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**REVIEW OF THE TRANSPORT SITUATION IN UNECE
MEMBER COUNTRIES AND OF EMERGING DEVELOPMENT TRENDS**

Note by the secretariat

The purpose of this document is to provide the Inland Transport Committee with a brief survey of the transport situation in the UNECE region in 2002, including some provisional indicators of the transport activity and trends. In addition, the document highlights some obstacles to the development of transport and best practices in governmental regulatory activity related to transport in member countries. It has been prepared by the secretariat on the basis of the contributions of the following countries and institutions: Austria, Belarus, Canada, Czech Republic, Denmark, Estonia, Israel, Latvia, Lithuania, the Netherlands, Norway, Poland, Russian Federation, Sweden, Switzerland, Turkey, Ukraine, United States of America, International Union of Railways (UIC) and the World Bank.

The report consists of a short text summarizing the main facts and trends reported and an annex containing short summaries of the contributions received. Each country summary is structured in three parts: 1) Traffic trends; 2) Obstacles to transport development, and 3) Best practices in transport and infrastructure regulation. The contributions in full will be made available on request.

I. TRAFFIC TRENDS

1. According to the information and preliminary data provided by the Governments, the International Railway Union (UIC) and other sources, transport and traffic volumes in 2002 in the

UNECE region as a whole seemed to have increased very slightly as compared to those in 2001. However, somewhat different patterns could be observed between transport modes as well as from one sub-region to another or from one country to another.

2. In EU and EFTA member countries railway freight transport volumes, on average, continued to decrease compared to previous year. The average negative growth rate in rail ton-km was -2.6% in the EU. However, in some countries (Belgium, Austria, Denmark) freight volumes grew moderately. The number of railway passengers and passenger kilometres slightly decreased compared to the previous year. In Central and Eastern Europe, both freight and passenger rail transport, on average, continued with their downward trend from the previous year and further decreased, but the rate of decline, -4.7% on average, was lower than in 2001. A significant increase was recorded only in Bosnia and Herzegovina and Slovenia. Transport of freight in almost all the Baltic States and the Commonwealth of Independent States showed an important increase of 6.9% on average with the highest growth in the Republic of Moldova and Lithuania.

3. Road transport continued growing across Europe, although more moderately, and seemed to have performed better than railways in 2002. Road freight transport in EU and EFTA countries again displayed a relatively moderate increase compared to the year 2001, while in Central and Eastern Europe and CIS countries the growth was more pronounced. Passenger road transport continued to grow in all countries, although less in Western Europe than in other parts. The growth of passenger volumes was slower in EU and EFTA countries with a larger part of growth attributed to public transport while in Central and Eastern Europe and CIS countries most of its growth could be attributed to passenger transport by private vehicles. In Central and Eastern Europe between 1990 and 2000 the number of cars on the roads has more than doubled, while at the same time rail passenger transport has more than halved. The trend towards private car ownership in these countries remains unbroken.

4. In some countries of the Commonwealth of Independent States, on average, the growth of goods transport in the period January – November 2002 was 3% compared with the same period of 2001. However, there were rather different growth rates of industrial and agricultural production, different intensity in external trade, and volatile price movements from one country to another. Except in Tajikistan, the volume of goods transport in 2002 was higher in all other CIS countries than in a previous year. In passenger transport, six countries recorded higher indices than a year ago.

5. Shift in modal split at European level in favour of rail transport did not happen in 2002. In combined transport, performance levels, expressed in ton kilometres, moved in different directions. Substantial increases in some countries were not able to compensate for the decline affecting other countries. Combined transport between some EU member countries as well as between some acceding and the EU member countries continued to perform well.

6. In Central and Eastern European countries, as well as CIS countries, according to the information reported, it appears that road transport maintained and, in some cases, even further increased its share in the total goods transport market.

**TRENDS IN INLAND GOODS TRANSPORT IN THE UNECE REGION IN 2002
(Estimates and projections)**

| | GDP | Goods transport (tkm) | | | |
|----------------------|-----------|-----------------------|---------|----------|---------------|
| | | Total | By road | By rail | |
| | | | | Total | International |
| EU + EFTA | 0.8–1.1 % | 1.0 % | 1.1 % | - 3.0 % | - 3.6 % |
| CEEC | 2.2 % | 1.1 % | 2.5 % | - 4.7 % | -2.8 % |
| Russian Federation | 4.0 % | 2.9 % | 0.1 % | 3.2 % | N.a. |
| Baltic & CIS | 4.4 % | 4.0 % | 3.0 % | 6.9 % | 9.1 % |
| South Eastern Europe | 3.6 % | 4.0 % | 5.0 % | - 6.7 % | - 3.2 % |
| Turkey | 3.6 % | N.a. | N.a. | - 26.5 % | 69.9 % |

Notes: Figures in the table are estimates and projections made by the secretariat and are intended to indicate orders of magnitude only.

N.a = Not available.

7. In Europe as a whole, international goods transport again performed better than domestic, thus continuing a long-lasting trend observed in the UNECE region. In Central and Eastern European countries, international rail goods transport performed in a similar fashion as domestic. Imminent accession of CEEC countries, faster economic growth in the EU in the second half of the next year and continuing growth in the Russian Federation could further add to a stronger demand for international transport in the next years.

8. After several years of stagnation, transport by inland waterways appeared to show some positive trends, especially in the Russian Federation and some CEEC countries.

9. In the United States and Canada, trends appeared to be similar to those in Western Europe. Steady growth in transport performance in passenger and freight transport of all modes was evident in the last ten years. Especially indicative is the dominant role of road transport in trade between the two countries. Other modes, inland navigation and particularly maritime transport, continued to play an important role in the international traffic of both countries.

II. OBSTACLES TO TRANSPORT DEVELOPMENT

10. Major impediments to transport development across the UNECE region were still strongly related to the overall economic trends in member countries and the situation inherited in the transport sector, mostly in UNECE Central and Eastern European member countries.

11. Major obstacles to further transport development in these countries became more apparent as they have been going through an intensive process of adaptation to the requirements of the European Union in the last years. In these countries, the major obstacles could be identified on several fronts. The stage and the quality of transport infrastructure at present seemed to be a major hurdle. Neglected and under-invested over decades, transport infrastructure will have to cope with ever increasing transport intensity as the economies of these countries become fully integrated

into the Union in a near future. In addition, old, unsafe and highly polluting vehicle fleets required substantial level of renovation, thus further raising the bill of transformation in the transport sector of these countries. As roads and streets of Central and Eastern European countries and cities were becoming increasingly congested, and travel demand was growing, there was an increasing demand for more modern and appropriate transport policies and management of transport resources that will cut the growing travelling time, curb the pollution, ensure a fair and open competition and provide fairly priced services.

12. Another obstacle to transport development in these countries related to a slower than expected structural transformation of the transport sector, in particular railways, where the separation of infrastructure and operations was not only a resource and time consuming process, but also had employment and social effects due to downsizing and restructuring of transport enterprises.

13. In European Union and EFTA countries, major obstacles to further transport developments could be linked to road congestion and to environmentally related consequences of transport growth, including urban transport. In general, in most of these countries, policy related, managerial and organizational aspects were identified as areas of concern, rather than the stage and the quality of infrastructure or vehicle stocks.

14. In the United States and Canada, some of the major obstacles to transport development and concerns related to the deteriorating quality of transport infrastructure (especially highways), growing road traffic congestion in major metropolitan areas and increased congestion and operating inefficiencies in railways. In addition, in both countries, environmental pressures from transport, vehicle pollution, security of transport, and overall transport capacity constraints as well as not yet fully integrated transportation systems making the best use of all transport modes, were perceived as additional impediments to transport sector development.

15. Between the Russian Federation and other CIS countries, there were some similarities but also important differences in terms of perceived obstacles to further transport development. Infrastructure was in a highly dilapidated state and the quality did not correspond to the growing needs of economies that were on a fast pace of recovery and expansion. In addition to the poor quality of transport infrastructure and outdated transport technologies, there was also a continuing imbalance between the transport supply and the volume and structure of the demand for transport services. Moreover, the transit capacity of the Russian Federation was not yet fully exploited. Furthermore, the fast growth of motorization and the shift from public to private passenger transport, especially in and around big cities, added pressure on the environment. The high average age of and pollution from the vehicle fleet was another major issue in the Russian Federation as well as in other CIS countries,.

