

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

TRANSPORT TRENDS AND ECONOMICS 2011 - 2012

The transport voice of Governments



UNITED NATIONS

Transport Trends and Economics 2011 - 2012

“the transport voice of Governments”

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United Nations Economic Commission for Europe (UNECE)

The United Nations Economic Commission for Europe (UNECE) is one of the five United Nations regional commissions, administered by the Economic and Social Council (ECOSOC). It was established in 1947 with the mandate to help rebuild post-war Europe, develop economic activity and strengthen economic relations among European countries, and between Europe and the rest of the world. During the Cold War, UNECE served as a unique forum for economic dialogue and cooperation between East and West. Despite the complexity of this period, significant achievements were made, with consensus reached on numerous harmonization and standardization agreements.

In the post-Cold War era, UNECE acquired not only many new member States, but also new functions. Since the early 1990s the organization has focused on analyses of the transition process, using its harmonization experience to facilitate the integration of Central and Eastern European countries into the global markets.

UNECE is the forum where the countries of western, central and eastern Europe, central Asia and North America – 56 countries in all – come together to forge the tools of their economic cooperation. That cooperation concerns economics, statistics, environment, transport, trade, sustainable energy, timber and habitat. The Commission offers a regional framework for the elaboration and harmonization of conventions, norms and standards. The Commission's experts provide technical assistance to the countries of South-East Europe and the Commonwealth of Independent States. This assistance takes the form of advisory services, training seminars and workshops where countries can share their experiences and best practices.

Transport in UNECE

The UNECE Inland Transport Committee (ITC) facilitates the international movement of persons and goods by inland transport modes. It aims to improve competitiveness, safety, energy efficiency and security in the transport sector. At the same time it focuses on reducing the adverse effects of transport activities on the environment and contributes effectively to sustainable development. The ITC is a:

- Centre for multilateral transport standards and agreements in Europe and beyond, e.g. regulations for dangerous goods transport and road vehicle construction at the global level
- Gateway for technical assistance and exchange of best practices
- Promoter of multi-country investment planning
- Substantive partner for transport and trade facilitation initiatives
- Historic centre for transport statistics.

For more than six decades, ITC has provided a platform for intergovernmental cooperation to facilitate and develop international transport while improving its safety and environmental performance. The main results of this persevering and important work are reflected in more than 50 international agreements and conventions which provide an international legal framework and technical regulations for the development of international road, rail, inland water and intermodal transport, as well as dangerous goods transport and vehicle construction. Considering the needs of the transport sector and its regulators, UNECE offers a balanced approach to and treatment of facilitation and security issues alike.

Foreword

By the Executive Secretary of the United Nations Economic Commission For Europe



Sven Alkalaj

UNECE Executive Secretary

The UNECE Transport Review was launched in 2008. The theme of the first edition was Road Safety. It was then followed by the Review titled Transport Without Borders, which was released for the Inland Transport Committee's (ITC) policy segment on trade and transport facilitation in 2009. The link between the ITC policy segment and the theme of the Review has been carried forward.

The current Transport Review is another step toward facilitating information sharing in the field of transportation. Staying aware of new developments, learning from each other and paving the way for new thinking has traditionally been some of the key roles of the ITC, which annually reviews transport trends and initiatives. The annual ITC documents on transport trends prepared over the past years can be found on our web-site. This "analytical service" is actually provided for by the ITC Working Party on Transport Trends and Economics (WP.5), which also through this publication - is meant to support the ITC as a platform for ECE member States to share their inland transport policies, including best practices of the past year or two, as well as perspectives and plans for the years ahead. In this fashion, the Transport Review is a knowledge sharing tool for the ITC and its working parties. On the other hand, the decisions, experiences and work results of the ITC and its subsidiary bodies are often trend setters, as well. Therefore, they are also compelled to show a complete picture of upcoming trends of inland transport modes. Thus, this is not just another publication, but it is a true review of recent changes in transport policies of Governments, as well as an illustration of practical and implemented initiatives and decisions of multilateral transport organisations.

This year's publication is dedicated to Transport trends and economics in 2011-12. It looks into questions like: What are the short-term trends in inland transport and how do they relate to the mid- and long-term trends? What were the major achievements or challenges in the course of the past 12 months and what expectations do the UNECE governments have for the upcoming 12 months? These were the broad questions we sought to answer both through the detailed questionnaires to the UNECE governments and through our own review and analysis.

Thirty-seven ECE member States responded to our invitation to participate in the survey, despite very short notice. Many replies to the questionnaire arrived within a single month. A few other countries expressed their willingness to take part, but lacked the time to collect all the data. This positive response has been very encouraging indeed. It reaffirms the need for a regular platform where national governments can keep abreast of the latest transport developments of their neighbours and beyond.

In addition to the desk research and the analysis of the country responses, we have asked well-known professors and business



representatives how they view the situation in a specific transport mode or transport policy segment and what short term trends they could identify. Their input has brought not only value to our analysis, but also supplemented it through a scientific perspective.

I take this opportunity to sincerely thank all those whose contributions made this Transport Review a success.

Sven Alkalaj
Executive Secretary of UNECE

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Transport trends emerging or reinforced in 2011

What we have learnt in the UNECE region



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Director

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Speaking about transport trends emerging or reinforced in 2011, about recent achievements, expectations for future, interesting new initiatives and projects the picture is not as gloomy as one would have thought in light of the extended economic crisis. On the contrary, the transport sector looks to use it as an opportunity to embark on a new growth more than ever before.

Successful transport policies and main obstacles for the development of inland transport in 2011

The national transport policies have several themes to pursue - subject to the specific needs in their country. Nonetheless, the following four themes seem to be of common interest:

- (a.) the reforms and improvement of railways (efficiency, infrastructure, and competitiveness);
- (b.) the development of transport infrastructure;
- (c.) the improvement of road safety; and
- (d.) The implementation of Intelligent Transport Systems.

Albania continues to work for an integrated infrastructure network that can meet the needs of growing tourism and trade. **Canada** launched the Rail Freight Service review to identify ways to improve the efficiency, effectiveness and reliability of Canada's rail-based logistics system. **France** continues to develop its high speed rail network; in 2011 it reached 800 km in total while the plan is to increase it to 2000 km by 2020. Between 2009 and 2011, the Federal Government of **Germany** provided a total of 500 million Euros from the second Economic Stimulus Package to fund the development and commercialization of electric mobility. **Poland** has taken several actions to increase road safety including the Program of Abolishment of Dangerous Points on Roads (PADPR).

In addition, transport policy deliberations at national and particularly at international levels reflect a growing concern for sustainable development. In this respect climate change mitigation and adaptation are the strong up-coming new themes (partly as a reflection of the global preparation for Rio+20). Furthermore, the emphasis on a balanced approach towards the three pillars, i.e. economic, social and environmental sustainability is further strengthened through an increased concern about economic growth and the role of transport (obviously triggered by the extended economic and financial crisis).

Several obstacles for the development of inland transport continued to be pertinent in 2011. Among them:

- For transport infrastructure: long and bureaucratic administration processes for completing public tenders, financing problems or financing alternatives, etc.
- For railways efficiencies: railway companies' reform and separation of infrastructure from operations, railways profitability and investments

in infrastructure, maintenance of existing infrastructures.

Cyprus as many other UNECE member states face the consequence of the lack of adequate infrastructure. The **Czech Republic** – again similarly too many others – was challenged by the shrinking public resources that led to delaying the implementation of infrastructure projects already underway, as well as to further increasing the maintenance backlogs. **Italy's** motorway network was last upgraded in the year 2000. Improved connections for cross border transport remains to be a huge task and interest not only for countries on the Eastern borders of the European Union and their neighbours, but also for the European Union at large.

Geopolitical changes in the ECE region have been leading to complex legal, regulatory and institutional frameworks for transport, i.e. the transport Single Market of the European Union, the NAFTA arrangements and the emerging Euro Asian customs union pave the way for increased level of harmonisation in a regional or sub-regional scope usually coupled with more liberal conditions for transport services, while they contribute to a more complex multi-layer legal and regulatory system. The bridging role of UNECE has become very important especially on the Euro-Asian continent in order to ensure that international transportation remains subject to harmonised conditions.

At the industry level, we can also see trends of convergences among sectors, especially in the automotive industry and in new transport and transport related customer services. Telecommunication, the electronic industry, as well as information and communication technologies expand the horizons of transport. At the same time, the earlier demarcation lines between the sectors are becoming less obvious and the categorisation of enterprises according to sectors is increasingly difficult. Similarly in other sectors, there is a growing demand for closer cross-sectoral cooperation. While the transport sector itself is living the age of reforms, the interdependence among several sectors is growing at a fast rate. Just let us think of the fast urbanisation and the urban mobility challenges. They call for particularly close cooperation between transport planning and urban development.

Road transport

Road transport continues to grow, both in terms of car use and commercial operations. After the drop in 2009, road freight transport grew in 2010, in some cases by more than 5%. In 2011 this growth continued though at a somewhat more modest rate. A good barometer to show the trends in international road freight transport is the number of TIR Carnets issued: in 2011 they exceeded three million. This was an increase by 38% compared to 2009 and more than 9% compared to 2010. Nonetheless, it has not yet reached the pre-crisis level.

2011 witnessed too a break-through in the road freight market. **Greece** decided to liberalize the road transport market and to simplify the accession procedures. While expectations towards progressive liberalisation of the ECMT road licences had been high, the 2011 Ministerial session of ITF agreed on maintaining the status quo with some modest improvements.

As far as individual car traffic and particularly car ownership is concerned the mega-trends are determined by macroeconomic conditions. The car use is particularly related to the changes in the per capita incomes. According to Marcos

Chamon, Paolo Mauro and Yohei Okawa, car ownership rates are minimal in the lowest income countries, but increase rapidly as per capita incomes grow above the initial threshold, which they estimate to be about USD 5000 per capita - based on 2000 prices -, and it falls slightly beyond a per capita income of USD 10,000. With this mega-trend, car ownership from today's level of around 1 billion cars will more than triple by 2050. Many UNECE transition economies of today will reach or pass the 600 cars per 1000 people level. The question is if it is realistic to expect that this macroeconomic association between the rising per capita incomes and the average car ownership can be de-coupled and if so, how. Would restrictive measures be politically acceptable to the broad public, can urban public transport improve at such a speed and to the extent that at least in big cities car use will be curved...? While one can remain rather skeptical, some new developments in the offer of choice for mobility can have an impact at least when national and local transport policies have the same goals. In fact, in recent years we have already seen some behavioral changes as the number of mobility choices increased significantly in many places through

- more possibilities for safe walking and biking;
- the development of car-sharing; and
- particularly through better public transport.

Urban public transport has a long and impressive tradition in the UNECE countries, particularly in Europe. The system is rather extended in most cities. In the past 20 years many cities modernized their system, some introduced competitive conditions for service provisions, several East European and Central Asian cities survived the crisis of the nineties and embarked on a more efficiently managed urban mobility. As the UNECE countries are highly urbanized and for urban citizens the cost of local mobility is a factor in their living standards, we were interested to know how much a daily bus ticket cost. Thus in our questionnaire to this Transport Review dealing with Transport Trends and Economics, we asked about it. It appears that the most expensive daily bus ticket is in Norway at \$11.90, while the cheapest is in Tajikistan at \$0.25. The average cost of daily bus ticket in the UNECE region is \$3.53. These figures reveal not only the differences between UNECE cities, but also the concerns about the cost-recovery capacity of public transport operators simply due to prices determined by what citizens can and cannot afford. (more on page70)

It is not easy to develop seamless transport and ensure that inter-connections between modes and between different geographic ranges, like urban-sub-urban-regional traffic are easy and efficient. In the **Slovak Republic** for example, the government intends to improve cooperation between bus and rail passenger transport and to this end a new public transport act is under elaboration.

Transport infrastructure development in urban areas poses many different challenges compared to funding national investment programs. **Switzerland** sets an interesting example with its infrastructure fund to solve transport problems in urban areas. The main purpose of this fund is to co-finance urban infrastructure projects.

Road traffic safety is a constant concern in all UNECE countries. In the first year after the launch of the UN Decade of Action for Road Safety we can see a lot of initiatives both at governmental and NGO levels. **Croatia** for example adopted the National Road Traffic Safety Programme 2001 – 2020, which is divided into five main topics: behaviour of all road users, road infrastructure improvements, safe driving, efficient medical care for road crash victims and other areas of work

Germany decided to enhance transport safety and reduce the number of fatalities due to road crashes by 40 per cent by 2020 through a road safety programme starting in 2011 **Rail transport**.

In Western Europe with several mega-cities and intensive travel between them, the creation of high speed train networks concurs with the revitalisation of railways during the past two decades. Wherever high speed and very high speed lines were built, they have proven to be an enormous success for passenger transport. The main drivers of transformation that railways face today are liberalization and privatization. Increased competitiveness and efficiency, relieving the burden on the state in terms of financial support and investment stimulation are the main objectives of railways liberalization.

Bulgaria considers its railways a major problem. The volume of railway traffic is decreasing, while the quality of passenger and cargo services was lower than expectation. The productivity of the railway sector in Bulgaria was the lowest in the whole EU. **Serbia** reports that the volume of its railways is decreasing due to a lack of rolling stock and the poor state of infrastructure. Punctuality for passenger traffic as well as **Swedish** railways freight transport is also decreasing. Large parts of the infrastructure are worn down in part because of neglected maintenance, lack of re-investment and increased traffic volumes. **Ukraine** pointed out the need to reform the railway sector taking into account the positive experience from the rest of the world. In Turkey, the outdated railway network in a large geographical area, the physical inadequacies and the geometrical standards as well as the inability of Turkish railways to provide combined transport services are considered as main problems of rail sector. **Slovenia** mentions that the old rail infrastructure is not meeting the characteristics of modern rail transport needs. As a result, the country is facing a modal shift in favour of road freight transport. **Finland** reported problems with train traffic during the two previous winters. However, there are plans to renew rail managements systems and rail switches.

Inland water transport

As described in the recent UNECE White Paper on Efficient and Sustainable Inland Water Transport in Europe, inland water transport in the ECE region is losing its market share. Countries reported that the use of inland water transport is low and becoming increasingly worse. Another major issue is the subject of missing links in inland waterways. The economic crisis and the lack of funds are reported as major obstacles for inland waterways infrastructure improvement. In addition to the lack of proper infrastructure, the old fleets are reported as barriers toward efficiency. Another important topic is that inland waterways are at risk of losing their environmental performance. The old fleets and the lack of alternative fuels become a significant disadvantage.

Serbia mentions that the main problems in inland waterways are the low level of inland water transport freight and the reduced turnover of goods in the domestic market. **Bulgaria** noted that one of the main measures under implementation is the acceleration of infrastructure projects in the field of inland waterways. The continued implementation of the River Information Systems in the inland navigation area of **Croatia** pursuant to two important strategic documents in this area: the development strategy for inland waterway transport (2008 – 2018) and

mid-Term development plan for inland navigation and inland ports (2009 – 2016). **Lithuania** notes as the main obstacle the insufficiently developed inland waterways transport sector (old fleet, more than 30 years, differences of depth in the separate parts of the main inland waterways of international importance, Kaunas – Klaipeda). **Canada** stated that the Federal review process for applications under the Navigable Waters Protection Program streamlined through amendments to the Navigable Waters Protection Act (NWPA).

Intermodal transport

In the 37 UNECE countries there are more than 144 freight villages or logistic centres. Twelve Governments replied that they have already developed a master plan for their logistics industry and 11 Government reported they have a master plan for their intermodal transport.

One of the most important issues that surfaced through the responses was countries' geographical location as a logistics competitive advantage. Twenty-three Governments stated that their country has a logistics – transport competitive advantage and six said that the logistics advantage of the country is directly connected with private sector initiatives and investments.

Albania stated that intermodal transport in Albania is not developed. The interaction among the different means of transport is weak, mainly due to the lack of adequate port and rail infrastructure. The Government of the Republic of **Armenia** has approved a programme for the construction an international logistic centre and transport infrastructure. The Government of **Canada** released the National Policy Framework for strategic Gateways and Trade Corridors to support specific strategies and seize geographic, trade and transportation opportunities in key regions. The Federal Government of **Germany** has developed a Freight Transport Logistics Action Plan.

The countries replies on the question about their geographical – logistics competitive advantage were:

Bulgaria stated that the country has a lot of competitive advantages from a logistics and transportation point of view, such as its geographical location, the sustainable political and economic situation, its railway and road network density and river – sea connection. **Croatia** reported that the country is well-positioned for establishing connections between Western and South Eastern Europe and between Central Europe, the Adriatic and the Mediterranean. **Greece** stated that it forms the natural gate to the EU from Far East countries. And **Italy** mentions that its geographic position in the Mediterranean Sea provides potential advantages along Asia-Europe maritime routes.

As it concerns multimodal transport generic trends an 8 per cent increase in traffic for unaccompanied and accompanied transport was reported for 2010. Although post-crisis levels have yet to be obtained, international traffic in 2010 increased by 9 per cent (3,52 million TEU) whereas national traffic increased by 6 per cent (2,54 million TEU). Particular problems arose in 2010 due to the lack of rail pocket wagons able to carry semi-trailers.

Intermodal road-rail traffic continued to grow in the first half of 2011. However, this trend slowed down in the second half of 2011. The outlook for 2012 is bleak,

as economic growth in Europe will be negatively affected by the austerity measures taken in a number of European countries. In addition, the scheduled temporary closure of the Brenner railway line in 2012 for maintenance and rehabilitation work will complicate trans-alpine services and may reduce its reliability and punctuality, while increasing costs.

Vehicles regulations

The political pressure is huge for technological innovations to develop environmentally friendly vehicles with a large number of highly technical safety features. In addition, demand is no longer for technological improvement but technological shift from traditional to new applications. Consider the automatic emergency braking system that can automatically detect a potential forward collision, which warns the driver and activates the vehicle's breaking system to stop the vehicle and/or avoid a collision. The lane departure warning system (LDWS) is a similar new safety feature of vehicles. However, the benefits from investment in vehicle safety will be impossible to reap unless road infrastructure keeps pace.

New technologies can bring many solutions to past and current problems, but as they open new avenues they also create new problems. For example, one asset of hybrid and electric vehicles is that they create little or no noise. As one man's dish is the other's poison, this benefit is a disadvantage for those with impaired vision and who rely on noises to warn them of danger. For these people, silent vehicles can be a tremendous danger. As a result, regulators, e.g. at the UNECE World Forum (WP.29), are considering requiring audible, acoustic signalling devices when vehicles are traveling at low speeds to alert people to their presence.

Without question, the automotive industry and its markets are undergoing major changes. Similar to the way the airline industry was shook up by the emergence of low-cost carriers, the emergence of low cost manufacturers in the automotive sector, particularly in emerging markets, could have a dramatic restructuring effect – with both benefits and backslides - on the future of the industry.

Climate change

Through the UNECE survey, 30 Governments replied that they are taking measures to address climate change. Sixty per cent of these countries are taking measures for both mitigation and adaptation of climate change, while 40 per cent are taking steps only focused on mitigation issues.

Many innovative climate change police measures were reported by the countries. More specifically: **Belgium** took several measures in 2010 regarding climate change, such as compensations for bicycle use, discounts for the purchase of new vehicles, eco-bonus and eco-penalty implementation measures, and benefits for company cars. The Government of **Canada** will spend more than \$149 million over the next five years on climate change adaptation initiatives. Currently, the **Bulgarian** Government is coordinating the development of the Third National Action Plan on Climate Change which will be implemented between 2013 and 2020. The **Danish** Government has taken several measures aimed at reducing CO₂ emissions by 40 per cent in 2020 as compared to 1990. The Republic of **Tajikistan** allocated \$50 million to begin developing and implementing climate change projects. The Government of **Ukraine** has approved the National Action Plan to

implement the provisions of the Kyoto Protocol. And **Norway** reported that an unusually cold winter followed by heavy rainfall caused significant damage to their transport infrastructure.

The government replies to our questionnaire confirmed that there is a need for the development and use of a standard monitoring assessment tool for CO₂ emissions in inland transport, including a transport policy converter for Governments. The project called For Future Inland Transport Systems (ForFITS) funded by the UN Development Account and led by the UNECE Transport Division is intended to meet this demand with the development of such a standard monitoring and assessment tool for CO₂ emissions including also a transport policy converter.

On the other hand, adaptation to climate change impacts in the transport sector has received so far much less attention. The term adaptation refers to the ability of a transport system to adjust to climate change and moderate potential damage. The Group of Experts on climate change impacts and adaptation on international transport networks in the framework of the ITC Working Party on Transport Trends and Economics (WP.5) has the objective to identify potential climatic impacts on transport infrastructure, determine the costs for the inland transport networks, as well as to collect and share existing best practices.

Intelligent transport systems

Many countries use intelligent transport systems in their public transport network. Buses, trains, trams and metros are the most common means of transport where UNECE Governments have installed ITS.

Germany has included ITS deployment in its 300 million Euro project called “Road Telematics 2015”. **Latvia** implements the International Freight Logistics and Port Information System (SKLOIS), which aims to efficiently use their transport infrastructure, as well as to ensure smooth transit operations through the country. The Government of **Canada** supports ITS deployment through contributions to projects undertaken in partnership with provincial and municipal governments and through PPP schemes. The **Czech Republic** illustrates that a nationwide information system on Timetables (NISTT) provides state guaranteed data on passenger transport for the general public, transport customers and carriers.

Transport Infrastructure

TEM and TER are flagship infrastructure projects of UNECE. In 2011, TEM and TER published their revised Master Plan. According to the TEM status map, it is feasible that by 2020, motorway or dual carriageway sections will be in full operation in five countries and nearly fully operational (with a few exceptions) in another six countries. According to the TER status map, railway sections with a design speed of 160km/h currently exist in nine out of the 25 countries participating in the revision.

In addition, under the Euro Asian Transport Linkages Project (EATL), 421 projects were proposed with a total cost amounting to approximately \$271 billion. The breakdown is as follows:

- 146 are road projects (47 per cent) with value of \$ 113 billion (53 per cent of the total investment cost);

- 121 are railway projects (39 per cent) with value of \$75 billion (35 per cent); and
- 44 are other projects (14 per cent) with value of \$25 billion (12 per cent of the total investment cost).

The Government of **Azerbaijan** has prepared a new strategy for development of the transport systems for approval by the cabinet of Ministers. **Bulgaria** mentions that railways infrastructure is in bad condition. In addition the subsidies for the railway sector were increased but less and less were the resources used for investments. The implementation of **Canada's** Economic Action Plan, which injected nearly \$500 million of stimulus money into the economy, resulted in a more modern transportation infrastructure. In 2010, the **Croatian** Government adopted an Action Plan to remove administration obstacles to investments. The Plan is comprised of 50 different measures. **Cyprus** reported that the main problem that has hindered the development of transport in the country is the lack of infrastructure. **Israel** mentioned that increasing congestion in urban areas and a decreasing proportion of public transport resulted in the Government deciding to investment more in rail and road systems. **Turkey** reported that the General Directorate of Highways considered the realization of some motorways projects by using PPP financing. The objective is to fully meet road transport demand by the end of 2023.



Transport
Policy
Review

CHAPTER 1. Transport Policy Review

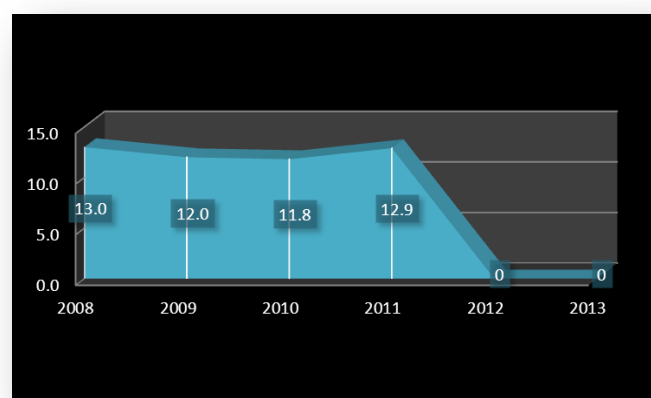
Introduction

- Chapter 1 focuses on countries' transport policy review. For each country a profile has been created which includes three main subjects:
 - Current economic analysis and forecast for the coming years based on inputs from the Economist Intelligence Unit;
 - Successful transport policy measures implemented by the countries over the past year(s); and
 - Main obstacles for the development of inland transport.Where no information is listed for the last two subjects, it is because countries did not reply to our questionnaire. Our objective was to keep countries' replies as much as close to the original text as possible.
- The following four themes were included in the majority of countries' replies on successful policy measures:
 - the reforms and improvement of railways (efficiency, infrastructure, and competitiveness);
 - the development of transport infrastructure;
 - the improvement of road safety; and
 - the implementation of intelligent transport systems.
- Concerning the obstacles for the development of inland transport in 2011 the countries stated the following:
 - For transport infrastructure: long and bureaucratic administration processes for completing public tenders, financing problems or financing alternatives, etc;
 - For railways efficiencies: railway companies' reform and separation of infrastructure from operations, railways profitability and investments in infrastructure, and maintenance of existing infrastructures.

