# STATUS OF TRANSPORT SECTOR RESTRUCTURING IN THE BALTIC STATES

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## INTRODUCTION

Useful insight into the transport sector of the Baltic States was gained from a seminar held in Estonia in 2003 in terms of realistic assessments of recent progress in restructuring and authoritative projections of promising future programs in the field. This paper draws heavily on the proceedings of the seminar, which were published by the World Bank in March 2004 (Ref 1). This paper presents a review of each of the several principal means of transport, namely, roads and road transport, railways, civil aviation, maritime transport, pipelines, urban transport, and transport support services.

Urgent needs for change in the **roads and road transport** sector are to expedite border crossings, improve training for road transport operators, enhance road safety, and develop better road links between poorer areas and main centres. Regarding **railways**, the principal needs are to reduce overcapacity, rationalize tariffs, raise levels of safety and improve railway service. In **aviation**, there is a need to improve administrative procedures, improve air services, modernize aircraft fleets, privatise and restructure Tallinn airport operations, complete the reconstruction of Riga and Vilnius airports. Concerning **maritime transport**, the principal requirements are to facilitate the anticipated significant expansion of maritime traffic at Baltic ports, improve safety in handling cargo and enhance environmental protection in ports and at sea. In **urban transport**, the principal needs are to overcome the continuing deterioration of public transport facilities, alleviate traffic congestion on city streets and secure a stable source of funding for urban passenger transport companies.

The quality of **transport support services** is good and their markets are competitive. Despite the fact that the Baltic States joined the European Union (EU) on May 1, 2004, administrative capacity in transport needs strengthening in all countries and in all modes. Customs legislation was also in place for EU accession, but administrative and operational capacity of the customs needs strengthening in all countries.

Underlying these various basic conclusions are significant economic trends, various other determining or influential factors and a variety of problems that affect the performance of the transport organizations.

## STRATEGIC CONTEXT

Among the notable transport trends in the Baltic States is the rapid growth of demand for transport, growth at a faster rate than that of the gross national product. There has also been increasing demand for consolidated transport related support services. Moreover, privatisation 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. Key data on the Baltic States' transport sector in 1999 and 2002 is given in Table 1.

The Baltic States have financed many of the major transportation sector projects with partial funding obtained either from international financing institutions or from other international organizations such as the European Union. The main such organizations in this field include the European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Nordic Investment Bank (NIB) and the World Bank. EBRD has financed mainly road and rail projects, EIB largely airports, ports and roads, NIB mainly road projects and the World Bank principally road and port projects.

