	10.	9.	8.	2,4	3,4	3,3	United States	11.	9.	8.	2,2	3,2	3,2
Russia	9.	10.	9.	2,4	3,4	3,3	Italy	7.	6.	9.	2,9	4,6	2,8
Lithuania	7.	7.	10.	2,8	3,5	3,3	Poland	14.	10.	10.	1,8	2,8	2,8
Top 10 share	-	-	-	86,4	80,3	79,8	Top 10 share	-	-	-	73,4	68,1	66,7
Mill. USD Total**	3 205	3 816	1 284				Mill. USD Total	4 174	5 321	1 740			
Mill. EEK Total	53 900	56 991	16 808				Mill. EEK Total	70 214	79 472	22 774			

LATVIA'S Exports to	Rank			Share (%)			LATVIA'S Imports from	Rank			Share (%)		
	2000	2002	2004*	2000	2002	2004*		2000	2002	2004*	2000	2002	2004*
Germany	2.	1.	1.	17,2	15,5	13,9	Germany	1.	1.	1.	15,7	17,2	15,1
United Kingdom	1.	2.	2.	17,4	14,6	13,6	Russia	2.	3.	2.	11,6	8,8	9,9
Sweden	3.	3.	3.	10,8	10,5	12,1	Lithuania	4.	2.	3.	7,6	9,8	9,6
Lithuania	4.	4.	4.	7,6	8,4	8,4	Estonia	6.	6.	4.	6,2	6,2	6,8
Estonia	6.	5.	5.	5,3	6,0	8,1	Finland	3.	4.	5.	8,6	8,0	6,7
Denmark	5.	7.	6.	5,8	5,7	6,7	Sweden	5.	5.	6.	6,8	6,4	6,3
Russia	7.	6.	7.	4,2	5,9	4,4	Poland	7.	7.	7.	4,7	5,0	5,0
United States	9.	8.	8.	3,3	4,2	4,3	Belarus	***	11.	8.	***	2,7	4,6
Netherlands	8.	9.	9.	4,0	3,8	3,0	Italy	8.	8.	9.	3,7	4,2	3,9
Finland	11.	10.	10.	1,9	2,3	2,8	Netherlands	10.	10.	10.	3,4	3,4	3,3
Top 10 share	-	-	-	77,5	76,9	77,3	Top 10 share	-	-	-	71,9	72,4	71,2
Mill. USD Total	1 845	2 372	827				Mill. USD Total	3 252	4 206	1 432			
Mill. LVL Total	1 131	1 409	457				Mill. LVL Total	1 994	2 497	792			

LITHUANIA'S Exports to	Rank			Share (%)			LITHUANIA'S Imports from	Rank			Share (%)		
	2000	2002	2004*	2000	2002	2004*		2000	2002	2004*	2000	2002	2004*
Switzerland	19.	18.	1.	1,3	1,7	16,8	Russia	1.	1.	1.	27,2	21,9	24,4
Germany	2.	3.	2.	15,0	10,5	10,1	Germany	2.	2.	2.	15,0	17,2	15,0
Latvia	1.	4.	3.	15,0	9,7	8,9	Poland	3.	4.	3.	4,9	4,8	5,1
Russia	4.	2.	4.	6,1	11,3	8,0	France	5.	5.	4.	4,2	3,9	4,3
France	9.	7.	5.	4,5	4,2	5,7	Italy	6.	3.	5.	3,6	4,9	4,1
United Kingdom	3.	1.	6.	8,3	14,1	5,7	China	14.	10.	6.	1,6	2,4	3,7
Sweden	8.	6.	7.	4,7	4,4	4,6	Sweden	7.	6.	7.	3,5	3,4	3,1
Denmark	6.	5.	8.	5,2	5,3	4,6	United Kingdom	4.	7.	8.	4,7	3,4	2,9
Belarus	14.	12.	9.	2,9	3,2	3,8	United States	10.	9.	9.	2,5	2,8	2,7
Poland	5.	9.	10.	5,6	3,6	3,6	Denmark	8.	8.	10.	3,2	3,0	2,7
Top 10 share	-	-	-	71,6	70,4	71,7	Top 10 share	-	-	-	67,2	64,7	68,0
Mill. USD Total	3 254	5 273	1 890				Mill. USD Total	4 956	8 298	2 496			
Mill. LTL Total	13 015	17 464	5 521				Mill. LTL Total	19 825	27 479	7 293			

\* January-March 2004

\*\* Values calculated by special trade system; End-of-period exchange rate, Q1/2004 as of 30.4.2004

**Attachment B.2. Structure of exports and imports by SITC commodity groups.**  
**Source: Canstat Statistical Bulletin 4/2003.**

<b>Share-% of total IMPORTS, current prices</b>		2000	2001	2002	2003
Food and live animals, beverages and tobacco (0-1)	Estonia	8,0	8,6	8,6	8,4
	Latvia	11,6	11,7	12,1	10,9
	Lithuania	9,0	8,5	7,2	7,4
Crude material, inedible, except fuels (2)	Estonia	4,1	4,1	4,4	4,2
	Latvia	3,5	2,9	3,3	4,0
	Lithuania	4,8	4,0	4,1	3,8
Mineral fuels, lubricants and related material (3)	Estonia	5,8	5,8	5,5	5,1
	Latvia	12,3	10,6	9,2	9,4
	Lithuania	21,7	20,3	16,5	16,9
Animal and vegetable oils, fats and waxes (4)	Estonia	0,3	0,4	0,5	0,3
	Latvia	0,6	0,7	0,7	0,6
	Lithuania	0,5	0,6	0,6	0,6
Chemicals and related products (5)	Estonia	8,7	9,0	9,5	9,5
	Latvia	12,5	12,4	12,7	12,4
	Lithuania	12,3	12,2	11,5	11,6
Manufactured goods classified chiefly by materials (6)	Estonia	17,2	18,6	20,1	19,5
	Latvia	18,8	19,2	19,1	19,6
	Lithuania	17,1	16,6	17,6	16,7
Machinery and transport equipment (7)	Estonia	45,2	42,2	40,2	42,6
	Latvia	28,2	30,0	30,7	31,0
	Lithuania	24,5	28,5	33,8	34,5
Miscellaneous manufactured articles (8)	Estonia	10,7	11,3	11,0	10,4
	Latvia	12,5	12,5	12,2	12,0
	Lithuania	7,6	7,7	7,2	7,4

<b>Share-% of total EXPORTS, current prices</b>		2000	2001	2002	2003
Food and live animals, beverages and tobacco (0-1)	Estonia	5,6	7,6	7,7	7,0
	Latvia	5,8	8,8	9,7	8,6
	Lithuania	11,1	11,7	10,0	10,9
Crude material, inedible, except fuels (2)	Estonia	13,8	11,6	12,4	12,2
	Latvia	33,5	27,8	26,8	28,3
	Lithuania	7,3	6,3	6,5	6,2
Mineral fuels, lubricants and related material (3)	Estonia	2,0	1,7	2,3	2,4
	Latvia	2,5	1,4	1,5	1,4
	Lithuania	20,9	23,1	18,7	19,5
Animal and vegetable oils, fats and waxes (4)	Estonia	0,2	0,2	0,4	0,3
	Latvia	0,1	0,0	0,0	0,1
	Lithuania	0,1	0,1	0,2	0,2
Chemicals and related products (5)	Estonia	3,9	4,5	4,8	5,5
	Latvia	6,4	6,4	5,9	6,1
	Lithuania	9,5	7,5	7,4	7,6
Manufactured goods classified chiefly by materials (6)	Estonia	16,5	18,6	21,0	21,3
	Latvia	26,2	28,1	29,4	28,6
	Lithuania	13,5	12,0	12,2	10,4
Machinery and transport equipment (7)	Estonia	39,9	36,3	29,1	29,4
	Latvia	7,1	8,3	8,3	9,1
	Lithuania	17,4	20,0	26,1	26,5
Miscellaneous manufactured articles (8)	Estonia	18,1	19,5	22,3	21,9
	Latvia	18,4	19,2	18,1	17,5
	Lithuania	20,0	19,1	18,8	18,8

**Attachment B.3. Transport sector balance of payments in the Baltic States, million USD. Sources: Bank of Estonia, Bank of Latvia, Bank of Lithuania; national statistical authorities in the Baltic States**