Albania

- The real GDP growth of Albania is forecasted to slow from an estimated 2.2 per cent in 2011 to 1.9 per cent in 2012, and then accelerate to 3.5 per cent in 2013. Inflation is expected to average 3 per cent in 2012- 13. The current-account deficit is expected to stay high, averaging 10.4 per cent of GDP. The draft budget for 2012 projects shows a deficit of 3 per cent of GDP, down from the targeted 3.5 per cent in 2011. Poor revenue performance (up by only 1 per cent year on year) led to a 27 per cent expansion of the budget deficit, to Lk31bn (USD\$300m) in January-September 2011.
- Fiscal policy has become more prudent since the parliamentary election in 2009, which was preceded by a rush to finish large public investment projects, including most notably, sections of the Durrës-Kukës road.

Figure 1 Albania GDP estimates and forecast (2008-2013).



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

6. The country reported the creation of a common and integrated infrastructure network for tourism and trade as a successful transport policy measure, including:
 - (a.) The North-South Corridor between Greece and Montenegro;
 - (b.) The Corridor VIII (East – West National Road Corridor);
 - (c.) The Durrës – Kukës – Morinë - Kosovo border Corridor.
7. Another successful measure was the implementation of the legal approximation and administrative capacity. In the road transport sector, in compliance with the National Plan of the Association for the Implementation of the Stabilisation Agreement (NPISAA), the Albanian Government has completed legal initiatives regarding the definition of qualitative criteria that must be fulfilled for admission to the road haulage profession and to passenger transport operators.

Main obstacles for the development of inland transport

8. The combined / intermodal transport in Albania is quite low. Cooperation among the different means of transport is weak, mainly due to the lack of port and rail infrastructure. The construction of the container terminal at the port of Durrës as well as the fuel storage station in Porto-Romano, the rehabilitation of the rail network and the development of rail services are some of the measures that would contribute to the development of intermodal transport in Albania.

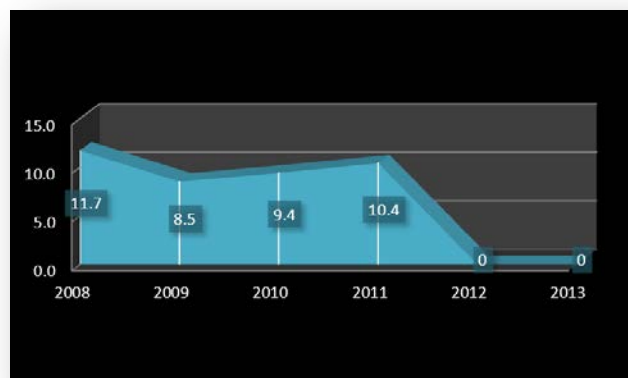
Andorra

No data available.

Armenia

9. The real GDP growth of Armenia is forecasted to slow to 3.6 per cent in 2012, from an estimated 4 per cent in 2011, in part due to the worsening external environment. The state budget deficit was Dram14.8 billion (US\$40 million) in the first eight months of the year, significantly smaller than the Dram26.5bn deficit in the earlier period the same year. Real GDP grew by 3.9 per cent year on year in the second quarter. The Economist Intelligence Unit estimates that Armenian real GDP will expand by 4 per cent in 2011, and forecasts that growth will slow to 3.6 per cent (revised down from 3.8 per cent) in 2012.

Figure 2. Armenia GDP estimates and forecast (2008-2013)



Successful transport policy measures

10. The policy of the Government of the Republic of Armenia in the field of passenger and goods transportation by road is mainly directed toward:
 - (a.) Increased service quality and safety levels;
 - (b.) National legislation that complies with international laws; and

Source: The Economist Intelligence Unit, UNECE

(c.) The development of several modes of transport.

11. In 2011, order to meet the requirements of the “European Agreement Concerning the Work of Crews of Vehicles engaged in International Road Transport”, the Republic of Armenia invested in a system that controls the respective devices (digital tachograph).

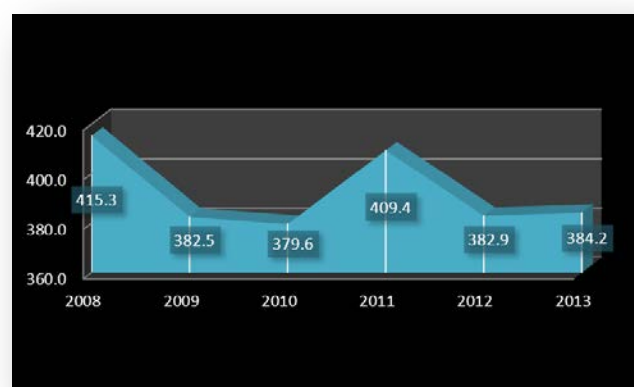
Main obstacles for the development of inland transport

12. Transportation costs for imports and exports of Armenia are very high. This is mainly due to the extensive use of sea instead of inland routes. As a result, Armenia faces high prices for consumer goods which have a negative effect on the country’s economy.

Austria

13. Austria’s GDP growth slowed to 0.3 per cent in the third quarter of 2011, with a particular slowdown in the manufacturing sector, driven by dramatically reduced export growth (0.6 per cent). The government has agreed in principle with the European Commission in its Stability Programme for 2011-2014 to act to reduce the government deficit to below 3 per cent of GDP by 2013. A Stability Programme for 2011-2014, to bring the deficit below the euro zone threshold of 3 per cent of GDP from 2013 and to 2.4 per cent by 2014, was submitted to the European Commission in early 2011.
14. The government has also proposed a constitutional deficit limit at 0.35 per cent of GDP from 2017 to bring debt to 60 per cent of GDP by 2020/2021. It is estimated that the deficit of 4.6 per cent in 2010 will shrink to 3.6 per cent of GDP in 2011. The government forecasts that the 2012 budget would bring the deficit to 3.2 per cent of GDP in 2012, below the Stability Programme target of 3.3 per cent.
15. Cost-curbing measures that are currently envisaged for 2012 include limiting early retirement, reducing personnel costs in schools, cutting costs at **Austrian Federal Railways (ÖBB)**, reforming healthcare and hospitals, and simplifying the tax code.

Figure 3. Austria GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

No data available.

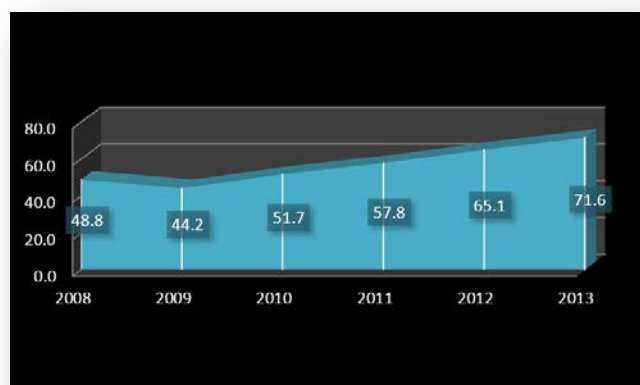
Main obstacles for the development of inland transport

No data available.

Azerbaijan

16. Azerbaijan's current account is forecasted to remain firmly in surplus in 2012-2016, averaging 12.6 per cent of GDP. High oil exports will continue to be the main driver of the substantial trade surplus. Azerbaijan rose by three places, to 66 out of 183 countries, in the World Bank's latest annual Doing Business survey. The economy is forecast to grow at an annual average of 3.5 per cent in 2012-2016, down from an average of 9.9 per cent in 2007-2011.

Figure 4. Azerbaijan GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

17. The Ministry of Transportation has prepared a draft "Strategy for the development of transport system" and a Concept paper of an "integrated transport policy" of the Azerbaijan Republic, which has been agreed upon by the relevant government authorities and submitted for approval by the Cabinet of Ministers.

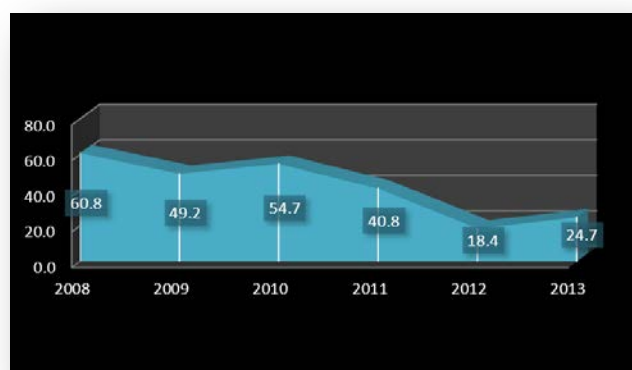
Main obstacles for the development of inland transport

No data available.



18. The Economist Intelligence Unit estimated that a slowdown of real GDP growth in Belarus to 3.6 per cent in 2011 and forecasted an annual average growth of just 3.2 per cent in 2012-2013 as domestic demand and government spending are hit by rouble devaluation. In the first three quarters of 2011, real GDP grew by 7.9 per cent year on year. However, this compares with year-on-year growth of just over 11 per cent in the first half, implying an abrupt slowdown in the third quarter. Nevertheless, industry performance drove the recovery following the downturn in 2009 and remains solid, with output growing by 10.6 per cent from January-September.

Figure 5. Belarus GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Belgium

19. The Economist Intelligence Unit's forecast is for the general government deficit to narrow from 4.2 per cent of GDP in 2010 to 3.8 per cent in 2011 and to 2.5 per cent by 2016. It forecasts that real GDP growth will slow to 2 per cent in 2011, weakening to just 0.4 per cent in 2012, and averaging under 2 per cent from 2013-2016.

Successful transport policy measures

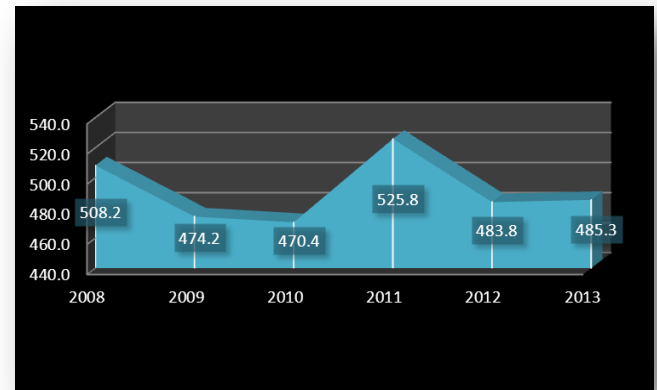
20. The Belgian Government has initiated a project which monitors the statistics of workers travelling every day from their home to their workplaces using different transport modes. The project monitors data and keeps statistics on private and public sector workplaces with more than 100 employees. Diagnostic evaluations are taking place every three years (2005, 2008, and 2011). The Government of Belgium has also taken several fiscal measures to decrease CO₂ emissions

- (a.) Since 2007, the deductibility of company cars is based on CO₂ emissions classification;
- (b.) Since 2010, the benefit in kind of private sector - company car is calculated based on CO₂ emissions;
- (c.) Since fiscal 2010, employers granted a compensation of 0.20 euro / km tax-free for commuting by bicycle;
- (d.) In 2011, discounts of new vehicles will be 15 per cent of the purchase value with a maximum of € 4640 (after indexation) when emissions are less than 105 g CO₂/km and 3 per cent (maximum 870 EUR) when emissions are between 105 and 115 g CO₂/km;
- (e.) In the Walloon region, an eco-bonus of 600 Euros is granted for the use of a new or used vehicle emitting between 0 and 98 grams of CO₂ per km, with special arrangements for large families and Liquefied Petroleum Gas (LPG) vehicles;
- (f.) An eco-penalty ranging from 100 to 1,500 Euros is forecasted, depending on the level of emissions of the vehicle being used, the average emissions of vehicles in circulation and the emissions levels for the vehicle being replaced;
- (g.) Since 2009, the Flemish Region grants a bonus for the installation of a particulate filter on used diesel cars.

Main obstacles for the development of inland transport

21. The Government of Belgium reported road congestion and the cumbersome administrative procedures in major infrastructure projects as major obstacles for the development of inland transport.

Figure 6. Belgium GDP estimates and forecast (2008-2013)



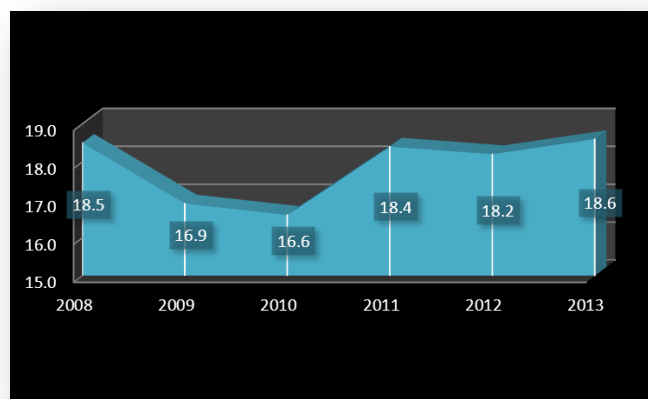
Source: The Economist Intelligence Unit, UNECE

Bosnia & Herzegovina

Figure 7. Bosnia and Herzegovina GDP estimates and

22. The Economist Intelligence Unit forecasts that real GDP growth in 2012 will remain sluggish, at 1 per cent—slowing from an estimated 1.6 per cent in 2011—before a modest acceleration to 2.5 per cent in 2013, as external demand picks up. The current-account deficit is forecasted to narrow from an estimated 5.7 per cent of GDP in 2011 to 5.3 per cent of GDP on average in 2012-2013, as international oil prices drop and tighter fiscal policies limit import demand growth.

forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

23. The country reported the implementation of infrastructure projects in the field of road, railway and inland waterway as successful transport policy measures. Some on-going projects are: the development of Motorway Corridor Vc, the rehabilitation and modernization of railways infrastructure, as well as the rehabilitation and modernization of international inland waterway River Sava.
24. As additional transport policy measures, the enhancement of transport safety and the reduction of the number of deaths in road accidents, as well as the implementation of a system that controls the respective devices (digital tachograph), according to the “European Agreement Concerning the Work of Crews of Vehicles engaged in International Road Transport” were reported.

Source: The Economist Intelligence Unit, UNECE

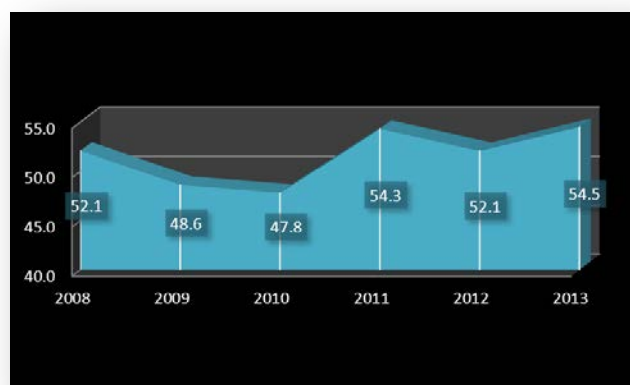
Main obstacles for the development of inland transport

25. Bosnia & Herzegovina’s economy still struggles with the after-effects of the global economic crisis.



26. The Economist Intelligence Unit estimated a real GDP growth of 1.9 per cent in 2011 and forecasted that the recovery will weaken in 2012, with 1.6 per cent growth, given decreasing export demand and a forecasted recession in the euro zone. In 2010, the budget deficit using the cash-based national methodology stood at Leva 2.8 billion (US\$1.9billion), or 4 per cent of GDP. The government intends to continue with fiscal consolidation, and its 2012 draft budget targets a deficit of only 1.35 per cent of GDP.

Figure 8. Bulgaria GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

27. The primary under implementation measures reported by the Government of Bulgaria are the following:
- (a.) Acceleration of the implementation of infrastructure projects in the field of railway, road, inland waterway, air and combined transport;

- (b.) Provisions for a transparent and harmonised competitive business environment for the transport market;
- (c.) More intensive implementation of public-private partnership mechanisms in transport infrastructure projects;
- (d.) Limiting harmful gas emissions, as well as the negative impact on the environment caused by the transport sector in general;
- (e.) Update of the existing regulatory norms to adapt to the international and European safety and security standards; and
- (f.) Renewal and modernisation of different transport modes' vehicles, rolling stock, fleet, facilities and equipment.

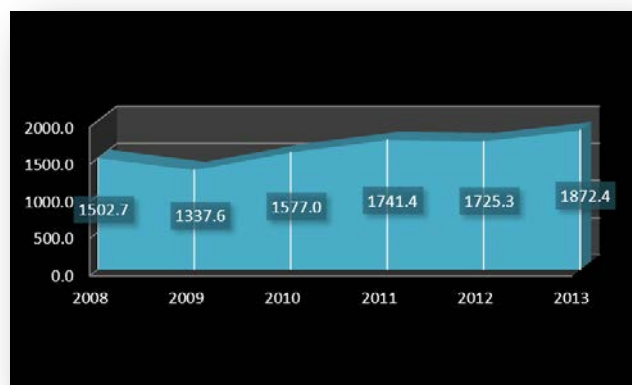
Main obstacles for the development of inland transport

28. One of the main problems that hindered the development of Bulgarian transport in 2010 was the condition of the Bulgarian Railways. The volumes of railway traffic and their market quotas decreased - the traffic in 2010 was 40 per cent lower compared to 2007. The quality of passenger and cargo services was lower than expected and the productivity of the railway sector in Bulgaria was the lowest in the whole European Union.



29. The Economist Intelligence Unit forecasts Canada's GDP growth at 1.8 per cent in 2012, as shipments slow to Canada's main export market, the United States. In the medium-term, high household debt will weigh on consumer spending. A darker outlook for the economy has forced the government to retreat from its target of balancing the federal budget by fiscal year 2014/15 (April- March).

Figure 9. Canada GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

30. In the context of the global economic slowdown, Canada's relatively strong performance can be attributed, in part, to sound economic fundamentals that include improvements to trade-supporting infrastructure and enhanced policies and regulations resulting from the Government of Canada's National Policy Framework for Strategic Gateways and Trade Corridors.

- (a.) Successful implementation of Canada's Economic Action Plan (EAP) injected nearly \$500 million of stimulus money into the economy. The result is a more modern transportation infrastructure;
- (b.) The department fostered the use of sustainable transportation approaches in communities across the country and encouraged improvements in fuel efficiency and the reduction of air pollutants;
- (c.) Efforts to modernize and harmonize standards, policies, programs and regulations for improving safety across all modes were implemented;
- (d.) In June 2010, amendments to the Railway Safety Act were tabled in Canada's Parliament under the Safer Railways Act. Nearly \$5 million was invested in rail safety initiatives. Transport Canada also invested over \$4 million in 57 grade crossing improvement projects across Canada;
- (e.) The federal review process for applications under the Navigable Waters Protection Program was streamlined through amendments to the Navigable Waters Protection Act (NWPA).

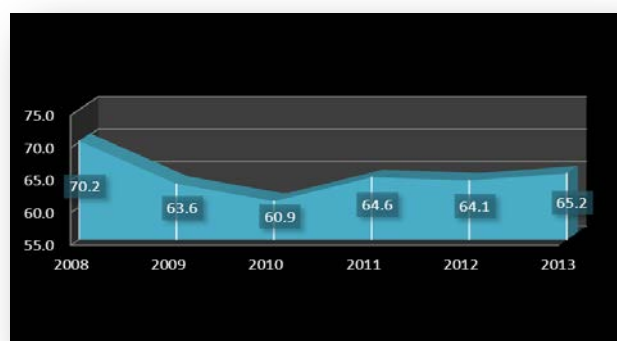
Main obstacles for the development of inland transport

31. The global economic slowdown and the resulting decrease in demand for manufactured goods and key commodities.
32. The Rail Freight Service Review was launched in 2008 to identify ways to improve the efficiency, effectiveness and reliability of Canada's rail-based logistics system.

Croatia

33. The Economist Intelligence Unit forecasted that the 2012 budget deficit will be similar to that of 2011, at around 5 per cent of GDP, before gradually contracting to within 3 per cent of GDP by 2016. Rising public debt will put a strain on government finances.

Figure 10. Croatia GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

34. The Croatian Government reported the adoption of the National Road Traffic Safety Programme for 2011-2020 as successful transport policy measure. The Programme includes: improvement of road users behaviour, improvement of road infrastructure, safe driving, more efficient and effective medical care for road crash victims and other areas of work.
35. In addition, the Government reported the continuing implementation of the River Information Systems (RIS) in the inland navigation area pursuant to two strategic documents in this area: the Development Strategy for Inland Waterway Transport (2008-2018) and the Mid-Term Development Plan for Inland Navigation and Inland Ports (2009-2016).

Main obstacles for the development of inland transport

36. The Government reported that the Croatian economy still struggles with the effects of the global economic crisis.
37. On 20 October 2010, the Croatian Government adopted the Action Plan to remove the administrative obstacles for investments, comprised of 50 measures including company registration, property acquisition, construction, judiciary, taxes, customs, etc.

Cyprus

38. According to Economist Intelligence Unit, the budget deficit is expected to increase from 5.3 per cent of GDP in 2010 to 7 per cent of GDP in 2011, reflecting investment in a new power plant. However, a decline close to 3 per cent of GDP in 2016 is anticipated. Real GDP growth is expected to fall from 1.1 per cent in 2010 to 0.1 per cent in 2011.

Successful transport policy measures

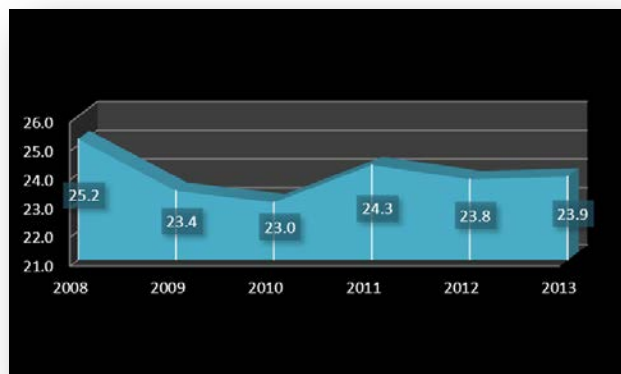
39. In Cyprus, passenger transport by bus was transformed and modernized to reflect the provisions of the Regulation on public passenger transport services by rail and by road. The new system basically consists of five operators for urban transport (5 geographical areas: Nicosia, Limassol, Larnaca, Ammochostos, Pafos) and one for intercity buses. Presently, the new system of public passenger transport by bus offers 1,755,000 routes every year, covering 31.5 million kilometres.

40. In addition to the urban and intercity bus service, a new closed door service connecting Nicosia and Limassol with Larnaca international airport was put into operation with great success.

Main obstacles for the development of inland transport

41. The main problem hindering the development of transport in Cyprus is the lack of infrastructure. The bus fleet, which consists mostly of old buses, will be replaced with new buses. So far, 20 per cent of the buses have been renewed. Operators are required to gradually renew the rest of the fleet.

Figure 11. Cyprus GDP estimates and forecast (2008-2013)

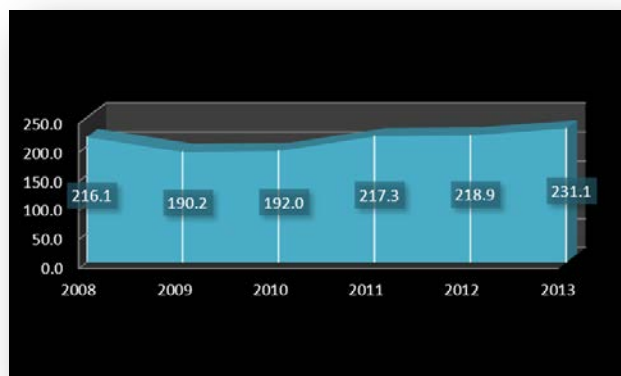


Source: The Economist Intelligence Unit, UNECE

Czech Republic

42. In the Czech Republic, the economy is expected to grow by 2.1 per cent in 2011, with fiscal austerity slowing the pace of expansion. The Economist Intelligence Unit forecast for 2012 has been revised down to just 1.5 per cent in 2012 owing to an expected recession in the euro zone.