16. In other CIS countries these problems were augmented with additional infrastructure problems. Although international financial institutions were making considerable efforts to develop and upgrade infrastructure in many CIS countries, the task seemed to be overwhelming. Due to the inherited transport infrastructure where single railway lines and one or two major roads with acceptable quality were available, many of the CIS countries were striving to further extend and upgrade the capacity of their transport sector to accept growing demand. In some CIS countries, the difficult configuration of their relief, lack of access to maritime and inland

navigation ports, and limited number of trading partners to a large extent conditioned the further development of transport. Furthermore, these countries did not have other alternatives to road or rail transport.

III. BEST PRACTICES IN TRANSPORT AND INFRASTRUCTURE REGULATION

17. In the past year, the regulatory efforts in the UNECE member countries were aimed at the elaboration of measures to further promote competition in the transport market by increasing the competitiveness of railways and the use of other environmentally friendly modes. They also aimed at improving road safety and reducing congestion in urban areas.

18. For example, in Canada, the focus was on developing a modern and relevant legislative framework that will enhance the safety, security, competitiveness, and sustainability of the transport system. In Israel, the reform aimed at restructuring and encouraging competition in public bus transport was under way. In Latvia, and several other acceding countries, the process of further harmonization with the European Union legislation continued, touching almost all aspects of transport. In Lithuania, a new version of the road law was prepared as well as the State programme for road traffic safety for 2002-2004, while in Poland the programme of construction of motorways and expressways was adopted. The Ministry of Transport of Turkey completed studies on the Transport Master Plan covering all modes, and in Switzerland, further measures to improve safety, performance and environmental aspects of traffic through the Alps were among the main regulatory efforts.

19. Particular importance in transport regulation was attached to improvements in the environmental performance of the transport sector. Increasingly rigorous regulatory technical requirements concerning gas exhaust and noise emissions by transport (such as the use of three-way-catalysts, improvements in engines and new solutions for quieter highways) were just some of the many measures applied or considered in many member countries. In addition, various economic instruments, such as new financial schemes to promote public transport in major urban areas, differentiated fuel taxes and subsidies for freight transport projects with lower CO₂ emissions, congestion pricing (Norway), variable car use taxes, continued to be used and were further refined in a number of countries.

20. In a number of Central and East European countries, and in particular in CIS countries, Governments continued to elaborate various administrative and economic measures to reduce levels of pollution, noise and other environmental impacts which were higher than in other countries in the region. It was expected that, with economic growth picking up and the increased capacity of population and industry to acquire more recent and less polluting transport vehicles, vehicle fleets' average age and the levels of pollution could be gradually reduced.

21. In Lithuania, for example, the Ministry of Transport adopted regulations on the promotion of use of "Green", "Greener and Safe" and "Euro II safe" lorries which correspond to the relevant EU directives and UNECE regulations thus significantly improving the environmental performance and traffic safety.

22. Promotion of rail and combined transport was another area of regulatory initiatives aiming at enhancing rail efficiency, reliability and competitiveness. Regulatory measures in this domain were mostly focused on combined and rail transport legislation (Latvia) while in other countries these initiatives continued to be supplemented with fiscal measures taxing road transport (Switzerland, performance-related heavy goods vehicle tax). In order to further increase road capacity and boost its efficiency, the Netherlands, for example, will construct additional rush-hour lanes and improve traffic management and information as well as safety in public transport.

23. After the event of 11 September and several major rail and road accidents (Gothard tunnel), security and safety in the transport sector were rapidly becoming priority legislative concerns, not only in North America but increasingly so in Europe as a whole. Measures included the introduction of equipment that prevents drunk driving in commercial vehicle fleets and the conversion of intersections to roundabouts (Sweden), comprehensive regulatory and other measures aimed at increasing passenger and cargo security (USA) and specific modal measures (road and rail tunnels safety, introduction of information technologies for enhanced surveillance of public transport, etc.).

24. Important regulatory measures concerning the promotion of infrastructure investments were being introduced and considered across Europe. The adoption of regulatory measures based on advanced technologies to gain more capacity from existing infrastructure and reduce the need for new infrastructure through better intermodal connectivity both for passenger and freight transport was characteristic for Poland, Russian Federation, the United States or Netherlands and for other member countries. In addition, a large number of member countries continued to cooperate in efforts to simplify border crossing procedures aimed at further improving travel and transit time of passengers and freight. In Norway, for example, experiments with Public-Private-Partnership schemes continued.

25. Finally, important regulatory developments, in almost all member countries, concerned measures aimed at better regulating the transport market. Governments were increasingly concerned with the need to find the equilibrium between the interests of the public and those of transport users and operators. They also endeavoured to ensure the desired balance between mergers and restructuring in the transport sector on the one hand and healthy competition on the other hand. The need to create an efficient, rightly priced and affordable, safe and sustainable integrated transport system was the overall objective. In Denmark, for example, the winner of the first competitive tender for 15% of the Danish passenger rail transport was expected to start operating in January 2003, and it might be expected that more tenders for such operations will be offered on more railway sections. In Central and Eastern European, as well as in some CIS countries, important regulatory work continued on institutional measures aimed at improving the management of the national transport system, or aligning it with the legislation of the European Union.

IV. OUTLOOK

26. Economic growth was expected to improve across Central and Eastern Europe to 3.3% in 2003 from the lower 2002 level as the EU starts to recover. However, this will depend on international factors and would be vulnerable to any further slowdown in the EU and to oil price

increases. GDP growth in the Russian Federation was expected to be between 3.5 - 4.4 % in 2003, while in the Euro-zone around 2.3 %. Transport demand, both passenger and freight traffic, across Europe was expected to continue increasing in 2003, requiring further regulatory measures.

27. Inland navigation freight transport showed signs of recovery towards the end of 2002 and was expected to further increase its share in the European freight transport market. Advantages in terms of price and environmental impacts, assuming the better quality of service, could increase the inland transport navigation share in the transport market. In the United States, for example, where inland waterways carry 11% of domestic ton-miles of freight transport, inland navigation is projected to grow at a rate of 0.8-1.6% annually to the year 2010.

28. As evidenced from replies, measures to improve modal split, safety and security, environmental concerns, congestion, in particular in urban areas, viable financing options for further infrastructure developments and upgrade will continue to head the regulatory agendas of member Governments. Other legislative concerns in member countries will focus on the further creation of more competitive and liberalized transport markets, further promotion of more environmentally friendly transport modes (rail, combined and inland navigation) and development of integrated transport systems. In all these areas, new technical regulations as well as economic and administrative instruments will continue to be explored and developed. Ensuring an increasing, steady and long-term private sector contribution to infrastructure development will continue to be a major goal.

Annex

SUMMARIES OF COUNTRY REPORTS

AUSTRIA

1) Road traffic on high-level road network rose by 2.9%, road freight transport by 3.1% and transport by road trains by 4.1% in the period January - October 2002 compared to the same period of the previous year. The number of journeys under the “ecopoint” regime rose by 7.3% during the first three quarters of 2002. The tendency that prevailed in the recent years – a moderate growth in national and considerably higher growth in international road transport – continued. Rail freight transported by Austrian Federal Railways (OeBB) rose by 3% in the first half of 2002. The rail freight is expected to continue to grow and, possibly, even stronger. Inland waterway freight transport on Danube rose by 2.5% in the first 3 quarters of 2002.

BELARUS

3) The national transport legislation and its harmonization with international standards has been taking place in the Republic of Belarus during the last few years. The following legal Acts have been adopted: Air Code, Trade Seafaring Code, Water Transport Code, Rail Transport Law, Dangerous Goods Transport Law, Law on Motor Transport and Motor Transport Operations, Road Traffic Code, new redaction of the Law on Road Resources, new redaction of the Law on Motorways. The state authority “Transport Inspection” was established in 2002 to monitor the law enforcement in the field of transport safety and ecological standards. It also provides forwarders and transport operators with licenses for transport of passengers and goods.

In the years 2001-2002, the following motorways projects have been launched: reconstruction of the ring road in the Minsk region, reconstruction of border crossing points with Ukraine), reconstruction of motorway E 30 to the border with the Russian Federation and at the border crossing station Kozlovichi that was expected to be finished enabling customs controls directly at the border. The construction of the Kozlovichi-2 checkpoint terminal has also started recently. Construction of a new bridge over the river Bug at the border with Poland is planned to be completed by the year 2005. The accession to the European Union of several States necessitates the improvement of the frontier infrastructure and facilitation of border crossing procedures at the western border of the Republic of Belarus. In the near future, the western and northern borders of Belarus will become the borders of the European Unions with the Commonwealth of Independent States.