Year	Estonia				Latvia				Lithuania				
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003	
<b>Sea transport</b>	<b>balance</b>	<b>184.2</b>	<b>204.0</b>	<b>194.1</b>	<b>237.8</b>	<b>403.8</b>	<b>376.9</b>	<b>334.9</b>	<b>330.6</b>	<b>134.1</b>	<b>138.9</b>	<b>137.1</b>	<b>97.7</b>
	credit	372.9	388.8	439.3	450.6	465.3	439.3	411.0	424.8	180.3	180.2	208.4	223.6
	debet	-188.7	-184.8	-245.2	-212.8	-61.5	-62.5	-76.1	-94.2	-46.2	-41.3	-71.3	-125.9
Passenger	balance	71.6	64.8	76.0	120.4	-0.2	-0.7	-4.2	1.8	2.8	4.6	5.7	3.8
	credit	109.5	112.9	131.1	152.6	0.6	0.4	0.7	2.8	2.8	4.6	5.7	3.8
	debet	-37.9	-48.1	-55.1	-32.2	-0.9	-1.2	-4.9	-1.0	0.0	0.0	0.0	0.0
Freight	balance	6.2	23.0	15.0	32.3	117.9	163.4	168.6	185.9	34.3	35.4	4.7	-4.2
	credit	118.9	120.1	150.4	165.1	143.5	178.8	188.5	212.7	65.7	65.9	65.3	105.5
	debet	-112.7	-97.1	-135.4	-132.8	-25.6	-15.4	-19.9	-26.8	-31.5	-30.4	-60.7	-109.7
Other	balance	106.4	116.2	103.1	85.1	286.2	214.2	170.6	142.9	97.0	98.8	126.7	98.1
	credit	144.5	155.8	157.8	132.9	321.2	260.1	221.8	209.2	111.7	109.7	137.3	114.3
	debet	-38.1	-39.6	-54.7	-47.8	-35.1	-45.9	-51.3	-66.4	-14.8	-10.9	-10.6	-16.2
<b>Air transport</b>	<b>balance</b>	<b>26.0</b>	<b>25.1</b>	<b>29.4</b>	<b>-27.5</b>	<b>-4.3</b>	<b>-7.1</b>	<b>-3.7</b>	<b>-4.2</b>	<b>17.8</b>	<b>16.8</b>	<b>25.7</b>	<b>38.4</b>
	credit	49.4	49.9	62.1	84.0	61.5	54.5	59.1	69.3	43.7	46.1	53.5	67.3
	debet	-23.4	-24.8	-32.7	-111.5	-65.8	-61.5	-62.7	-73.5	-25.8	-29.3	-27.7	-28.9
Passenger	balance	26.5	26.7	29.8	3.9	4.8	-3.3	-0.9	1.1	22.5	24.8	31.0	37.4
	credit	35.2	35.8	45.9	54.1	36.3	26.9	30.4	35.6	26.9	28.0	34.4	37.6
	debet	-8.7	-9.1	-16.1	-50.2	-31.2	-30.3	-31.3	-34.5	-4.4	-3.2	-3.4	-0.2
Freight	balance	-0.4	-0.6	-1.4	-33.7	-7.2	-6.6	-8.3	-11.5	-2.0	-1.6	-3.1	-6.6
	credit	3.0	3.6	2.9	13.8	2.8	4.1	4.7	5.3	3.6	3.7	3.6	4.6
	debet	-3.4	-4.2	-4.3	-47.5	-10.0	-10.7	-12.9	-16.8	-5.6	-5.3	-6.6	-11.1
Other	balance	-0.1	-1.0	1.0	2.3	-1.9	2.9	5.5	6.2	-2.7	-6.4	-2.2	7.6
	credit	11.2	10.5	13.3	16.1	22.4	23.4	24.0	28.4	13.2	14.4	15.5	25.2
	debet	-11.3	-11.5	-12.3	-13.8	-24.3	-20.6	-18.5	-22.2	-15.9	-20.8	-17.7	-17.7
<b>Other transport</b>	<b>balance</b>	<b>93.9</b>	<b>75.5</b>	<b>90.7</b>	<b>259.8</b>	<b>160.0</b>	<b>191.9</b>	<b>208.0</b>	<b>268.3</b>	<b>118.7</b>	<b>139.5</b>	<b>194.3</b>	<b>247.1</b>
	credit	301.3	354.5	300.5	449.1	268.7	275.8	301.8	402.1	267.8	305.6	393.0	590.9
	debet	-207.4	-279.0	-209.8	-189.3	-108.7	-83.8	-93.7	-133.8	-149.1	-166.1	-198.6	-343.8
Passenger	balance	1.3	1.0	1.9	-3.8	2.9	5.8	7.1	8.7	5.0	3.9	6.7	16.1
	credit	3.6	5.1	4.6	5.2	4.4	6.4	8.3	10.2	8.8	9.0	11.0	20.9
	debet	-2.3	-4.1	-2.7	-9.0	-1.5	-0.6	-1.2	-1.5	-3.9	-5.1	-4.3	-4.8
Freight	balance	5.4	4.1	24.7	202.9	106.0	172.2	192.2	251.7	128.2	151.1	201.4	256.6
	credit	190.6	266.7	218.3	331.8	180.3	230.6	259.5	342.5	252.6	288.5	368.2	516.6
	debet	-185.2	-262.6	-193.6	-128.9	-74.2	-58.3	-67.3	-90.8	-124.4	-137.4	-166.9	-260.0
Other	balance	87.2	70.4	64.1	60.7	51.0	13.9	8.8	8.0	-14.5	-15.5	-13.7	-25.6
	credit	107.1	82.7	77.6	112.1	84.1	38.8	34.0	49.4	6.4	8.1	13.7	53.3
	debet	-19.9	-12.3	-13.5	-51.4	-33.0	-25.0	-25.2	-41.5	-20.9	-23.6	-27.5	-78.9
<b>Transport</b>	<b>balance</b>	<b>304.1</b>	<b>304.6</b>	<b>314.2</b>	<b>470.1</b>	<b>559.5</b>	<b>561.7</b>	<b>539.3</b>	<b>594.7</b>	<b>270.6</b>	<b>295.2</b>	<b>357.2</b>	<b>414.9</b>
(All)	credit	723.6	793.2	801.9	983.7	795.5	769.6	771.9	896.2	491.7	531.9	654.8	934.0
	debet	-419.5	-488.6	-487.7	-513.6	-236.1	-207.9	-232.6	-301.5	-221.1	-236.7	-297.6	-519.1
<b>Services</b>	<b>balance</b>	<b>562.2</b>	<b>580.4</b>	<b>490.0</b>	<b>855.0</b>	<b>442.7</b>	<b>495.9</b>	<b>544.2</b>	<b>583.4</b>	<b>380.2</b>	<b>456.5</b>	<b>543.5</b>	<b>600.6</b>
(All)	credit	1,497.7	1,649.1	1,711.8	2,238.5	1,212.7	1,189.0	1,252.3	1,527.1	1,058.9	1,156.8	1,478.8	1,810.5
	debet	-935.5	-1,068.7	-1,221.8	-1,383.5	-769.9	-693.1	-707.8	-943.7	-678.7	-700.3	-935.3	-1,209.9
<b>Transport</b>	balance	54.1	52.5	64.1	55.0	126.4	113.3	99.0	101.9	71.2	64.7	65.7	69.1
% share of services	credit	48.3	48.1	46.8	43.9	65.6	64.7	61.6	58.7	46.4	46.0	44.3	51.6
	debet	44.8	45.7	39.9	37.1	30.7	30.0	32.9	31.9	32.6	33.8	31.8	42.9
<b>Transport</b>	balance	5.6	5.1	4.5	5.2	7.2	6.8	5.9	5.4	2.4	2.4	2.5	2.3
% share of GDP*	credit	13.2	13.3	11.3	10.8	10.3	9.3	8.4	8.1	4.3	4.4	4.6	5.1
	debet	-7.7	-8.2	-6.9	-5.6	-3.1	-2.5	-2.5	-2.7	-1.9	-2.0	-2.1	-2.9
<b>Goods</b>	<b>balance</b>	<b>-767.3</b>	<b>-788.4</b>	<b>-1,102.4</b>	<b>-1,570.6</b>	<b>-1,058.1</b>	<b>-1,350.7</b>	<b>-1,444.2</b>	<b>-1,997.7</b>	<b>-1,103.8</b>	<b>-1,108.0</b>	<b>-1,336.8</b>	<b>-1,628.8</b>
(All)	credit	3,308.7	3,359.3	3,515.6	4,593.0	2,058.3	2,215.8	2,575.7	3,171.0	4,050.4	4,888.9	6,030.7	7,642.2
	debet	-4,076.0	-4,147.7	-4,618.0	-6,163.6	-3,116.5	-3,566.5	-4,020.0	-5,168.7	-5,154.2	-5,997.0	-7,367.6	-9,271.0

\*Calculated by current values in national currencies

**Attachment B.4. Selected country rankings in international comparison, The Baltic States, Finland and Poland.**

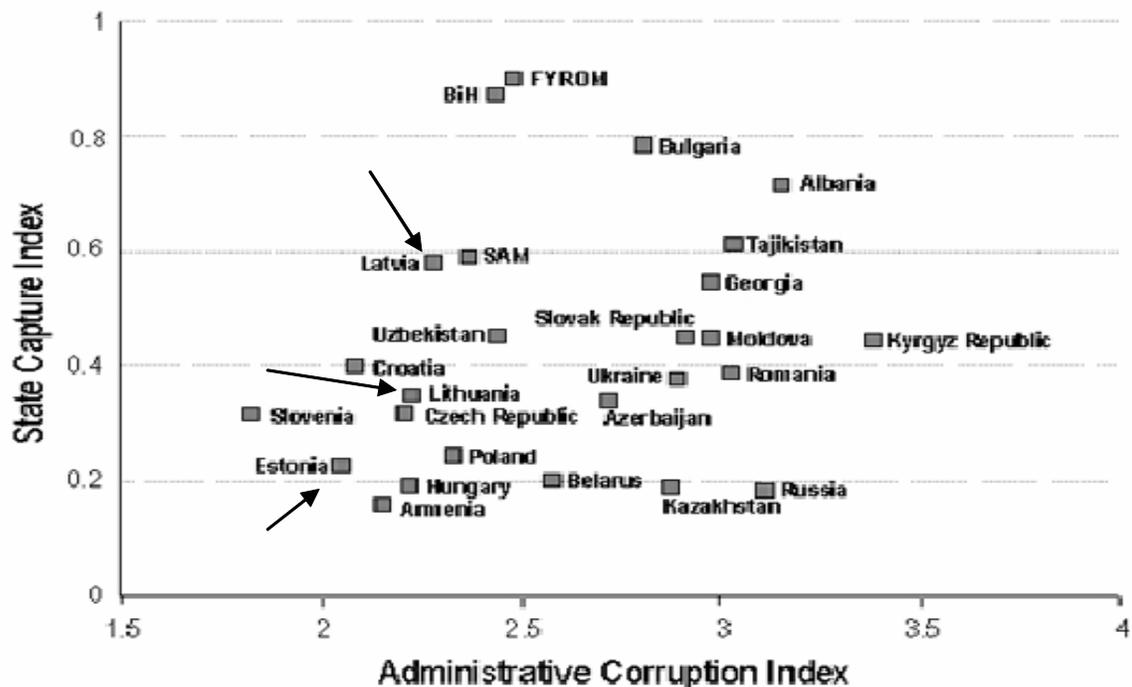
	Finland	Estonia	Latvia	Lithuania	Poland
Corruption Perception Index*					
Rank 2003 (133 countries)	1.	33.	57.	41.	64.
Rank 2000 (90 countries)	1.	27.	57.	43.	43.
Index of Economic Freedom**					
Rank 2004 (155 countries)	14.	6.	29.	22.	56.
The Lisbon Review 2004***					
Rank among Accession Countries (12)		1.	3.	7.	9.
Rank among EU-15 countries (15)	1.				
Global Competitiveness Report 2003-2004***					
Rank, Growth Competitiveness Index (102 countries), in which...	1.	22.	37.	40.	45.
Macroeconomic environment index	2.	34.	36.	41.	49.
Public institutions index	2.	28.	45.	41.	58.
Technology index	2.	10.	26.	36.	34.
Rank, Business Competitiveness Index (95 countries)	1.	28.	29.	40.	47.

\* by Transparency International

\*\* by The Heritage Foundation / The Wall Street Journal

\*\*\* by World Economic Forum

**Attachment B.5. Two Dimensions of Corruption: Administrative Corruption and State Capture. Source: World Bank, Transition – The Newsletter About Reforming Economies**



## Attachment B.6. International comparison of business environment, scores

### The Lisbon Review 2004, by World Economic Forum

(Scale 1...7, larger values representing stronger performance)

	Estonia	Latvia	Lithuania	Finland
<b>Total Score</b>	4,64	4,34	4,05	5,80
<b>Subindexes</b>				
Information Society	4,92	3,62	3,36	5,78
Innovation and R&D	3,82	3,86	3,57	5,87
Liberalization	4,40	4,44	4,10	5,36
Network Industries	4,98	4,35	4,51	6,33
Financial Services	5,43	4,84	4,67	6,13
Enterprise	4,90	4,87	4,38	5,48
Social Inclusion	4,20	4,47	3,69	5,46
Sustainable Development	4,44	4,29	4,17	5,97

### Economic freedom 2004, by The Heritage Foundation

(Scale 1...5, 1=most conducive for economic freedom, 5=least conducive for economic freedom)

	Estonia	Latvia	Lithuania	Finland
<b>Total Score</b>	1,76	2,36	2,19	1,95
<b>Subindexes</b>				
Trade Policy	1,00	2,00	2,00	2,00
Fiscal Burden	2,10	2,60	2,40	3,50
Government Intervention	2,00	2,50	2,50	3,00
Monetary Policy	2,00	1,00	1,00	1,00
Foreign Investment	1,00	2,00	2,00	2,00
Banking & Finance	1,00	2,00	1,00	2,00
Wages & Prices	2,00	2,00	2,00	2,00
Property Rights	2,00	3,00	3,00	1,00
Regulation	2,00	3,00	3,00	2,00
Informal Market	2,50	3,50	3,00	1,00