Figure 12. Czech Republic GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

43. The transport policy of the Czech Republic for the period 2005 - 2013 contains a number of measures:

- (a.) Harmonization of transport market conditions. For example, in 2007, the Czech Republic started the gradual implementation of a performance-based toll collection system.
- (b.) The development of an integrated transport system; the elaboration of the legal framework for facilitating transport services in regions;
- (c.) The railway sector transformation;

Main obstacles for the development of inland transport

44. The main problem hindering the development of transport in 2010 was the lack of resources in public budget. This resulted in current projects to be put on hold (including maintenance work). Another negative consequence of public deficits is the lack of funds for the operation of public transport.

Denmark

45. The budget deficit is expected to widen to close to 6 per cent of GDP by 2012, from 2.9 per cent of GDP in 2010. The deficit is expected to decrease in 2013, but in the absence of far-reaching reform, it is unlikely to return to surplus. Real GDP growth is forecasted to stagnate in 2012, recovering moderately thereafter.

Successful transport policy measures

46. The Danish Government aims to reduce CO₂ emissions by 40 per cent in 2020 compared to 1990. In the Transport sector, the Government is promoting public transport and bicycle transport in order to reduce CO₂ emissions. More than two-thirds of the investment budget is in the rail sector.

Main obstacles for the development of inland transport

No data available.

Estonia

47. The budget deficit is expected to remain well below the EU-mandated limit of 3 per cent of GDP in 2011-2013, before returning to surplus from 2014. The Economist Intelligence Unit estimates for real GDP growth in 2011 of 6.5 per cent reflects the strength of the economic performance in the first eight months. Worse external prospects will see growth slow to an annual average of just 3.2 per cent in 2012-2016.

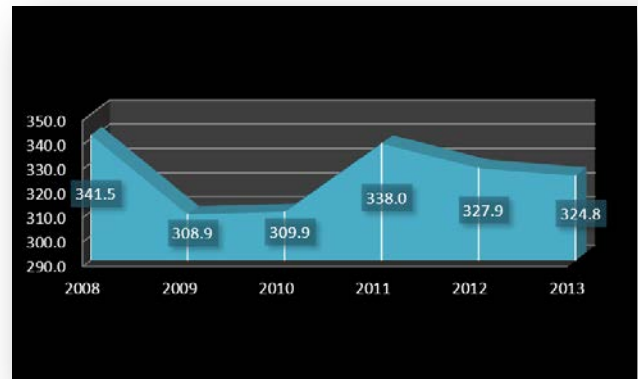
Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

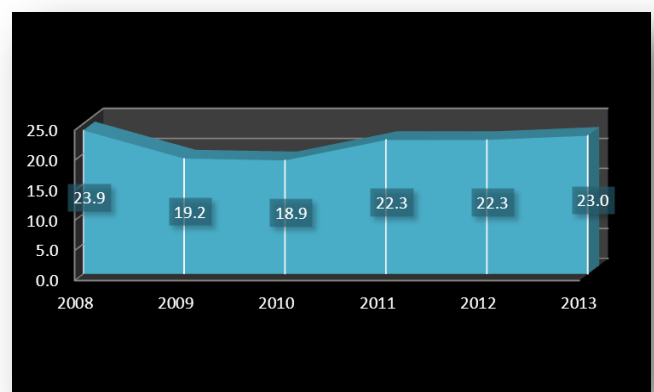
No data available.

Figure 13. Denmark GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Figure 14. Estonia GDP estimates and forecast (2008-2013)

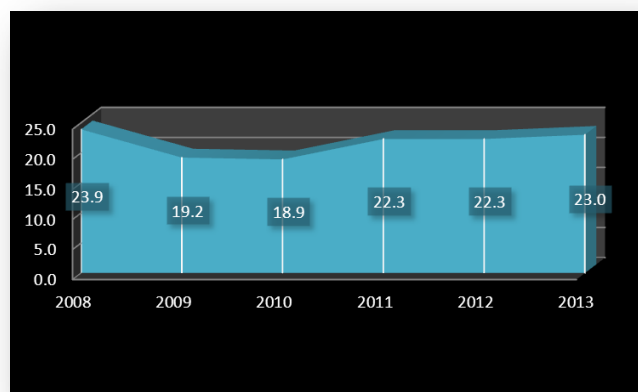


Source: The Economist Intelligence Unit, UNECE

Finland

48. The Economist Intelligence Unit expects that fiscal policy will remain cautious, with spending cuts and tax rises being implemented in 2012 and, to a lesser extent, in subsequent years. It is also expected that the government accounts will remain in deficit, but at low levels, up to 2016. The recovery from the 2009 recession has come to a sharp halt and the Economist Intelligence Unit forecasts that after a growth of 3.6 per cent in 2010 and 2.7 per cent in 2011, there will be a 0.1 per cent contraction in GDP in 2012.

Figure 15. Finland GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

49. The main successful transport policy measures implemented by the Finish Government are as follows:

- Development of the “national travel centre” concept;
- Development of regional public transport ticketing systems;
- Implementation of the national smart card system for long distance coaches (over 400 companies) and a national multimodal journey planner www.journey.fi.

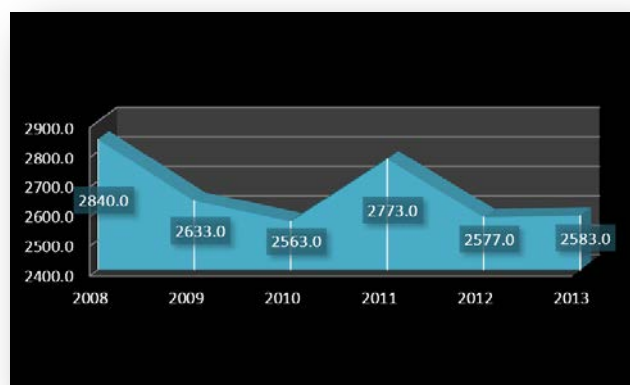
Main obstacles for the development of inland transport

50. The problems with train traffic during the two previous winters were reported as main obstacles. There are plans to renew rail management systems (partly implemented) and rail switches. There are some plans for increasing the capacity of Helsinki’s main rail station.

France

51. The Economist Intelligence Unit forecasts that fiscal policy will remain restrictive in 2012, as the government tries to reduce the budget deficit from close to 6 per cent of GDP in 2011. The French economy is forecasted to experience a mild recession around the turn of 2011-2012. Growth is expected to contract by 0.5 per cent in 2012, with a gradual recovery from 2013. The government is targeting a reduction in borrowing of €113.1 billion over 2012-2016.

Figure 16. France GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

52. The Government reported the LGV (Lanes de Grand Vitesse) programme as a successful transport policy measure: eight hundred km were launched in 2011

with a target of 2,000 km through 2020. Another successful measure is the Public Transport with environmental friendly transport means (Transport en commune en site proper, TCSP). Six hundred and twenty two km were launched in major cities in 2011 with a target of 1,500 km through 2020. In addition, the French Agency for Multimodal Information and Ticketing was created to improve information for users of public transport.

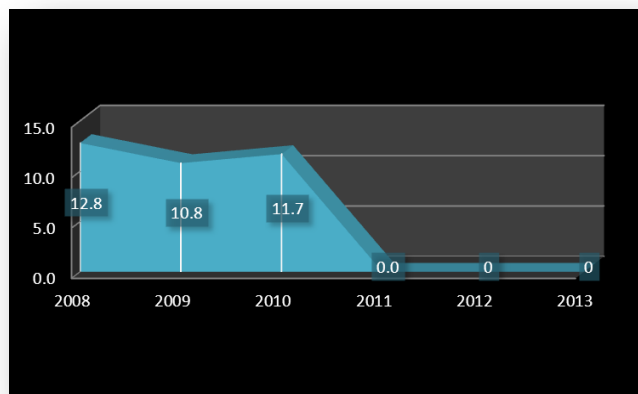
Main obstacles for the development of inland transport

53. The Government reported that rail traffic both for freight and passengers should increase. Two initiatives were started: the National commitment for rail freight (ENFF) and the Focus on the Railways.



54. Real GDP expanded by 5.8 per cent in the first quarter of 2011. Year on year growth was recorded in the majority of sectors, with the highest growth recorded in finance (24 per cent), transport (9.1 per cent) and manufacturing (8.6 per cent).

Figure 17. Georgia GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

55. The country reported the following new policy measures for inland transport:
- (a.) Georgia became a party of the AETR agreement in 19 May 2011;
 - (b.) Georgia actively participates in the EC TRACECA Programme projects.

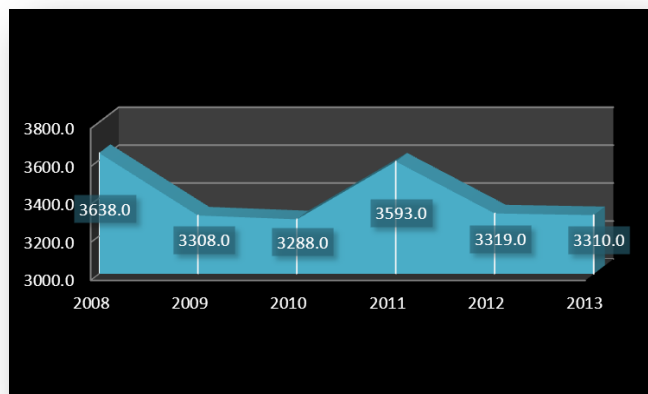
Main obstacles for the development of inland transport

No data available.



56. The Economist Intelligence Unit forecasts that the German economy will return to recession in late 2011 and early 2012. It expects a contraction of 0.2 per cent on average in 2012, followed by growth of 1 per cent in 2013 and a pick-up to an average of 1.5 per cent in 2014-2016.

Figure 18. Germany GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

57. The Federal Government's Freight Transport and Logistics Action Plan is a strategic approach containing concrete measures for the future direction of freight transport. Initial works on a new Federal Transport Infrastructure Plan 2015 have already begun.

- (a.) Use of ITS within a 300 Million Euro project "Road-

Telematics 2015";

(b.) Enhancing transport safety and reducing the number of deaths in road accidents by 40 per cent up to 2020 (road safety program 2011);

(c.) National Hydrogen and Fuel Cell Technology Innovation Programme (NIP), as fossil energy sources are becoming increasingly scarce and expensive;

(d.) Between 2009 and 2011, the Federal Government provided a total of 500 million Euros from the Second Economic Stimulus Package to fund the development and commercialization of electric mobility;

(e.) In 2009, the Federal Government announced that it would develop a mobility and fuel strategy which would not favour a specific technology, but would in fact include all modes of transport;

(f.) Reducing traffic noise significantly by the "National Noise Protection Program" until 2020;

(g.) Further development of the national plan to enhance bicycle traffic from 2013 to 2020.

Main obstacles for the development of inland transport

No data available



58. The Economist Intelligence Unit forecasts that severe austerity measures will reduce the government deficit from 10.6 per cent of GDP in 2010 to 9.5 per cent in 2011 and substantially to 6.2 per cent in 2012 and 4.2 per cent in 2013, helped by debt relief. GDP is forecast to decline steeply for the fourth year running in 2012, by 7.5 per cent. It is then expected to fall by 1 per cent in 2013 and to grow slightly over 2014-2016.

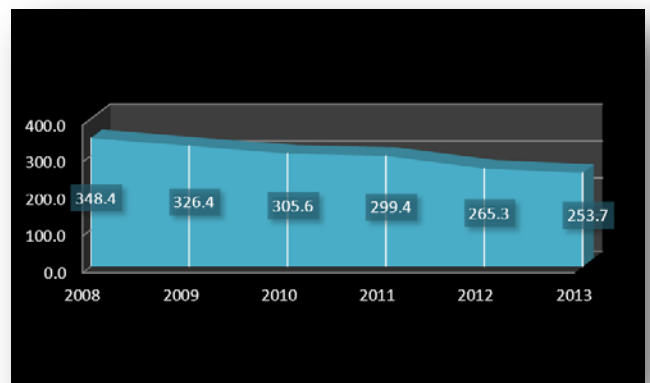
Successful transport policy measures

59. The country reported efforts to promote the liberalization of the road transport market and the simplification of business access procedures as successful transport policy measures. In addition, the Government reported the restructuring and modernization / consolidation of railway and urban transport organizations / agencies. The configuration of the institutional framework towards the deployment of ITS and the progression, enhancement and promotion of the TEN-T networks and of the intermodal transport were also reported as additional successful measures.

Main obstacles for the development of inland transport

60. The country reported that the consequences of the economic crisis, as well as the dramatic increase in the recession of the economy have had a strong impact on the country's development and consequently affected the development of transport in direct and indirect ways.

Figure 19. Greece GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Hungary

61. The Economist Intelligence Unit expects a return to deficits from 2012 in Hungary, averaging 3 per cent of GDP per year from 2012-2016. The expected euro zone recession in 2012 will have a negative impact on Hungarian growth, with real GDP expanding by only 0.6 per cent. The Economist Intelligence Unit forecasts an average annual real GDP growth of 2.4 per cent per year from 2013-2016.

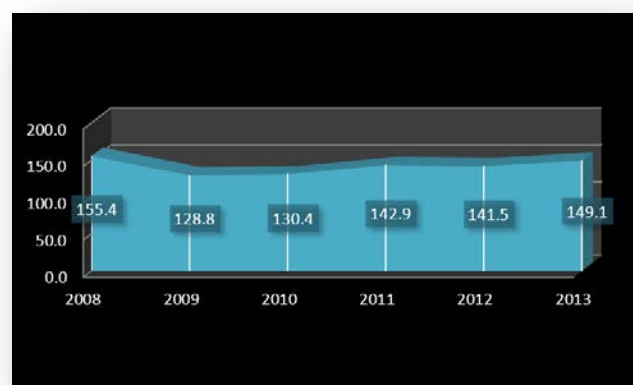
Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

62. The country reported that economic conditions have hindered the development of transport in Hungary. The economy started to recover after the downturn, but some investments were postponed or slowed down because of decreased incomes. At the same time, there are still problems with crediting processes and high, volatile currency rates.

Figure 20. Hungary GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Iceland

63. Based on the Economist Intelligence Unit analysis, after recording large surpluses of over 5 per cent of GDP in 2006-2007, public finances deteriorated massively in 2008-2009. The general government accounts showed a deficit of 10 per cent of GDP in 2009. Fiscal consolidation has seen the deficit fall to 7.8 per cent of GDP in 2010 with an estimated outturn of 6.2 per cent for 2011. However, the Economist Intelligence Unit expects little further progress in 2012-2013 owing to an economic slowdown and the government's reluctance to risk further unpopularity as the 2013 election approaches.
64. Gross government debt rose from 28 per cent of GDP at the end of 2007 to 111 per cent at the end of June 2011, owing largely to the recapitalisation of the failed commercial banks and the Central Bank of Iceland. Net debt remains more manageable, at an estimated 42 per cent of GDP.

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Ireland

65. The Economist Intelligence Unit forecasts that the budget deficit will fall from an estimated 10.7 per cent of GDP in 2011 to 8-8.5 per cent in 2013 and about 2 per cent in 2016, assuming that public debt restructuring will be agreed upon after the European Union / International Monetary Fund lending facility expires in 2013. A gradual pickup is forecasted from 2013, with GDP growth accelerating to 2-2.5 per cent in 2014-2016.

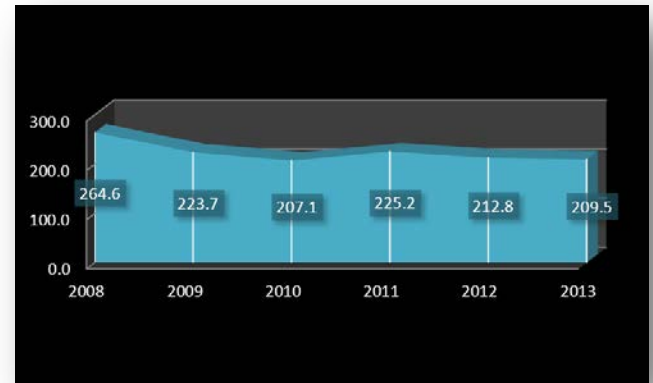
Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Figure 21. Ireland GDP estimates and forecast (2008-2013)

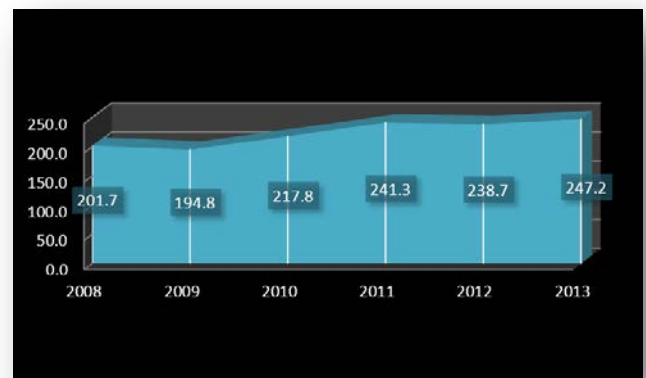


Source: The Economist Intelligence Unit, UNECE

Israel

66. The Economist Intelligence Unit expects economic growth to weaken to 2.8 per cent in 2012, as consumption growth slows to a more sustainable pace and export demand weakens sharply. Growth will pick up again in 2014-2016, averaging a robust 5 per cent a year. Monetary policy will be loose in 2012, as inflationary pressures weaken and global demand growth slackens, tightening only slightly thereafter.

Figure 22. Israel GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

67. The Government of Israel reported the following successful transport policy measures:

- The multi-year investment programme for the rail system and inter-urban roads;
- The "Green" Taxation on vehicles resulting in lower tax rates on low pollution level vehicles;
- The liberal civil aviation policy as it concerns increased frequency, improved level of service and achievement of lower prices;
- The development of the high occupancy lane to Tel Aviv (Fast Lane) - additional lane on Road 1 to Tel Aviv - with a dynamic toll for private car usage, free parking and shuttle service; and
- The port service price reform and the elimination of cross subsidies.

Main obstacles for the development of inland transport

68. The country reported congestion in urban areas and the decreasing share of public transport as the main obstacles for inland transport development. The increasing investments in rail and road systems and the deregulation of the public transport sector were reported as measures to be taken.

Italy

69. The Economist Intelligence Unit forecasts that the budget deficit will fall from an estimated 4 per cent of GDP in 2011, to 1 per cent in 2013. The Unit also expects that weakening demand from trade partners and fiscal austerity at home will lead to a decline of 0.6 per cent in GDP in 2012, followed by near stagnation in 2013 and growth of just over 1 per cent from 2014 to 2016.

Successful transport policy measures

70. The Government reported the development of the high speed railway network and the increase of road network capacity as successful transport policy measures.

Main obstacles for the development of inland transport

71. The completion of the motorway network upgrade was reported as one of the main obstacles for the development of inland transport. The last upgrade of the network took place in 2000. In addition, the lack of subsidies for local public transport was also reported as obstacle.

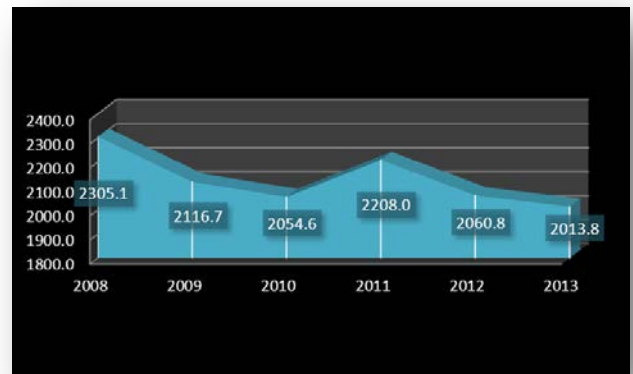
Kazakhstan

72. According to the Economist Intelligence Unit, the state budget deficit is estimated to have narrowed to 2.3 per cent of GDP in 2011, from 2.5 per cent of GDP in 2010. The deficit will remain unchanged in 2012, before narrowing from 2013 due to improving economic conditions. Over the forecast period, an improvement in domestic conditions, as well as investment in the energy sector will drive GDP growth. However, annual average growth, forecast at 5.6 per cent in 2012-2016, will be slower than in 2000-2007. The current account is expected to maintain a surplus in 2012-2016 and the trade surplus will be boosted by rising oil production volumes. This will offset the continuing deficits in other components of the current account.

Successful transport policy measures

No data available.

Figure 23. Italy GDP estimates and forecast (2008-2013)

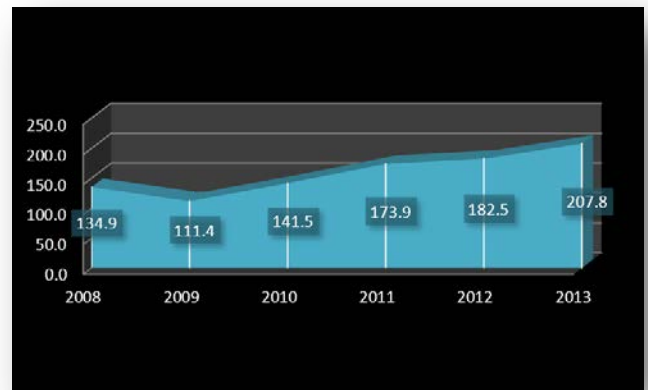


Source: The Economist Intelligence Unit, UNECE

Main obstacles for the development of inland transport

No data available.

Figure 24. Kazakhstan GDP estimates and forecast (2008-2013)

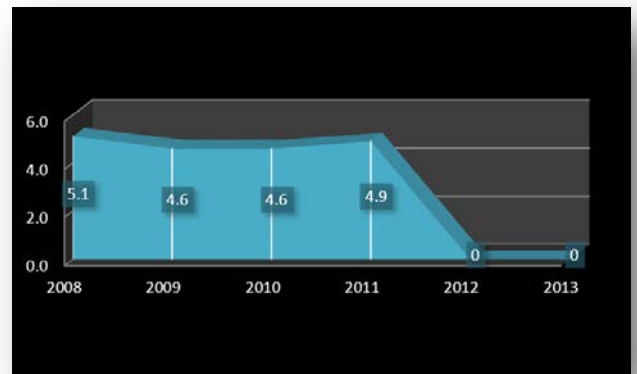


Source: The Economist Intelligence Unit, UNECE

Kyrgyzstan

73. Difficulties with revenue-raising and high levels of social spending will produce large budget deficits in 2012-2013. After a strong recovery in 2011, the Economist Intelligence Unit expects real GDP growth to slow to an average of 6.5 per cent in 2012-2013, assuming no renewed political instability and that troubled Western economies do not trigger another global recession. It also expects the current-account deficit to narrow from 8.8 per cent of GDP in 2011 to just over 6 per cent per year in 2012-2013.

Figure 25. Kyrgyzstan GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Latvia

74. Real GDP growth resumed in the second half of 2010 and the economy rebounded strongly in 2011. The Economist Intelligence Unit estimates real GDP growth at 4.6 per cent in 2011 and forecasts that it will slow to 3 per cent in 2012. The recession led to a sharp decline in inflation, and consumer prices fell by 1.1 per cent in 2010. Consumer price growth is estimated to have risen to 4.4 per cent on average in 2011 as global oil and food prices increased, although it is expected to fall in 2012-2013.

Successful transport policy measures

75. The country reported the transport infrastructure works completed in 2009 – 2010:

- (a.) The Opening of the “Rīgas Ekspresis” container-train route Riga-Moscow;
- (b.) The achievement since 2009, of the “Verona Declaration on Road Safety” target set;
- (c.) The promotion of containers transit to the Russian Federation, China, Belarus and Ukraine.

76. In 2010, the reconstruction of Liepāja and Riga ports hinterland road connections, the change of rail turnout transmission in the Eastern-Western rail corridor, as well as the improvement of TEN road network were completed.