**Table 1.** Key data on the Baltic States' transport sector in 1999 and 2002

| | | Estonia | | Latvia | | Lithuania | | |
|---|---|---|---|---|---|---|---|---|
| | Unit | 1999 | 2002 | 1999 | 2002 | 1999 | 2002 | Sources |
| **Value added and employment of Transport, Storage and Communications (TSC) sector** | | | | | | | | |
| Gross Value Added of TSC #) | USD million | | 1 009 | | 1 219 | | 1 891 | *1)* |
| TSC in % of Gross Value Added | % of total GVA | 15,2 % | 15,5 % | 15,3 % | 14,5 % | 10,6 % | 13,7 % | *1)* |
| Employed in TSC | thousands | 63 | 55 | 90 | 86 | 105 | 87 | *1)* |
| TSC in % of total employment | % of all employed | 10,2 % | 9,4 % | 9,5 % | 8,7 % | 6,4 % | 6,2 % | *1), 2)* |
| Average salaries in TSC | USD/month | 356 | 455 | 321 | 373 | 299 | 300 | *1), 2)* |
| Average salaries in All sectors | USD/month | 285 | 394 | 242 | 297 | 247 | 258 | *1), 2)* |
| **Balance of payments and FDI of the transport sector** | | | | | | | | |
| Balance of transport services trade | USD million | 321 | 313 | 522 | 539 | 186 | 357 | *3)* |
| Goods and services trade balance | USD million | -258 | -614 | -691 | -900 | -1 099 | -793 | *3)* |
| Inward FDI stock in the TSC sector | USD million | 687 | 906 | 329 | 385 | 420 | 680 | *3)* |
| FDI stock of the TSC sector | % of all inward FDI | 28 % | 21 % | 27 % | 14 % | 20 % | 17 % | *3)* |
| **Transport work (excl. maritime transport)** | | | | | | | | |
| Total freight transport work | Million ton-km | 11 274 | 14 089 | 22 436 | 26 221 | 18 219 | 25 370 | *1)* |
| *Railway transport work* | *Million ton-km* | *7 295* | *9 697* | *12 210* | *15 020* | *7 849* | *9 767* | *1)* |
| *Transport work by road* | *Million ton-km* | *3 975* | *4 387* | *4 161* | *6 120* | *7 740* | *10 709* | *1)* |
| *Oil pipelines transport work* | *Million ton-km* | .. | .. | *6 055* | *5 071* | *2 627* | *4 892* | *1)* |
| *Air transport work* | *Million ton-km* | *4* | *5* | *10* | *10* | *3* | *3* | *1)* |
| Total passenger transport work | Million passenger-km | 3 191 | 3 282 | 3 590 | 3 443 | 3 797 | 3 068 | *1)* |
| *Railways passenger transport work* | *Million passenger-km* | *238* | *177* | *984* | *744* | *745* | *498* | *1)* |
| *Road transport passenger work* | *Million passenger-km* | *2 222* | *2 330* | *2 368* | *2 361* | *2 665* | *2 046* | *1)* |
| *Air transport passenger work* | *Million passenger-km* | *298* | *355* | *238* | *338* | *387* | *524* | *1)* |
| **Road and road transport** | | | | | | | | |
| Road network of central Gov:t | kilometer | 16 430 | 16 443 | 20 329 | 20 279 | 21 161 | 21 335 | *4)* |
| Road density (all roads ##) in 2002 | km/million people | 33 412 | | 29 623 | | 21 207 | | *4)* |
| Estimated Gov:t budget for roads | USD million | 47 | 77 | 64 | 46 | 116 | 159 | *4)* |
| Government road budget | USD/km of Gov:t roads | 2 861 | 4 701 | 3 148 | 2 278 | 5 482 | 7 471 | *4)* |
| Killed in road accidents | actual number | 232 | 224 | 604 | 518 | 748 | 697 | *4)* |
| Injured in road accidents | actual number | 1 691 | 2 852 | 5 244 | 6 300 | 7 696 | 7 427 | *4)* |
| Number of killed in road accidents | per 100,000 vehicles | 42 | 46 | 86 | 64 | 62 | 47 | *4)* |
| Passenger cars | thousands | 451 | 401 | 483 | 619 | 981 | 1 181 | *2), 4)* |
| Buses | thousands | 6 | 5 | 12 | 11 | 15 | 15 | *2), 4)* |
| Lorries and special vehicles | thousands | 81 | 80 | 85 | 103 | 115 | 116 | *2), 4)* |
| Road freight transported | million tons | 11,3 | 17,8 | 33,3 | 36,9 | 45,7 | 45,0 | *4)* |
| Passengers transported by road | million passengers | 171 | 171 | 167 | 174 | 273 | 182 | *4)* |
| Diesel fuel average actual prices | US cents per liter | 36 | 56 | 35 | 65 | 34 | 59 | *5)* |
| Super Gasoline average actual prices | US cents per liter | 45 | 58 | 55 | 70 | 51 | 69 | *5)* |
| **Railways and rail transport** | | | | | | | | |
| Railways revenues *) | USD million | 92 | 117 | 147 | 189 | 149 | 232 | *4)* |
| Personnel in railways **) | number of personnel | 5 592 | 3 602 | 16 550 | 14 699 | 16 718 | 13 096 | *4), 6)* |
| Rail freight transported | million tons | 37,4 | 42,6 | 33,2 | 40,1 | 28,8 | 36,7 | *4)* |
| Rail passengers transported | million passengers | 6,8 | 5,2 | 24,9 | 22,0 | 10,6 | 7,2 | *4)* |
| **Port traffic and merchant fleet** | | | | | | | | |
| Port traffic | million tons | 34,4 | 46,8 | 49,0 | 52,2 | 15,6 | 25,9 | *4)* |
| Merchant fleet | 1,000 Gross ton (GT) | 241 | 317 | 333 | 89 | 397 | 435 | *7)* |
| **Air transport** | | | | | | | | |
| Air passenger throughput | thousands | 552 | 606 | 562 | 633 | 481 | 635 | *4)* |
| Air cargo handled (excl.mail) | thousand tons | 5 | 4 | 4 | 7 | 5 | 4 | *4)* |

#) Roughly 1/3 of TSC's Gross Value Added is from transport, 1/3 from storage and 1/3 from communications ##) Excluding forest roads

*) Lithuania in 1999 freight and passenger revenue only; Estonia: Eesti Raudtee only for 2002 **) Estonia: data for 2000 and 2002 on Eesti Raudtee only

1) Statistical bulletins of EU Candidate countries 2003 2) Statistics Estonia, Statistical Bureau of Latvia, Statistics Lithuania

3) National Banks of EST, LAT, LIT 4) Ministries of transport data; Pre-seminar Questionnaire

5) Metschies 2003 6) Eesti Raudtee annual reports

7) Ministers of transport for 1999, UNCTAD for 2002, For Latvia; 1998 and 2002

Through its PHARE, ISPA and other programs, the European Union has had a substantial impact on institutional development of the transport sector in all three Baltic States and in the closely related fields of trade and transport facilitation concerning Customs and border crossing stations.