### Corruption Perception Index 2001-2003, by Transparency International

(Scale 10...0, 10=highly clean, 0=highly corrupted)

Year	Estonia	Latvia	Lithuania	Poland	Finland
2003	5,5	3,8	4,7	3,6	9,7
2002	5,6	3,7	4,8	4,0	9,7
2001	5,6	3,4	4,8	4,1	9,9

### Qualitative Assessments of the Business Environment 2002, by Joint EBRD-World Bank Survey

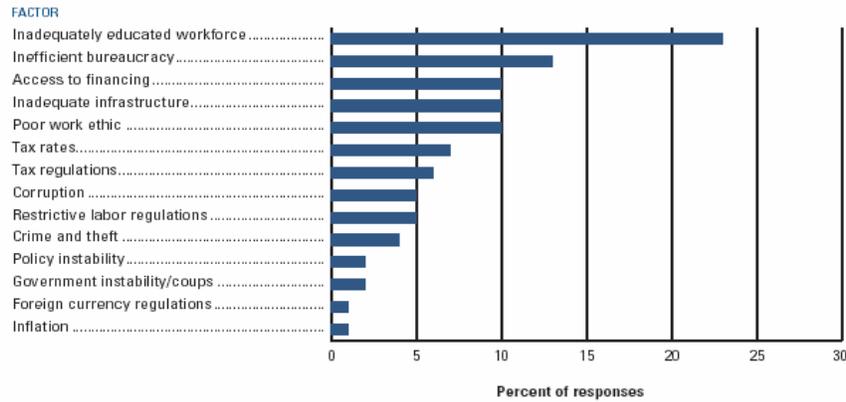
(scale of 1 to 4, with 1 indicating a minor obstacle and 4 a major obstacle)

	Estonia	Latvia	Lithuania	Poland
<b>Average</b>	<b>1,79</b>	<b>1,88</b>	<b>2,01</b>	<b>2,45</b>
Finance	1,99	1,91	1,81	2,91
Infrastructure	1,54	1,38	1,55	1,55
Taxation	1,99	2,80	2,78	3,17
Regulation	1,79	1,95	1,74	2,32
Judiciary	1,85	1,56	2,16	2,47
Crime	1,70	1,62	1,91	2,26
Corruption	1,69	1,94	2,15	2,50

**Attachment B.7. The Most Problematic Factors for Doing Business in the Baltic States. Source: World Economic Forum, Executive Opinion Survey (2003)**

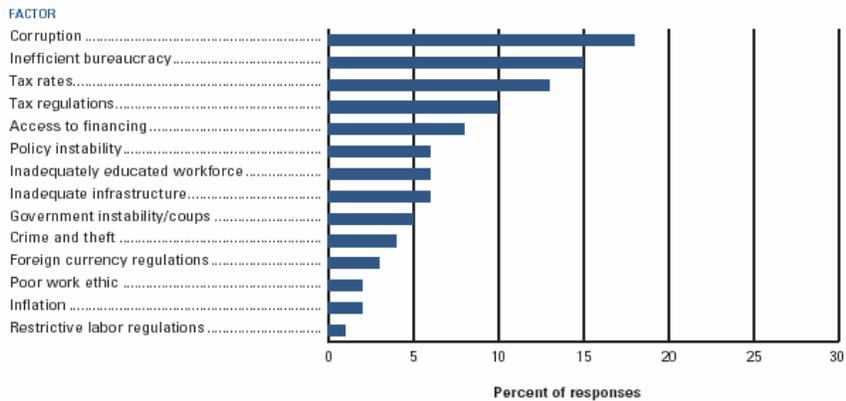
**Estonia**

**The Most Problematic Factors for Doing Business**



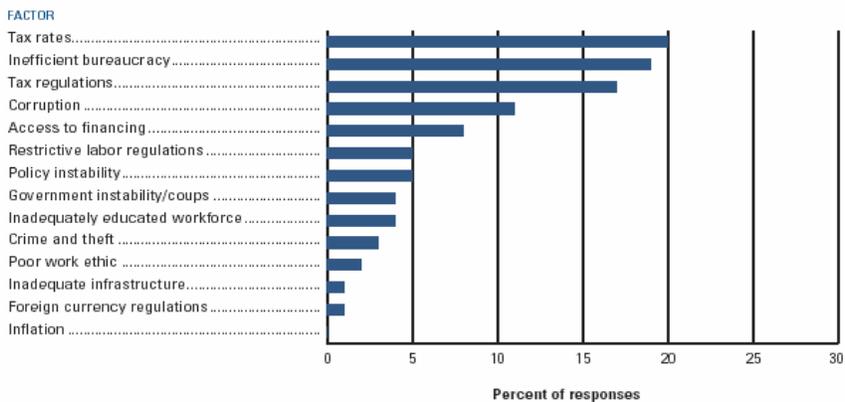
**Latvia**

**The Most Problematic Factors for Doing Business**



**Lithuania**

**The Most Problematic Factors for Doing Business**



Note: From a list of 14 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

## **Attachment C.1. Background on Klaipeda Free Economic Zone**

Lithuania's parliament passed The Law on the Establishment of Free Economic Zones in the year 2000. Klaipeda is the second largest city in Lithuania, and the Klaipeda (then called Special Economic Zone, SEZ) SEZ site of 205 hectares (500 acres) occupied a location in the geographical center of the city, connected to the industrial infrastructure, including water and energy supplies.

Foreign investors were attracted by the significant tax relief measures such as a corporate tax holiday for the first 5 years if the investment is larger than 1 million USD. The SEZ was under the control of the private Klaipeda SEZ Management Company.

Klaipeda multipurpose port is one of the major ones in the Baltic States. In 2000, the port had seven specialized stevedoring companies, three shipyards, a shipbuilding yard, and shipping agencies and forwarders. Modernization was also carried out to handle bulk carriers up to 60,000 tons and tankers up to 90,000 tons.

In the year 2000, The World Bank granted a loan of 35.4 million USD of the total 57 million USD investment to reconstruct the port. In the World Bank loan appraisal, the port was assessed as having a competitive advantage over other Baltic ports based on following criteria:

- ice free all year round; Riga, Tallinn and St. Petersburg need ice breakers
- the best hinterland road with a four lane European standard highway to Vilnius
- a 16 % increase in traffic flow in 1997 – 1998
- logistic costs are the lowest in the region according to a survey conducted
- avoiding border crossings; faster route for cargo compared to routing via land

For example, Siemens, one of the biggest foreign investors in Lithuania, is an example of a production-oriented company that depends on well-functioning transport connections. In 1993 the company established a plant in Klaipeda - "Baltijos Automobiliu Technika", employed 1,200 persons in 2001. It produced 90% of all wire collections for Renault cars. Imports of raw materials arrive from 35 countries and all production is exported. A third party logistic operator's services are used for transport. Full trailer load shipments are routed by the daily ferry connection Klaipeda – Kiel (DE). The Klaipeda plant received excellent ratings from its parent company for employee efficiency.

Source: Ojala and Queiroz (2001, eds.) Transport Sector Restructuring in the Baltic States, Proceedings of a Seminar held in Riga on November 16-17, 2000, The World Bank

## Attachment C.2. The main business journals and news agencies covering the Baltic States in 2004. Compiled by the Consultant.

<b>Business Newspapers</b>	<b>Target Dispatch</b>	<b>Description</b>	<b>Published</b>
The Baltic Times	the Baltic States	Newspaper covering business, finance, general news for the Baltic States	Weekly
Äripäev	Estonia	Estonian business newspaper	Daily
Dienas Bizness	Latvia	Latvian business newspaper	Daily
Verslo Žinios	Lithuania	Lithuanian business newspaper	Daily
<b>Business Magazines and Journals</b>	<b>Target Market</b>	<b>Description</b>	<b>Published</b>
The Baltic Review	the Baltic States	English-language magazine covering business, finance, politics, economics, and culture in the Baltics	Quarterly
The Baltic Course	the Baltic States	English-language business magazine for the Baltic States	Quarterly
Northern Enterprise	Scandinavia & the Baltic States	English-language magazine that covers the Nordic and Baltic Sea markets	Bi-monthly
Nordicum	Scandinavia & the Baltic States	Scandinavian business magazine on business, economies and politics in Northern Europe and Baltic Sea Area	Bi-monthly
Lithuanian Business Review	Lithuania	English-language journal on the Lithuanian economy and business environment	Monthly
<b>Specialized Transport Journals and Magazines</b>	<b>Target Dispatch</b>	<b>Description</b>	<b>Published</b>
Transport Weekly	Latvia	Transport magazine in Russian and English	Weekly
Sea Magazine	Lithuania	International transport business magazine in Lithuanian, Russian and English	Bi-monthly
Transit	Russia, the Baltic States & CIS-countries	Transport business journal in Russian and English that covers Russia, CIS-countries and the Baltic States	3 times a year
Baltic Transport Journal	the Baltic States	Transport journal in English covering sectors of maritime, aviation and tourism	
Transporto Pasaulis	Lithuania	Transport magazine in Lithuanian	Monthly
Vežėjų žinios	Lithuania	Transport magazine in Lithuanian	Bi-weekly
Transport ja Teed	Estonia	Transport magazine in Estonian	
Latvijas Auto	Latvia	Transport magazine in Latvian and Russian	
Port and Transport of Latvia	Latvia	Latvian transport magazine	
Transport		English-language Research Journal of Vilnius Gediminas Technical University and Lithuanian Academy of Sciences	Bi-monthly
Computer Modelling and New Technologies		Research Journal of Latvian Transport and Telecommunications Institute that includes	
<b>News Agencies</b>	<b>Target Dispatch</b>	<b>Description</b>	<b>Published</b>
Baltic Business News	the Baltic States	The largest news agency in the Baltic States	Daily
Baltic News Service	the Baltic States	English-language news service covering business news from the Baltic States	Daily
ETA - Estonian News Agency	Estonia	Information agency in Estonia	Daily
LETA - Latvian Newsagency	Latvia	Information agency in Latvia that provides news in Latvian, Russian and English	Daily
ELTA - Lithuanian News Agency	Lithuania	Information agency in Lithuania that provides news in Lithuanian, Russian and English	Daily
News.lt	Lithuania	Information agency in Lithuania that provides news in Lithuanian, Russian, English and German	Daily
<b>Others</b>	<b>Target Dispatch</b>	<b>Description</b>	
<a href="http://www.transportas.lt">www.transportas.lt</a>	Lithuania	Lithuanian transport information center in Lithuanian and English	
<a href="http://www.transport.lv">www.transport.lv</a>	Latvia	Latvian transport information centre in English, Russian and Latvian	
<a href="http://www.balticdata.info">www.balticdata.info</a>	Russia, the Baltic States & Poland	Database for information on Russia, Estonia, Latvia, Lithuania, and Poland	

Most of the journals and news agencies have a web-site that can be found by using a search engine.

## Attachment C.2. Issues on air freight statistics in the Baltic States

**Comprehensive statistics on airfreight shipments are not available.** Obtaining accurate statistics on numbers of passengers, airfreight volumes, movement of flights etc. is essential in order to research and analyze for example the market development or in regard of air transport service providers for assessing ones competitive position. Most airports provide accurate and detailed data and are made available by the airports, international aviation associations and national statistics offices.