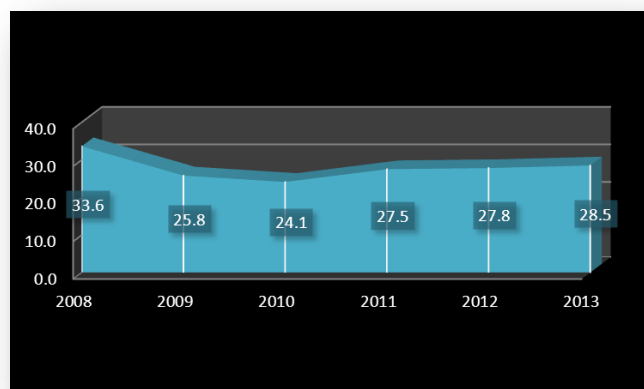
77. In addition, the public transport system was restructured, resulting in lower operating costs.

Main obstacles for the development of inland transport

78. It was reported that the financial resources available for infrastructure projects are insufficient.

79. In order to efficiently use transportation infrastructure and ensure more efficient transit transport via Latvia, the international freight logistics and port information system (SKLOIS) is being implemented.

Figure 26. Latvia GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

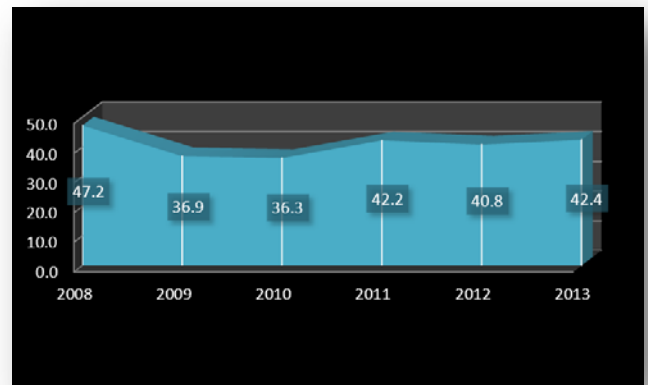
Liechtenstein

No data available.

Lithuania

80. The Economist Intelligence Unit estimates a recovery in real GDP growth to 6 per cent in 2011. However, growth is forecasted to slow sharply in 2012, to 2.5 per cent, owing to a worsening external environment. It also forecasts average annual growth of 3.3 per cent in 2012-2016. The current-account deficit will widen further from 2012 as continued growth in domestic demand pulls in imports, reaching 4.2 per cent of GDP by 2016.

Figure 27. Lithuania GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

81. The Government reported that in a period of 11 months in 2011 the following results were achieved:

- (a.) Reduction in the number of fatalities on the roads by 8 per cent compared to the same period in 2010;
- (b.) Reduction in the number of people injured in traffic accidents by 8 per cent, compared to the same period in 2010 ;
- (c.) Three hundred forty fewer accidents compared to the same period in 2010 happen during 2011.

82. In 2011, the Lithuanian Government successfully implemented the shuttle container train project “Saule”. The first 41 containers train with computer-aided equipment departed from China and reached Lithuania within 13 days. The remaining distance to Belgium was reached in six days.

Main obstacles for the development of inland transport

83. The following main obstacles were reported:

- (a.) Insufficiently developed network of hinterland connections (road and railways) to the Port of Klaipeda;
- (b.) Undeveloped infrastructure connections within the EU member States and third countries;
- (c.) Lack of efficient public cooperation among different modes of transport that would facilitate the development of multimodal transportation services;
- (d.) Insufficiently developed inland waterways transport sector;
- (e.) Inadequate railway infrastructure for freight transportation in the North - South section;
- (f.) Border crossing issues - Lithuania is EU’s border with the Russian Federation and Belarus, yet there is no infrastructure that would connect the country with other non-EU countries.

Luxembourg

84. GDP growth is expected to slow from 2.7 per cent in 2010 to 2 per cent in 2011. In 2012, the Economist Intelligence Unit estimates that Luxembourg will experience a moderate recession with GDP declining by 0.4 per cent, followed by a modest recovery to 0.7 per cent growth in 2013.

Figure 28. Luxembourg GDP estimates and forecast (2008-2013)

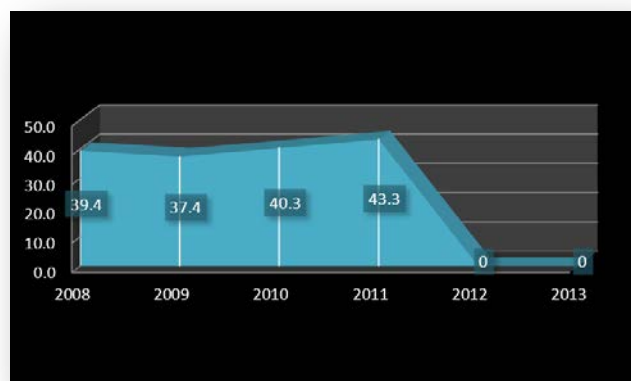
85. The 2012 budget removes the 0.8 per cent 2011 "crisis" supplement on income tax and expects a low 0.7 per cent deficit for the year. Results for the first nine months of 2011 were favourable.

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

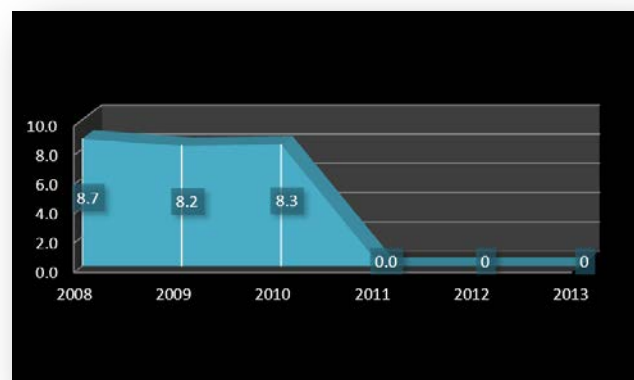


Source: The Economist Intelligence Unit, UNECE

Malta

86. GDP growth slowed to 0.7 per cent quarter on quarter in the first quarter of 2011, mainly on the back of weaker domestic demand, driven mostly by lower investment and a drawdown of inventories. Private and public consumption recovered. The contribution of net exports remained largely positive. Inflation remained high, while unemployment eased further.

Figure 29. Malta GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Monaco

Successful transport policy measures

87. The country reported the creation of an underground road infrastructure that will better serve the inter-districts by reducing transit traffic inside the districts as a successful transport policy measure. In addition, the qualitative and quantitative improvement of transport by bus and the implementation of a single ticket pricing (single ticket at 1 euro) were successful measures. Monaco cooperates with the French SNCF for rail services. The country is planning to purchase five TER (Train Express Regional) for 50 million Euros to set at SNCF disposal with the main objective to increase rail traffic.

Main obstacles for the development of inland transport

88. The country reported the limited size of the country's territory as well as its lanes together with the congested undergrounds as the obstacle for the development of inland transport. To date, there is only one coastal railway line.

Montenegro

89. The central government budget deficit in the first half of 2011 amounted to 52.4 million Euros (US\$73.4m), down from 54.1 million Euros in the first quarter, but up sharply from 11.5million Euros a year earlier. The government expected the 2011 budget deficit to amount to 3.3 per cent of GDP—up from 2.4 per cent, which was projected in the budget.

90. Real GDP grew by 2.1 per cent in the first half of 2011, according to the Ministry of Finance, which provided no further details. Industrial output picked up in August, rising by 18 per cent year on year, after a sharp contraction in the first half of the year. Tourism rebounded from January-July 2011, with revenue rising by 7.9 per cent year on year. Inflation accelerated to 3.6 per cent year on year in August (from 3 per cent in July).

Successful transport policy measures

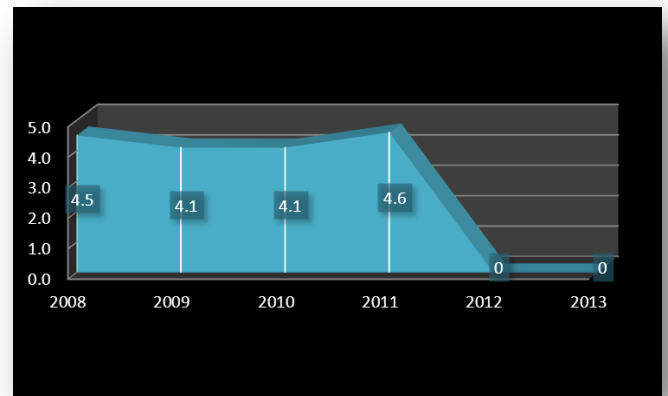
No data available.

Main obstacles for the development of inland transport

No data available.

Netherlands

Figure 30. Montenegro GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Figure 31. The Netherlands GDP estimates and forecast (2008-2013)

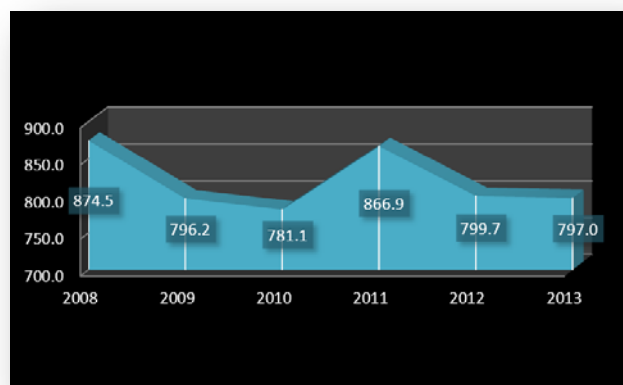
91. Based on Economist Intelligence Unit estimates, the budget deficit is expected to fall below 3 per cent of GDP from 2013. Public debt will rise to around 70 per cent of GDP, before falling back. The Economist Intelligence Unit has revised its GDP growth forecast down to 1.4 per cent (from 1.6 per cent) in 2011 and expects a deeper recession in 2012 (-0.6 per cent), followed by sluggish average growth of 1.5 per cent in 2013-2016.

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.



Source: The Economist Intelligence Unit, UNECE



92. The 2011 revised national budget does not exceed the 4 per cent rule, and equates to a moderate fiscal tightening of 0.3 per cent of mainland trend GDP. The impact of the 2012 budget on mainland GDP is estimated to be broadly neutral. The Economist Intelligence Unit estimates that the general government budget surplus should be around 13 per cent in 2011. The government has pledged to keep the overall tax burden constant. It has earmarked future public spending for road and rail infrastructure programmes and an expansion of healthcare.

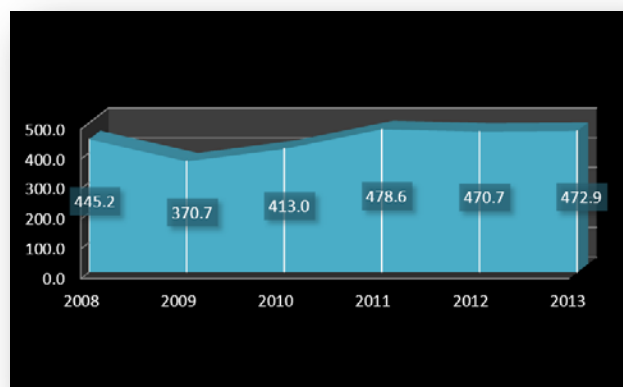
Successful transport policy measures

93. The country reported a considerable increase in infrastructure investments (road and rail) for 2011.

Main obstacles for the development of inland transport

94. Main obstacles reported included the weather conditions where the cold winter was followed by heavy rainfall causing damages to transport infrastructure. (ie. frost heave, flood and landslides).

Figure 32. Norway GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE



95. The Economist Intelligence Unit estimates real GDP growth at 3.8 per cent in 2011, the same as in 2010, sustained by strong domestic demand. Inflation is estimated to average 4.1 per cent in 2011, owing to higher indirect taxes,

strong domestic demand and high commodity prices. Annual inflation will fall thereafter, fluctuating around 2.6-3.3 per cent, which is within the authorities' target range.

Successful transport policy measures

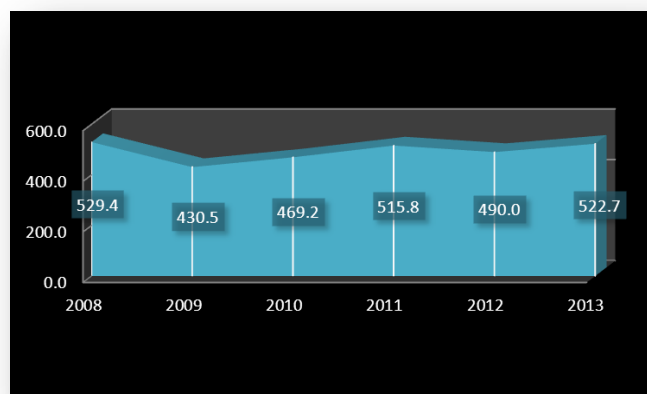
96. The country reported the introduction of an electronic toll collection system on public motorways, selected expressways and national roads for heavy goods vehicles and buses on 1 July 2011.
97. The Law on public mass transport entered into force in March 2011. The Law regulates the obligations of various public bodies responsible for the organization of public transport.

98. The government has taken several actions to increase road safety. Among these actions was the Program of Abolishment of Dangerous Points on Roads (PADPR). During the duration of PADPR programme (2005-2010), 397 investments were completed.

Main obstacles for the development of inland transport

99. The country reported that the economic crisis decreased the income of the National Road Fund, therefore investments in road infrastructure were reduced. Also, the country reported that the amount of financial resources for infrastructure development in the next European Multiannual Financial Perspective 2014-2020 is uncertain.
100. The current level of road safety in Poland is still at unsatisfactory levels. The government reported that new infrastructure (motorways, expressways and by-passes) is being built and awareness campaigns targeted for different groups of road users are being launched to increase road safety.

Figure 33. Poland GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Portugal

101. The Economist Intelligence Unit forecasts that the deficit will gradually fall to below 3 per cent of GDP in 2016, but the process will be slowed by recession and subject to implementation risk. According to Economist Intelligence Unit estimates, the economy is expected to be extremely weak, weighed down by the effect of severe fiscal consolidation on all domestic demand components. Inflation is expected to peak at 3.7 per cent in 2011 and to be more subdued in 2012-2016.

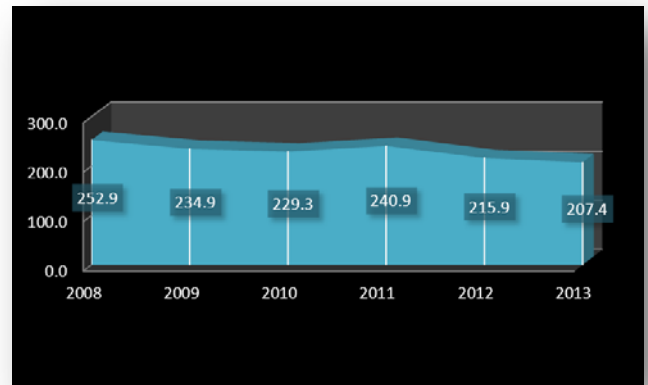
Figure 34. Portugal GDP estimates and forecast (2008-2013)

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.



Source: The Economist Intelligence Unit, UNECE

Republic of Moldova

102. The Economist Intelligence Unit forecasts a contraction to 1.1 per cent of GDP by 2013. It also estimates real GDP growth at 5.5 per cent in 2011. It is forecasted to slow to 3.5 per cent in 2012, as prospects in the euro zone have significantly worsened.

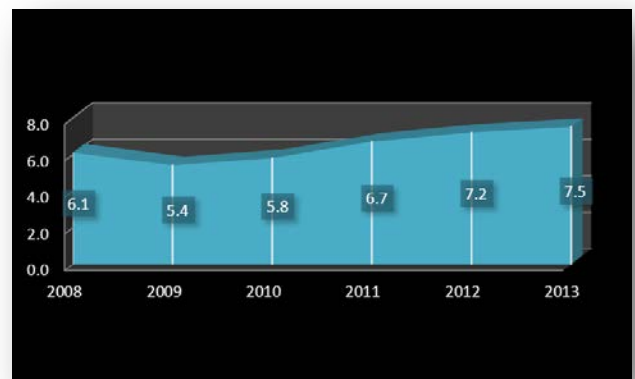
Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Figure 35. Republic of Moldova GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Romania

103. The Economist Intelligence Unit forecasts a real GDP growth of 1.5 per cent in 2012, after an estimated growth of 2 per cent in 2011, reflecting a contraction in the euro zone and the impact of fiscal austerity on domestic demand. Growth is forecasted to average 4.2 per cent from 2013-2016.

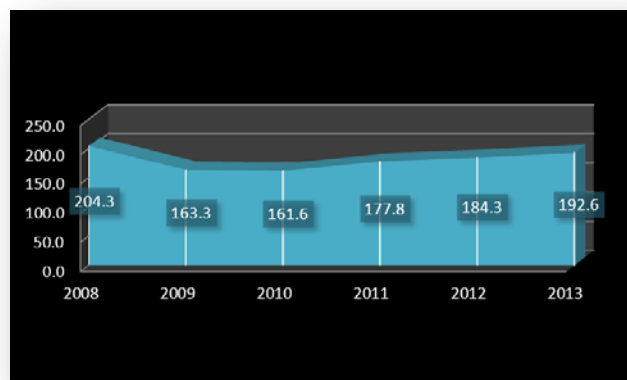
Successful transport policy measures

104. The government reported the following transport policy measures and actions that have been implemented:

- Spatial Planning of the National Territory (Law no. 363/2006);
- Sectoral Operational Programme on Transport 2007-2013 (SOP-T); and
- TEN-T revision, in the framework of the new regulation promoted by the European Commission;

- (d.) Directive 2010/40/UE (ITS Directive) was transposed in national legislation until 27 February 2012;
- (e.) The Intermodal policy in Romania is under implementation, being approved by the Order of the Minister of Transport and Infrastructure no. 457/2011 (20.06.2011).
- (f.) Directive 33/2009/CE on the promotion of clean and energy-efficient road transport vehicles was transposed into Romanian legislation by the Government Emergency Ordinance no 40/2011 on the promotion of clean and energy-efficient road transport vehicles.

Figure 36. Romania GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Main obstacles for the development of inland transport

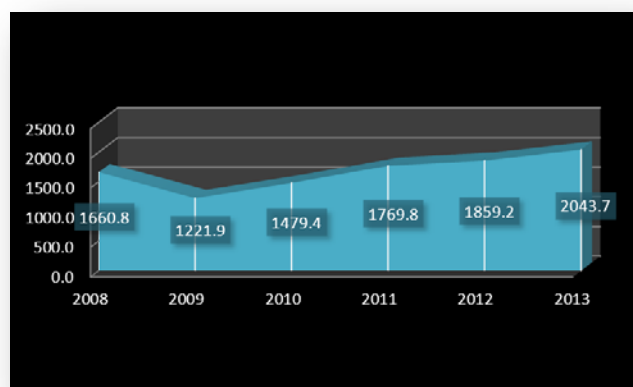
105. The main problems occurring in transport development are:

- (a.) The provision of financing and technical documents;
- (b.) The preparation of contracts for new works and their execution within the completion date; and
- (c.) Obstacles in intermodal transport: (i). development of ports' rail hinterland connections, (ii). short distance rail transport is less efficient compared to road transport, (iii) absence of awareness and information on the benefits of intermodal transport.

Russian Federation

106. Based on Economist Intelligence Unit analysis, contrary to previous plans, the latest fiscal plans suggest that the overall budget will remain in deficit from 2012-2014. The budget's reliance on oil has greatly increased: from 3.6 per cent of GDP in 2007, the non-oil budget deficit widened to 13.9 per cent of GDP in 2009 and narrowed only marginally in 2010, to 12.8 per cent.

Figure 37. Russian Federation GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

107. The measures that are being implemented under the Transport Strategy are:

- (a.) The formulation of a single transport space in the Russian Federation on the basis of balanced development and efficient transport infrastructure;
- (b.) Accessibility, competitiveness and quality of transportation services for passengers and cargo; and
- (c.) Integration into the global transportation system and realization of transit potential of the country;

Main obstacles for the development of inland transport

108. Given the large area of the country and the large fluctuations in population density the following issues are

considered as main obstacles for the development of inland transport:

- (a.) territorial heterogeneity of transport infrastructure development (long-term factor);
- (b.) the need to further improve the availability of transportation services for the population (long-term factor);
- (c.) the insufficient use of transit transport; and
- (d.) the need to ensure transport safety.

San Marino

No data available

Serbia

109. The Economist Intelligence Unit forecasts a steady, modest real appreciation of the dinar in 2012-2016, following sharp real depreciation in 2009-2010. It also forecasts a modest real GDP growth, of 2.4 per cent, in 2012, following an estimated growth of 2.3 per cent in 2011, as euro zone growth turns negative.

Successful transport policy measures

110. The country reported the strategy for railway, road, inland waterway, air and intermodal transport development in the Republic of Serbia from 2008 until 2015 as a successful transport policy measure.

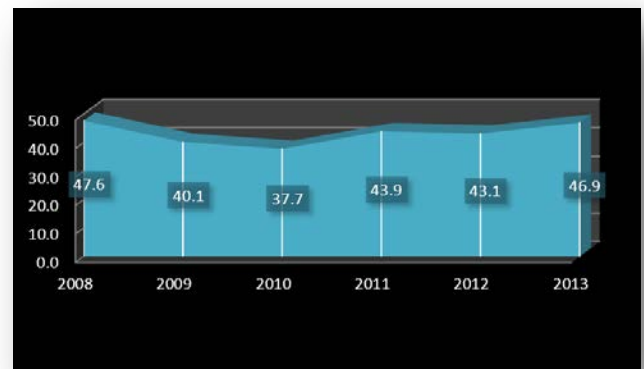
Main obstacles for the development of inland transport

111. Passenger traffic on Serbian railways show a downward trend in transport volume, primarily due to the lack of rolling stock, as well as to poor infrastructure conditions.
112. The main problems in inland waterway are the lack of full use of water transport freight and the reduced turnover of cargo in the domestic market (including import and export of goods).
113. Insufficient funds for modernization and maintenance of the road network, obsolete vehicle fleet and lack of ITS on roads significantly affect the development of road transport in the Republic of Serbia.

Slovak Republic

114. The consolidated government deficit is unlikely to shrink to less than 3 per cent of GDP until 2013. Real GDP

Figure 38. Serbia GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

growth is forecast to average 3.2 per cent per year in 2012-2016, which is subdued compared with the pre-crisis years. The Economist Intelligence Unit forecasts that in 2012-2016, Slovakia will register average annual current account deficits of 3.4 per cent as the trade balance gradually shifts to deficit.

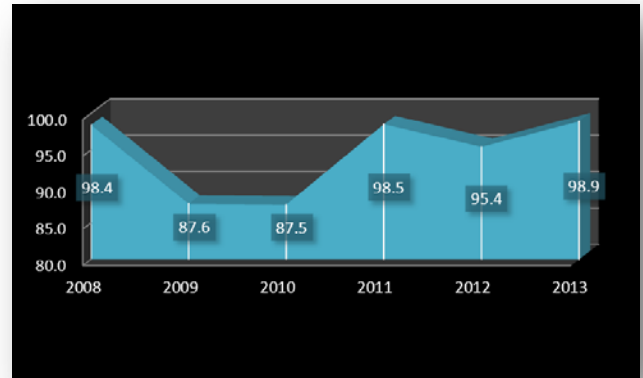
Successful transport policy measures

115. The Slovak Republic is implementing the Operational Programme for Transport from 2007 – 2013.

116. In January 2011, a new decree on railway infrastructure charges entered into force. Infrastructure charges are based on costs that are directly related to train movement.

117. In the Slovak Republic, the cooperation between bus and rail passenger transport is not fully developed and an act on Public Transport is under preparation. Public tendering in public transport will be introduced gradually in line with the Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road. Since 4 March 2012, a new rail transport undertaking (RegioJet) has started providing rail public passenger service on the Bratislava – Dunajská Streda – Komárno line so now the incumbent operator is not covering the entire rail passenger market in Slovakia.

Figure 39. Slovak Republic GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Main obstacles for the development of inland transport

118. The country reported the unfinished motorway connection between the western and eastern part of Slovakia as a main obstacle for development. Reconstruction of main railway lines integrated into AGC and AGCT agreements in Slovakia is gradually progressing. The construction costs were higher than assumed due to higher EU standards (technical standards for interoperability - TSI).

119. In addition, there is a need for improvement of connection between bus and rail passenger transport, since the shift from individual to public transport it is a main obstacle. An act on public transport is under preparation in which the basic principles and tasks for both transport modes will be introduced. The high charges for railway infrastructure usage and the obsolete railway freight rolling stock were also reported.