The development of a network of international transport lines is another priority. A programme of development of the rail and road transport in Belarus is planned to be fulfilled by the year 2005. Belarus plans to join the Agreement on the international “North-South” transport corridor; a mutual agreement on this subject has been reached with the Russian Federation, Iran and India. One of the main advantages of this Agreement for the Contracting Parties is a reduction of temporary and financial expenses on transit operations as well as facilitation and unification of administrative and customs procedures of international transit in accordance with international standards and agreements.

At the International Conference on further improvement of international transport corridor No.5, held in Kiev in October 2002, the Republic of Belarus has proposed the extension of the Pan-

European corridor No.5 from Lvov to Minsk. This project would provide transport operators with the shortest route towards Hungary, Slovakia, Austria and other countries of the Danube river region, Italy and the Baltic States. The extension of this corridor towards the Russian Federation and the Republic of Belarus would also provide a land transport bridge between the largest seaports of the Adriatic Sea and the Baltic Sea. It will therefore allow the Pan-European transport corridors 5, 2 and 9 to enter into a common transport network.

CANADA

1) Number of rail passengers increased by almost 5% and passenger kilometers by approximately 1.2% in 2000. The number of passengers using scheduled intercity bus services has also increased in 2000. In rail freight transport, both CN and CPR reported an increase in their total revenue-kilometers. Between 1990 and 2000, trans-border for-hire truck traffic to and from the United States rose by an average annual growth of 13.3%. In terms of volume, 45% of traffic moved domestically by rail, 43% by road and 12% by maritime transport. In terms of value, close to 2/3 of Canada's total trade with the United States in 2000 moved by road (nearly 57% of exports and 80% of imports). In terms of volume, pipelines carried the most trade, followed by road, rail and maritime transport for exports to the USA. For imports from the USA, road was again dominant, followed by maritime and rail.

2) Among many challenges for transport developments, Transport Canada points to the following: the right balance between the interests of the public and those of transport users and providers; harmonization of transport industries' safety and regulatory regimes; the balance between mergers in industry and the possible reduction in competition; development of an integrated transportation system which will ensure the best use of all modes of transport and ways to maximize the use of existing, underutilized transport capacity; more attractive public transport; affordable and accessible traffic services in rural and remote areas; promotion of the use of less green house gas intensive modes; transport services for an increasing number of aged population as well as to persons with disabilities; development and deployment of Intelligent Transport systems, and education of a highly skilled workforce that can respond to rapid changes in technology and new ways of doing business.

3) Transport Canada's strategic objectives are: to ensure high standards for a safe and secure transportation system, to contribute to Canada's economic growth and social development and to protect the physical environment. The focus of Transport Canada is on developing a modern and relevant legislative framework that will enhance safety, security, competitiveness, and sustainability of the transport system. Some of the legislation that Transport Canada administer include: Canada Transportation Act, Motor Vehicle Safety Act, Motor Vehicle Transport Act, Railway Safety Act, Transport of Dangerous Goods Act, etc.

CZECH REPUBLIC

1) In 2001 the number of rail passengers was 84% of the 1995 level. Since the year 2000, a reversal of gradual growth of rail passenger transport has been observed. Compared to 1995, in 2001 the number of passengers carried by integrated transport systems increased four times. National scheduled bus transport fell since 1990 more than 50%. Compared to 1995, the number of passengers carried by urban public transport fell by 2 % in 2001. In the period 1990 - 1997, the

total transport of goods slightly increased (by about 5%), but the share of road transport in the total increased significantly. Its performance increased approximately 2.5 times to the detriment of the rail transport where it dropped to half. Inland waterway transport performance also fell by nearly 50% during this period. In 1998 the road transport performance declined by about 15% compared to 1997. In 1999, it started to grow again, especially due to an increase in international transport. This trend remained unchanged until 2001. For the first time since 1990, rail transport started to grow again in 2000. Unfortunately in 2001 rail transport performance decreased again by 3.5% and amounted to 28% of total freight transport performance. From the environmental point of view, it is very alarming that 67% of total international transport is carried by road. It is encouraging that combined transport shows slow, although steady growth. Rail goods transport in containers has an average annual growth rate of approximately 1.1%. Waterway transport performance also decreased in 2001 in comparison to 2000 by almost 17% (its share in transport market is only 1.02 %).

2) An unfavourable modal split with a high growth of road transport, especially heavy goods transport as well as passenger car traffic (in cities and agglomerations) is the major obstacle to transport development. Support of the development of environmentally friendly transport systems, reduction of the consumption of non-renewable resources, restriction of the emission, noise reduction and less land-take and lower risks of water and soil contamination remain to be priorities of the transport policy. The total carbon dioxide emissions by traffic are still rising. In 2001, the emission of this gas grew by 18% compared with 1985. The private car traffic has a largest share (44%), road haulage (30%) and other (public) transport modes have relatively small share (26% all together). A similar pattern can be observed as regards emissions of carbon monoxide, nitrogen oxides and sulphur oxides even if they show a decline in terms of absolute values. In the case of urban public transport, priority is given to the use of public mass transportation systems, introduction of integrated transport systems along with the development of environmentally friendly means of transport, while at the same time repressing the individual car traffic.

3) The backlog in infrastructure maintenance and its slow modernization remains to be an important issue. In 2002, extensive flooding affected a large part of the Czech Republic's territory, including the capital city of Prague. Thereafter, almost 250 road and 19 railway bridges, including 282 kilometres of railway lines were renewed. By the end of 2002, a large part of the damage was successfully repaired. Other works along the core transport corridors, particularly in railway transport, were also successfully completed. The majority of investments in railway infrastructure were directed at construction and modernization of lines along transit Corridors I, II, IV and VI.B. In road transport, major attention was paid to gradual construction and maintenance of the road motorway network. The total length of motorway network in the Czech Republic reached 517 kilometres. Further works on motorways were either launched or under way in 2002. It is encouraging to note a drop in the number of killed persons, by 8.8%, and of seriously injured by 0.6%. Despite a modest improvement in past years, attention continues to be given to accidents prevention and improvement of vehicles safety equipment. A growing trend of accidents on safeguarded railway crossings is observed.

DENMARK

1) In 2001, the traffic on Danish roads decreased by 0.3%. It was the first time in the last twenty years that a decrease in road traffic has been registered. In the same year, the total road

transport amounted to 70.5 million passenger kilometres. Also in 2001, the rail transport amounted to 5.5 million passenger kilometres, and compared to the previous year it was an increase of 4%. However, about 54.5 % of this amount was made on the urban rail system in Copenhagen, where the first leg of the Copenhagen metro was opened in October 2002. The metro will further be extended in 2003 and 2007 when it will connect the city with the airport. By January 2003, the winner of the first competitive tender for passenger transport by rail was expected to start operating on 15% of the rail network. After gaining more experience with this approach, it might be expected that operations on more railway sections will be offered for tender.

3) In 2001 the infrastructure investments in Denmark were worth more than € 1.5 billion that corresponded to slightly less than 1.5% of GDP. Approximately 75% of this amount was spent on road infrastructure (construction and maintenance), 15% on rail infrastructure and about 10% on the Copenhagen metro.