EU requires Member States to provide statistical data on carriage of passengers, freight and mail by commercial air services as well as on civil aircraft movements to or from Community airports. Respective legislation<sup>63</sup> was passed in 2003 providing guidance on implementation. Collected data will be made comparable, inter alia with data provided by the International Civil Aviation Organization (ICAO) and other modes of transport.

Unfortunately, current statistical data collection methods do not comprise airfreight carried by road transport. It is estimated that in the Baltic States approximately 60-75% of all cargo carried under air waybill is actually transported by airlines road feeder services (RFS). The main reason for using RFS is the fact that freight capacity on operating aircraft is very limited or even not available. Goods that have either a high weight or high volume can not be transported on available aircraft.

Also off-line carriers operate in the Baltic States. An off-line carrier carries goods from, for example, Far East to a major hub airport in Central Europe by its aircraft. It then “delivers” the cargo with its trucks to the final destination airport to where it has no direct flight services. The main difference between normal road transport and road feeder service is contractual. Cargo on road feeder service is also carried under air waybill and the same terms and condition apply as to carriage by air.

Although the mode of transport is the decisive factor for gathering statistical data on goods transports, it would be valuable to include RFS transports in an additional line with airfreight movements. Expected rising passenger figures in all three States are likely to reduce cargo capacity on aircraft until the passenger load factors reach a level where it is feasible to operate bigger types of aircraft. Airfreight that does not fit on flights will be transported by other modes of transport, but it is not recorded as airfreight in statistics.

Above-described problems with air freight statistics are not confined to Baltic States alone, but affects air transport statistics throughout Europe.

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<sup>63</sup> For further information see: Regulation (EC) No 437/2003 on statistical returns in respect of the carriage of passengers, freight and mail by air Commission regulation (EC) No 1358/2003 implementing Regulation (EC) No 437/2003 on statistical returns in respect of the carriage of passengers, freight and mail by air and amending Annexes I and II thereto

### Attachment D.1. Comparison of railway indicators of Baltic States and selected European countries. Source: UIC

Railway Indicators	Estonia	Latvia	Lithuania	Belgium	Bulgaria	Netherlands	Denmark	Norway	Finland	Slovakia
Area (km <sup>2</sup> thousands)	45.2	64.6	65.3	30.5	110.9	41.5	43.1	387.0	338.1	49.4
Population (millions)	1.4	2.4	3.5	10.3	8.0	16.0	5.3	4.5	5.2	5.4
Population density (Inhab./km <sup>2</sup> )	29.9	36.5	53.4	336.7	72.4	386.3	123.8	11.7	15.3	110.3
Total length of lines (km)	968	2,270	1,775	3,515	4,318	2,806	2,047	4,077	5,850	3,662
Incl. Electrified (%)	13.6	11.3	6.9	83.4	65.9	73.4	30.5	61.8	41	42.5
Incl. Double track (%)	10.8	13.6	31.4	76.8	22.4	66.8	44.3	5.1	8.7	27.8
Density of railway lines for 1000 sq.km of territory	21.4	35.1	26.0	115.3	38.9	67.6	47.5	12.6	17.3	74.7
Personnel per 1 km length of lines	3,869 4.0	13,407 5.9	13,100 7.4	42,500 12.1	36,400 8.4	25,500 9.1	11,900 5.8	9,400 2.3	11,800 2	43,700 11.9
Carried freight (thousand tonnes) per 1 km length of lines	71,100 73.5	40,100 17.7	36,700 20.7	69,000 19.6	18,500 4.3	24,500 8.7	7,100 3.5	19,900 4.9	41,700 7.1	49,900 13.6
Aver. length transportat. of freight (km)	131	375	266	121	250	150	263	134	232	208
Total freight turnover (million tonnes-km) per 1 employee (thousand tonnes-km)	9,330 2,411	15,020 1,120	9,767 746	8,363 197	4,627 127	3,685 145	1,867 157	2,669 284	9,664 819	10,383 238
Gross tonnes-km of trains (million)	17,671**	29,456	20,542	43,301	16,142	6,659		12,053	28,974	30,104
Average freight density (gross million tonnes-km per 1 km length of lines)	18.3	13.0	11.6	12.3	3.7	2.4		3.0	5.0	8.2
Total passengers (thousand) Passenger turnover (million pass.-km)	5,187 177	21,960 744	7,200 498	164,900 8,260	33,700 2,598	320,000 14,288	151,100 5740	49,800 2,477	58,000 3,305	59,400 2,682
Aver. length transport. of passenger trip (km)	34.1	33.9	69.2	50.1	77.1	44.7	38.0	49.7	57.0	45.2
Locomotives per 100 km length of lines	178 18.4	223 9.8	254 14.3	914 26	602 13.9	267 9.5	98 4.8	111 2.7	612 10.5	1,131 30.9
passenger cars, electric and diesel multiple units per 100 km length of lines	251 25.9	440 19.4	509 28.7	3,413 97	1,655 38.3	2,832 100.9	1,697 82.9	850 20.8	1,030 17.6	2,229 60.9
freight wagons per 100 km length of lines	3,648* 377	5,543 244	9,396 529	15,186 432	14,195 329	2,099 74	4,424 216	2,446 60	11,523 197	18,604 508

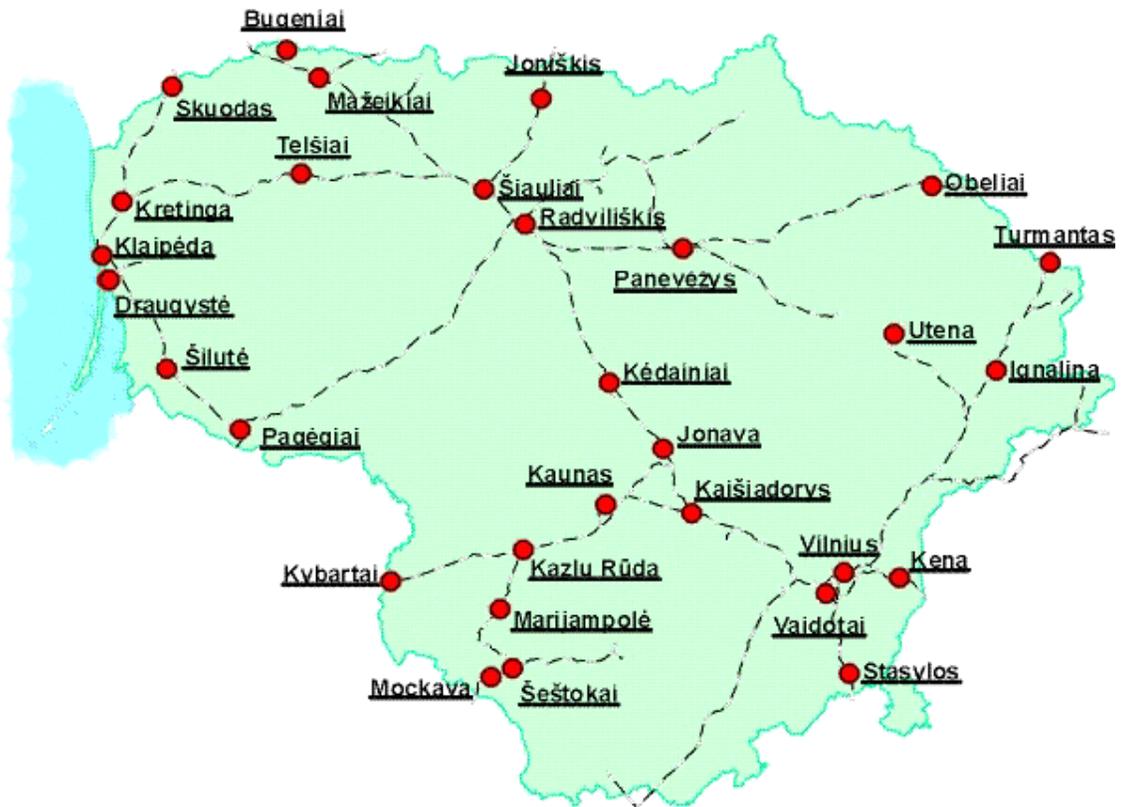
\* 3648 freight wagons under Estonian Railways Ltd. ownership and 13,788 owned by private companies

\*\* Data for concerning only Estonian Railways Ltd.

Attachment D.2. Railway cargo intensity in Latvia. Source: Transport Infrastructure Development for a Wider Europe.



**Attachment D.3. Railway route scheme in Latvia and Lithuania. Sources: Latvian and Lithuanian Railways**



**Attachment D.4. Statistics over rail transport in the Baltic States 1996-2003.  
Transport Ministry data compiled by the Latvian MoT.**