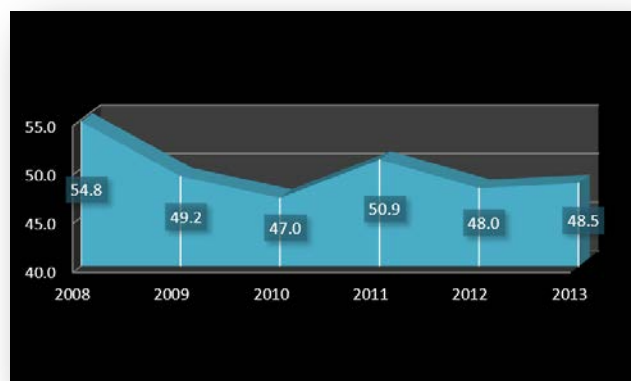
120. The Economist Intelligence Unit forecasts that the general budget deficit will remain large in 2012, at 4.4 per cent of GDP. From 2013, it is forecasted to shrink to within 3 per cent of GDP, as required by the European Union. It also expects real GDP growth to slow from an estimated 1.2 per cent in 2011, to 0.5 per cent in 2012.

Successful transport policy measures

Figure 40. Slovenia GDP estimates and forecast (2008-2013)

121. In 2008, the Republic of Slovenia introduced a vignette system for charging motorway passenger's cars and motorbikes. Due to that measure, a substantive shift from state roads to motorway roads has been achieved, which has decreased the number of fatal road accidents.

122. In 2010, the Republic of Slovenia implemented cross financing of transport infrastructure. The development of rail infrastructure is being financed by funds collected from road pricing and port concession.



Source: The Economist Intelligence Unit, UNECE

Main obstacles for the development of inland transport

123. The country's public transport faced a decrease in the number of passengers moved. The country is currently implementing the national project on integrated public passenger transport, which will be finished by 2014.

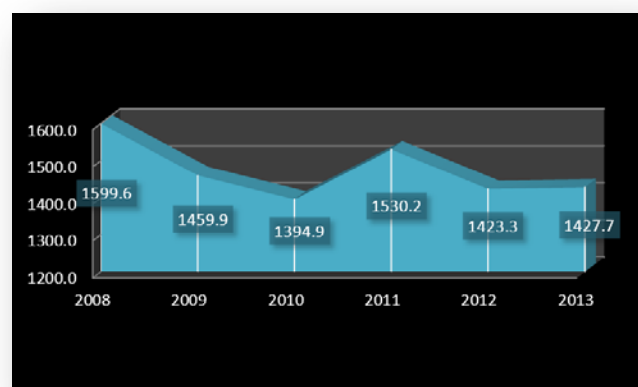
124. The old rail infrastructure is not meeting the needs of modern rail services. Therefore, Slovenia is facing a modal shift in favour of road freight transport.

125. Due to the economic crisis, substantial decreases in the transport market took place. Slovenia is taking measures to improve its competitiveness on the market by improving the transport infrastructure and logistics.



126. The Economist Intelligence Unit believes that the general government budget deficit will narrow only gradually from 9.3 per cent of GDP in 2010, to below 3 per cent of GDP by 2016, with the government missing its target of 3 per cent of GDP by 2013. However throughout 2012-2016, the Unit's forecast is for slow improvement, with an average annual real GDP growth of 1.2 per cent.

Figure 41. Spain GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

127. The country reported the following as main successful transport policy measures:

(a.) Strategic Plan for Transport Infrastructure (Plan Estratégico de Infraestructuras del Transporte) 2005-2020 (PEIT).

www.fomento.es/MFOM/LANG_CASTELLANO/ESPECIALES/PEIT/;

(b.) Savings Plan for Energy Efficiency and Reducing Emissions in Transport and Housing (Plan de ahorro, eficiencia energética y reducción de emisiones en el transporte y la vivienda) (2011).

www.fomento.gob.es/NR/rdonlyres/3A6E2F43-5449-45ED-B6DC-3C39E9E6AA30/101081/11040601P3PlanAhorroenergetico.pdf;

- (c.) Strategic Plan for the Promotion of Rail Freight in Spain (Plan Estratégico para el Impulso del Transporte Ferroviario de Mercancías en España.) www.fomento.gob.es/NR/rdonlyres/E9229D97-59DB-44BE-BA47-AC93A45C4C72/98696/10091401PEITMF.pdf;
- (d.) Plan of Guidelines for Bus Transportation (Plan de líneas de actuación para el transporte en autobús) (PLATA 2010-2014). www.fomento.gob.es/MFOM/LANG_CASTELLANO/DIRECCIONES_GENERALES/TRANSPORTE_POR_CARRETERA/Documentos/Plata/;
- (e.) Strategic Plan of Action for the Transport of Goods by Road (Plan Estratégico de actuación para el transporte de mercancías por carretera) (PETRA II); www.fomento.gob.es/MFOM/LANG_CASTELLANO/DIRECCIONES_GENERALES/TRANSPORTE_POR_CARRETERA/Documentos/PETRA_2/.

Sweden

128. The Economist Intelligence Unit expects that following a growth of 5.4 per cent in 2010, the economy is estimated to grow by 3.3 per cent in 2011, but with a sharp slowdown at the mid-year mark, leading to a growth of only 0.3 per cent in 2012. A gradual pick-up to around 2 per cent is expected by 2016. Inflation (EU harmonized measure) is estimated to average 1.7 per cent in 2011.

Successful transport policy measures

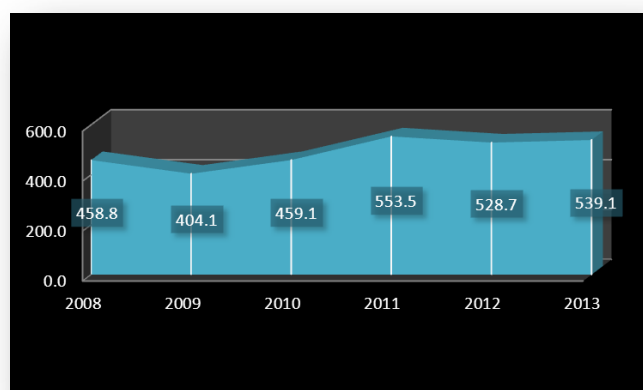
129. Swedish transport policy and policy measures based on the “vision zero” concept designed to reduce the number of severe accidents related to road traffic have been very successful.

Main obstacles for the development of inland transport

130. Large parts of railway infrastructure are worn down partly because of neglected maintenance and neglected re-investments, as well as increased railway traffic volumes.

Switzerland

Figure 42. Sweden GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Figure 43. Switzerland GDP estimates and forecast (2008-2013)

131. The Economist Intelligence Unit expects GDP growth to slow sharply from an estimated average of 1.9 per cent in 2011. Recession is forecasted for late 2011 and early 2012. The Unit expects a gradual recovery in 2013-2016, but net exports will be particularly weak.

Successful transport policy measures

132. The government reported its policy in heavy goods transport as a successful transport policy. This policy relies on three pillars: the Heavy Vehicle Fee, new Railway lines across the Alps and railway reform to make rail more competitive. It also depends on three main factors: the distance driven, the admissible weight of the vehicle and the emissions.

133. The policy in urban transport (agglomerations) was also reported as a successful measure. The creation of an infrastructure fund to co-finance infrastructure projects in urban areas was the main pillar of this policy.

Main obstacles for the development of inland transport

134. Congestion was reported as the main obstacle. The above mentioned measures help alleviate the problem of the congestion.



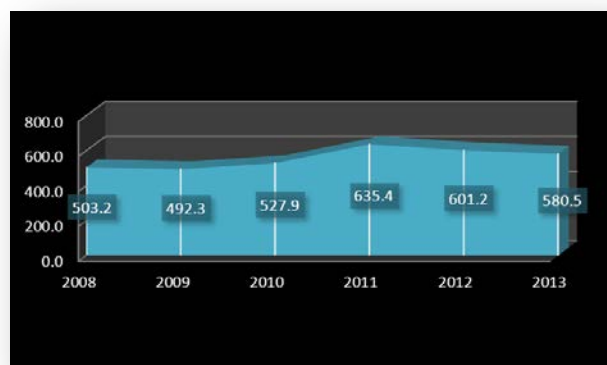
135. Real GDP rose by 6.9 per cent year on year from January-June 2011, with growth picking up from 6.5 per cent in the first quarter to 7.3 per cent in the second quarter. Industrial output growth has been patchy, owing to lower aluminium production, but picked up rapidly in June. Inflation rose to an average of 13.3 per cent from January-June.

Successful transport policy measures

136. The Government of the Republic of Tajikistan developed and approved the State programme for the development of the country's transport system through 2025. Also, the government developed 37 projects totalling USD\$1.1billion to attract new investments. In accordance with the rehabilitation programme, a network of roads is being constructed and will link the Capital to other regions of the country. This network includes:

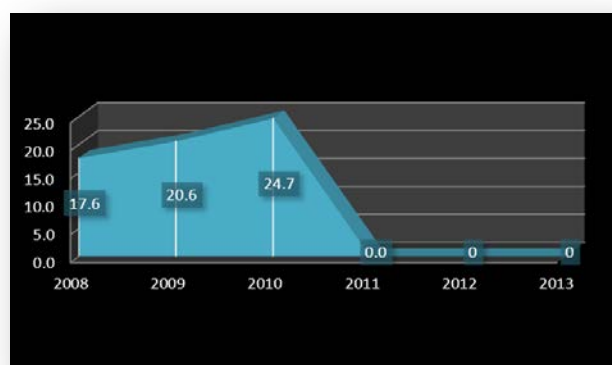
- (a.) China's exit to the highway Karakarumskoe;
- (b.) Dushanbe-Khujand-Aini-border of Uzbekistan;
- (c.) Dushanbe-Kurgan-Tube-Nizhny Panj-border Afghanistan; and
- (d.) Dushanbe-Vahdat-Jirgatol-border Kyrgyzstan.

137. The Republic of Tajikistan government is also paying special attention to the development of railway



Source: The Economist Intelligence Unit, UNECE

Figure 44. Tajikistan GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

transportation. Work is underway to bring the level up to the requirements of international standards for the Kurgan-Tube-Kulyab railway line and its infrastructure.

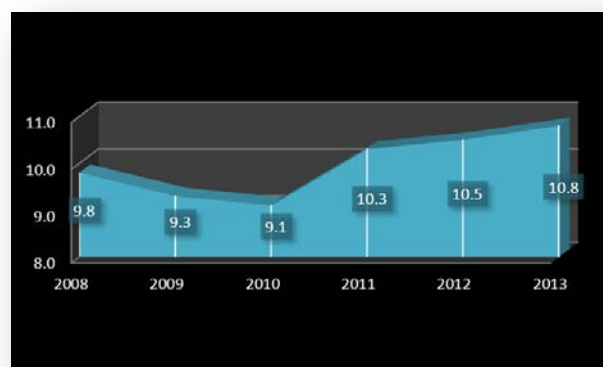
Main obstacles for the development of inland transport

138. The country reported the following as main development obstacles:
- (a.) unofficial fees at border crossings and long vehicle waiting times (especially in Kyrgyzstan and Uzbekistan);
 - (b.) unwarranted delays in the appointment of trucks in the Republic of Tajikistan;
 - (c.) the lack of road freight terminals that meet international standards requirements; and
 - (d.) the lack of a mechanism to develop logistics and logistics centres.

The former Yugoslav Republic of Macedonia

139. The Economist Intelligence Unit estimates a real GDP growth of 3.1 per cent in 2011, slowing to 2.8 per cent in 2012, reflecting the euro zone recession forecast. Stronger growth is forecasted for 2013, supported by government consumption and recovering domestic demand. The budget deficit will remain large in 2011-2013, but the government is committed to narrowing it, supported by a 390 million (US\$550 million) precautionary credit line (PCL) with the IMF.

Figure 45. The former Yugoslav Republic of Macedonia GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

Turkey

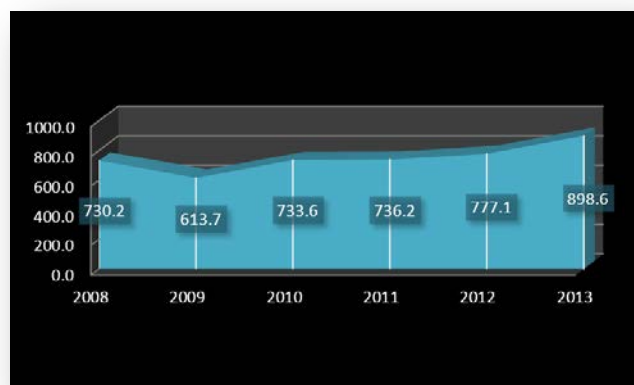
140. Following a sharp rise in 2009, the budget deficit is expected to ease from 3.6 per cent of GDP in 2010 to 1.8 per cent in 2011, and stabilise around 2 per cent in 2012-2016. The Economist Intelligence Unit expects GDP growth to slow from an estimated 7.5 per cent in 2011 to 3.5 per cent in 2012, before picking up to 5-5.5 per cent per year 2013 through 2016.

Successful transport policy measures

Figure 46. Turkey GDP estimates and forecast (2008-2013)

141. The government of Turkey reported the following legislative and administrative improvements in road transport as successful transport policy measures:

- (a.) International and domestic operations have been licensed on the basis of the new road transport law and legal regulations enacted in line with EU requirements;
- (b.) Necessary administrative and institutional measures have been taken for the training requirements on the Certificate of Professional Competence (CPC);
- (c.) A Ministerial Decree on road safety was published on 19 March 2009 for the gradual reduction of older motor vehicles from circulation;
- (d.) As of October 2011, there are 193 fixed and 73 mobile inspection stations, operating in 81 provinces;
- (e.) A comprehensive investment plan has been prepared for increasing the number of control stations up to 160 by 2020;
- (f.) Turkey became a Contracting Party to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) as of 22 February 2010;
- (g.) Regarding the implementation of digital tachograph, on 4 January 2010, the Ministry of Transport was appointed as the National Authority for the implementation of digital tachograph in Turkey.



Source: The Economist Intelligence Unit, UNECE

142. For Railway Transport the country reported the following:

- (a.) Introduction of high speed train services by constructing High Speed Railway Lines;
- (b.) Increasing the average speed of trains by upgrading the existing lines and fleet;
- (c.) Making Turkish railways more efficient and productive by taking appropriate reform measures such as other railways in the world;
- (d.) Enabling private sector to operate in railways; and
- (e.) Progress in the construction of large intercontinental infrastructure projects such as Marmaray Project, which connects Europe and Asia through a tube tunnel.

Main obstacles for the development of inland transport

143. The country reported that financing transport infrastructure projects is quite difficult due to budget constraints. Public Private Partnership (PPP) schemes are considered important options.

144. In addition, the old railway network in large geographical areas, the physical inadequacies and the low geometrical standards of the network were reported as basic obstacles.

Turkmenistan

Figure 47. Turkmenistan GDP estimates and forecast (2008-2013)

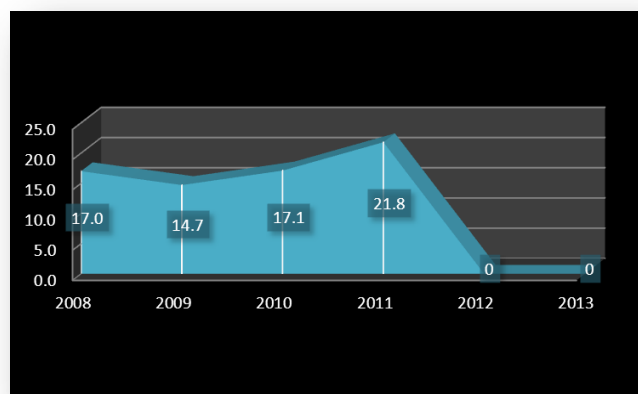
145. The Economist Intelligence Unit estimates real GDP growth of 11 per cent in 2011, and forecasts growth of 6 per cent in 2012 and 7 per cent in 2013, as gas exports rise more slowly and investment picks up. It also estimates a return to surplus on the current account in 2011, after recording deficits in 2009 and 2010.

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

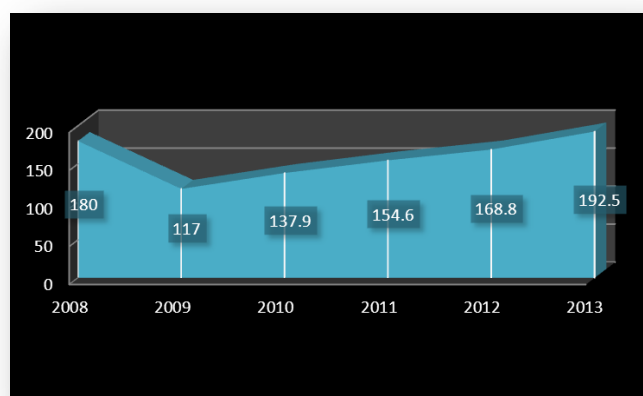


Source: The Economist Intelligence Unit, UNECE



146. Real GDP growth is estimated at 4.2 per cent in 2011, supported by domestic demand and export growth. In 2012, it is forecast to dip to 3.4 per cent owing to weaker export demand growth, before strengthening from 2013-2016.

Figure 48. Ukraine GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

147. The development and approval by the Cabinet of Ministers of Ukraine of the Transport Strategy of Ukraine until 2020 was reported as a successful transport policy measure, as well as:

- (a.) Drafting of the State Target Economic Program on development of road and urban electric transport from 2012 - 2015 ;
- (b.) New edition of the State Target Program for reforming railway transport;
- (c.) A draft Law on Amendments to the Law of Ukraine "On Railway Transport", aimed at improving the management of rail systems; and
- (d.) In the second half of 2010, the opening of the rail-road bridge over the Dnieper River.

Main obstacles for the development of inland transport

148. The main problems hindering the development of passenger transport in 2011 were:

- (a.) Operations of public bus routes in a large number of "small" carriers;
- (b.) The presence of "illegal carriers" who under the guise of non-scheduled operations run parallel to regular bus routes;
- (c.) The presence of large numbers of passengers who are entitled to free travel on buses; and
- (d.) One of the most acute problems in the railways is the physical deterioration of locomotives and the inconsistency of its technical and economic characteristics with the modern requirements.

United Kingdom of Great Britain and Northern Ireland

149. After contracting by a cumulative 7.1 per cent over five quarters during 2008-2009, real GDP grew by 1.8 per cent in 2010. Weak growth of 0.7-0.8 per cent is forecast for 2011-2012. The Economist Intelligence Unit assigns a 50 per cent risk to a contraction of GDP in 2012. The economy expanded by a quarterly 0.5 per cent from July-September.

Successful transport policy measures

No data available.

Main obstacles for the development of inland transport

No data available.

United States of America

150. The Economist Intelligence Unit forecasts that Federal debt (net of debt holdings by government agencies) will rise from just below 38 per cent of GDP in 2008 to around 73 per cent in 2014, before stabilising. The Economist expects the deficit to fall from 8.7 per cent of GDP in 2011 to 7.8 per cent of GDP in 2012, before dropping back to 3.4 per cent by 2016.

Successful transport policy measures

No data available.

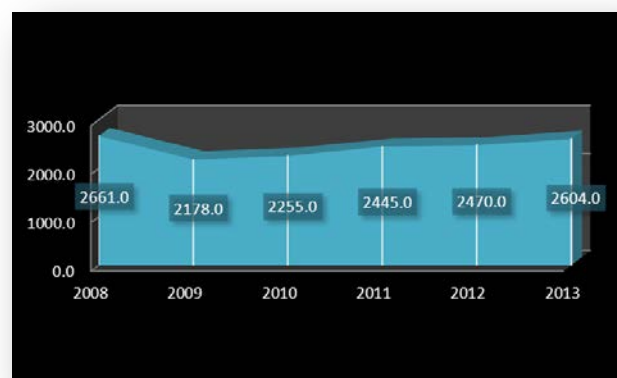
Main obstacles for the development of inland transport

No data available.

Uzbekistan

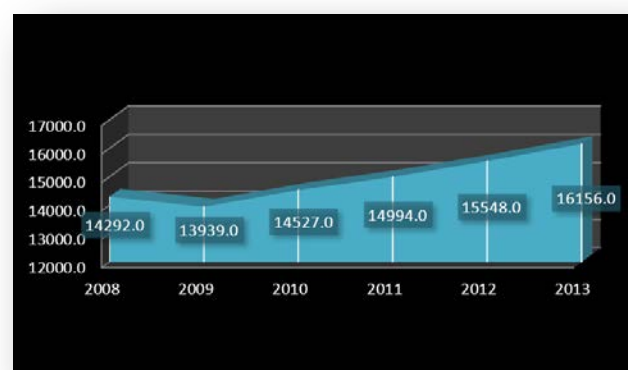
151. Real GDP growth will remain robust from 2012-2013, owing to broadly favourable export prices. The Economist Intelligence Unit expects that the current account will reach more than 15 per cent of GDP in 2011, before falling to around 10 per cent of GDP by 2013, as global prices of Uzbek commodity exports decline.

Figure 49. United Kingdom GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

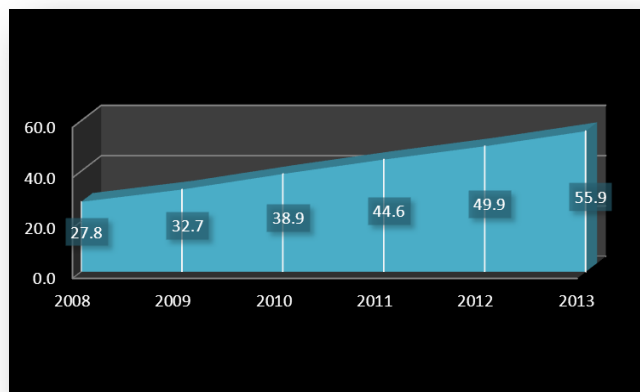
Figure 50. United States of America GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

Successful transport policy measures

Figure 51. Uzbekistan GDP estimates and forecast (2008-2013)



Source: The Economist Intelligence Unit, UNECE

152. The country reported that during 2011, the Republic of Uzbekistan adopted a number of legal documents concerning road transport:

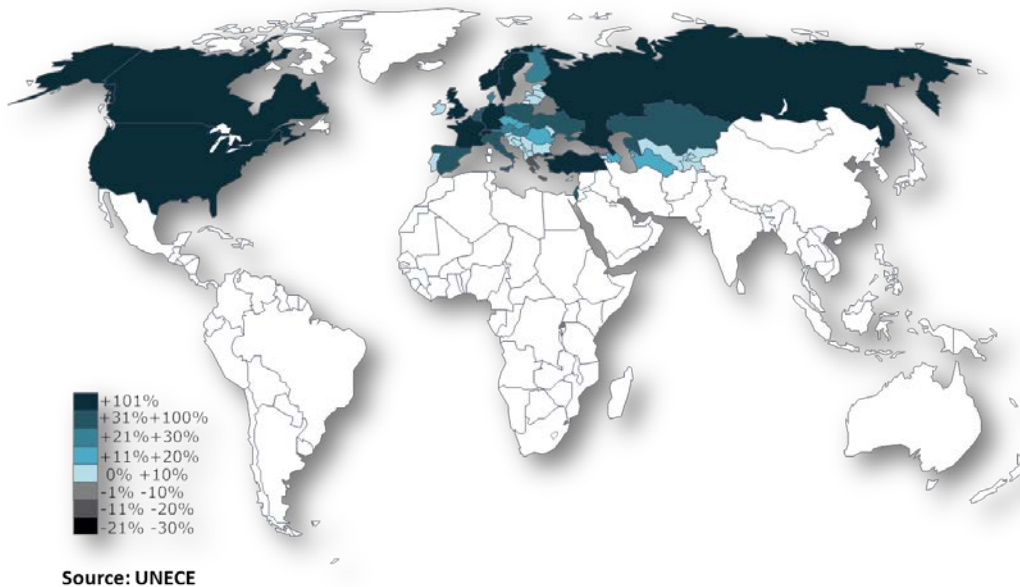
- (a.) The road traffic safety Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated 16 February 2011. № 35 "On Approval of Regulations for the carriage of dangerous goods by road in the Republic of Uzbekistan";
- (b.) The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan of May 18, 2011. № 139 "On measures to regulate the activities of the taxi line." The resolution approved the "Regulations on the common signs of a taxi and for linear requirements for the organization of their work";
- (c.) The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan of May 25, 2011, № 149 "On improvement of the order of conveyance, storage facilities and parking areas of vehicles, arrested for violation of law"; and
- (d.) Since 2007 the Association "Toshshahartranshizmat" («Тошшахартрансхизмат») conducted a large-scale renewal of the bus fleet with the acquisition of comfortable, new buses. There were invested of more than \$120.0 million in order to:
 - Purchase the news buses that would improve public transportation services;
 - Upgrade parking stations and; and
 - Improve the technical services of rolling stock for passenger transport in Tashkent.