ESTONIA

- 1) Observations were made on the basis of the data for the first half of 2002. The volume of goods transported by rail increased by 6% compared to the same period of 2001. The volume of goods transported by road increased by 15% and the share of international traffic was 17%. In the first half of 2002, almost 70% of passengers used the services of Estonian road transport enterprises (except urban transport). Of the passengers using road transport 70% used urban transport.
- 2) The main obstacle in road transport is insufficient level of capital investment and limited share of modern roads. Technical equipment and installations are outdated. During the last decade, a disparity has emerged between the number of vehicles and the road development. As the number of passenger cars grew rapidly, the capacity of main roads and streets of Tallinn and other bigger cities has been exhausted. Traffic management also calls for technological and organizational innovation, especially regarding traffic safety. Roads covering surface has deteriorated. Road repair, delayed by insufficient funding in recent years, has become an acute problem. As railways have to take on a major share of the rapidly increasing international carriage of goods and transit, problems are arising from limited capacity of tracks and border stations, but also technological backwardness of railway infrastructure and rolling stock. Environmental, safety and speed related problems are consequences of the obstacles mentioned above. In navigable inland waterways, modernization and maintenance are also insufficient. The problem is a limited access to port infrastructure - bottlenecks, inadequate ports infrastructure especially in view of increasing cargo and passenger flow.
- 3) Through ISPA (*Instrument for Structural Policies for Pre-Accession, which covers the environment and transport sectors only*) 120.6 km of road along Via Baltica and road E-20 from Tallinn to Russian border were finished by 30 September 2002 thus improving the quality and safety of users by renovating existing traffic signs and markings, constructing new intersections and reconstructing existing ones. There is also the Southeastern railway border station planning program, which will end on April 2003. Maritime Safety Act, which regulates maritime safety and safety of navigation on the navigable inland waterways for ships and recreational craft flying the national flag, entered into force on 1 January 2003.

ISRAEL

1) Compared to the previous year, transport performance of all vehicles (annual kilometres travelled) increased by 3.2% in 2001. This rate is expected to remain at same level in 2002 and 2003, and might even decrease slightly, due to Israel's economic recession and serious security situation. Annual railway passenger movement had increased by 20% in 2002 compared to 2001. Due to massive investments in rail transport – new lines and upgrade of existing ones, a 15% annual increase in railway passenger movement is anticipated during the next few years. In 2002, a similar performance in rail freight transport was achieved as in 2001. In the next few years, a rise of about 5% is expected in railway freight transport.

3) The reform intended to bring about structural changes and encourage competition in public bus transport started in 2001. The reform is based on granting rights, by tender, to groups of bus routes for a specific period of time. Its aim is to improve the level of service and lower the bus fares. Prior to the reform, this area of public transport was controlled by two companies, which together covered more than 90% of the entire market, giving way to inefficient operation and poor service. During 2001-2002, tenders were put out for 8% of the bus routes belonging to the two big companies, with dramatic results. Bus fares were lowered by an average of 30%. Furthermore, significant increase of efficiency was felt in the big bus companies, which could also take part in tenders and maintain their presence in the market. In order to encourage the use of public transport and reduce the use of private vehicles, Israel's Ministry of Transport changed its policy regarding parking in large cities. The policy allows a high standard of parking in residential areas while lowering it in city centres. This plan is combined with massive investment in infrastructure for public transport and light rail in the metropolitan areas.

LATVIA

1) Traffic volumes in 2002 have not changed considerably. Road freight transport has remained almost at the same level during the last 5 years. The same situation could be observed in passenger transport. Traffic intensity, however, continued to increase in 2002 compared with the previous years. The overall increase of average annual daily traffic (AADT) was 7% on compared to 2001. According to statistics, truck traffic share in the total traffic on roads reaches 25%. Latvian Road Administration forecasts the average traffic increase of 2- 4% by year 2015. Rail freight traffic has remained almost same during the last 3 years. More than 70% of all transported freight is transit through ports. The volume of transported passengers has been stable during the last 3 years. The biggest share of total freight flow is transit. Almost 90% of freight in transit was shipped from the CIS countries to the West. Total turnover of Latvian ports in 10 months of 2002 reached 44 million tons (8.9% less than in previous year). Ensuring optimal management of transport resources, increasing safety and curbing pollution are currently some of the most important transport policy issues.

2) The main problem hindering road transport development is insufficient capacity of infrastructure. In Riga and other cities infrastructure cannot take all incoming traffic from the main road network thus causing traffic congestions. Inadequate road maintenance and postponed rehabilitation due to insufficient funds degrade road infrastructure and level of services for road users. Railway infrastructure also needs renovation, modernization and safety improvements. Unequal conditions for competition, compared to other transport modes, hinder development of

the railway sector. State budget investments in railways are minimal in comparison to the road transport sector, with a negative impact on the quality of railway infrastructure and condition of the rolling stock. One of the biggest problems for the Ro-Ro and ferry line service development in Latvia is the congestion on the Latvian - Russian border. The border control on the Russian Federation side is slow and trucks wait long hours, thus making the transit corridor from Europe to the Russian Federation via Latvia quite expensive. A serious obstacle for development of ports and railways is the Russian railway tariff policy offering significantly lower tariffs for railway transportation to Russian ports in comparison to the opposite direction from Russian ports to Latvia.

3) Latvia is in the process of harmonization its national legislation with that of the European Union. In combined transport, Latvia is implementing the EU Directive 92/106/EEC of December 1992 on the establishment of common rules for certain types of combined transport. Amendments to the Law on Railways, including the issuance of safety permits to railway undertakings, were prepared and submitted to the Government in order to improve safety on railways. The Railway Technical Inspection, supervised by the Ministry of Transport of Latvia, will issue safety permits. In 2002, major infrastructure developments were on the "E" road network. With the financing ensured through ISPA funds as co-financing source for road project financing, several projects have been implemented on Via Baltica and the West-East corridor in addition to those financed by the road trust fund and, for the railway, project of the West-East corridor. About €5 million were invested in ISPA co-financed projects in 2002. In total, road infrastructure investments amounted to 0,07 percent of GDP in 2002. The annual EU investments in Latvia's transport sector in the framework of ISPA programme have amounted to €23 million. In order to increase infrastructure investments, a proposal was made to the Latvian Parliament to increase a part of collected excise tax on fuel earmarked for road trust fund. According to the existing legislation, 60% of the revenue from the excise tax on fuel is designated to road trust fund. The new proposal aims at increasing this share up to 85%.

LITHUANIA

1) Due to increased foreign trade, road traffic has been steadily growing. During the 1990-2002, Lithuanian foreign trade increased by 40 %. However, due to the concentration of industrial and trade enterprises, traffic intensity growth was uneven. Main traffic flows are concentrated on roads, especially those along the Pan-European corridors I, IX-B and IX-D. Between 1997-2002, traffic flows along these transport corridors increased almost by 50 %, and traffic flows of heavy weight vehicles (>2.5 tonnes) increased by 100 %. The above-mentioned corridors also play a very important role at the national level. On certain sections the average annual daily traffic intensity grows by 13-16 % per year. After falling down in 2001, total freight traffic in 2002 was expected to reach the level it had in 2000 with a projected, although slow growth until 2010. Railway freight traffic is expected to reverse the downward trend of the last three years and to grow slowly until 2010. Road freight transport is expected to maintain and even increase its share in total freight traffic. Both inland waterways and maritime freight transport, steadily growing in the last three years, will continue to play an important role. Number of passengers carried by public transport system is continuously declining, but the trend could be reversed towards 2010. Road public transport share in passenger traffic is well over 90%. Transport and communications sectors contributed 13.6 % to the GDP during the first half of the 2002.

2) Major obstacles to further railway transport developments are: high physical amortization of the railways infrastructure; ageing rolling stock; insufficiently electrified network; inefficient organizational structure of the Lithuanian railways (the infrastructure is not separated from operations - thus hindering the development of market relations in the railway transport sector); In road transport main problems are related to: high average age of vehicle fleet (busses); the lack of road bypasses in biggest cities, inappropriate capacity of streets for intensive traffic flows; high rate of road accidents, and in particular, negative environmental impacts. In addition, legal or administrative support for development of multi-modal transport does not exist. Inland waterway transport is underdeveloped as well.

3) During 2002 a new version of the Road Law was prepared. The State programme for road traffic safety for 2002-2004 was also prepared and approved. The Resolution No. 108 of the Government on the implementation of the Law on Financing of the Road Maintenance and Development Programme was also adopted in 2002. In addition, the Minister of Transport and Communications has adopted regulations on promotion of the use of "Green", "Greener and Safe" and "EURO III Safe" lorries, and on approval of obligatory indicators for oil fuels according to the EU Directives. All implemented measures have significantly improved efficiency, traffic and environmental safety. The Draft Order of the Parliament on the reform of the railway sector and JSC "Lithuanian railways" had also been elaborated, and it will define the role of the State in financing renovation of the infrastructure and development projects, determine the future structure of the sector and functions of new subjects, and determine the stages of the reform. In 2002, the Via Baltica project has been completed and the Lithuanian Motorways Project further progressed. This project relates to the development of the Pan-European transport Corridors IX and I, and includes reconstruction of other "E" roads. In the railway sector, through the joint efforts of Lithuanian, Byelorussian and Ukrainian railways, organisation of the combined transport train "Viking" (Odessa-Klaipėda-Odessa) was completed. The most important railway infrastructure projects in 2002 were capital rehabilitation, modernization of signalling and telecommunications equipment, reconstruction of Kena border transmission station and reconstruction of Klaipėda port access railway station. In 2002, 1.05 % of the GDP was allocated to infrastructure financing and investments in the transport sector.