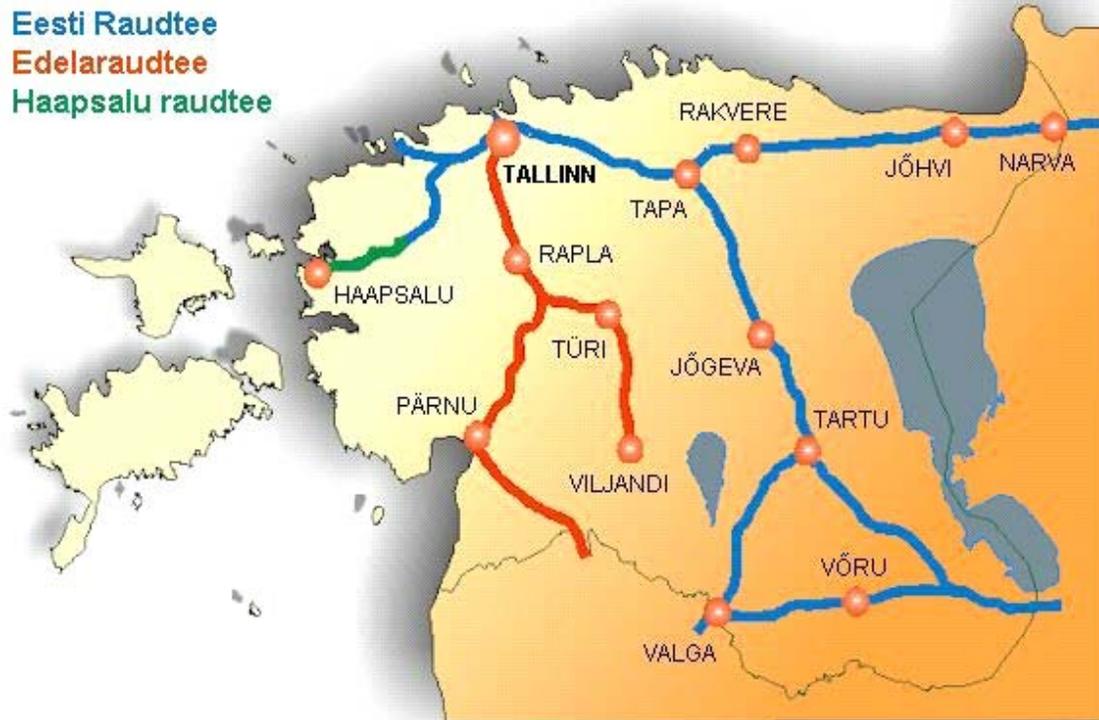
<b>Estonia</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Freight transported (million tons)*	24.8	29.0	31.9	37.4	39.7	38.9	42.6	42.0
<i>inland</i>	9.6	9.2	8.3	0.0	7.4	5.5	4.0	3.7
<i>export</i>	1.1	1.4	1.3	0.0	0.8	0.6	0.6	0.6
<i>import</i>	2.9	4.4	3.8	0.0	2.8	2.7	2.6	3.0
<i>inland transit</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>transit through ports</i>	11.3	14.1	18.6	0.0	28.7	30.1	35.5	34.8
<i>Freight transport work (million tonkm)*</i>	3,894	4,810	5,786	7,295	7,801	8,218	9,330	9,256
Passengers transported (million)**	6.7	5.6	6.7	6.8	7.3	5.5	5.2	5.1
<i>inland</i>	6.2	5.1	6.5	6.6	7.1	5.4	5.1	
<i>international</i>	0.5	0.5	0.3	0.2	0.1	0.1	0.1	
<i>Passenger transport work (million passengerkm)**</i>	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2
<hr/>								
<b>Latvia</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Freight transported (million tons)	35.3	41.0	37.9	33.2	36.4	37.9	40.1	48.4
<i>inland</i>	2.6	2.5	2.4	1.9	1.8	2.0	2.3	2.3
<i>export</i>	1.5	2.8	2.6	1.7	1.9	1.2	0.7	1.0
<i>import</i>	3.7	4.6	4.6	3.6	4.0	3.4	3.5	4.1
<i>inland transit</i>	4.8	4.7	2.8	2.1	2.8	14.4	4.0	3.8
<i>transit through ports</i>	22.8	26.4	25.5	23.9	25.9	16.8	29.6	37.2
<i>Freight transport work (million tonkm)</i>	12,412	13,970	12,966	12,208	13,291	14,179	15,020	17,604
Passengers transported (million)	35.1	33.0	30.1	24.9	18.2	20.1	22.0	23.0
<i>inland</i>	34.0	31.9	29.2	24.1	17.5	19.6	21.5	22.6
<i>international</i>	1.2	1.1	0.9	0.7	0.7	0.5	0.5	0.4
<i>Passenger transport work (million passengerkm)</i>	1.2	1.1	1.1	1.0	0.7	0.7	0.7	0.8
<hr/>								
<b>Lithuania</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Freight transported (million tons)	29.1	30.5	30.9	28.8	30.7	29.2	36.7	43.4
<i>inland</i>	4.1	4.7	6.0	5.0	4.7	6.3	6.5	5.4
<i>export</i>	5.3	5.5	6.2	5.1	4.1	4.3	4.5	7.0
<i>import</i>	4.7	4.6	5.0	4.3	4.0	3.4	4.9	7.2
<i>inland transit</i>	5.3	5.8	5.3	5.3	6.4	8.1	13.1	0.6
<i>transit through ports</i>	9.7	9.9	8.5	9.2	11.6	7.0	7.7	23.2
<i>Freight transport work (million tonkm)</i>	8,103	8,622	8,265	7,848	8,919	7,741	9,767	11,457
Passengers transported (million)	13.2	11.2	10.6	10.6	8.9	7.7	7.2	7.0
<i>inland</i>	11.2	9.2	9.0	9.1	7.4	6.3	5.8	6.0
<i>international</i>	2.0	1.9	1.7	1.5	1.4	1.4	1.5	1.0
<i>Passenger transport work (million passengerkm)</i>	889	766	715	693	611	533	498	432

\* Data regarding only Estonian Railways Ltd.

\*\* From 2001 onwards Edelaraudtee Ltd., Elektriraudtee Ltd. and EVR Express only

**Attachment D.5. Railway route scheme in Estonia. Source: Estonian Railways**

**Eesti Raudtee**  
**Edelaraudtee**  
**Haapsalu raudtee**



**Attachment D.6. International scheduled destinations and number of direct flights per week (June 2004) Source: Airports**

From Tallinn (TLL)				From Riga (RIX)				From Vilnius (VNO)			
To	IATA code	country	No. of flights/ week	To	IATA code	country	No. of flights/ week	To	IATA code	country	No. of flights/ week
Helsinki	HEL	Finland	47	Helsinki	HEL	Finland	36	Copenhagen	CPH	Denmark	30
Stockholm	ARN	Sweden	23	Copenhagen	CPH	Denmark	28	Frankfurt	FRA	Germany	18
Copenhagen	CPH	Denmark	20	Stockholm	ARN	Sweden	19	Helsinki	HEL	Finland	18
Riga	RIX	Latvia	15	Amsterdam	AMS	Netherlands	18	Warsaw	WAW	Poland	16
Frankfurt	FRA	Germany	13	Prague	PRG	Czech Republic	15	Stockholm	ARN	Sweden	13
Prague	PRG	Czech Republic	10	Tallinn	TLL	Estonia	15	London	LGW	United Kingdom	12
London	LGW	United Kingdom	9	Vienna	VIE	Austria	14	Amsterdam	AMS	Netherlands	11
Warsaw	WAW	Poland	7	Warsaw	WAW	Poland	12	Moscow	SVO	Russia	11
Oslo	OSL	Norway	6	London	LHR	United Kingdom	11	Prague	PRG	Czech Republic	11
Hamburg	HAM	Germany	5	Oslo	OSL	Norway	11	Berlin	TXL	Germany	10
Vilnius	VNO	Lithuania	5	Vilnius	VNO	Lithuania	10	Riga	RIX	Latvia	10
Moscow	SVO	Russia	4	Moscow	SVO	Russia	9	Tallinn	TLL	Estonia	10
Munich	MUC	Germany	4	Berlin	TXL	Germany	7	Vienna	VIE	Austria	10
Amsterdam	AMS	Netherlands	3	Frankfurt	FRA	Germany	7	Brussels	BRU	Belgium	5
Berlin	TXL	Germany	3	Hamburg	HAM	Germany	7	Paris	CDG	France	5
Kiev	KBP	Ukraine	3	Munich	MUC	Germany	7	Cologne	CGN	Germany	4
Paris	CDG	France	3	Kiev	KBP	Ukraine	5	Hamburg	HAM	Germany	4
Milan	BGY	Italy	2	Minsk	MSQ	Belarus	5	Oslo	OSL	Norway	4
<b>From Tallinn City Hall</b>				Brussels	BRU	Belgium	4	Dublin	DUB	Ireland	3
To				Milan	BGY	Italy	3	Kiev	KBP	Ukraine	3
Helsinki	HEL	Finland	70	Dublin	DUB	Ireland	2	<b>From Kaunas (KUN)</b>			
				Tel Aviv	TLV	Israel	1	To			

**List of selected IATA airport codes**

AMS	Amsterdam-Schiphol
ARN	Stockholm-Arlanda
BGY	Milan Bergamo-Orio Alserio
BLL	Billund
BRU	Brussels
CDG	Paris-Charles De Gaulle
CGN	Cologne
CPH	Copenhagen-Kastrup
DUB	Dublin
FRA	Frankfurt International
HAM	Hannover
HAM	Hamburg-Fuhlsbuettel
HEL	Helsinki-Vantaa
KBP	Kiev-Borispol
KUN	Kaunas International
LGW	London-Gatwick
LHR	London-Heathrow
MMX	Malmö-Sturup
MSQ	Minsk
MUC	Munich
OSL	Oslo-Gardermoen
PLQ	Palanga
PRG	Prague-Ruzyně
RIX	Riga
RNB	Ronneby-Kallinge
SVO	Moscow-Sheremetyevo
TLL	Tallinn-Ulemiste
TLV	Tel Aviv
TXL	Berlin-Tegel
WAW	Warsaw-Frederic Chopin Airport
VIE	Vienna-Schwechat
VNO	Vilnius

**From Palanga (PLQ)**

To	IATA code	country	No. of flights/ week
Hamburg	HAM	Germany	8
Billund	BLL	Denmark	5
Malmö	MMX	Sweden	5
Oslo	OSL	Norway	5
Ronneby	RNB	Sweden	3
Berlin	TXL	Germany	1
Frankfurt	FRA	Germany	1
Hannover	HAM	Germany	1

## Attachment D.7. Description of the EU-funded Marco Polo program

Marco Polo<sup>64</sup> – is an EU-funded program which intends to help the transport and logistics industry to achieve sustained modal shifts of road freight to short sea shipping, rail and inland waterway. Marco Polo sets quantified and verifiable objectives for modal shift. The aim is to maintain the traffic share between the various transport modes for the year 2010 at its 1998 level. The program involves a budget of 115 million € (2003 - 2007) to achieve its ambitious goal of shifting the expected yearly increase of road freight to the other modes of transport.

The Programme's objective is to reduce road congestion and to improve the environmental performance of the freight transport system within the Community and to enhance intermodality, thereby contributing to an efficient and sustainable transport system. To achieve this objective, the Programme supports actions in the freight transport, logistics and other relevant markets. The programme will be geared towards promoting commercially oriented services in the freight transport market. Neither research and development nor infrastructure measures are its focus. The Marco Polo programme covers three broad fields:

- Start-up aid for new non-road freight transport services which will have to be viable in the medium term. Setting up new non-road freight transport services is always risky. For example, regular maritime, rail and inland waterway services need a load factor of about 70 to 90% to stay viable. The costs of setting up a new service may be co-funded up to a maximum of 30%.
- Support for the launch of services or systems of strategic importance for Europe. This would involve, for example, setting up motorways of the sea or high quality international rail freight services, operated on a one-stop shop basis. These actions should change the way in which non-road freight transport operations are carried out and use trans-European transport networks or pan-European corridors. The maximum amount of aid is 35%.
- Stimulation of cooperation on the freight logistics market. Transport operators should plan their operations in terms of the intermodal network in order to overcome the fragmentation of the market and the intense commercial pressure from road transport. The maximum amount is 50%.