## FOREIGN TRADE AND EU MEMBERSHIP

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.

In January-November 2003, 80 percent of Estonia's and Latvia's, and over 60 percent of Lithuania's export is with the 25 old and new EU countries. 75 percent of Latvia's, 65 percent of Estonia's and 57 percent of Lithuania's imports come from EU25.

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% and in imports 49%. In Lithuania, the EU-15 trade covered only 43% of exports and 41% of imports.

Estonia's trade is closely linked with Finland, Sweden and Germany while Latvia and Lithuania trade is closely linked with Germany, Russia and Britain. Intra-Baltic trade has been relatively limited, but it has increased substantially both in absolute and relative terms during the past few years. The relative share of trade with Russia has declined, while its absolute volume has increased.

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 internationalisation of the Estonian transport sector.

The Baltic States have adopted the main elements of the *acquis*, but further progress is needed in some secondary legislation and overall implementation of transport sector legislation. In addition, administrative capacity requires further strengthening, both in qualitative and quantitative terms, in particular in the rail and the road sector.

## ECONOMIC IMPORTANCE OF TRANSPORT IN THE BALTIC STATES

*Transport and storage make over 10 % of GDP*

Transport, storage and communications are an important sector in all EU countries, but its share of GDP is the highest in the Baltic States. In 2002, 15.5% of the Gross Value Added in Estonia, 14.5% in Latvia, and 13.7% in Lithuania was produced by the transport, storage and communications sector.

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 10% to 11% of the countries' Gross Value Added or GDP in 2002 (Table 1).

*Strong positive cash flow into the Balance of Payments*

The transport sector generates significant positive cash flows to all three countries. In 2002, the positive flow of foreign currency in the trade of transport services was the highest in Latvia at USD 539 million, followed by Lithuania at USD 357 million, and Estonia, USD 313 million.

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

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

For the period 2002-2010, Estonia intends to spend over 550 million euros, mostly on roads and ports. Latvia has plans to invest approximately 500 million euros, half of which on roads. Lithuania plans to invest up to 1,250 million euros mostly on railways and ports. Combined, this makes 2,300 million euros till 2010 even without the proposed Rail Baltica project.

## ROADS AND ROAD TRANSPORT

In the roads and road transport sector, the urgent needs are to enhance road safety, increase road maintenance and develop better highway links between poorer areas and main centres as well as to improve training for road transport operators.

*Road traffic safety record is among the poorest in Europe*

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 absolute number of fatalities has declined slightly from 1999 to 2002. However, the number of injured has increased by 69% in Estonia and 20% in Latvia. Only in Lithuania the number of injured has decreased slightly in that period (Table 1).

*Road investment activity is high, but the main problem is funds for maintenance*

The Baltic States have invested heavily in their main road network. Road investment is likely to continue at a rapid rate throughout the decade. While projects related to Via Baltica have a high priority, also projects with secondary roads will receive more funds. As budgetary allocations in Estonia, Latvia and Lithuania are not fully sufficient to cover capital investments, road finance from external sources will be needed in the future, including substantial assistance from EU's Regional Development and Cohesion funds.

*The Baltic States spend now less money on maintaining their road networks than before.*

Systematic road maintenance may not be a glamorous undertaking for politicians or road administrations, but it is very good business for road users. Technical publications often cite the statistic that for every additional $1 a country spends on road maintenance, road users save up to $2 in developed countries and $3 or more in developing countries. Heavy trucks and buses benefit most from proper road maintenance, but also passenger car users benefit from reduced accidents, operating costs, and travel times.

*Transferring tasks from Road administrations to the private sector*

Road administration in all three countries - and especially in Estonia and Latvia - has undergone a rapid restructuring. Road construction, maintenance and design are now performed by the private sector. As a consequence, the number of employees in road administrations has decreased. This rapid change has even caused a lack of civil engineering skills in the ministries or road administrations.

*Motorization is rapid, and private car usage increases fast*

Motorization progresses rapidly as the number of passenger cars, buses and trucks has increased substantially. Also the fleet renewal has been profound, as western models have replaced Soviet-era vehicles, albeit partly with second-hand vehicles. Only in Estonia, the number of passenger cars has not increased.

*Rapid road freight growth, and in Lithuania road surpasses rail in ton kilometres*

Demand for road freight transport, measured in ton kilometres has grown very rapidly in Latvia (+ 48%) and Lithuania (+ 39%) from 1999 to 2002. In Lithuania, road transport demand even surpassed that of rail transport in 2002. In Latvia and Estonia, rail transport performs roughly two times more ton kilometres than road transport.

In Estonia, transport work grew only modestly, even when the transported volume increased by 59% from 1999 to 2002. This indicates a growing demand on short-distance domestic transports, for example, in construction.