Main obstacles for the development of inland transport

No data available.

Statistics - Trends

Figure 52. GDP percentage change from 2009 – 2011 in UNECE member States

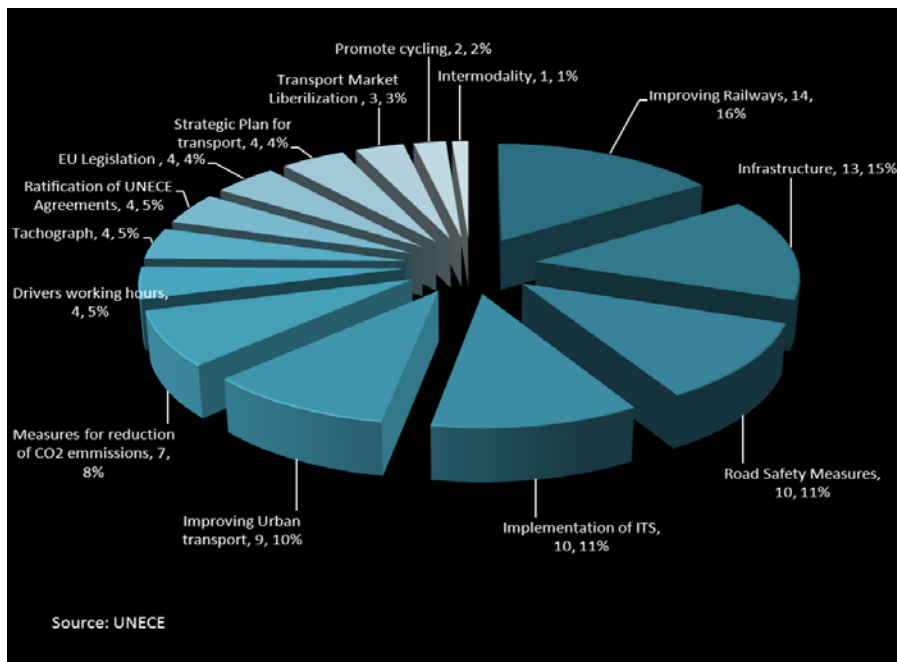


Transport Trend

The majority (84%) of ECE countries it is forecasted that will have an increase of their GDP in 2011 comparing to 2009

153. Seventeen per cent of UNECE member States (10 countries) are forecasted to have a positive percentage change of their GDP from 2009 to 2011 (more than 100 per cent increase). Fourteen per cent of UNECE member states are forecasted to have a GDP increase comparing to 2009 between 30 per cent and 100 per cent. 84 per cent of UNECE member States (47 countries) are forecasted to have positive increase of their GDP of less than 30 per cent. Only 2 countries are forecasted to have a negative percentage change of their GDP comparing to 2009.

Figure 53. Successful Transport Policy measures in UNECE member States

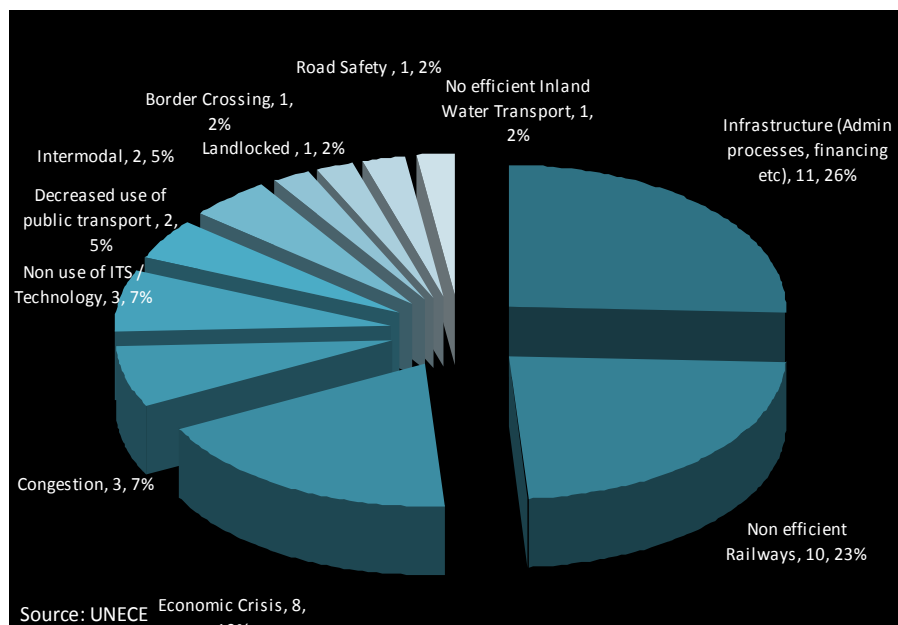


Transport Trend

Improving railways, infrastructure, road safety and the implementation of Intelligent Transport Systems were the most popular successful transport policy measures that UNECE member States implemented in 2011

154. **Successful transport policy measures:** For the successful transport policy measures question, 14.16 per cent of the countries replied about the successful implementation of railway improvement measures, 13.15 per cent measures on infrastructure improvement measures and 10.11 per cent on road safety and ITS measures.

Figure 54. Main obstacles for the development of Inland Transport in ECE member States



Transport Trend

Administration processes and financing schemes for infrastructure development, railways efficiency and the economic crisis were the main obstacles for the development of inland transport in 2011

155. **Main obstacles for the development of inland transport:** The UNECE member States that participated in our questionnaire considered the following to be significant obstacles for the development of inland transport:
- a. 11.26 per cent indicated infrastructure development as a main obstacle. The main problems that countries are facing with infrastructure include the bureaucratic administration processes that cause delays on the development of the projects and the difficulties regarding financing infrastructure projects.
 - b. 10.23 per cent of the countries indicated inefficient railways are a major obstacle for the development of inland transport. Railways appear to be at the top of the agenda of UNECE member States regarding both successful transport policy measures and the main obstacles for the development of inland transport.
 - c. The economic crisis (8.19 per cent) comes in third as a main obstacle for the development of inland transport.



Road
Transport

CHAPTER 2. Road Transport

Introduction

156. In almost all responding countries following the drop in 2009, road transport grew in 2010, sometimes by more than 5%. The forecasts for 2011, in general, show there is an increase although not as significant as in 2010. Concerning road freight transport, the issue of TIR Carnets can be a reliable barometer: in 2011 the number of TIR Carnets issued exceeded three million, having increased by 38% compared to 2009 and more than 9% compared to 2010.
157. The UNECE countries - particularly in Europe – generally have a robust public transport system. In our questionnaire we asked about the cost of a daily ticket for a bus, tram or underground. Based on the responses we could analyze the bus prices. It appears that the most expensive daily bus ticket is in Norway at \$11,90 and the cheapest one is in Tajikistan at \$0,25. The average cost of daily bus ticket in the UNECE region is \$3,53.
158. UNECE does substantive work in the area of road transport, primarily through the Working Party on Road Transport (SC.1) which promotes the development and the facilitation of international transport of goods and passengers by road through harmonization and simplification of the rules and requirements.
159. The following illustrate UNECE member States responses to the Transport Division's questionnaire on the evolution of traffic volumes on road transport in their country in 2011 and discussion of prospects for the next few years. Since our questionnaire was not a structured data collection questionnaire but rather it was based on the respondent's opinions, the data illustrated by the countries are not homogeneous in their presentation and analysis.

Albania

160. Albania reported that in 2010, the arrivals of foreigners by various means of transport (in thousands) were :
- (a.) 2,418 Total;
 (b.) 1,956 by inland transport.
161. The Albanian Government reported the following statistics on forecasted number of passengers and passenger-km and maritime transport.

Forecasted number of passengers and passenger-km until 2030 (road transport)			
YEAR	2010	2015	2030
Passengers per day	210 070	412 007	743 891
Passenger km per day	21 735 767	51 946	91 312 021
Average trips length in km	103	126	123
Tons (Thousand per year)	14 207	19 607	35 930
Average trips length in km	117	117	120

Maritime Transport						
2010	Durres			Vlore		
	Total	Enter	Exit	Total	Enter	Exit
Passengers	834 040	407 775	426 265	165 229	77 002	88 227
Vehicles	198 807	108 857	89 950	32 932	16 781	16 151
Trucks	52 767	28 004	24 763	9 743	5 237	4 506
Trailer	15 695	8 127	7 568	761	408	353
2010	Sarande			Shengjin		
	Total	Enter	Exit	Total	Enter	Exit
Passengers	116 069	58 182	57 887	4 467	2 741	1 726
Vehicles	604	299	305	1,253	798	455
Trucks						
Trailer						

Armenia

162. The Armenian Government reported that in 2010, 10,577,500 tonnes of freight were shipped, out of which 6,196,000 tonnes were shipped by road.

163. In the year 2010, 251,600,000 passengers were carried, out of which:

- (a.) 206,000,000 by road;
- (b.) 18,000,000 by taxi; and
- (c.) 4,900,000 by trolley-bus.

164. The prospect for the upcoming few years is approximately a 10 per cent of increase in the overall traffic volume.

Belgium

165. The Belgium Government highlighted the evolution of transport since 1985. The country reported that traffic has experienced a period of increase particularly on highways between 1997 and 1999, although there was a reduction from 1999 to 2005 followed by an increase in 2006 - 2007, and finally a decline in 2008 as a result of the economic crisis. The years 2009 - 2010 are marked by a slight increase in traffic on the motorways.

Synthesis of the evolution of automatic counts 1985 – 2010 (annual increase in per cent based on 1985 = 100 per cent)

Year	Daily average intensity (6h - 22h)	
	highways	Other roads
Base	23 800 car/jour = 100 per cent	6 500 car/jour = 100 per cent
2003 – 2004	+0.80	+1.50
2004 – 2005	+0.70	-0.50
2005 – 2006	+3.30	+0.60
2006 – 2007	+3.00	+0.97
2007 – 2008	-0.60	-1.90
2008 - 2009	+0.90	+0.50
2009 - 2010	+0.66	-0.11

Bosnia & Herzegovina

166. Bosnia and Herzegovina provided data on the transport of goods, passengers and passengers transported in urban-suburban areas.

Transport of Goods			
	Tons of goods transported, in thousands		Change in per cent
	2010	2011	11/10
Road	3 584	3 603	0.5

Transport of Passengers			
	Passengers transported, in thousands		Change in per cent
	2010	2011	11/10
Road	21 270	21 996	3.4

Transport of Passengers/Urban-Suburban transport			
	Passengers transported, in thousands		Change in per cent
	2010	2011	11/10
	123 447	119.079	-3.5

Source: The data are provided from the Agency for Statistics of B&H web site. Bosnia and Herzegovina-Agency for Statistics of B&H. 19 December 2011, First Release, Road, railway, air and postal transport third quarter 2011.

Bulgaria

167. The Bulgarian Government reported that the transport performance of road freight transport for 2011 on a quarterly basis was:

- (a.) I quarter – 4,678.2 million tonnes / km;
- (b.) II quarter – 5,161.0 million tonnes / km.

168. Compared to 2010 data for Quarter I and II, a significant increase in of road freight transport performance of **33 per cent and 13 per cent** respectively was observed. Despite the economic crisis, a tendency for growth of transport performance in 2011 exists. In the next few years, the Bulgaria Government expects a steady increase of traffic volumes for all transport modes.

* Our conclusions are based on the road freight transport because until now quarterly-based data is missing for the other modes of transport. But the tendency in percentage change of turnover indices in transport approves the steady increase of traffic volumes for all modes of transport.

** The data is received from the National Statistical Institute of Republic of Bulgaria and it is available on www.nsi.bg

Canada

169. Based on available information for the first 9 months of 2011, Canada’s traffic volumes carried by various modes (road, rail, marine and air) continued to increase in 2010-2011 after a significant slowdown linked to the economic recession of 2008-2009.

170. Trucking is the main mode carrying cargo between Canada and the United States (U.S.). After a decrease of 15 per cent in 2009, truck movements at the Canada/U.S. border increased by 7.6 per cent in 2010, but reached almost no growth after the first 9 months of 2011, reflecting the slow recovery of the U.S. economy. Volumes of truck freight at the border are expected to grow at a lower rate overall in 2011 as compared to 2010.

Croatia

171. At present, Croatian data on traffic volumes on various modes of transport in 2011 are available from the period January to September 2011. For the different transport modes (road, railway, air, maritime, inland waterway and pipeline transport) for that period, road transport represented 42.9 per cent of passenger transport and 59.1 per cent of goods transport.
172. Based on data available, evolution of traffic volumes compared to the same period in 2010 is as follows: The total number of transported passengers decreased by 14.36 per cent, while the total transport of goods carried increased by 0.17 per cent. The number of transported passengers decreased by 7.02 per cent, while the volume of transported goods increased by 3.22 per cent.

Source: Internal calculations using the data provided from the Central Bureau of Statistics web site. Republic of Croatia – Central Bureau of Statistics. 14 November 2011 First Release According to the Publishing Programme 2011 – Transport and Communications. www.dzs.hr

Czech Republic

173. The Czech Government reported that the total number of passengers, as well as the transport performance of the public transport increased in 2010, but not significantly. The number of passengers increased by 0.4 per cent and the performance of public transport by 2.4 per cent. In 2009, the increase of passengers was 4 per cent. The increase of public transport performance in passenger-kilometres was of 14 per cent.
174. The total volume of goods carried in freight transport dropped moderately in 2010 by 1.5 per cent. On the contrary, total volume of transport expressed in tonne-kilometres increased by 13 per cent. The levels of 2010 data are similar to those from 2008.
175. For the coming years, 2012–2014, passenger transport in passengers / km is not expected to increase significantly. The forecasted increase is for 3 to 4 per cent. Freight transport is forecasted to increase for next three years to 6 to 7 per cent.

Denmark

176. The Government of Denmark reported that in 2011 there was a small growth between 0 and 1 per cent in personal car traffic but a larger growth in lorry traffic of 3-5 per cent as compared to 2010.
177. Concerning public transport (bus and rail) an expected growth between 0 and 3 per cent is expected in 2011 compared to 2010.

Finland

178. The Finish Government reported that a stable and very modest growth of road transport will take place in 2011. More information can be found via the following link: www.liikennevirasto.fi/julkaisut/pdf3/liti2011-06tietilasto2010web.pdf.

France

179. The French Government reported that road freight had a decrease of 2.6 per cent during the 1st trimester of 2011 and of 0.9 per cent in the 2nd trimester of 2011.

Georgia

180. The Georgian Government reported that road transport for the period January–September 2010 was 20.7 million/tonnes and 20.9 million/tonnes for the same period in 2011.

Germany

181. The German Government provided data on transportation of goods and passengers for the last three years, including forecasts for 2011 and 2014.

Transportation of Goods									
	Million tonnes					Change p.a. in per cent			
	2008	2009	2010	2011	2014	09/08	10/09	11/10	14/11
Road	3 438.4	3 094.2	3 129.8	3 230.1	3 490.8	-10.0	1.1	3.2	2.6
Rail	371.3	312.1	355,4	367.4	397.9	-15.9	13.9	3.4	2.7
IWT	245.7	203.9	232,5	237.2	245.4	-17.0	14.0	2.0	1.1
Total ¹	4 150.0	3 702.0	3 810.2	3 927.9	4 227.9	-10.8	2.9	3.1	2.5

Transportation of Passengers									
	Million Persons					Change p.a. in per cent			
	2008	2009	2010	2011	2014	09/08	10/09	11/10	14/11
Cars etc ²	56 120	57 128	57 083	57 586	58 692	1.8	-0.1	0.9	0.6
Public Tr.	9 104	9 261	9 268	9 340	9 504	1.7	0.1	0.8	0.6
Total ³	67 738	68 916	68 914	69 546	70 905	1.7	0.0	0.9	0.6

Greece

182. The Greek Government provided data on urban rail transport (Athens Metro) and urban transport in general. More specifically:

183. For urban rail transport (Athens Metro):
 (a.) 2010 : 185.4 million passenger;
 (b.) 2011 prediction: 182.7 million passengers: - 1.5 per cent / gradual increase anticipated, due to the construction and operation of new lines and stations.

184. For all means of urban transport :
 (a.) 2010 : 626.7 million passengers
 (b.) 2011 : prediction : 552.6 million passengers : - 11.8 per cent

Hungary

185. The Hungarian Government reported there was a significant decrease in transport volumes during the last 2-3 years due to the economic crisis. The transport volumes have not still reached pre-economic crisis levels.

	Road	Total
2011. Q1-Q2 (million tonnes)	87 071	126 019

¹ Including pipelines and air transport.

² including individual cars, motorbikes and taxis

³ including air transport and rail

In percent of 2010. Q1-Q2 data	95.03 per cent	96.27 per cent
In percent of 2009. Q1-Q2 data	83.64 per cent	90.18 per cent
In percent of 2008. Q1-Q2 data	73.82 per cent	78.35 per cent

Source: Hungarian Central Statistical Office

Israel

186. The Government of Israel reported that inland transport will have an increase of 3 to 4 per cent in 2011. In the coming years the levels of increase will be similar (between 3 to 4 per cent).

Italy

187. The Italian Government reported that after a dramatic reduction of the road transport section in 2009 of about 10 per cent, 2011 seems to show an increase in both passengers and goods. It seems goods transport suffered the consequences of the economic crisis while the transport of passengers recorded an increase.

Latvia

188. Latvia reported that cargo transport by road in 2010 increased to 46.8 million tons compared to 37.8 million in 2009. However, it has not yet reached pre-economic crisis levels (54.5 million tons in 2008). It is expected that the growth of National and neighbouring countries' economies will positively influence cargo transport by road in 2011.

Lithuania

189. The contribution of the transport sector to the total Lithuanian GDP is estimated at 11.5 per cent in 2011. 7.3 per cent of total number of persons employed in 2011 were working in the transport sector. According to preliminary forecast, cargo volumes (by all modes of transport) will increase by 7.1 per cent in 2011, as compared to 2010.

190. Volumes of passenger transportation by all modes of transport in 2011 increased by 0.6 per cent compared to 2010. Nevertheless, forecasts show trends of slightly less increases in 2011.

Norway

191. Norway reported that it expects a 1 per cent increase in road traffic and a slightly higher increase for heavy vehicles.

Poland

192. According to the 2010 road census, the average daily traffic on national roads of Poland was 9,888 vehicles/day. On E-roads the traffic was 16,667 vehicles/day. From 2005 to 2010, average daily traffic on Polish roads increased by 22 per cent. The volume of goods transported by road in 2010 increased by 5.6 per cent compared to 2009 (791.8 million tonnes). Further development depends on the economic situation and the impact of rising fuel prices.

Romania

193. The Romania Government reported that road transport faced an increase in both goods volume (tonnes) and goods transport performance (tonnes – km) in the first semester of 2011 compared to the first semester of 2010. Goods transport increased by 7.5 per cent. Road transport registered the most significant share, 55.6 per cent of the freight transport in total. Based on Romanian forecasts, freight road transport is expected to register a negative evolution in 2012, followed by a slight increase in 2013.

Concerning goods transport performance, in the first semester of 2011, freight road transport increased by 8.0 per cent compared to the same period in 2010.



194. In the first semester of 2011, compared to the first semester of 2010, the number of passengers for road transport registered a positive evolution, increasing by 2.0 per cent. Nevertheless the road passenger transport was dominant, with a share of 76.9 per cent from total passenger transport. Passenger performance (passengers-km) also registered positive evolutions in the first semester of 2011 compared to the first semester of the previous year, growing by 0.1 per cent.

195. According to estimates by the Federal State Statistics Service of the Russian Federation in January-October 2011, turnover amounted to 4,059.9 billion tons of transportation-miles from which 181.0 billion was by road. Freight turnover during the first 10 months of 2011 increased compared to the same period in 2010 to 3.5 per cent.

196. The passenger transport in January-October 2011 amounted to 374.7 billion-passenger-kilometres from which 113.7 billion is attributed to private cars. The share of road transport in January-October 2011 accounted for over 37.6 per cent of total passenger traffic of all types of public transport.

197. Compared to the same period in 2010, passenger transportation in the Russian Federation increased by 3.7 per cent. In accordance with the socio-economic development of the Russian Federation for 2011-2013 produced by the Ministry of Economic Development, an increase in turnover of 6.5 per cent per year is expected.



198. The Serbian Government reported that road transport is dominated by passenger traffic (without public/city transport) representing 73.1 per cent of the total number of passenger-kilometres (pkm).



199. The Slovak Government mentioned that road transport faced a decrease in the amount of transported cargo (tonnes) in 2010 as compared to 2009.



200. In Slovenia in 2010, road traffic amounted to 17.8 billion vehicle-kilometres, almost the same as in 2009. Of that, 15.6 billion vehicle-kilometres were by passenger cars (87.7 per cent) and 1.9 billion vehicle-kilometres (10.6 per cent) by trucks. A lower share of vehicle-kilometres was made by buses and motorcycles (both 0.8 per cent).



201. The Spanish Government reported that 2010's levels were on average maintained for 2011. Average daily light vehicle, which can be used as an indicator of private passenger transport, decreased by 0.5 per cent. In public transport, the number of passengers in urban transportation has grown by 0.9 per cent. Long distance travel had an increase of 1.3 per cent. Coach transportation has only grown by 0.3 per cent, meanwhile other modes are inconsequential.

Sweden

202. Road transport dominates the transportation of goods but the number of tonnes transported during 2011 decreased by 6 per cent.

203. The development of transport, especially for cargo, will depend mostly on the evolution of GDP. A slight increase for 2012 and a higher increase in 2013 is forecasted.

204. The Swedish Government reported that during 2010, traffic volumes increased significantly compared to 2009, mainly as a result of a rapid economic recovery. Economic growth continued in 2011, but appears to be slowing down. This will most likely mean that there will be a limited growth in traffic volumes during the next few years.

Switzerland

205. The recent evolution of traffic volumes in Switzerland is as follows: 1960 - 2009:

- (a.) Transport volume in passenger transport road (Mio. Person-km) was 18,590 in 1960 and 89,930 in 2009 meaning a 484 per cent increase;
- (b.) Freight transport road (Mio. Tkm) was 2,152 in 1960 and 16,734 in 2009 meaning a 778 per cent increase.

206. Distances travelled by freight transport on Switzerland's roads will increase between 36 and 87 per cent by 2020. These figures include the effects of the Heavy Vehicle Fee (HVF) and the 40-tonne limit, as well as other ancillary programmes. This forecasted growth is much higher than the linear trend (+27 per cent). Growth in tonnage distance (tkm) by rail will be between 48 per cent and 96 per cent.

Tajikistan

207. During the first 10 months of 2011, all modes of transport moved 51,726.6 thousand tonnes of cargo equating to a 3 per cent increase compared to the same period in 2010.

	January – October 2011	Compared to 2010 per cent	Compared to 2009 per cent
Freight Total (in tons)	51 726.6	103.0	109.0
By road	51 724.8	103.0	109.0
Rail	7 715.0	90.0	71.5
Car	44 009.8	105.7	122.4
Air	1.6	96.0	104.9

Turkey

208. The Government of Turkey reported the following statistics on freight and passengers transportation:

	Road (percentage (%))
Freight	80.63
Passenger	89.59

2023 Targets	Freight	60
	Passenger	72

209. Concerning traffic volume on state roads in 2011, initial studies show that traffic volume is likely to increase approximately 6-9 per cent compared to 2010 traffic volume.

Ukraine

210. In 2011, 4,250 million passengers travelled on Ukrainian roads. The forecast for 2015 is that this figure will reach 4,876 million passengers. Consumer demand for transportation by road in quantitative terms was fully satisfied.