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<sup>64</sup> [http://europa.eu.int/comm/transport/marcopolo/index\\_en.htm](http://europa.eu.int/comm/transport/marcopolo/index_en.htm)

**Attachment E.1. The main liner shipping connections in the Baltic States in early 2004. Source: Ojala et al. 2004 and additions by the TTFBS team.**

Port	Port(s) of call	Frequency	Operator	Nation	Type
Tallinn	Helsinki (FIN)	>15/day	several	EST,FIN	Pax/RoRo
Tallinn	Stockholm (SWE)	1/day	Tallink	EST	Pax/RoRo
Paldiski	Kapellskar (SE)	1/day	Tallink	EST	Pax/RoRo
Paldiski	Turku-Bremerhaven-Harwich-Cuxhaven-Kiel	1/week	Mannlines	UK	Ro-Ro
Muuga	Helsinki-Antw.-Rdam	2/week	TECO	EST	Ro-Ro
Muuga	Felixstowe (GBR)	1/ 14 days	TECO	EST	Ro-Ro
Muuga	Bremerhaven-Hamburg	1/week	TECO	EST	Ro-Ro
Muuga	Fredericia (DEN)	1/ 14 days	Hacklin	FIN	Container
Tall-Riga-Klaip.	DEN, GER, BE, NE	Several/ w	Unifeeder	DEN	Container
Tall-Riga-Klaip.	Bremerhav-Hamburg	2/ week	Teamlines	GER	Ro-Ro
Riga	Stockholm (SWE)	3/week	Rigasealine	LAT	Pax/RoRo
Riga	Lubeck (GER)	4/week	DFDS Tor Line	LAT	Ro-Ro
Riga	Rotterdam-Felixstowe-Copenhagen	1/week	Kursu/LSC joint service	LIT/LAT	Container
Riga	Ventspils-Antwerp-Klaipeda	1/14 days	Ricon line - Latvia service		Container
Riga	Århus-Bremerhaven-Helsinki-Rauma	1/week	Maersk Sealand	DEN	Container
Riga	Tallinn-St. Petersburg	1/10 days	French Baltic Line		Container
Riga	Hamburg-Bremerhaven	1/week	Team Lines	GER	Container
Riga	Antwerp-Rotterdam-St. Petersburg	1/10 days	Euro service		Container
Riga	Gdynia-Antwerp-St.P-Helsinki	1/week	MSC	SUI	Container
Riga	Bremerhaven-Hamburg	1/week	Unifeeder	DEN	Container
Riga	Hull, Ipswich (GBR)	1/ 14 days	Rix Baltic	LAT	Container
Liepaja	Rostock (GER)	2/week	Scandlines	DEN	Pax/RoRo
Liepaja	Karlshamn (SWE)	3/week	Scandlines	DEN	Pax/RoRo
Ventspils	Nynashamn (SWE)	5/week	Scandlines	DEN	Pax/RoRo
Ventspils	Travemunde (GER)	2/week	VentLines	LAT	Pax/RoRo
Klaipeda	Kiel (GER)	6/week	LISCO/Scandlines	LIT/DE N	Ro-Ro
Klaipeda	Sassnitz (GER)	3/week	LISCO/Scandlines	LIT/DE N	Ro-Ro
Klaipeda	Århus-Aabenraa (DEN)	2/week	Scandlines	DEN	Ro-Ro
Klaipeda	Karlshamn (SWE)	6/week	LISCO	LIT	Ro-Ro
Klaipeda	Fredericia-CPH (DEN)	2/week	DFDS Tor Line	DEN	Ro-Ro

**Attachment E.2. Container traffic in two major Baltic States ports in 2003.**  
**Source: Port Authorities**

**Year  
2003**

**Port of Klaipeda**

	<b>Container</b>	<b>Outbound</b>	<b>Inbound</b>	<b>Total</b>
Full	20'	5806	14173	<b>19979</b>
	40'	13743	18688	<b>32431</b>
<b>Total</b>		<b>19549</b>	<b>32861</b>	<b>52410</b>
Empty	20'	11123	1736	<b>12859</b>
	40'	7536	2797	<b>10333</b>
<b>Total</b>		<b>18659</b>	<b>4533</b>	<b>23192</b>
<b>Total</b>	20'	16929	15909	<b>32838</b>
	40'	21279	21485	<b>42764</b>
	Total units	<b>38208</b>	<b>37394</b>	<b>75602</b>
	<b>Total TEU</b>	<b>59487</b>	<b>58879</b>	<b>118366</b>

**Year  
2003**

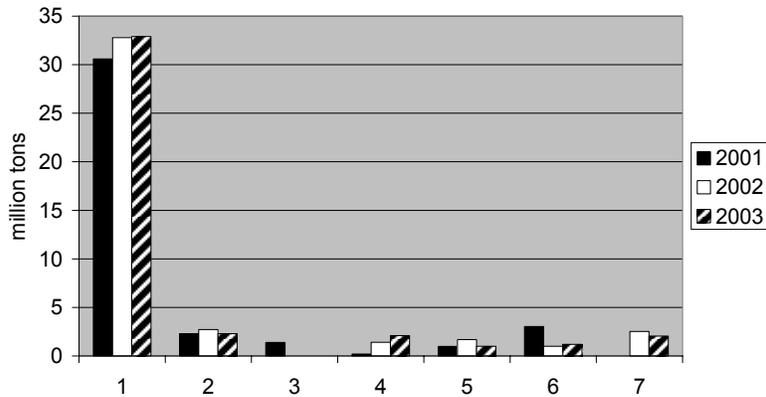
**Port of Tallinn**

	<b>Container</b>	<b>Outbound</b>	<b>Inbound</b>	<b>Total</b>
Full	20'	4731	15679	<b>20410</b>
	40'	13766	13854	<b>27620</b>
<b>Total</b>		<b>18497</b>	<b>29533</b>	<b>48030</b>
Empty	20'	8623	374	<b>8997</b>
	40'	3502	3989	<b>7491</b>
<b>Total</b>		<b>12125</b>	<b>4363</b>	<b>16488</b>
<b>Total</b>	20'	13354	16053	<b>29407</b>
	40'	17268	17843	<b>35111</b>
	Total units	<b>30622</b>	<b>33896</b>	<b>64518</b>
	<b>Total TEU</b>	<b>47890</b>	<b>51739</b>	<b>99629</b>

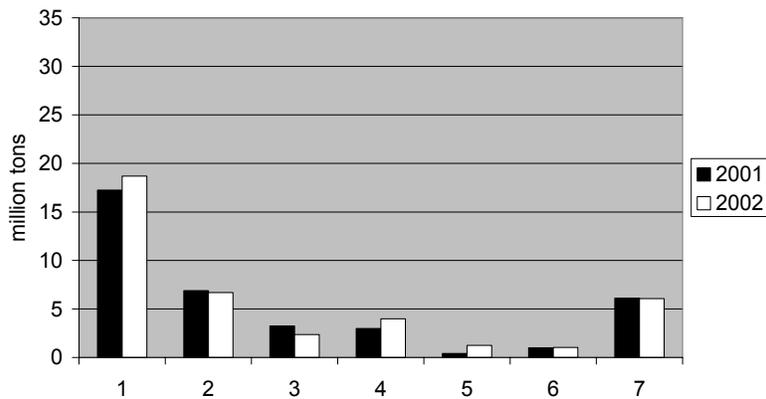
**Attachment E.3. Rail freight by product category in the Baltic States. Source: Annual reports of Estonian Railways Ltd., Latvian and Lithuanian Railways**

**Categories: 1 = Oil and oil products, 2 = Fertilizers, 3 = Ferrous products, 4 = Coal, 5 = Grain, 6 = Timber, 7 = Other**

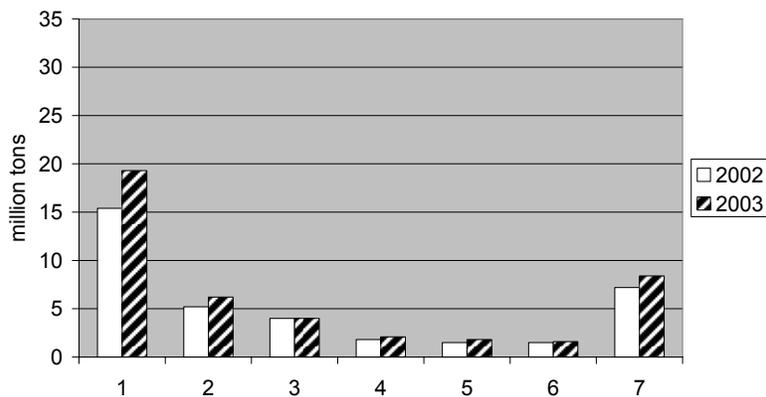
Rail freight by product category in Estonia



Rail freight by product category in Latvia



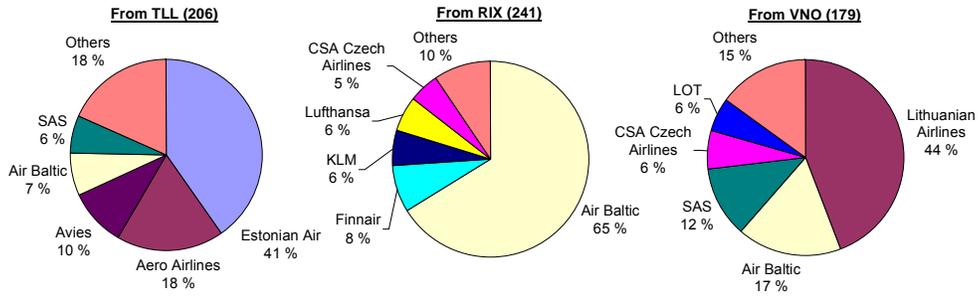
Rail freight by product category in Lithuania



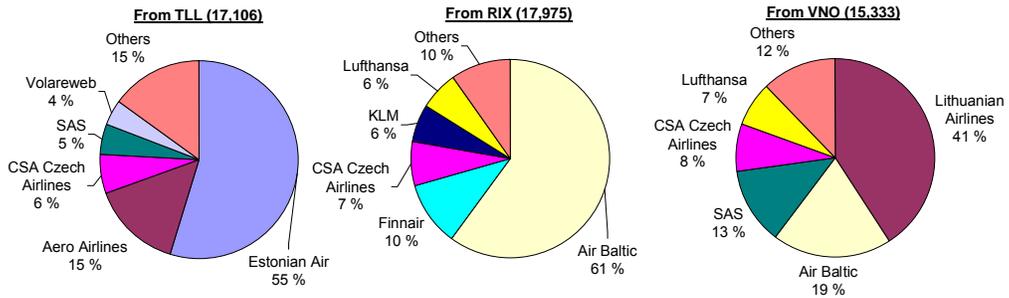
**Attachment E.4. Financial data for Baltic States' railways 1997-2003, in USD million. Source: The Ministries, Estonian, Latvian and Lithuanian railways**

	1997	1998	1999	2000	2001	2002	2003
Estonian railways Ltd. revenue	-	-	91.6	94.9	91.3	118.6	141.8
Estonian railways Ltd. net profit	0.1	3.1	7.3	2.2	8.1	14.0	27.9
Subsidies to passenger transport (operations and infrastructure)	4.8	10.2	13.3	13.7	10.8	14.2	12.9
State budget investments (without investment to rail Administration)	4.7	4.5	5.3	0	-	-	-
Latvian railways revenue	-	-	146.7	159.3	161.2	188.6	276.4
Latvian railways net profit	1.5	0.8	-2.0	5.7	4.0	14.3	11.0
Subsidies to passenger transport	1.2	1.6	2.1	2.0	2.0	3.2	3.7
Latvian State budget investments	0	1.7	3.4	0	-	5.3	0.8
Lithuanian railways revenue	-	-	-	-	151.63	232.4	306.2
Lithuanian railways net profit	11.8	0.2	-6.4	1.7	-	1.6	5.1
Subsidies to passenger transport	3.3	6.0	3.5	1	1.2	1.2	1.5
Lithuanian State budget investments	6.8	12.3	1.8	0.9	-	-	7.5