*Slow growth in bus transport, but a dramatic downturn of rail passenger volumes*

Demand for bus transport grew a little in Estonia, remained stable in Latvia and decreased substantially in Lithuania in 1999-2002. This is partly due to the increase of passenger car usage, as passenger kilometres by rail decreased by 25% in Estonia and Latvia, and by 33% in Lithuania.

*The most expensive fuel in Latvia, the cheapest in Estonia*

Motor transport has also become more expensive due to increasing diesel and gasoline prices. Thanks to competitive markets, their price follows world market prices more closely now than in the mid-1990s. Fuel taxation differs between the countries, and Latvia has the most expensive diesel and gasoline, followed by Lithuania and Estonia.

## RAILWAYS

With regard to railways, the principal needs are to continue with railway restructuring, especially in Latvia and Lithuania, including efforts to separate commercial operations from rail administration, and in all three countries to reduce over-capacity, rationalize tariffs, raise levels of safety, and improve railway service.

*Rail transport propelled to strong growth by oil transit trade in Estonia and Latvia*

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 arrangements 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. Transit traffic to Kaliningrad is likely to remain a substantial operation for Lithuania; in 2002, it accounted for 36% of the cargo volume carried by rail.

*Rail passenger volumes at their lowest level since 1990*

Passenger transport volumes were at their lowest level in 2002 since 1990. This is almost exclusively domestic traffic in Estonia and Latvia. In Lithuania, international services - mainly connecting Kaliningrad and Russia - perform 20% of passenger kilometres. Developing passenger rail transport remains a challenge, as passenger cars and bus transport offer an increasingly competitive substitute to rail.

*Railways have turned profitable, yet unit freight revenue shows no signs of increase*

All railways have improved their management and have turned profitable. In 1999-2002, freight revenue per ton-kilometre remained unchanged in Estonia and Latvia, but increased slightly in Lithuania. Passenger services are operated at loss.

The number of railway staff has been reduced in all three countries. In Estonia, the privatisation of railways has radically changed the management and organization of railways. However, total labour costs in railways have remained the same in Estonia and Lithuania and increased substantially in Latvia despite personnel reductions.

*Estonia privatised its railways, Latvia and Lithuania struggle with restructuring*

Rail infrastructure ownership and railway operations remain the responsibility of the public sector in Latvia and Lithuania. Estonia privatised its railways in 2001. Rail infrastructure maintenance and construction is entirely run by the private sector in Estonia, and most of this work is privatised also in Latvia. In Lithuania, these duties are still carried out by the state-owned Lithuanian Railways. Railway restructuring was politically a problematic process in Estonia. It has also been one of the most difficult restructuring processes in Latvia and Lithuania.

*Substantial investment in railways; the feasibility of Rail Baltica remains to be seen*

Lithuania plans to invest 835 million euros in rail infrastructure in 2004-2015. This is far more than Latvia. In Estonia, Government investment in rail is very small because rail infrastructure and operations have been privatised. The Baltic States have put considerable political weight to the Rail

Baltica project. It is a blueprint for a new, European standard high-speed railway line between Berlin, Warsaw, Kaunas, Riga and Tallinn. The construction is planned to start in 2008.

If realized, it would be the biggest single transport infrastructure project in the Baltic States, estimated at 3.9 billion euros, of which over 2.5 billion in the Baltic States. So far, preliminary studies have been prepared but no economic feasibility assessments have been presented. However, current volumes of cargo and passengers in the north-south direction by rail or other modes do not readily justify such a large investment.

## AIR TRANSPORT

Key aspects of civil aviation in the Baltic States are: (i) aviation infrastructure and management remains the responsibility of the public sector; (ii) the major airline in Lithuania is state owned, in Latvia government has a majority stake, and in Estonia a minority stake; the airlines have recently turned profitable after several years of negative financial results; (iii) several major airlines operate from the major airports; and (iv) passenger traffic has steadily increased; cargo traffic, however, remains low.

While aviation infrastructure in the three Baltic States remains in the public sector, the organizations for infrastructure administration are quite different. In Estonia and Latvia, the airlines have been transformed into joint ventures with established international carriers and other investors.

The Civil Aviation Administration (CAA) in each of the three countries falls under the Ministry responsible for transport. Estonia runs its Air Traffic Management (ATM) as a state-owned corporation, Lithuania as a state-owned enterprise, while the national CAA is in charge of ATM in Latvia.

*600,000 passengers in each country, and the demand is gradually picking up*

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 Vilnius. Cargo traffic is modest in each country. Major foreign airlines in many cases operate to the Baltic States through code-sharing arrangements. Important carriers serving the Baltic States are Finn air, Lufthansa, Scandinavian Airlines (SAS) and British Airways. The Baltic States have attracted some airline investments in anticipation of their EU membership.