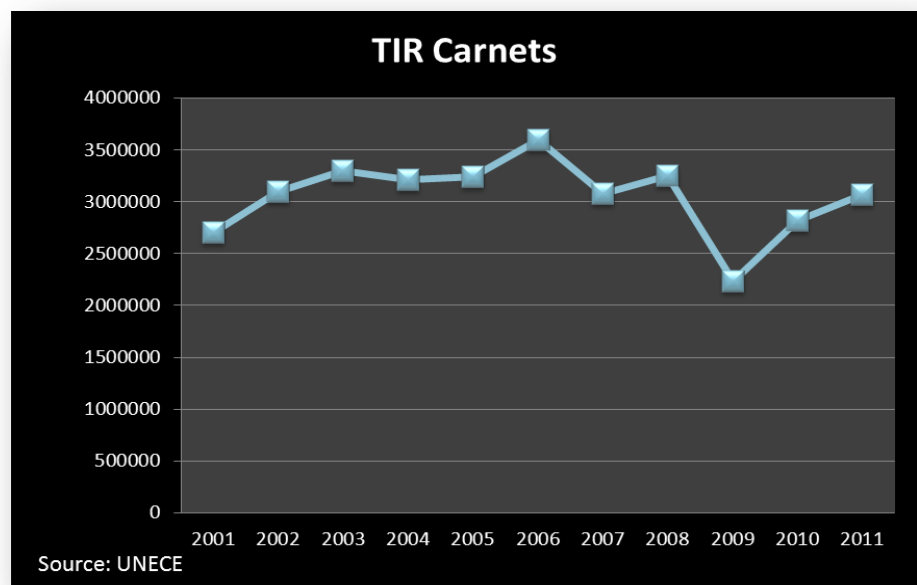
Statistics

Transport Trend

The number of TIR carnets issued is increasing

211. In spite of previously lower estimates, 3,000,000 TIR carnets were issued by IRU in 2011 (actual: 3,074,050). This means an increase of approximately 38 per cent compared to 2009 and 9 per cent compared to 2010.

Figure 55. Number of TIR Carnets issued (2001 – 2011)

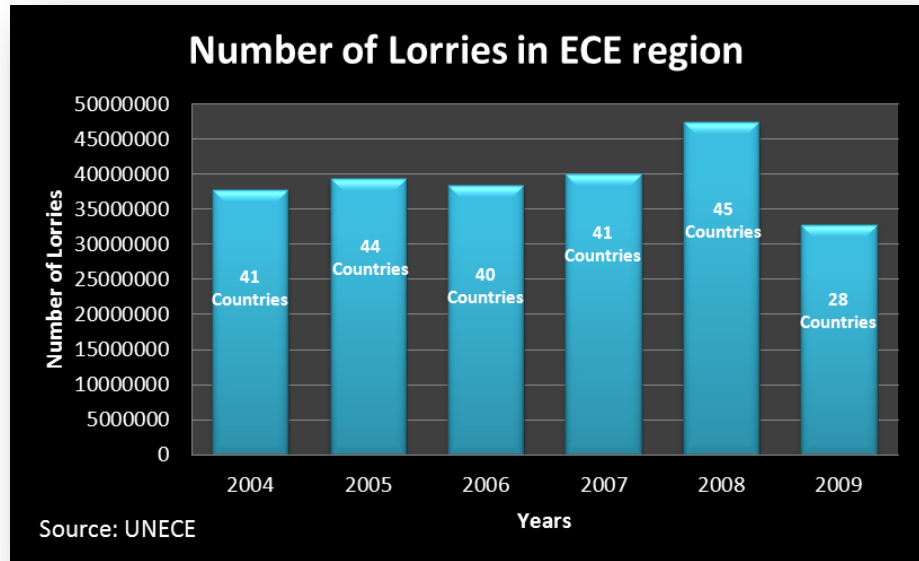


Transport Trend

The number of lorries in ECE region remains stable

212. The glossary of transport statistics prepared by UNECE, ITF and Euro stat defines a lorry as a rigid motor vehicle designed, exclusively or primarily, to carry goods. The number of lorries in UNECE member States was stable between 2004 and 2009. The analysis does not include data from the USA. Data was submitted as follows: in 2004, 41 countries submitted data; in 2005, 44 countries; in 2006, 40 countries; in 2007, 41 countries; in 2008, 45 countries and in 2009, 28 countries.

Figure 56. Number of Lorries in selected ECE countries

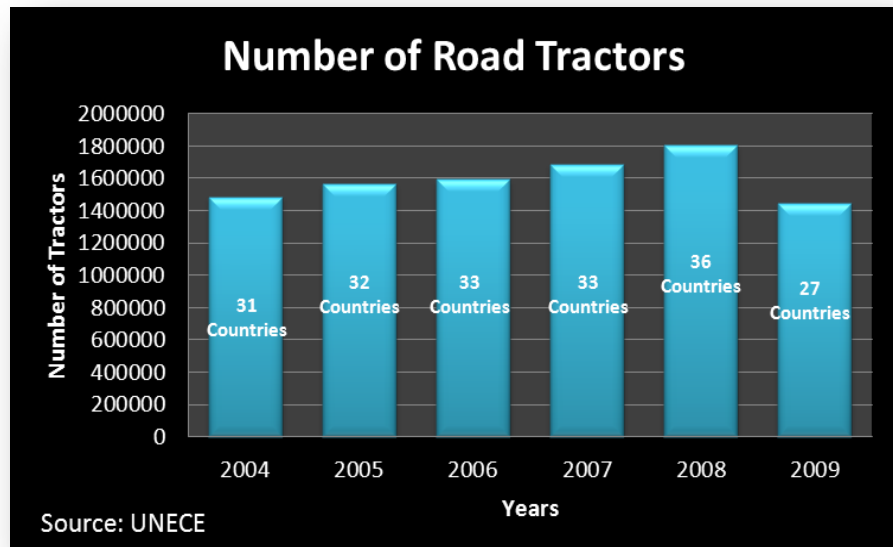


Transport Trend

The number of Road Tractors in ECE region is stably increasing

213. The glossary of transport statistics prepared by UNECE, ITF and Eurostat defines a road tractor as a road motor vehicle designed, exclusively or primarily to haul other road vehicles which are not power-driven (mainly semi-trailers). The number of road tractors in the UNECE region for the last 6 years increased. Only 2009 showed a decline but this was due to the fact that fewer countries participated in the data collection.

Figure 57. Number of Road Tractors in selected ECE countries

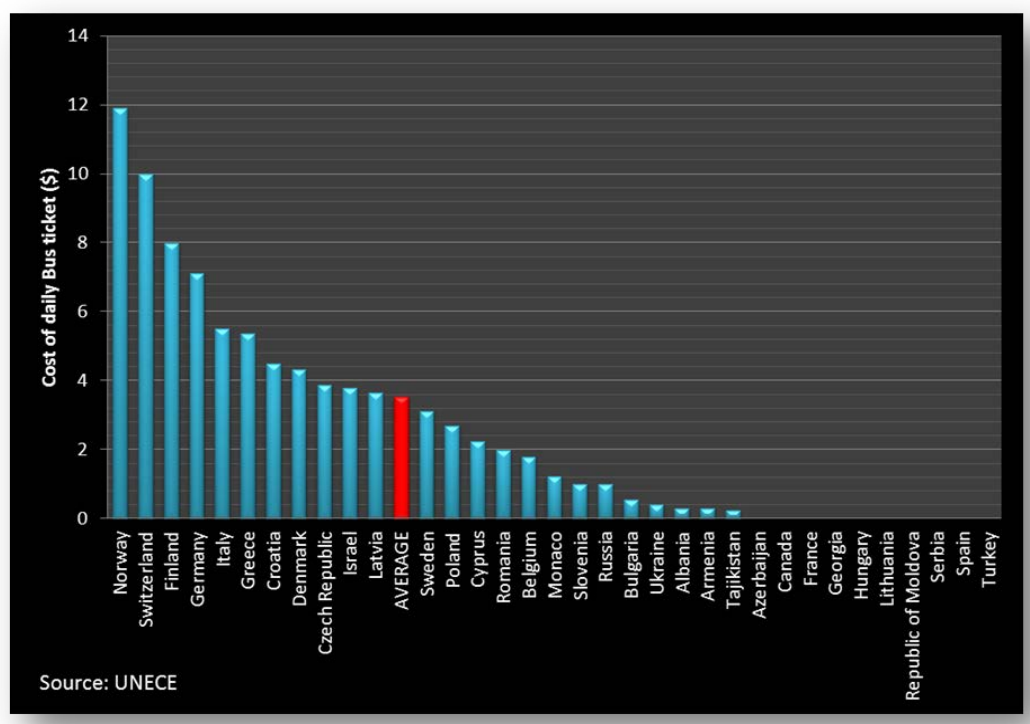


Transport Trend

The average cost of a daily bus ticket in the ECE region is 3,53US\$

214. The following graph illustrates the cost of a daily bus ticket in the UNECE region in USD. The average cost of a daily bus ticket is 3.53US\$. The most expensive daily bus ticket is 11.90US\$ in Norway, while the cheapest is 0.25US\$ in Tajikistan.

Figure 58. Cost of a daily bus ticket in selected ECE countries

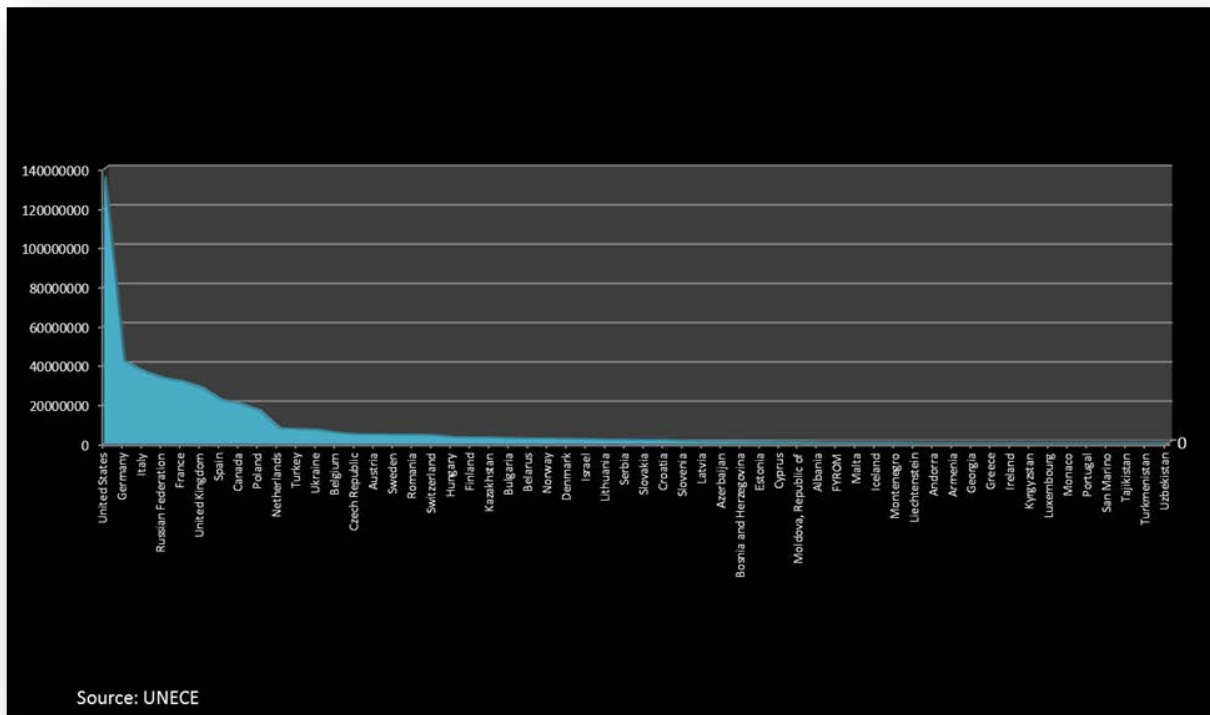


Transport Trend

The number of passenger vehicles circulating in the UNECE region reaches 445,299,147

215. The number of passenger vehicles in circulation in the UNECE region in 2009 reached 445,299,147 cars. The average is 10,355,794 cars. Thirteen countries did not provide data. The country with the highest number of passenger vehicles is the USA with 135,932,930 cars. The country with the lowest number of passenger vehicles is Lichtenstein with 25,909 cars.

Figure 59. Number of Passengers Vehicles in selected ECE countries



Stabilisation in travel by road in the EU27, but not by rail



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Travel by car in the EU27 seems to have stabilised, not as a result of the global downturn in 2008, but since 2006. On average every person now travels 9,600 km a year by car, with a total of about 12,000 kms by all forms of land based transport. Similar trends can be seen in the USA, where the stabilisation figures are much higher at 24,000 kms per person by car and 28,000 kms by all modes. It is unclear why such a stabilisation should have taken place as the previous period (1980-2005) were all characterised by substantial increases in the distances travelled by car and other forms of transport. The recent growth in air travel may explain the changing trends, as land travel is being replaced by longer distance travel by air, and the figures may have been compounded by the more recent economic downturn, the reductions in real incomes, the rising costs of travel and the higher levels of unemployment.

Over the recent past there has also been a substantial increase in rail travel in the EU27, principally driven by the growth in High Speed Rail (HSR). On average, travel by rail in the EU27 is still a small part of the total land travel market (about 820 kms per person per year). HSR now accounts for over 26 per cent of all rail travel (2010), an 80 per cent increase on the 2000 figure. Rail travel seemed to be in terminal decline twenty years ago, but there has now been a renaissance.

With the stabilisation in car travel and the growth in rail travel, one would expect reductions in CO₂ emissions from transport in the EU27, yet land transport has not made any contribution to the 8 per cent target set for the EU by the Kyoto Protocol for reductions in GHG emissions by 2011 (on 1990 levels). The increase in transport GHG emissions (primarily CO₂) has been 12.5 per cent over this period, but again there has been a slight reduction since the peak in 2007, but only of 2 per cent. If these figures are normalised by the population increase, a stabilisation figure seems to be apparent since 2005 of 1.89tCO₂ per person for land transport.

This means that the levels of CO₂ emissions in land transport have only very recently begun to stabilise and reduce, but even then, this reduction is minute when compared with the targets of an 80 per cent reduction by 2050 (on 1990

levels). Technological innovation within transport and communications will help, but the real task is to reorganise the way in which people carry out their everyday activities to reduce their travel distance and substitute technology for transport as well as within transport.

“For better, for worse; for richer, for poorer; in sickness and in health ...”



Alan Pearman

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“For better, for worse; for richer, for poorer; in sickness and in health ...”, as the wording of the traditional British wedding ceremony has it, road transport and the society of which it is part are inseparably linked. Social, political and economic events of the last two or three years together with larger, longer trends in transport and society more generally have again amply illustrated in 2011 just how deep and enduring the linkage is.

Recent events affecting the Global Economy have posed multiple challenges to the road sector and people working in it. Although there are encouraging signs that the very worst may have passed, recovery is still hesitant and fragile to further macroeconomic shocks. Nonetheless, international GDP growth seems a little stronger, as are some of the key indicators of road sector activity.

However, not all the economic and financial challenges road transport faces stem from economic shocks and essentially cyclical responses. There are critical secular trends also. Demographic changes are leading to higher populations and, in many parts of Europe, to ageing ones. These affect the level and nature of the demand for transportation, but also, critically, put substantial demands on public and in terms of healthcare, pension provision, etc., competing with transport for investment funds. Populations are more itinerant, supply chains more globalised and economic activity more mobile. Much transport infrastructure is location-specific. Getting the right transport infrastructure (physical but also institutional) can be a major facilitator of robust recovery; errors, on the other hand, will have increasingly high opportunity costs.

Internationally, and with the active engagement of the major international transport bodies such as UNECE, ITF and the EU, the road sector is responding to these challenges, seeking greater Efficiency (high output with low input) and greater Effectiveness (aligning output with what is wanted).

Recent initiatives have sought to increase efficiency through more straightforward border-crossing, encouraging inter-modality, understanding better the links between ports and the transport needs of their hinterlands, promoting more efficient vehicle design and the use of Intelligent Transport Systems technology. Active efforts to broaden the range of funding sources for infrastructure, for example through different types of PPP arrangement, are also under way.

However, the services provided by the transport sector must also change to be effective in meeting developing societal expectations. International initiatives to promote safety and mitigate adverse health and environmental consequences are in place and indeed to promote sustainability in all its dimensions. Responding to the range of security challenges posed by mass international transport is an active area of investigation. Recognition of climate change and increasingly unpredictable climatic conditions in some locations is also an important trend for the inland transport sector.

Open, long-term and fully international co-ordination lies at the heart of much of what is needed and what is being done. Efforts to harmonise legislation and systems; policy co-ordination through things like the EU White Paper; long-term international infrastructure plans such as TEM and initiatives such as EATL

and the TEN-T all have critical parts to play.

Trends for the next few years....

- A slow, but not necessarily uninterrupted, return to growing levels of demand.
- Continued pressure on public funds with increasing emphasis on innovative, 'second generation' public-private partnership arrangements.
- Emphasis on efficient vehicle design and use with ITS having a central role affecting logistics, infrastructure capacity utilisation and safety.
- Significant changes in supply chains, with both global and local sourcing growing, depending upon the product.
- Continued pressures to diminish the health and environmental externalities of road transport.
- Continuing need for close international collaboration to address emerging issues.

Facilitated international Road Transport Drives Trade and Economic Development



Martin Marmy
Secretary General
International Road
Transport Union
(IRU)

Road transport is instrumental in interconnecting every business in every region to every major world market through its high quality, flexible and unique door-to-door services. It is the backbone of strong economies and dynamic societies, drives trade, creates employment and ensures a better distribution of wealth.

Growth in BRIC countries directly results from innovation and investment in production tools, and in particular in small and medium-sized enterprises (SMEs), such as road transport companies, that generate some 85 per cent of employment.

OECD and EU policies differ in that they increasingly restrict the activities of SMEs and the road transport industry with new regulatory and fiscal burdens. Governments of OECD countries must recognise that the further facilitation of international road transport, hence trade, is key to restoring and expediting economic growth in 2012, as it has been the case in BRIC countries.

In the spirit of public-private partnership, and based on its 60 years of well appreciated experience, the IRU has provided tried and tested effective solutions for facilitating international road transport, such as the revitalisation of trade along the Silk Road through the development of international road transport. It should be known that while several countries are landlocked to sea transport, NO country is landlocked to international road transport!

Launched in 2008, the IRU's New Eurasian Land Transport Initiative (NELTI) Project has been monitoring the commercial deliveries of goods by truck on various itineraries along the Silk Road. The results show a competitive potential for the development of trade on the NELTI routes, but highlight that over 40 per cent of transport time along the Silk Road is lost at borders due to inappropriate procedures.

Streamlining these customs procedures can be easily achieved by simply ratifying and effectively implementing the key UN multilateral trade and road transport facilitation instruments, in particular the Harmonization and TIR Conventions.

The facilitation and security provided by these UN global conventions is

further complemented by, on the one hand, the IRU Border Waiting Times Observatory (BWTO), an IRU web-based application enabling customs authorities to report on waiting times at their borders, free of charge, anywhere in the world and, on the other hand, by the IT TIR risk management tools, such as TIR Electronic Pre-Declarations (IRU TIR-EPD) and Real Time SafeTIR (RTS) developed by the IRU in fruitful partnership with the national Customs authorities of more than 25 countries.

These tools simplify customs formalities at borders by improving trade security while reducing waiting times by ensuring that customs procedures take place at origin and destination as called for in the Harmonization Convention. These effective facilitation tools, based on UN Conventions, can be applied not only on NELTI routes, but everywhere on continents where trade and international road transport operators are confronted with the same barriers affecting global trade and economic growth.

By effectively implementing the key UN Conventions, which have proven to be effective in numerous regions for more than 50 years, and according to the IRU's motto "working together for a better future", we can drive progress, prosperity and ultimately peace throughout the world!

Online UNECE Transport Division resources for review.

Annual Bulletin of Transport Statistics for Europe and North America

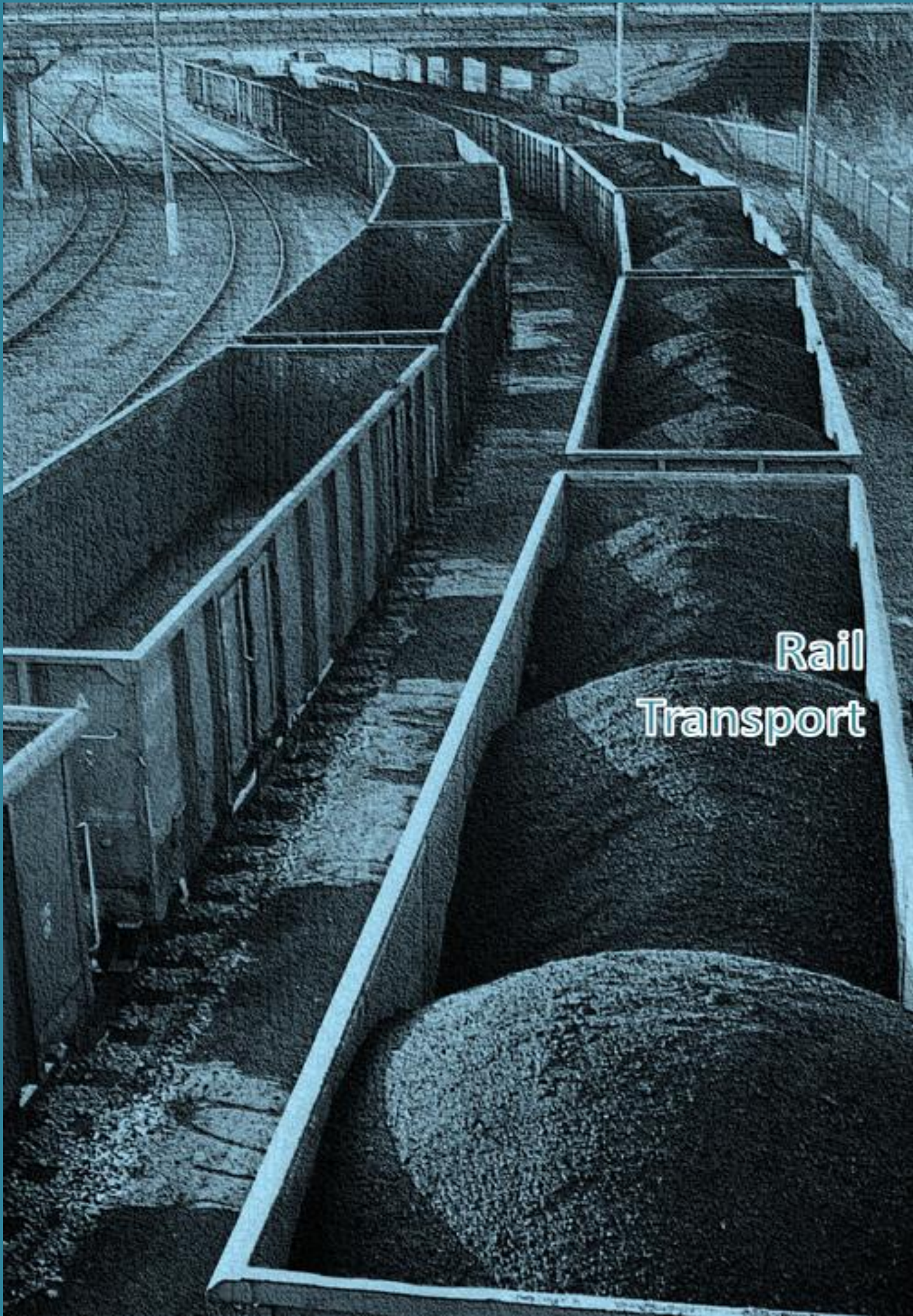
Main Transport Indicators in the UNECE Region



www.unece.org/transport/areas-of-work/road-transport/transmainc1sc1publications/bulletin-of-transport-statistics.html



www.unece.org/transport/areas-of-work/road-transport/transmainc1sc1publications/main-transport-indicators-in-the-unece-region.html



Rail
Transport

CHAPTER 3. Rail Transport

Introduction

216. According to UNECE Governments, rail transport makes up a small piece of the transport pie. However, these same Governments have railways at the top of their transport agenda and consider it the transport mode of the future. As described above in the transport policy segment, investment in railway infrastructure, efficiency and profitability are the most important issues.

217. UNECE Governments recognise the important and sometimes crucial role of railways in the development of intermodal transport and reducing climate change impacts. That is the reason why for both intermodality and climate change, Governments highlighted measures they've taken to improve railway efficiency.