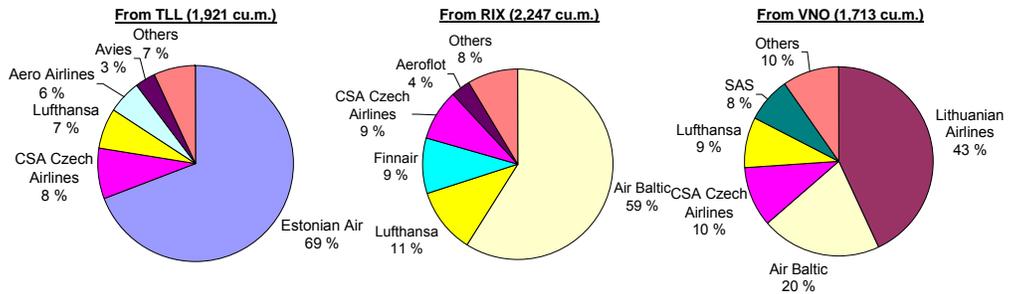
**Attachment E.5. Airlines market share of scheduled passenger (A) flights, (B) available seat capacity and (C) cargo volume capacity (belly air freight only) in June 2004. Source: Compiled from data from airlines, airports and aircraft manufacturers.**



(A) Airline's share of all scheduled passenger flights per week (total)

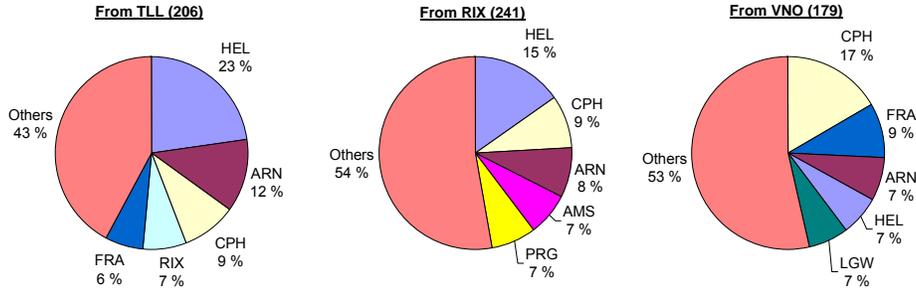


(B) Airline's share of available seat capacity per week (total)

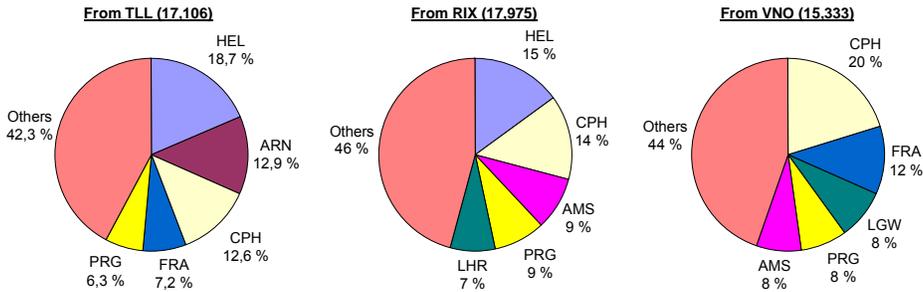


(C) Airline's share of available cargo capacity in cubic meter per week (total)

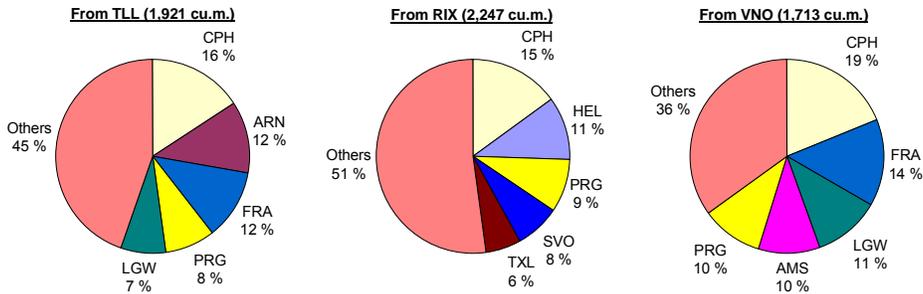
**Attachment E.6. Destination's market share of scheduled passenger (A) flights, (B) available seat capacity and (C) cargo volume capacity (belly air freight only) in June 2004. Source: Compiled from data from airlines, airports and aircraft manufacturers.**



(A) Destination's share of all scheduled from the named airport flights per week (total)



(B) Destination's share of available seat capacity per week (total)



(C) Destination's share of available cargo capacity in cubic meter per week (total)

**Attachment E.7. Passenger flight charges – passengers (week 26, 21.6.-25.6.2004)  
Non-stop flights, return ticket rates searched via operating  
airlines Internet pages on 7.6.2004; Lithuanian Airline's rates via  
e-mail**

From Tallinn		Total in USD		USD/km	
To	Operating airline	Economy	Business	km	(Economy class)
Copenhagen (CPH)	Estonian Air	264	635	835	0,32
Frankfurt (FRA)	Estonian Air	342	794	1454	0,24
	Lufthansa	1 844	1 934	1454	1,27
Helsinki (HEL)	Finnair/Aero	127	264	83	1,53
London-Gatwick (LGW)	Estonian Air	360	788	1782	0,20
Moscow (SVO)	Estonian Air	316	623	867	0,36
Stockholm (ARN)	Estonian Air	189	512	378	0,50
	SAS	261	517	378	0,69
Warsaw (WAW)	LOT Polish Airlines	349	760	832	0,42
Kiev (KBP)	Estonian Air	340	626	1067	0,32
Prague (PRG)	CSA Czech Airlines	425	940	1228	0,35
Riga (RIX)	Air Baltic	132	631	278	0,48
Vilnius (VNO)	Estonian Air	168	514	529	0,32

From Riga		Total in USD		USD/km	
To	Operating airline	Economy	Business	km	(Economy class)
Copenhagen (CPH)	Air Baltic/SAS	441	995	724	0,61
Frankfurt (FRA)	Lufthansa	662	1 328	1267	0,52
Helsinki (HEL)	Air Baltic	166	613	362	0,46
	Finnair	194	665	362	0,54
London-Heathrow (LHR)	Air Baltic	448	1 001	1675	0,27
	British Airways	461	1 136	1675	0,28
Moscow (SVO)	Aeroflot	270	499	840	0,32
	Air Baltic	354	609	840	0,42
Stockholm (ARN)	Air Baltic	288	768	443	0,65
Warsaw (WAW)	LOT Polish Airlines	235	630	559	0,42
	Air Baltic	207	613	559	0,37
Kiev (KBP)	Air Baltic	264	735	838	0,31
Prague (PRG)	Air Baltic	205	726	993	0,21
	CSA Czech Airlines	267	803	993	0,27
Tallinn (TLL)	Air Baltic	120	605	278	0,43
Vilnius (VNO)	Air Baltic	123	545	263	0,47

From Vilnius		Total in USD		USD/km	
To	Operating airline	Economy	Business	km	(Economy class)
Copenhagen (CPH)	Air Baltic	178	880	815	0,22
	Lithuanian Airlines	181	1 086	815	0,22
	SAS	269	804	815	0,33
Frankfurt (FRA)	Lufthansa	130	254	1234	0,11
	Lithuanian Airlines	326	1 086	1234	0,26
Helsinki (HEL)	Finnair	272	638	611	0,45
	Lithuanian Airlines	253	1 086	611	0,41
London-Gatwick (LGW)	Lithuanian Airlines	109	1 086	1724	0,06
Moscow (SVO)	Lithuanian Airlines	n.a.		786	
Stockholm (ARN)	SAS	315	819	678	0,47
	Lithuanian Airlines	652	1 086	678	0,96
Warsaw (WAW)	LOT Polish Airlines	295	449	393	0,75
	Lithuanian Airlines	n.a.		393	
Kiev (KBP)	Lithuanian Airlines	n.a.		589	
Prague (PRG)	CSA Czech Airlines	118	840	895	0,13
	Lithuanian Airlines	n.a.		895	
Riga (RIX)	Air Baltic	170	833	263	0,65
	Lithuanian Airlines	n.a.		263	
Tallinn (TLL)	Estonian Air	231	562	529	0,44
	Lithuanian Airlines	n.a.		529	

## **Attachment E.8. Background data on the air freight capacity calculation**

The ATR-72 is a twin turboprop regional airliner and has capacity for 68 passengers and has a 3m<sup>3</sup> cargo compartment. With a maximum passenger payload the available cargo capacity is almost zero.

The Boeing 737-500 is a short to medium range jet airliner with capacity for 110 passengers and a 13m<sup>3</sup> cargo compartment. Both types of aircraft are currently operated in scheduled passenger traffic in the Baltic States.

The Airbus A320 is a medium range jet airliner with capacity for 150 passengers and a 31m<sup>3</sup> cargo compartment. A320 type of aircraft has three cargo compartments, two of which are designed to carry aluminum containers called Unit Load devices (ULDs). The third compartment is used for bulk loaded cargo. ULDs are usually handled with highloaders and related equipment, which currently are not available at the Baltic States major airports. These containers can be handled with forklifts as well, but this is more difficult, time-consuming and bares the risk of puncturing the containers. The jagged edges of a ripped container can cause further damage or injuries to cargo, baggage and handlers.

It is assumed that every second passenger carries baggage of an average volume of 65 liters.

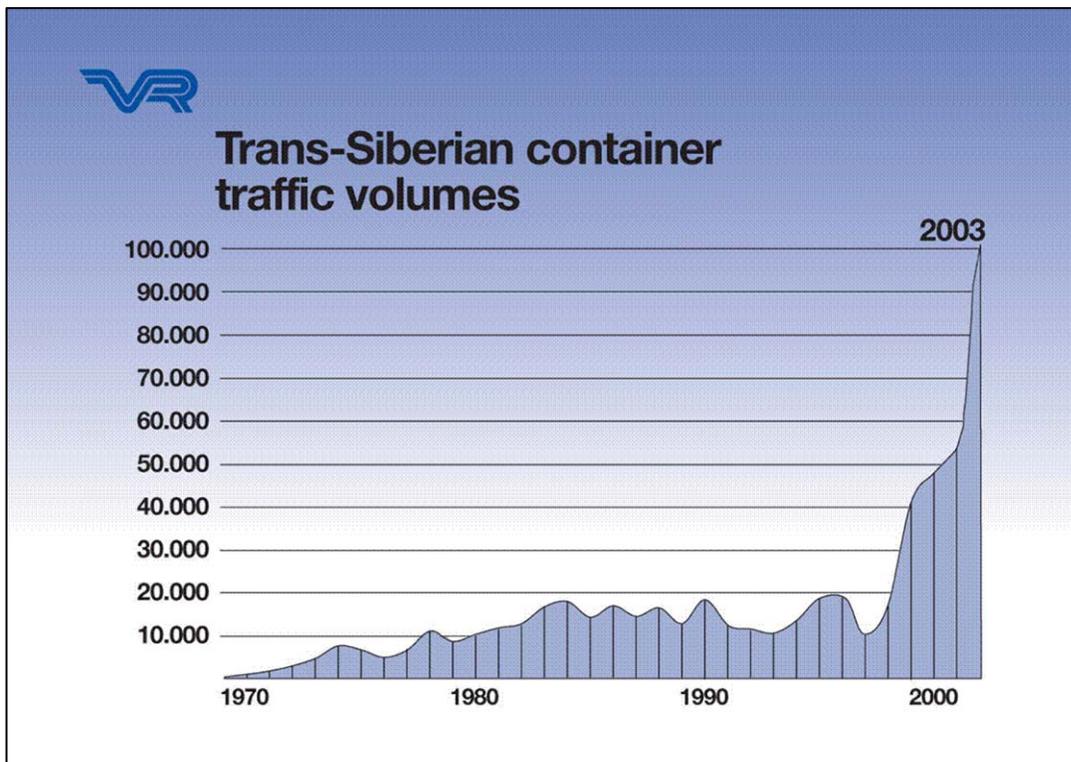
Figure B illustrates the total cost of the cargo compartment on a trip of 200 nautical miles (nm). For simplification the total flight cost is calculated based on the cost of available seat mile of the specific aircraft.