The main investor in Estonian Air is Maersk Air after SAS sold its 49 percent stake in Autumn 2003. The Estonia government has a 34 percent stake and an investor group has a smaller stake. The government provides no subsidies to Estonian Air. The Latvian Government has a 52.6 percent stake in the national airline, AirBaltic. The other principal shareholder is Scandinavian Airlines. Transaero of Russia has a very small stake in AirBaltic. AirBaltic receives no direct or indirect state subsidies. In Lithuania, the national airline, Lithuanian Airlines, is owned and operated by the government. Several attempts to privatise this airline had been unsuccessful, including one in 2003. A new privatisation scheme has been launched, and as part of it, Air Lithuania, a local carrier, was divested in February 2004.

Frequent helicopter passenger service is provided between Tallinn and Helsinki. The flight time between the two capitals is only 19 minutes.

*Bilateral agreements used now, EU's Single European Skies anticipated in 2005*

Intra-EU air traffic stands for over 2/3 of all traffic. Assignment of slots for service is often granted freely. The right of foreign airlines to operate air services in the Baltic States is based on bilateral agreements with various governments. This practice will continue with non-EU countries within the limits of EU regulation. For example, EU's stringent noise regulation will effectively ban non-complying aircraft from the main airports, and give only short transitional periods for traffic in some minor airports.

The key regulatory issues for Baltic States civil aviation can be summarized as follows: (i) progressive liberalization (increased competitiveness) of air services in relation to EU countries; (ii) airport slot allocation; (iii) technical requirements and administrative procedures of the Joint Aviation

Authority; (iv) appointment of an independent accident investigator; (v) need for improved statistics; (vi) greater reliance on market forces *vis-à-vis* approval procedures at the CAA; and (vii) harmonization of air navigation systems in view of EU's Single European Sky initiative (expected to be implemented in 2005).

*Substantial airport development with EU assistance and loans from EBRD and EIB*

Tallinn airport has financed its reconstruction with EBRD and EIB loans, EU's PHARE program, its own internal resources and some state budgetary assistance. Regional airports in Estonia mainly use state budgetary allocations for construction activity. A regional airport financial plan in Estonia for the period 2000-2006 has been prepared. In Latvia, the main source of funding for reconstruction and improvement at Riga International Airport is a passenger departure tax. Other sources of funds are international financial institutions and commercial banks. In Lithuania, reconstruction and improvement of airports are funded through the airports' own resources and loans from foreign investors.

*Limited administrative capacity and fragmented markets among the key weaknesses*

The main weaknesses identified in civil aviation of the Baltic States are (i) limited administrative capacity of regulators; (ii) small and fragmented markets; (iii) lack of individual strategies for particular markets; (iv) large number of air carriers compared with the modest market size; (v) prevalence of "two aviation worlds" in terms of technology and regulations; and (vi) diminished access at EU airports for all air carriers of the Baltic States.

*Strengthening administrative capacity and legal harmonization among the key issues*

The most important development areas in civil aviation of the Baltic States are: (i) in all three countries, strengthening administrative capacity, complete legal harmonization with EU, signing of the Common Market Aviation Area Agreement; (ii) in Estonia, airport privatisation and restructuring including privatisation at Tartu and certain other airports and restructuring at Tallinn airport; (iii) in Latvia, reconstruction of Riga airport including a new terminal, runway extension, category II facilities, and improving access road to the airport; and (iv) in Lithuania, CAA restructuring, fleet improvement, reconstruction of Vilnius airport including new terminal, runway extension, aprons, navigation facilities, and at Palanga airport runway rehabilitation, improved landing system, and a decision on the future of the ex-military airbase.

## MARITIME TRANSPORT AND PORTS

Key points regarding this sub-sector are: (i) ports have shown strong economic results during the past few years; (ii) stevedoring and shipping companies have been almost completely privatised; (iii) further strengthening of the maritime administration is needed; (iv) the merchant fleets registered in the Baltic States need to comply to Paris MoU; (v) international regulation on maritime safety at sea and in ports need to be followed; and (vi) environmental issues have grown more important.

*Major ports are owned by Governments and they have been very profitable*

Governments own the land occupied by large ports of the Baltic States while smaller ports may belong to municipalities or, as in Estonia, may involve some private ownership of port land. Private companies generally carry out port work such as stevedoring and warehousing.

The only ports of the Baltic States handling a million tons or more of cargo annually are Tallinn, Kunda and Parnu in Estonia; Ventspils, Riga and Liepaja in Latvia; and Klaipeda and Butinge in Lithuania. Among these ports, only the port of Tallinn has significant international passenger traffic. The islands of Saaremaa and Hiiumaa in Estonia generate domestic ferry traffic.