NETHERLANDS

1) In the next several years the Ministry of Transport, Public Works and Water Management will invest heavily in traffic flow improvements in the road transport. The objective is to increase road capacity and to address the major bottlenecks. From 2004, fuel tax will be cut. In the coming years there will be provisions for a number of roads widening projects and new link roads. In addition, a number of special rush hour lanes will be constructed. In railway transport, the Government's current focus is on increasing reliability and punctuality. Over the next four years the Ministry will spend an additional €300 million on measures to catch up with overdue maintenance. The replacement of tracks, overhead cables and unreliable points is intended to reduce the number of breakdowns in infrastructure by 25 to 30% in 2006. Furthermore, the Ministry will make every attempt to help Dutch Railways to reduce the number of delays. Punctuality was 79.9% in 2001, and will increase to 87% by 2006. By 2010, 95% of trains are expected to arrive on time. The Government will commit itself, together with the regions, to promote goods transports along waterways and railways.

2) A major obstacle that has hindered transport development in the Netherlands is the rejection by the Parliament of the draft National Traffic and Transport Plan (NVVP). The NVVP outlines a new perspective for traffic, transport and related infrastructure in the Netherlands up to the year 2020, and because of this rejection, there is a risk of delay in various policy areas - traffic safety and decentralization. Many projects might run into procedural delays. The Ministry is currently engaged in drafting an adjusted NVVP that will be submitted to Parliament in the spring of 2003.

3) *Efficiency* – In order to increase road capacity, additional rush hour lanes will be constructed in the next few years. Other measures include improved and more effective use of existing infrastructures, improvements in traffic management and information, and extension of passing restrictions for heavy goods vehicles.

Safety - In 2001, number of killed in road traffic accidents decreased by 8% compared to 2000. To improve safety in tunnels the Government is currently engaged in drafting framework legislation, which is planned to come into force in 2005. In cooperation with the Ministry of the Interior, the Ministry of Transport set up a plan for improvement of public safety in public transport intended to take effect in 2003. Between 2001 and 2003 €60 million have been made available to provinces and municipalities for traffic safety measures, For 2003, the Government will reserve a sum of €4.6 million for the installation of digital tachometers in heavy goods vehicles. Another €6.5 million have been earmarked for safe transport for schoolchildren. Remote control of the vehicle speed - intelligent speed adjustment, will further open up opportunities for improving safety in road transport. As from 1 January 2003 all lorries registered in the Netherlands are required to have a blind spot mirror. Since 30 March 2002 a ban on using hand-held telephones whilst driving has been in force and their use is subject to a fine of €138. Regulations on drugs and medication behind the wheel will be widened and the permissible level of alcohol for new car-drivers and motorcyclists will be reduced from 0.5 to 0.2 per mille.

Environmental performance of transport - Emission of CO₂ is expected to increase. The main source of this increase is the increase of freight road transport. The emissions of NO_x and SO₂ show a more favourable trend. Technical improvements in engines and the use of three-way-catalysts will lead to further reduction in their emissions. Together with a number of companies, the Ministry of Transport has recently tested a new sound isolation screen and two new types of road surface. The Ministry of Transport has made €7.7 billion available for freight transport projects resulting in a reduction of CO₂ emissions. Inland waterway and short sea transport projects and road and rail freight initiatives by shipbuilders, distributors and suppliers, etc., will qualify for a grant of up to 40% of the investment costs. This subsidy applies not only to technical modifications of vehicles or vessels but also to logistical improvements, such as the more skilful arrangement of transport routes or a shift from road transport to rail or water.

NORWAY

1) The increase in road traffic in the period October 2001- 2002 is estimated at 3.2% and is the largest for several years. The increase was highest for heavy vehicles and for traffic in sparsely populated areas. Although no comparable information exists for railway transport, railways share of total transport (measured in ton-km or passenger-km) has shown a declining tendency with a share of about 5-6% in 2000. In absolute numbers, rail traffic volumes show some increase.

2) Given the Norwegian geography, climate and population distribution, both transport and infrastructure developments/maintenance are expensive. No special problems occurred concerning transport sector developments in 2002. Rail network is limited; road network is of varying quality, especially concerning heavy vehicles. Some airports are located in sparsely populated areas, but are of significant importance. Roads congestion is mainly a problem in a few cities and on some main routes, and mainly a temporary problem due to weather conditions or holidays.

3) Work continued on road pricing and experiments with Public/Private/-Partnership schemes. These experiments may lead to further use of this way to organize financing and building of the transport infrastructure. Reorganization of public administration (road, rail and air) continued. This meant, among other measures, separating road administration and infrastructure development and making the latter part a competitive company owned by the state. The regional organization has also been changed to larger regions with some specialization. The national rail administration has been made a joint-stock company owned by the State in 2002. There are no evaluations of the merits of these developments at this time. A decision has been made to speed up development of the Norwegian main international road connection E6 - Oslo - Swedish border, including a new bridge on the border. Data for infrastructure investments in terms of GDP for 2002 were not available. Road investments have the largest share and are divided between the State, counties, and communes. This causes difficulties in getting even approximate investment figures.

POLAND

1) In the last two years volumes of freight and passengers has slightly decreased. The most notable feature in 2002 was a smaller decrease in railway transport than in the road transport for hire and reward. In the first ten months of 2002, only pipeline and maritime transport grew, while only air transport has shown slight increase in number of passengers compared to the same period in 2001. Two different forecast scenarios show that the tendency of a growing share of road transport, both freight and passenger, is expected to continue in the next 10-15 years. Traffic volume is expected to increase by 4% in 2002 and a number of road vehicles is expected to increase by 209% in the year 2020 compared to the 2000. In the first half of 2002, the number of road accidents, compared to the same period of 2001 remained same, while the number of fatalities decreased by 14%.

2) The major obstacle to transport sector developments is insufficient capacity for investments in both road and rail infrastructure. In road transport, infrastructure is not suited to heavy loads of freight vehicles (only 3% of the Polish national road network is suited to 11.5 kN axle load). The rest of 5500 km needs upgrading. About 28.5% of national roads have good pavement, 37.5% have an unsuitable covering and 34% are in a bad condition. Traffic congestion and poor conditions of traffic are caused, among other things, by a lack of bypasses around cities and insufficient number of bridges. Furthermore, most of national roads have neither separated lines for slow traffic (bicycles, agricultural vehicles) nor separation for local and transit traffic, thus further decreasing the safety for users. In addition to insufficient investments in railway infrastructure, the rolling stock is outdated and overexploited as well.

3) In 2002, the Polish Government, aiming to boost economic growth and fight unemployment, adopted the strategy called "Entrepreneurship-Development-Employment". The integral part of the strategy is the programme of infrastructure development, and its main

component is a programme of motorways and expressways construction. Realizing that the present system based mainly on the BOT concept, has failed to produce satisfactory results, the decision was taken to introduce the vignette system from 2003. The main financing institution will be the National Road and Motorway Fund with the main revenue coming from the sale of vignettes, income from enterprises' shares transferred by the State Treasury, loans from International Financial Institutions (IFIs) and commercial loans. Another important source of financing will be the EU funding from the ISPA programme, and after the accession, the EU Cohesion Fund. In another development, Road Transport inspection has become fully operational in October 2002 and the main duties of inspectors will be to enforce national and international regulations concerning road transport and to ensure road safety by inspecting the technical state of vehicles. Infrastructure investments in 2002 amounted to about 0.18% of the Polish GDP. Including grants from the EU and loans from IFIs, the total amounted to nearly 0.34% of the GDP. Expenditures for railway included investments mainly on sections belonging to the Pan-European Transport Corridor II and III and modernization of sections, railway knots, removal of bottlenecks as well as railway border crossings. Investments in road infrastructure took a major share of the total infrastructure investments. In the road sector work has been completed on part of the Pan-European Corridor III and continued on sections on the Pan European Transport Corridors II and VI.