A volume of 1m<sup>3</sup> is assumed for each available passenger seat. This volume is added up to the volume of the cargo compartment and put in relation to the total cost of the flight trip.

As the aircraft's capacity in number of seats and cargo compartment increases the unit cost can be significantly reduced.

Total cost, or direct operating costs, depend on the airline's individual scheduled maintenance plans, contract maintenance agreements, local labor rates, cost accounting practices, operating environment and aircraft utilization.

**Attachment E.9. A) Map of Trans-Siberian Railway route, B) Trans-Siberian Container Traffic Volumes in TEU's (source: Finnish Railways)**



## Attachment F.1. Projects implemented by TEDIM

Projects, which are highlighted are considered of special relevance in respect of trade and transport facilitation in the Baltic States. Their results may be directly or indirectly applied in the Baltic States environment – or they may be used as the background material for more targeted development projects. Detailed descriptions of the listed projects are available at [www.tedim.com](http://www.tedim.com)

Project abbreviation	Project object
<b>Ad Log</b>	<b>Study on Advanced Logistics Services in the Baltic States on the threshold of the EU membership. International firms' logistics strategies and experiences.</b>
<b>CustEur I &amp; II</b>	<b>Develop the customs procedures on the Russian/EU border with the help of modern information technology and harmonising the formalities with the EU procedures.</b>
<b>CustCom</b>	<b>Speed up the border formalities in goods traffic on the EU/Russian border with the help of EDI and information technology.</b>
Decision Support	Develop a knowledge based and self-analysing IT/solution as an efficient problem solving, strategic analysis-, planning and decision method.
EuroKaliningrad	Develop Kaliningrad Oblast using methodology designed during the implementation of a similar project, EuroRussia, for St.Petersburg and Leningrad Oblast.
<b>EuroRail-Kaliningrad</b>	<b>Automation of border railway stations and organizing a system of mutual interchange of the messages with the data of waybills between Russian and Polish railroads</b>
<b>EuroRussia</b>	<b>Improve the working environment, production and investment preconditions for western companies in Russia, helping Russian companies to network</b>
<b>ILP-Internet Logistics Platform</b>	<b>Support cross-border co-operation between Polish and European public and commercial institutions and enterprises with electronic documents</b>
<b>LogCom (Logistics Communication)</b>	<b>Promote border-crossing procedures in freight transport by creating a system in which standard electronic documents can be sent to all customs and border-crossing authorities at the EU/Russian border.</b>
NeLoC	Network Logistics Centres in the Baltic Sea Region
<b>RailCom</b>	<b>Introduction of electronic waybills between Finland and the Russian Federation</b>
<b>RailCust</b>	<b>Expedite the border-crossing processes on railway networks</b>
<b>RailTrack</b>	<b>Railway shipment tracking&amp;tracing system for transport in the EU and CIS</b>
StandLog/InfoLogService	Developing information-logistics services in Russia
Transport Chain Hinterland – Baltic Sea	Innovative solutions in transport telematics.
<b>Internat.-Baltic Port Logistics-University</b>	<b>Train logistics specialists to meet the needs of modern Baltic ports</b>
PolCorridor	'Developing intermodal connections to Poland's Baltic Sea ports with railway transport to Austria and other parts of southern and southeastern Europe
SLINT	Evaluate the potential for opening a new railway line from Odessa to Gdansk.
<b>BaSIM - Baltic Sea Information Motorways</b>	<b>Highlight the necessity of building up an information platform in harmony with infrastructure investments.</b>
BSR Dynamic Routing	Create a telematics system for the Baltic Sea and hinterlands, giving information on different transport modes as a basis for transport chain planning.'
DCMS - Dangerous Cargo Monitoring System	Monitor transports of dangerous cargo in the Baltic Sea and to provide information for national and international search and rescue organisations.
<b>ELog RUS-EU</b>	<b>Develop the transfer of logistics information between Russia and the EU Member States and compatible electronic information systems.</b>
RFID in the Paper Transport Chain	Develop an identification system for paper transport based on Radio Frequency Identification-technology.
TEDIM Green Link	define a railway transport link Stockholm– Turku–Vainikkala/ Buslovskaja–St.Petersburg–Moscow and on to the Far East via the Trans-Siberian Railway.
<b>BOPCom</b>	<b>Software and programmes to serve the harbour activities and communication.</b>
DMS and InDeM	General model and international rules for freight delivery management.
EuroPol	Networking Polish and EU logistics service providers
EuroLoN	Develop information system that supports networking of enterprises
Farmit	Develop electronic trade for agriculture in Finland and the Baltic States.
GHADIS	Develop an easy-to-use graphic interface for harbour information exchange.
LQIM	Improve logistics provision quality

## Attachment G.1. Veterinary and phyto-sanitary control posts in Estonia and Latvia.

### Estonia (Source: European Commission and Veterinary and Food Boards of Estonia)

Checkpoint name	BCP	Type of control post	Authorized products in April 2004*	Authorized products in January 2005**	Live animals**	Phyto-sanitary authorized**
Luhamaa	EE-RU	Road	HC, NHC	HC, NHC	X	X
Narva	EE-RU	Road	-	HC, NHC-NT		X
Paldiski	-	Seaport	HC(2), NHC-NT(2)	HC, NHC-NT		X
Paljassaare	-	Seaport	HC-T(FR)(2)	HC,T(FR)(2)		X
Muuga	-	Seaport	-	HC, NHC-T(FR), NHC-NT		X

\* Status in April 2004 as per European Commission decision on the list of the approved BCPs available at:  
[http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l\\_160/l\\_16020040430en00070051.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_160/l_16020040430en00070051.pdf)

\*\* Status in December 2004. Source: Veterinary and Food Board of Estonia

### Latvia (Source: European Commission and Food and Veterinary Service of Latvia)

Checkpoint name	BCP	Type of control post	Authorized products in April 2004*	Authorized products in January 2005**	Live animals**	Phyto-sanitary authorized**
Grebneva	LV-RU	Road	-	HC, NHC-NT, NHC -T(CH)		X
Terehova (14)	LV-RU	Road	HC, NHC-NT	HC, NHC-NT	X	X
Patarnieki (14)	LV-BY	Road	HC, NHC-T(CH)	HC, NHC-T(CH)	X	X
Silene	LV-BY	Road	-	-	-	X
Rezekne (14)	LV-RU	Railway	-	HC (2), NHC- (NT) (2)	-	X
Daugavpils	LV-BY	Railway	-	HC (2), NHC-NT (2)	-	X
Riga port	-	Port	-	HC (2),NHC (2)	-	X
Balmarine Terminal (Riga port)***	-	Port	-	HC-T(FR) (2)	-	-
Ventspils port	-	Port	-	HC (2), NHC (2)	-	X
Liepaja port	-	Port	-	-	-	X
Riga airport	-	Airport	-	-	-	X
Latvian post	-	Post	-	-	-	X

\* Status in April 2004 as per European Commission decision on the list of the approved BCPs available at:  
[http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l\\_160/l\\_16020040430en00070051.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_160/l_16020040430en00070051.pdf)

\*\* Status January 17, 2005. Source: Food and Veterinary Service of Latvia

\*\*\* Private financing

HC = All products for human consumption

NHC = Other products

NT = No temperature requirement

T = Frozen/Chilled products

T(FR) = Frozen products

T(CH) = Chilled products

(2) = Packed products only

(14) = Designated for transit across the European Community for consignments of certain products of animal origin for HC, coming to or from Russia under the specific procedures foreseen in relevant Community legislation

**Attachment G.2. Veterinary and phyto-sanitary control posts in Lithuania**  
**Source: European Commission and Lithuanian Customs**

Checkpoint name	BCP	Type of control post	Authorized products in April 2004*	Authorized products in January 2005**	Live animals**	Phyto-sanitary authorized**
Kena (14)	LT-BY	Rail	HC-T(FR), HC-NT, NHCT(FR), NHC-NT	HC-T(FR), HC-NT, NHCT(FR), NHC-NT	-	X
Vaidotai	LT-BY	Rail	-	-	-	X
Stasylos	LT-BY	Rail	-	-	-	-
Kybartai (14)	LT-RU	Rail	HC, NHC	HC, NHC	-	-
Pagegiai (14)	LT-RU	Rail	HC,NHC	HC,NHC	-	-
Lavoriskes (14)***	LT-BY	Road	HC, NHC	HC, NHC	-	X
Medininkai (14)	LT-BY	Road	HC, NHC-T(FR), NHC-NT	HC, NHC-T(FR), NHC-NT	X	X
Salcininkai (14)	LT-BY	Road	HC, NHC	HC, NHC	-	X
Raigardas	LT-BY	Road	-	-	-	-
Kybartai (14)	LT-RU	Road	HC, NHC	HC, NHC	-	X
Nida	LT-RU	Road	-	-	-	-
Panemune (14)	LT-RU	Road	HC,NHC	HC,NHC	-	-
Ramoniskes (bilateral BCP)	LT-RU	Road	-	-	-	-
Malku	-	Seaport	HC, NHC	HC, NHC	-	X
Molo	-	Seaport	HC-T(FR)(2), HC-NT(2), NHC-T(FR)(2), NHCNT(2)	HC-T(FR)(2), HC-NT(2), NHC-T(FR)(2), NHCNT(2)	-	X
Pilies	-	Seaport	HC-T(FR)(2), HC-NT(2), NHC-T(FR)(2), NHCNT(2)	HC-T(FR)(2), HC-NT(2), NHC-T(FR)(2), NHCNT(2)	-	X
Nidos****	-	Seaport	-	-	-	-
Nemuno****	-	Seaport	-	-	-	-
Rusnes****	-	Seaport	-	-	-	-
Vilnius Airport	-	Airport	HC, NHC	HC, NHC	X	-
Kaunas Airport	-	Airport	-	-	-	-
Siauliu Airport	-	Airport	-	-	-	-

\* Status in April 2004 as per European Commission decision on the list of the approved BCPs available at:

[http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l\\_160/l\\_16020040430en00070051.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_160/l_16020040430en00070051.pdf)

\*\* Status in January 2005. Source: Lithuanian Customs

\*\*\* closed for cargo traffic till 31-08-2006 due to road reconstruction on Belarus (BY) side

\*\*\*\* operates only during navigation season

HC = All products for human consumption

NHC = Other products

NT = No temperature requirement

T = Frozen/Chilled products

T(FR) = Frozen products

T(CH) = Chilled products

(2) = Packed products only

(14) = Designated for transit across the European Community for consignments of certain products of animal origin for HC, coming to or from Russia under the specific procedures foreseen in relevant Community legislation