The major ports of Tallinn, Riga and Klaipeda handle relatively diverse traffic while the traffic of Ventspils is mainly oil and chemicals, and the traffic of Liepaja comprises principally timber, metals and bulk liquids. The major ports as well as the privately run cargo handling operations in them have been very profitable.

Private sector participation in port operations has increased significantly in recent years, driven by increased opportunities made available, as the role of public authorities has become more limited. The countries adopting this new policy have been able to attract substantial amounts of private capital investment to refurbish infrastructure and modernize cargo-handling equipment. Under private management of certain operations, ports have improved performance in terms of improved quality of service and reduced cost of cargo handling.

*The national merchant fleets have been declining, but Baltic seafarers still have jobs*

The merchant fleets of the Baltic States in 2002 included 174 ships totalling about 898,000 gross tons. Some of these ships were inherited from the Soviet Union. Including small vessels and fishing fleet, Lithuania had 376 ships, Latvia 362 ships and Estonia 160 ships. The fleet of Latvia has declined in recent years, whereas Lithuanian and Estonian fleet, measured in gross tonnage, has remained stable. Private companies own a major part of the fleets.

Seafarers from the Baltic States have found plenty of jobs in ships sailing under foreign ownership or flags. This applies especially to deck officers and engineers, but also to able-bodied seamen, thanks to their comparatively good training and skills.

*Over 100 million tons through Baltic ports, with unitised traffic increasing fast*

The total sea borne trade in the Baltic Sea is over 400 million tons. Ports in the Baltic States handle about 30 percent of this volume. Individual ships in the Baltic Sea do not exceed 150,000 tons because of draft restrictions in the Danish straits. Also, lack of berths and limited cargo handling capacity limit the size of ships that can be accommodated.

Operations of Ro-Ro ferry lines have increased significantly especially in trade with other EU countries, where such use is common. Traffic in passengers and vehicles between Tallinn and Helsinki grew steadily till 2001 and volumes are well balanced in the two directions. A number of EU-based shipping companies have formed joint ventures in the Baltic States, or opened liner routes with their Ro-Ro and container vessels.

*New Vessels Traffic Systems are being implemented*

Increased ship traffic in the Baltic Sea during recent years has increased the dangers of ship operations there. These growing dangers have led to the creation and implementation of an advanced system for control. A vessel traffic management and information system (VTMIS) is being implemented in the Gulf of Finland in 2004 jointly by Finnish, Russian and Estonian maritime authorities.

*Safety at sea and in ports and related inspections is among key regulatory issues*

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 statistics for 2002 under the Paris Memorandum of Understanding (MOU), the percentage of vessels registered in the Baltic States detained following Port State control was over 6 %. 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 were removed from the black list to the grey list of the Paris MOU.

*Information flow and safety among key development areas in the maritime workshop*

Regarding maritime and port issues, the most important development areas as follows: (i) information flows and systems; (ii) maritime safety issues and especially ISPS; (iii) infrastructure development; and (iv) environmental protection. Other issues include EU Transport Policy, transit traffic, cargo security, competition of ports and shipping as well as institutional development.

## TRANSIT OF OIL AND OIL PRODUCTS IN THE BALTIC STATES

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. The economic impact of oil transit traffic through the Baltic States is quite significant to these countries. Transit revenues represent 5 to 8 percent of gross domestic product of the three Baltic countries. Each Baltic state earns a significant amount of revenues from this transit traffic. 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.

The Polotsk-Ventspils crude oil pipeline leading to the port of Ventspils has an annual capacity of 14 to 16 million tons of crude oil; parallel to the crude pipeline is an oil products pipeline with an annual capacity of 4 million tons. A pipeline serves the Lithuania oil export terminal at Butinge with an annual capacity of 13 million tons of crude oil. A company in which the Russian oil company, Yukos, has a controlling stake owns the terminal facilities at Butinge. Most of the crude oil and products brought to the port of Tallinn arrive by railway. For the ports of Riga, Liepaja and Klaipeda, railways are the only economically feasible means of transporting oil to the ports.

*Capacity in Russian terminals is increasing, and tariff policy favours these terminals*

Competition between the Baltic ports for transit traffic has intensified during recent years. All the Baltic ports have modernized their facilities to attract that important traffic. At the same time, major Russian oil companies have successfully played off the Baltic ports against each other and thus pressed down transit fees. As a further measure favouring Russian interests, the volume of oil shipped on tankers from Russian ports on the Baltic has increased sharply.

St. Petersburg has increased its oil shipping capabilities while a new; nearby Russian oil shipping port of Primorsk was developed and began shipping oil in 2001, and will reach a capacity of 40 million tons in 2004. Another Russian terminal in Vysotsk in the Gulf of Finland goes operational in 2004 with an annual capacity of 10 million tons. Also, the Russian Federation has revised railway tariffs in such a way as to benefit railway shipments of oil through Russian ports.