RUSSIAN FEDERATION

1) In 2002, the transport system operated and expanded against a background of decelerating growth rates, with a gradual substitution of domestic for external economic growth factors, gradual improvement in the investment climate, and the adoption of various measures as part of the tax reform. The positive trend in the operation of the transport system observed in earlier years continued. The volume of commercial freight operations rose by 2.5%. Changes in the volume of goods carried by various modes of transport reflected modifications in the structure of the transport system and the specific features of demand for transport services. Growth in road transport operations stood at 2%. The objective of development of the transport sector in the Russian Federation in 2001-2002 was to ensure the free movement of citizens, improved provision of transport services to remote areas of the country, lower unit costs and faster carriage, a more efficient transport sector that is more attractive to investors, coordinated development of transport infrastructure, and targeted support for publicly important modes of transport not entirely sustained by market capacity. In 2001-2002 there was a rise in demand both for passenger and freight transport services. It is expected that these trends will persist during the current year and in the short term. The overall volume of passenger traffic fell slightly in 2001 compared with 2000. A further small drop was expected in 2002. The main reason for this trend is the decline in the volume of passengers carried by urban public transport as a result of the rise in the share of "commercial carriers", and also growth in the number of cars in personal use. Suburban buses and private cars also took over part of passengers from suburban trains. The structure of the passenger transport market in the Russian Federation is changing fast with redistribution of passengers among alternative modes of transport. Overall indicators for freight transport have increased in line with the growth of gross domestic product and industrial output. Highest growth occurred in the road haulage sector, as a result of a shift to road transport. The highest growth in volumes of goods operations in 2001 occurred on inland waterways, where carriage of imports and exports increased substantially. The volume of inland waterways freight transport to the Far

North has risen by 8.7 % compared to 2000. For 2002 a negligible drop in the volume of freight carried by inland waterway (1.8 per cent) was expected. Analysis of the present situation offers grounds for expectations that this trend will be maintained in the medium term.

2) The process of market transformations of the Russian transport system cannot be regarded as completed. In rail transport, where economic activities need to be separated from State management functions, the reform is only at an initial stage, the process of creating legislative and judicial machinery to regulate transport activities is not complete, problems arising from the unsatisfactory financial situation of transport enterprises, especially urban passenger transport, persist, and the sharp drop in investment in the transport sector in the 1990s led to a deterioration in infrastructure and equipment in all modes of transport.

The main problems, which are typical for the transport sector in general, include the following:

- For a long time (during the 1990s) the rate of renewal of transport infrastructure was inadequate; the trend towards physical wear and obsolescence continued in 2002;
- Transport technologies used remain markedly out of date, and there are lags in the introduction of computer technology;
- The imbalance between the production capacities of the transport system and the structure of external trade, which arose from the break-up of the USSR, has not been fully eliminated;
- The advantages offered by Russia's transport links in carrying transit goods, including containers, along Euro-Asiatic transport corridors, have not been fully exploited.

The Main problems in road transport are due to the high average age of the vehicle fleet, the structure of the fleet that does not correspond to market demand, and its poor compliance with environmental standards. In inland water transport the main problems are the outdated and worn-out loading and unloading equipment in ports and the unsatisfactory state of mooring facilities.

3) The first stage of the oil terminal at the seaport of Primorsk, fertilizer transshipment complex in the port of St. Petersburg and the first stage of a coal terminal in the port of Ust-Luga were brought to service. A car ferry has been opened linking St. Petersburg and Kaliningrad with German ports. Full-scale navigation on the river Oka has been restored. Conditions of navigation on the Severnaya Dvina river and other inland waterways have been improved. Radio navigation and telecommunication systems for transport management have come into operation in the cities of Volzhsky and Volgograd. In total, 1,253 kilometres of public roads and 13,800 kilometers of bridges and overpasses have been constructed or reconstructed. A bridge over the river Bureya on the main Chita-Khabarovsk highway has been opened as part of the "TRANSSIB" Euro-Asiatic transport corridor. Work is continuing on a ring road around St. Petersburg, a bypass for the city of Sochi, etc. The integrated approach to the set of issues involved in transport development is pursued within the context of the special programme on "Modernization of the Russian Transport System (2002-2010)" adopted by the Government on 5 December 2001. The aim of the programme is to make the transport system better balanced, more efficient and safer while meeting the country's vital interests. The programme covers the period to 2010, and implementation is scheduled in two stages. The heart of the programme is the sub-programme related to the development of international transport corridors, including the Euro-Asian "TRANSSIB" and "NORTH-SOUTH" corridors.

SWEDEN

1) Road traffic has continued to increase. On national roads private car traffic has grown by approximately 3.6% and lorries 2,5% (vehicle-km) for the period November 2001 - November 2002 compared to the previous 12-months. There are indications that rail passenger traffic shows a quite rapid growth. An increase in passenger-km in the range of 3-6% has been calculated for 2001 and this growth in traffic has continued during 2002. Rail goods transport has decreased by 3.6% in ton-km the first six months of 2002 compared to the same period last year. Prognoses made by the Swedish Institute for Transport and Communications Analysis (SIKA) show a continued growth of both passenger and goods traffic during the coming years (around 25% from 1997 to 2010). Increases are expected for all traffic modes, most rapidly however for cars and lorries. No short-term forecasts are made, but the increase up till now has been faster than would have been expected if a linear trend were assumed between 1997-2010.

2) The problems seem to be pretty much the same as during the last years. To name a few: the number of dead and seriously injured is still decreasing (the numbers decreased steadily and rapidly until 1996 but have since been stable or increasing); increased emissions of carbon dioxide from traffic; increasing traffic around and congestion in major cities, especially Stockholm; the number of delays in rail traffic is increasing, partly as a result of growing traffic.

3) Education in heavy eco-driving (i.e. learning drivers of lorries to decrease the fuel consumption) and large-scale tests with intelligent speed adoption equipment are examples of projects that are still regarded as successful. Another example is introduction of equipments that prevents drunk driving in commercial vehicle fleets. The National Road Administration runs all these projects. Other examples of good practice in the road traffic safety area is replacement of conventional guard rails by steel cable guard rails which are considered more safe and conversion of intersections to roundabouts, which are aimed at slowing down traffic and limiting the seriousness of collisions. On national roads, investments have been focused on traffic safety measures, especially installation of steel cable guards. On railroads, construction of new tracks between Stockholm and Västerås (in mid-Sweden) and between Helsingborg and Malmö (in southern part of Sweden) has continued in order to reduce the travel time. Two big projects that are currently under construction are the railway "Botnia link" between Härnösand and Umeå in northern Sweden and the "Årstabridge" in central Stockholm. Infrastructure investments were expected to increase in 2002 compared to 2001. The figure for total infrastructure investments in 2002 corresponds to 0.7% of GDP for 2001. The traffic situation in the Stockholm region has been very much in focus in recent years. A special Governmental committee has been appointed to suggest how the transport system in the Stockholm area could be developed. The Stockholm municipality has reached a political agreement to make a full-scale test of road pricing in Stockholm.

SWITZERLAND

1) The unfavourable economic situation in 2001 caused a slight decrease in freight transport by CFF (-2.48% in tones and 2.3% in ton-kilometres) compared to 2000. The Alpine rail transport stagnated in 2002. Bearing in mind the general economic situation, this result could be considered as success, and is largely due to the transfer of freight from road to rail, following the tragic accident in St. Gothard road tunnel in October 2001. This transfer was manifested by an increase in the volume of accompanied combined transport. Transport by full wagonload recorded

only a 5% increase. Trans-Alpine road transport, in spite of the St. Gothard accident, continued to grow by 16% in tones. However, the number of heavy goods vehicles transiting the Trans-Alpine area grew by only 3%. Such result is mostly due to the introduction of the Performance Based Heavy Vehicle Fee (RPLP), which forced transporters to maximize loading of their vehicles. A declining trend in freight transport was expected in 2002. In the domain of combined transport, a slight increase was expected in 2002 compared to a previous year. Non-accompanied combined transport in the Alpine area slightly increased, while accompanied transport increased due to the introduction of the new rolling highway Loetschberg – Simplon. On the CFF network, the number of passengers grew by 6% and passenger-kilometers increased by 4.1%. Similar results were achieved by other railway transport enterprises providing mainly regional traffic services.