Notwithstanding these negative influences on Baltic States oil transit revenues, it is expected that Russian oil exports will rise substantially in the years ahead and that the Baltic States will benefit from this trade through transit operations. In recent years, some 80 percent of Russian oil exports have gone to Europe. While the Russians are looking for other markets in the world, Europe will undoubtedly continue to be a major market.

## TRANSPORT SUPPORTING SERVICES

Key aspects concerning transport related services are as follows: (i) infrastructure limitations and regulatory issues are not major concerns of those firms providing transport related services in the Baltic States; (ii) the supply of transport related services in these countries is adequate and generally of good quality; (iii) advanced information technology is becoming increasingly important to companies providing transport related services in the Baltic countries; and (iv) well over half of the transport related services in the Baltic States are provided by international firms.

*The market for transport support services is competitive and service quality is good*

The principal transport related services provided are freight forwarding, customs brokerage, customs service, warehousing services, insurance, and banking. In all three of the Baltic States, these services are almost entirely privatised and the general quality of services is good and improving.

Ten companies dominate freight forwarding services in the Baltic States. These firms handle about half of the total market for these services. The freight forwarding market has been growing rapidly here. During the past five years, the net turnover in this market grew three-fold in Estonia. Most of the main freight-forwarding operators are subsidiaries of major international logistics firms, and they offer a wide range of transport and logistics services.

Throughout the three countries, buyers increasingly favour "one-stop-shopping" for the various transport related services such as customs, warehousing and the like. The overall quality of these

services, in terms of timeliness, accuracy of documentation and the absence of fraud, has improved dramatically during the past ten years, especially since the mid 1990s.

The various transport related services provided by specialist firms in this field are particularly attractive to companies engaged in international trade. Expedited clearance of imported goods often permits companies to reduce their inventories of such goods with consequent savings in cost and improved delivery times to their customers.

*Customs clearance volume has risen fast, but it is expected to fall in EU*

Prior to joining the EU, the volume of customs clearances in the Baltic States had been increasing considerably while the number of people involved in customs clearance or processing remained stable. The quality of the custom services has also improved. The principal areas needing improvements are border crossings where excessive delays occur; data exchange systems between ports and custom warehouses; and improved customs relations between Baltic countries and Russia.

Much of customs clearance work is not needed in intra-EU trade. As a consequence, many customs, customs brokers and freight forwarding staff became redundant

Unreasonable delays at border crossings have been a common and persistent problem in all three Baltic States. Special efforts are required to minimize these delays. In late 2003, persistent borders crossing delays affected the trade with EU countries, which is increasingly depending on tight delivery schedules and dependable service.

Customs practices have generally improved in the Baltic countries during recent years as procedures have been simplified. Each of the countries has adopted the Automated System of Customs Data Management (ASYCUDA). However, this system is not used in intra-EU trade, so its main usage remains in trade with non-EU countries.

Joining the EU on May 1, 2004 caused in Estonia, Latvia and Lithuania a significant impact on day-to-day trade practices with other EU countries and with non-EU countries, notably that of Russia. However, the three Baltic States are well integrated to the world economy, and the EU membership did not dramatically change their trade or FDI patterns. Very few problems with trade and border crossing practices in intra-EU trade were reported in interviews that took place right before or after the EU accession (Ref 2).

The main trade, transport and border crossing problems are with Russia, and to lesser extent with some other CIS countries. 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.

*Reliable insurance, banking and related support services available*

Reliable international insurance services as well as banking services are in place in all three Baltic countries. Some restructuring of these services is expected, especially in Latvia and Lithuania, in the near future. Competition in the provision of these services is increasing, a trend that has had the effect of reducing costs of insurance services.

## URBAN TRANSPORT

In the urban transport sub-sector of the Baltic States, both infrastructure and service provision essentially remain in the public administrative domain. Urban bus and trolley services are offered by a limited number of private companies. Their share of the overall market is for the time being small, but it will rise as EU rules enforce competitive tendering of routes in major cities.

The dominance of publicly owned operators reflects in part the poor profitability of these services for private firms when required to maintain good service levels. Good quality service affordable to the public is clearly in the public interest.

*Cost recovery and service level is at the core of urban transport's problems*

A persistent problem in urban transport in the Baltic States and elsewhere is that effective urban transport system needs subsidies in order to keep up a decent service level in terms of connectivity and

frequency of services. This involves an integrated bus, tram, trolleybus and commuter train system. None of the cities in the Baltic States has an underground service. The pricing scheme needs to recover a high percentage of costs, while considering the Public Service Obligations or, for example, elderly people, children and the disabled.