2) Relatively slower growth of road transport could be attributed to the introduction of the Performance Based Heavy Vehicle Fee and an increase in the maximum permissible weight of goods vehicles (from 28 to 34 tones). The agreement between Switzerland and the European Union entered into force in June 2002. It contains principles of the coordinated transport policies allowing Switzerland to continue pursuing its policy of transferring freight traffic from road to rail. The central element of the agreement constitutes the progressive increase of the maximum permissible weight of freight vehicles with the increase of the vehicle fee. The abovementioned agreement also foresaw a system of quotas for circulation of 40 tonnes freight road vehicles originating in the EU in Switzerland, before the actual increase in the maximum permissible weight of freight vehicles. One of the principal objectives of the Swiss transport policy is to stabilize the intensity of freight traffic through Alps at its 2000 level, and the first results at the end of 2002 show that this objective is achievable.

3) The traffic through St. Gothard tunnel was reestablished on 21 December 2001 with a very strict safety conditions for freight vehicles, which were lifted in September 2002 after additional safety installations and reinforced ventilation was put in place. Since then, the traffic is open to freight vehicles in both directions and is managed by a “feeding” system that allows acceptable flow of freight traffic in sufficiently safe conditions. The system proved to be very efficient. Ministers of Alpine countries met in November 2001 and considered measures to improve the safety, performance and environmental aspects of the traffic through Alps. Following this meeting, a steering committee “Security of transport and mobility in Alpine zones” was established in order to prepare a joint declaration. After Swiss and Dutch Ministers of Transport adopted the Memorandum of Understanding in 2001 on establishment of a freight traffic corridor between Rotterdam and Milan. The principal objective is to make traffic of goods by railway on the north-south axis more efficient and faster. Italy and Germany joined this project in January 2003. In 2002, overall investments in transport infrastructure, including subsidies for operating costs for regional public transport, amounted to 1.7% of the estimated 2002 GDP. Public transport received about 8.4% more and road transport about 0.1% less than in 2001. Total investments for large rail infrastructure projects (about 1.5 billion CHF annually over the 20 years period) amounted to 0.36% of the GDP in 2002.

TURKEY

1) Road freight transport to and from Europe increased by 16% in the first 10 months of 2002. The principal export destinations for freight were Germany, Italy and Romania. Export to the Russian Federation, CIS countries and Asia grew by 4% in the same period. Road transport to

Russian Federation had the highest share, followed by Georgia and Azerbaijan. The road transport is expected to maintain and assume an even higher share in the total freight transport. In railway transport, main developments were related to modernization of passenger coaches operating between the large cities because of the notable increase in demand in passenger transport. Containerization had shown a rapid increase in recent years and is expected to continue in future. Overall combined transport has also experienced considerable growth.

2) Procedures by national authorities of transit and/or destination countries are causing the main problems for Turkish road transporters. This is particularly relevant as the road transport has the highest share in Turkish foreign trade, especially for goods having the highest unit value. Major problems for transporters are the shortage of permits, long waiting hours at borders, the lack of harmonized procedures (such as control, weighing, disinfections) and constantly changing rules (especially in transition countries), arbitrary prices, corruption, etc. Moreover, Turkish road transporters are facing additional and very high taxes levied for transit, frequent theft and attacks on drivers and trucks as well as difficulties in obtaining visas for professional drivers. The effects of shifting freight transport from road to rail and inland navigation have brought additional costs and created significant losses to Turkish companies. In railway transport, major obstacles to transport developments could be attributed to: lack of maintenance; delays at border crossings; lack of funds for construction of new infrastructure, and insufficient capacity on certain sections lacking electrification and signalling. A Draft Railway Law has been prepared and presented to the Ministry of Transport. General transport policies favouring development of road transport in the past have also contributed to some obstacles to faster railway transport developments.

3) The Ministry of Transport has completed studies on the transport master plan covering railways, road, maritime, air and pipeline transport. The Transport Master Plan consists of various activities that should lead to evaluation and establishment of macro-transport policies. In another development, the International Transporters' Association of Turkey (UND) has initiated a project which is a transport network covering various border and inland custom offices. The network will enable official bodies as well as UND to follow up entry and exit in all Turkish customs on a timely and reliable basis. The UND also proposed a project for a "truck tracing" system. A saving up to 60% in communication and 50% in insurance costs has been realized through the implementation of the system. In railway transport, in addition to a Draft Railway Law, new developments include incorporation of privately owned wagons in cooperation with the private sector; contract for the Bosphorus tube crossing; and reopening of the border station in Nusaybin. The total railway infrastructure investments represented around 0.5% of the GDP in 2002. In road transport, major investments were directed in new construction and maintenance and rehabilitation of motorways and other sections on E roads. The Turkish Environmental Law and Environmental Impact Assessment (EIA) Regulation first put in application in 1993 was revised in June 2002.

UKRAINE

1) In 2002, the volume of goods transported by railways amounted to 384 million tonnes and to 189 billion tone/kilometers. The volume of goods in transit was 44.4 million tonnes. Road transport also performed well, close to its 2001 level, with 230,000 trips to Europe and Asia. Goods vehicle stock is growing and it now comprises 17,000 goods vehicles licensed for international transport.

2) The main obstacle in rail transport relates to export, import and transit transport operations at border crossing points. All controls over entry of goods carried out at borders involve different authorities often duplicating their procedures. Assigning border controls functions to fewer authorities at the borders would facilitate and speed up procedures for clearing the goods. In inland navigation, the main problem is related to the lack of transit capacity on the Danube at Novi Sad. Local authorities charge transporters for opening of the pontoon bridge (€0.3 per registered tone) and letting the goods pass through. As a result of such practice, the traffic along the Pan-European Transport corridor 7 practically ceased to exist, and goods are increasingly rerouted to the Adriatic Sea. The Ukrainian Shipping Company has suffered indirectly from the UN sanctions against the Federal Republic of Yugoslavia during 1992-95 and more directly during the course of the NATO military action in 1999, and continues to incur losses. Total amount of direct losses amounts to US \$ 28.2 million and indirect to US \$ 559.8 million. In road transport, the main obstacle relates to the aged vehicle fleet. Delayed and slow renewal of the road vehicle fleet is caused by the lack of resources for obtaining new vehicles and by the considerable amount necessary for paying duties and taxes when importing vehicles to Ukraine. Other obstacles in road transport relate to the insufficient volume of financing for road infrastructure, outdated legislative basis and the lack of due regard to advanced scientific and technological norms and standards.

3) The project "Development of Ukrainian railways" aimed at restructuring and modernization of railway infrastructure along the Pan-European Transport corridor 3 (Lvov-Zmerinka-Kiev) is being carried out. Together with the EBRD, Ukrainian railways jointly prepared realization of the project "High-speed passenger service on Ukrainian railways" aimed at enhancing the quality of passenger services, rail safety and traffic speed and decreasing the use of passenger cars. In order to improve the "E" road infrastructure, the State road service invested €30.7 million in its maintenance. In order to integrate Ukrainian roads into the European transport network, the programme for development and functioning of national network as the part of international transport corridors, adopted by the Cabinet of Ministers in 1998, was carried out. During the observed period, €14.3 million were invested in construction and reconstruction of roads along the international transport corridors. During the last year, a number of investment proposals under concession were offered to national and international investors, and a concession agreement was signed for road construction and operation in the Lvov area on the Pan-European corridor 3. Also, a financing arrangement for rehabilitation of the road section Tchop – Lvov (on 3rd and 5th Pan-European transport corridor) was concluded. Combining the financial resources of the EU, Poland and TACIS trans-border cooperation fund, construction of the road bridge over river Zapadni Bug on the Polish-Ukrainian border was completed.

UNITED STATES OF AMERICA

1) Vehicle miles of travel (VMT) have continued to grow over the past decade and in the last year. National VMT in the U.S. for the month of June 2002 was 1.67% higher than for the same month in 2001. Truck traffic growth is projected to increase for the next decade at an annual rate of 2%. In 1999 railroads carried 37% of intercity freight ton-miles in the U.S. Railroad traffic has sustained steady growth since economic deregulation in the early 1980's. Revenue ton-miles increased 2.8 % for the 4th quarter in 2001 over the same period in 2000. An increased growth in ton-miles carried is projected for the next decade, averaging some 1.5% per year to the year 2008.