In Estonia, both municipal and private companies operate urban, suburban and county services. There are two municipal companies in Tallinn. In Parnu, the bus company is 50 percent owned by the government and 50 percent owned by other investors. In Tartu, a private international firm is operating a large part of the city's bus transport. Rail services are provided in Estonia to local and intercity passengers by a private company and a subsidiary of Estonia Railways.

In Latvia, more than twenty bus companies, two tram and one combined tram and trolley company provide passenger services. Three of the companies are municipally owned.

In Lithuania, there are 46 bus companies and two trolley bus lines, all under municipal ownership. In addition, private bus companies provide services in Lithuania both within urban areas and beyond urban centres.

*Regulatory environment is changing to allow competition in urban transport*

A number of regulatory issues concerning urban transport face the Baltic States. In Estonia, parliament adopted the Public Transport Act in 2000 providing the legal basis for public transport activity including harmonization with EU requirements. Public transport was made part of the free market economy with local authorities issuing permits, under competitive bids, to private firms for bus services.

Latvia, too, has made provision for issuance of permits to private bus lines. Any licensed firm is allowed to compete for a permit to operate a bus service. Nevertheless, municipal companies serve about 70 percent of the urban market.

The Lithuanian Ministry of Transport attempts to reach a fair balance between municipal and private companies in the provision of urban transport services.

Lack of public funds for urban transport is the main obstacle to increased effectiveness of services. In Estonia, for example, three fourths of the buses are more than ten years old and repair costs of buses have steadily increased as the buses have aged. Inability to finance new buses is attributed to the decline in passenger traffic levels and consequently revenue.

In the Baltic countries, the market for urban transport services is eroding at the same time that increased motorization-induced traffic congestion is exerting pressure on the operating costs and service quality of urban transport providers. Prevailing fares and financial assistance in the form of subsidies are insufficient to finance good quality services. No stable source of adequate funding has been found for urban transport.

*Competitive tendering is coming; Tartu has embraced it already*

EU membership also brings about the need to arrange competitive tendering of public transport services in major urban areas. This has already been exercised in Tartu, Estonia, where an internationally operating firm has won tenders for bus transport.

Since mid-1990s, private operators have rapidly gained market share from municipal enterprises in many EU countries, including Sweden and Finland. The tendering processes have typically provided lower costs for taxpayers and better service quality.

## ENVIRONMENTAL ISSUES

Improvement of environmental quality has become an integral part of policy making in the transport sector in the three Baltic countries. Tighter emission controls on vehicles have already been imposed here on private and commercial vehicles and these controls will become more rigorous in the near future.

Further action is needed as the Baltic States have relatively high aerial emissions from transport vehicles relative to the volume of traffic. As environmental issues cross-administrative boundaries, a tightening cooperation between Government and research entities, both nationally and internationally, is called for. Active participation in international and regional bodies, such as NATURA 2000, Baltic

21 Agenda, Helsinki Commission, and maintaining a dialogue with non-governmental environmental organizations will require more attention in the future.

## SUMMARY AND CONCLUSIONS

This paper presented a review of each of the several principal means of transport in the Baltic States, namely, roads and road transport, railways, civil aviation, maritime transport, urban transport, and transport support services.

Urgent needs for change in the roads and road transport sector are to expedite border crossings, improve training for road transport operators, enhance road safety, and develop better road links between poorer areas and main centres.

With regard to railways, the principal needs are to continue with railway restructuring, especially in Latvia and Lithuania, including efforts to separate commercial operations from rail administration, and in all three countries to reduce over-capacity, rationalize tariffs, raise levels of safety, and improve railway service.

Some of the relevant aspects of civil aviation in the Baltic States are: (i) aviation infrastructure and management remains the responsibility of the public sector; (ii) the major airline in Lithuania is state owned, in Latvia government has a majority stake, and in Estonia a minority stake; and (iv) the airlines have recently turned profitable after several years of negative financial results.

Key points regarding maritime and ports include: (i) ports have shown strong economic results during the past few years; (ii) stevedoring and shipping companies have been almost completely privatised; (iii) further strengthening of the maritime administration is needed; and (iv) the merchant fleets registered in the Baltic States need to comply to Paris MoU.

Key aspects concerning transport related services include: (i) infrastructure limitations and regulatory issues are not major concerns of those firms providing transport related services in the Baltic States; (ii) the supply of transport related services in these countries is adequate and generally of good quality; and (iii) advanced information technology is becoming increasingly important to companies providing transport related services in the Baltic countries.

In the urban transport sub-sector of the Baltic States, both infrastructure and service provision essentially remain in the public administrative domain. Urban bus and trolley services are offered by a limited number of private companies. Their share of the overall market is for the time being small, but it will rise as EU rules enforce competitive tendering of routes in major cities.

Each of the Baltic States has experienced substantial growth in the volume of merchandise exports and imports. 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% and in imports 49%. In Lithuania, the EU-15 trade covered only 43% of exports and 41% of imports.

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