Inland waterways, excluding the Great Lakes, oceangoing coastwise shipping, carry 11% of domestic ton-miles of freight shipping. Tonnage growth has held steady at approximately 1% annually over the past few decades and is projected to grow at a rate of 0.8-1.6% annually to the year 2010. Tonnage carried on the inland waterway system for the month of June 2002 was 5.5% below that for the same month in 2001. Import and export tonnage handled at U.S. ports has been relatively steady over the past few years, although it was down 0.3% in June 2002 over the same month in 2001.

2) Some of the major obstacles to transport developments and concerns relate to: dependence on foreign energy (the transportation sector relies heavily on oil, accounting for two-thirds of U.S. petroleum use in 2000); environment; vehicle pollution; security (infrastructure security has become of particular importance); adoption of new technologies (such as ramp meters, signal synchronization and computer-aided dispatch systems to reduce congestion, improve efficiency and make travel safer); the development and widespread deployment of alternative energy storage systems (including fuel cells, batteries, hybrid vehicles, regenerative braking and flywheels to decrease reliance on foreign oil and drastically cut emissions). Although the U.S. continues to invest in highway infrastructure and in improving its operational performance, the quality of highway operations continues to deteriorate. Congestion, in urban areas primarily, is the most important factor accounting for this deterioration in performance. Nationwide, vehicle miles of travel (VMT) are up 80% since 1980. During the same period, the overall number of licensed drivers increased 31%. Despite the substantial growth in VMT and licensed drivers, lane miles increased only 3.8% over the same period. In the next 20 years socio-demographic factors such as: rapidly increasing population growth, the aging population, rapid migration and urbanization in the south and west and increasing numbers of non-English speaking highway users, will affect the safety and operational performance of the national highway and transit systems. Shipments of hazardous materials by truck are increasing rapidly impacting the safety of the highway system as well as presenting important security challenges. The rapid growth in rail freight volumes experienced over the past decade and projected for the future, especially in intermodal/containerized traffic, causes increased congestion and operating inefficiencies. The privately operated freight railroads will have to consider innovative financing arrangements to obtain the needed capital for future capacity improvements.

3) In the road transport regulation, the most prominent measures were: statewide and metropolitan planning; minimum training requirements for operators of multiple-trailer trucks; railroad-highway grade crossing safety; revision of regulations on hours of service for truck drivers, rest and sleep and tyre safety information. In the domain of transport security both regulatory and other measures were introduced including increased cargo security by: promoting private-sector adoption of high standards of supply chain security; identification and examination of high-risk containers, and provision of advance electronic information on containers to customs, port, and shipping officials as early as possible; implementing common standards for electronic customs reporting and initiating comprehensive smart border initiatives with Mexico and Canada. The U.S. Customs Service is, through its Container Security Initiative (CSI), partnering with key ports to introduce pre-screening and risk analysis of cargo containers based on advance information. In 1999, the Federal, State and Local Transportation Expenditures from Own Funds, as a Percentage of GDP, were distributed to air transport (0.234%), road (1.027%), rail (0.006%), waterway (0.083%), and transit transport (0.312%). Legislation is being drafted by the Department of Transportation that will determine future federal funding for transportation and continue to foster the safest, most secure and most efficient transportation system. The framework for legislation envisions incentives for improved performance; consolidating and

streamlining programs and improving project delivery, and focusing on system performance and enhancing program accountability. Other emerging themes include intermodal connectivity both for passenger and freight transportation as well as the adoption of advanced technologies to gain greater productivity from existing infrastructure and reduce the need for new capacity oriented investments. The Secretary of Transportation has set a goal of deploying the integrated metropolitan Intelligent Transportation System (ITS) infrastructure in 75 of the nation's largest metropolitan areas by 2006.

THE WORLD BANK

Many countries in the World Bank Europe and Central Asia (ECA) region¹ have embarked on structural reforms in transport sector. However, progress toward an appropriate legal and regulatory environment was highly uneven. While there is considerable foreign and domestic private sector interest in participating in some infrastructure sub-sector projects, the readiness of private operators to take the associated risks was low and the willingness of governments to embrace the private sector varies significantly between countries. The EU accession countries were among the fastest reformers. In all ECA countries, it is essential to ensure that transport contributes fully to economic growth and for this purpose, given the poor state of transport networks in most countries, governments need to accelerate the elimination of maintenance backlogs and make transport infrastructure improvement sustainable.

The main issues transport sector was facing were: (i) competition; (ii) better regulations, and better enforcement of these regulations; (iii) transport services essential to the poor and other disadvantaged groups; (iv) labour retrenchment; (v) decentralization of transport network management and proper oversight of transport operations; (vi) transport investment planning and procurement practices; (vii) changes driven by globalisation and evolving manufacturing patterns and new business opportunities linked to telematics requiring revised national transport policies; (viii) development of environmentally friendly transport systems; (ix) access to services by persons with mobility handicaps.

Different transportation modes were facing additional specific challenges. International trade and transport - (i) aggressive trade and transport facilitation; (ii) cooperation between the different border agencies (customs, border police, veterinary and phyto-sanitary controllers), the transport authorities, and service suppliers both within and between countries and with countries along the same transport corridors in order to reduce waiting times at the borders and to provide essential cost savings and growth of legal trade and transit; (iii) reform of customs agencies to further reduce the cost of international transport.

Railways – (i) basic reforms (separation of policy making, regulatory roles and enterprise functions), already introduced in EU candidate countries, are still to be faced by several CIS countries; (ii) the unbundling of operations along business lines and the introduction of transparent and modern cost accounting and information systems; (iii) closure of uneconomic

¹ The following 28 countries are grouped into the World Bank's Europe and Central Asia (ECA) region: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, the Kyrgyz Republic, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Republic of Moldova, Poland, Romania, the Russian Federation, the Slovak Republic, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan and the Federal Republic of Yugoslavia.

lines and large-scale staff reductions; (iv) non-core services that many railways still own which need to be divested; (v) redrawing the roles of the government, advancing fiscal decentralization and capacity improvement of regional and municipal governments, and establishing fair competition rules; (vi) rolling stock renewal, track rehabilitation, and modernization of signalisation and safety; (vii) liberalization of freight tariffs and the offering of non-discriminatory track access rights at reasonable, transparent and realistic charges.

Roads and Road Transportation – (i) transformation of road administrations into commercially operated road management organizations limiting their activities to management; (ii) formulation and implementation of comprehensive National Traffic Safety Programmes; (iii) modernization of road financing systems to draw on road user charges, especially to fund road maintenance; (iv) to improve connection of the national with the international network (with cautious regard for the Trans-European Networks, Pan-European and Euro-Asian corridors, and economic areas); (v) immediate strengthening of the bearing capacity of the road network, including bridges, to carry larger vehicles with higher axle loads to accommodate the rapid growth of road freight transport; (vi) significant quality improvements and a redesign of rural roads management; (vii) reclassification of the road network to better reflect ownership and accountability on the level of the central, regional and local governments; (viii) vocational and managerial training of the staff in road transport operations.

Inland Navigation and Ports – (i) introduction of commercial port management; (ii) separation of the port authority and commercial operations; (iii) environmental protection and enforcement, and, where lacking, introduction of technical inspections of and vessel registration rules; (iv) better utilization of inland waterways.

As of 30 June 2002, the World Bank had a number of transport infrastructure projects under implementation. These projects covered almost all transport modes, in some countries also included strengthening and capacity building of ministries of transport and their administrative capacities, improvements in management practices of the overall sector or particular modes, etc. Projects were under implementation in Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Croatia, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, FYR Macedonia, Poland, Romania, Russian Federation, Turkey and Uzbekistan. It is also worth mentioning the regional program for Trade and Transport facilitation in Southeast Europe that aims to strengthen and modernize the customs administration and other border control agencies in the region. Based on 7 projects (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Romania and FR of Yugoslavia), this collaborative effort between the Government, IDA, the EU and various Governments seeks to reduce non-tariff costs to trade and transport, and to reduce smuggling and corruption at border crossings. In the Fiscal years 2002-2004, the World Bank transport lending in ECA Region will amount to about US \$ 726 million. Loans are aimed at financing transport infrastructure projects (road maintenance, transport facilitation, etc.) in Albania, Armenia, Bosnia-Herzegovina, Croatia, FR Yugoslavia, Republic of Moldova, Poland and Turkey.