Albania

218. The Albanian Government reported that railway freight transport in 2010 was at the same levels as it was in 2009. The amount of passenger transport is reduced. The prospect for the next few years is optimistic.

Year	2010	2011	2013
a. Passenger Traffic			
-000 passengers	462	570	650
-million pass/km	20.8	26.2	31.2
b. goods traffic			
-000 tons	420	450	460
-Million ton/km	69.0	74.2	76.4

219. The rehabilitation of the rail network and rail services reform will result in a positive impact that improves the interoperability between different types of transport.

Armenia

220. Armenia reported that in 2010, 10,577,500 tonnes of freight were shipped, of which 3,063,300 tonnes were shipped by railway.

221. In addition, 251,600,000 passengers were carried in 2010, of which 800,000 were carried by railway.

Bosnia & Herzegovina

222. Bosnia & Herzegovina's Government reported the following data:

Transport of Goods			
	<i>Tons of goods transported, in thousands</i>		<i>Change in per cent</i>
	2010	2011	11/10
Railway	9 662	10 944	13.3

Transport of Passengers			
	<i>Passengers transported, in thousands</i>		<i>Change in per cent</i>
	2010	2011	11/10
Railway	666	662	-0.6

Bulgaria

223. One of the main problems that hindered the development of Bulgarian transport in 2010 was the condition of Bulgarian railways. The volumes of railway traffic and their market quotas decreased - the traffic in 2010 was 40 per cent lower as compared to 2007. The quality of the passenger and cargo services was lower than expected. Meanwhile, the productivity of the railway sector in Bulgaria was the lowest in the whole European Union.

Canada

224. In Canada railway traffic (both intermodal and non-intermodal) grew by 12 per cent in 2010, and dropped to 5.6 per cent (in the first 9 months of 2011) after having experienced a decrease of more than 13 per cent in 2009.

Croatia

225. In Croatia, railway transport represented 43.1 per cent of passenger transport and 9.4 per cent of goods transport from January to September 2011.

Czech Republic

226. According to the data available, the number of passengers transported decreased by 24.58 per cent, while the volume of transported goods decreased by 0.25 per cent compared to the same period in 2010.

227. In the Czech Republic the volume of railway transport in passenger kilometres increased by 1.4 per cent, and the number of passengers carried remained, more or less, the same.

228. After three years railway transport recorded an increase of 8 per cent with respect to the volume of goods carried and by 7.7 per cent with respect to the volume of transport expressed in tonne-kilometres.

Finland

229. Finland reported problems with train traffic during the previous two winters. The Government plans to renew rail managements systems (partly implemented) and rail switches. In addition, an analysis is taking place on how to increase capacity at the main Helsinki rail station.

	2010	2009	Change per cent
Train km (1000)	51 000	50 019	2.0
Passenger Traffic	35 048	35 120	-0,2
Freight Traffic	15 952	14 899	7.1
Gross ton km (1000000)	33 091	31 412	5.3

France

230. The French Government reported that rail freight experienced a 14.8 per cent increase the first trimester of 2011, and a decrease of -5.5 per cent for the second trimester of 2011. The use of regional express trains (TER) had a decrease of 2.9 per cent the first trimester of 2011 and an increase of 2.9 per cent for the second trimester of 2011. The TGV frequency had an increase of 6.3 per cent the first trimester of 2011 and a 1.1 per cent increase the second trimester of 2011.

Georgia

231. In Georgia, Railways (I-IX month) in 2010 and 2011 increased by 14.7 per cent and increased by 15.0 per cent (in million/tonnes) respectively.

Germany

232. The German Government reported the following data for railways development:

	2008	2009	2010	2011	2014
Rail freight in million tonnes	371.3	312.1	355.4	367.4	397.9
Rail passengers in million passengers	2 348	2 369	2 396	2 442	2 507

Greece

233. The Greek Government reported that railway freight volume decreased in 2011 compared to 2010, although the respective revenue from rail freight transport for the same period increased.

Hungary

234. The Hungarian Government reported the following data for railways:

	Rail
2011. Q1-Q2 (million tonnes)	22 147
In percent of 2010. Q1-Q2 data	101.80 per cent
In percent of 2009. Q1-Q2 data	108.97 per cent
In percent of 2008. Q1-Q2 data	88.04 per cent

Italy

235. In Italy, as was the case in most UNECE countries, rail freight transport suffered the consequences of the economic crisis. The transport of passengers by rail recorded an increase.

Latvia

236. Rail passenger turnover in 2010 in Latvia decreased by 3 per cent to 20.9 million passengers in comparison to 2009. The number of bus passengers decreased by 15 per cent in 2010 compared to 2009 (144.3 million passengers).

237. Cargo traffic by rail decreased in 2010 to 49.2 million tonnes (app. 4.5 million tonnes less than in 2009, approximately 6.9 million tonnes less than in 2008). However, in the first half of 2011 an increase of 4.6 million tonnes was recorded, leading to predictions of the largest rail cargo traffic in past 10 years. Compared to the EU average, Latvia's rail transport's share of total freight transport is quite significant.

Lithuania

238. In Lithuania railways traffic volumes are partially restored – compared with the results from 10 months of 2010. Transportation by railway traffic has increased by 16 per cent in 2011. During 9 months of 2011, JSC "Lithuanian Railways" transported 39.72 million tonnes of goods in total, which is 14.1 per cent more compared to the corresponding period in 2010.

Poland

239. In 2010, the volume of goods transported by rail transport in Poland increased by 8 per cent in comparison to 2009 (216,9 million tonnes). The long-term forecast predicts stagnation.

Romania

240. In the first semester of 2011, the rail freight traffic volume carried by transport operators increased by 18.2 per cent compared to the first semester of 2010. In the same period, the performance of rail goods transport increased by 13.7 per cent compared to the same period of 2010.

241. In the first semester of 2011, compared to the first semester of 2010, the number of transported passengers by rail decreased by 4.2 per cent. Nevertheless, rail passenger transport was dominant, with a share of 20.0 per cent of total passenger transport. The passenger transport performance (passengers-km) in the first semester of 2011 compared to the first semester of 2010 decreased by 6.5 per cent.

Russian Federation

242. According to estimates by the Federal State Statistics Service of the Russian Federation, in January-October 2011 turnover amounted to 4,059.9 billion tons of transportation-miles, from which 1,756.1 billion tonnes-km were by rail.

243. Freight turnover for 10 months of 2011 increased by 3.5 per cent compared to the same period last year. Passenger transport in January-October 2011 amounted to 374.7 billion-passenger-kilometres, from which 119.3 billion was by railways.

Serbia

244. In the first half of 2011, traffic volumes of various transport modes in the Republic of Serbia varied. Rail transport is represented in passenger traffic (without public/city transport) by 8.0 per cent. The highest percentage of cargo is transported via railway (49.2 per cent)

Slovak Republic

245. In the Slovak Republic, rail transport increased in 2011 compared to 2010.

246. The number of passengers carried by railway transport in the first half of the year:

- (a.) From 01 to 06/2011 22 997 844 passengers were transported by Slovak railways;
- (b.) From 01 to 06/2010 22 324 012 passengers were transported by Slovak railways;;
- (c.) From 01 to 06/2009 22 748 924 passengers were transported by Slovak railways;.

247. Therefore, the number of passenger flow is about 22.5 millions. The aim is to maintain the same level and eventually see an increase.

248. The traffic volumes of freight railway transport in first half of the year:

- (a.) From 01 to 06/2011 8 920 174 tis. gross tkm (7 097 157 train km) were transported ;
- (b.) From 01 to 06/2010 8 848 226 tis. gross tkm (7 050 188 train km) were transported.

Slovenia

249. In 2010, railway traffic reached 19.1 million train kilometres, representing an increase of 9.4 per cent compared to 2009 and 7.3 per cent more than 2000. Eleven million train kilometres were taken by passenger trains (the same as in 2009) and 8.0 million train kilometres by goods trains (23.5 per cent more than in 2009).

Spain

250. The Spanish Government reported that the amount of goods transported by rail has grown by 10 per cent, although its contribution to total transport is very weak.

Switzerland

251. The recent evolution of traffic volumes in Switzerland is as follows: From 1960 to 2009 there was an increase of transport volume in passenger transport Rail (Mio. Person-km) with 7,973 in 1960 and 18,571 in 2009 meaning a 233 per cent increase. The freight rail transport (Mio. tkm) was 4,315 tkm in 1960 and 9,398 tkm in 2009 meaning a 218 per cent increase.

Tajikistan

252. The Government of Tajikistan reported the following data:

	January – October 2011	Compared to 2010 per cent	Compared to 2009 per cent
Freight Total (in tons)	51 726.6	103.0	109.0
By road	51 724.8	103.0	109.0
Rail	7 715.0	90.0	71.5
Car	44 009.8	105.7	122.4
Air	1.6	96.0	104.9

Turkey

253. The Government of Turkey reported the following data:

		Railways (percentage %)
	<i>Freight</i>	4,76
	<i>Passenger</i>	2,22
2023 Targets	<i>Freight</i>	15
	<i>Passenger</i>	10

Uzbekistan

254. Uzbekistan reported that the SJSRC "Uzbekistan Railways" has implemented a number of major projects, including:

- (e.) Upgrading passenger locomotives;
- (f.) Organizing high-speed line at the Tashkent-Samarkand section;
- (g.) Constructing railway lines,- 1.Navoi - Uchkuduk - Sultanuizdag - Nukus, 2.Tashguzar - Boysun – Kumkurgan, 3. Hairatan - Mazar - Sharif "(Afghanistan);
- (h.) Development of a combined rail-road bridge across the Amu Darya River;
- (i.) Electrified railway line "Tukimachi - Angren";
- (j.) Opening the high-speed passenger rail service along the route "Tashkent - Samarkand" with further expansion to Bukhara; and
- (k.) Launching railway passenger cars, tanks and other accessories production.

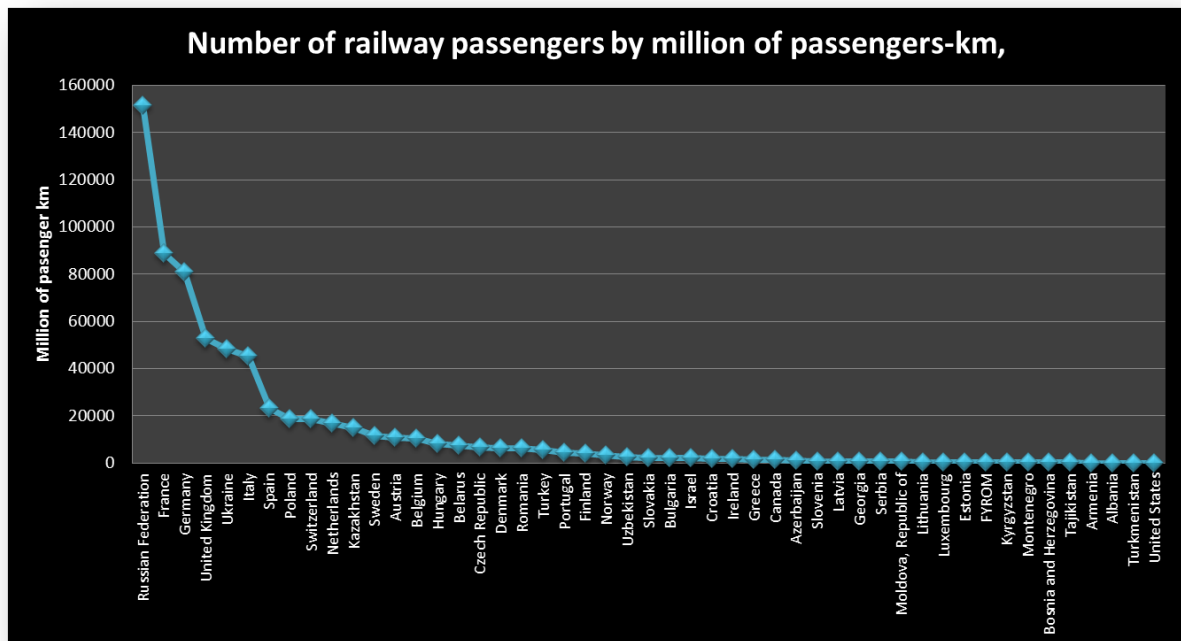
Statistics

Transport Trend

11 countries out of 56 performed more than the 80% of the number of railway passengers in 2009 in ECE region

255. In UNECE region the number of passengers by millions of passengers per km rose to 663,110. Data from two countries (USA and Turkmenistan) is missing. From our analysis we found that 20 per cent of UNECE member States (11 countries) achieved more than the 80 per cent of the total number of railway passengers (530,488). Eight out of the eleven countries are from Western Europe. The other three are CIS countries.

Figure 60. Number of railway passengers by millions of passengers-km



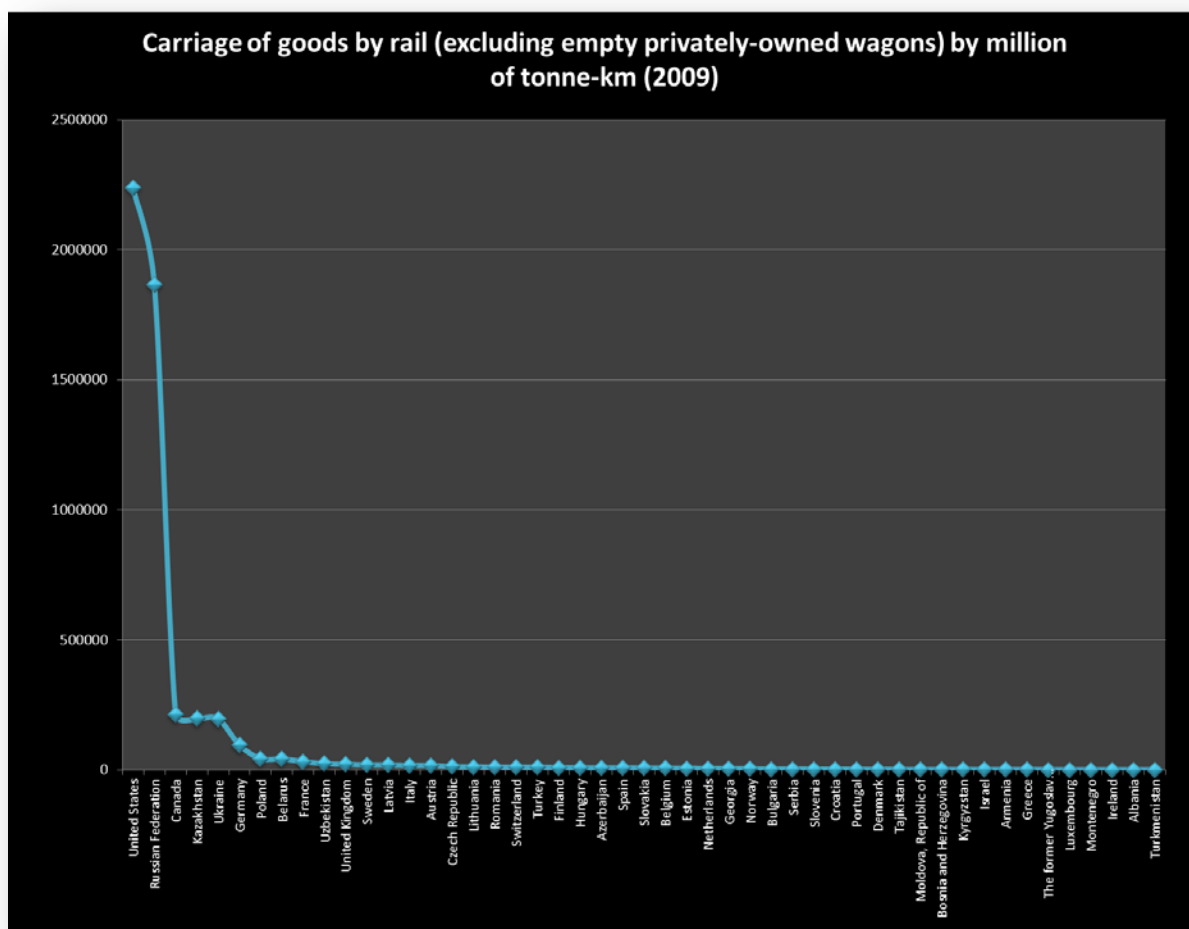
Source: UNECE

Transport Trend

11 countries out of 56 performed more than the 80% of the carriage of goods by rail in 2009

256. Twenty per cent of the countries in the UNECE region (11 countries) achieved more than the 80 per cent of the carriage of goods by rail. These eleven countries did more than 4,968,739 million of tonne km from a total of 5,187,495.

Figure 61. Carriage of goods by rail (excluding empty, privately – owned wagons) by millions of tonne km in the UNECE region in 2009



Source: UNECE

Transport Trend

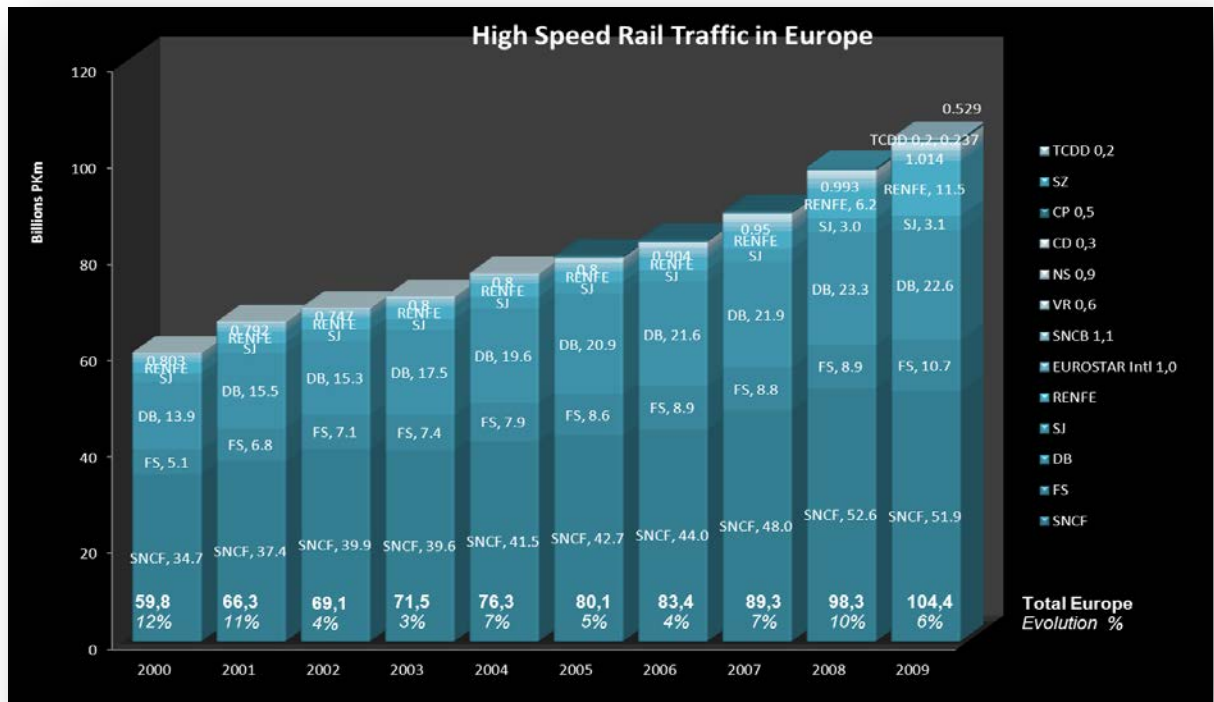
High speed trains development contributes to the revitalization of railways

257. The creation of high speed networks coincides with the revitalisation of rail during the last two decades. In fact, it is an essential part of that revitalisation. Wherever high speed and very high speed lines have been built, they have proven to be an enormous success for passenger transport. These networks have met customer demand and passenger numbers have frequently grown in double-digit percentages in member States that have created these lines.

258. The figure below illustrates the development of high speed rail traffic in Europe over the last decade. As we can see, French railways have the biggest share of the market at 51.9 billion passengers – Kilometer (Pkm) in 2009. The first high speed line between Paris and Lyon was primarily created to resolve capacity problems. Since then, it has become evident that time is a major competitive factor for rail. It is essentially high speed lines that contribute to the growth of modal share for rail in passenger transport.⁴

⁴ Michael Clausecker, Director General UNIFE, Nike Bonnen, UNIFE Public Affairs Manager, Article on “Railway transformation” book of Roland Berger Strategy Consultants 2010.

Figure 62. High Speed Rail Traffic in Europe



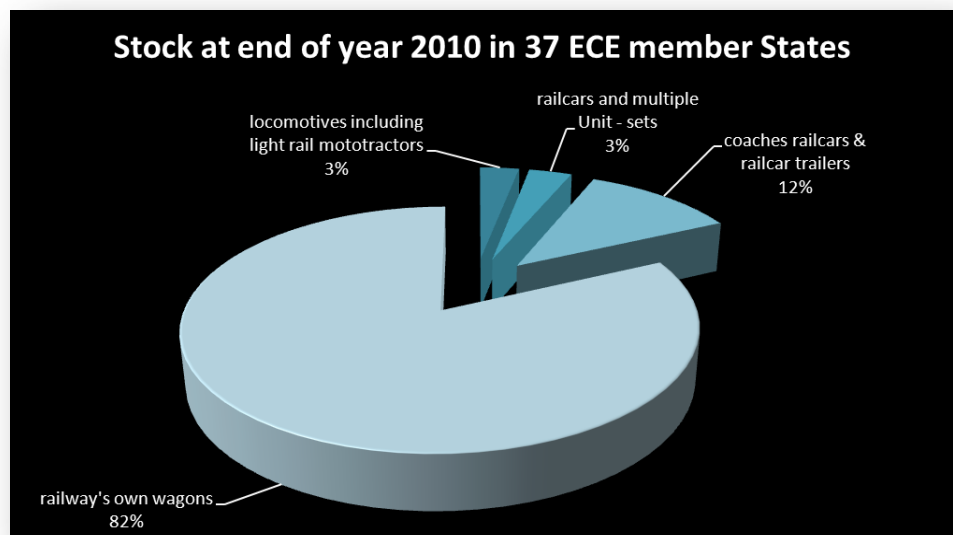
Source: UIC, UNECE

Transport Trend

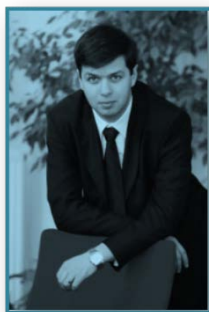
More than 82% of railways stock end of year 2010 was railways own wagons.

259. Based on data from UIC, at the end of 2010 in 37 UNECE member states the stock of railways was 82 per cent railways' own wagons, 3 per cent was locomotives, 12 per cent coaches – railcars and 3 per cent was multiple units.

Figure 63 Rail Stock at the end of the year 2010 in 37 UNECE member States



Source: UIC, UNECE



Stefan Roseanu

Senior Partner
Club Feroviar
Secretary
General
Romanian
Railway Industry
Association (AIF).

Background

EEC and CIS define a space with a recent common history (with the notable exception of Turkey and Greece they were part of communist area which has determined a 20-year period of reshaping economies and social-politic systems). Also they represent the middle point between the productive intensive Far East and consumer-markets of Western Europe. This geographic position is the new advantage of the given countries in attracting transit routes. But the high political fragmentation of this area and integration in different political constructs (EU, CIS, Eurasian Union etc.) requires a very delicate game of negotiations and concessions that would lead eventually to a technical and administrative harmonisation of railway infrastructures.

The impact of financial crisis on railway sector

The high interest that the communist leaders have shown to railways translate in a positive legacy among the public of this transport mode (the quota of railways in EEC and CIS is more than double to the one in Western Europe), but, at the same time, in an economic burden when we speak of maintenance and investments. Thus we can consider that the real railway crisis manifested even before the actual financial crisis.

The recent accession of 12 Central-East European Countries to the European Union (2004 and 2007) has offered the chance to attract more cheap money. The same period represents the rebirth of Russian economy, which is welded with money coming from natural resources and a national ambition to host major international sport and cultural events. A similar experience we witness at other countries in the area, e.g. Azerbaijan, Kazakhstan, Turkmenistan that use their "gas-dollars" to invest in railways.

On these grounds we can consider that the actual financial crisis has hit dramatically more the freight business with initial drops of 30 per cent-40 per cent in total volumes and reshaping of markets (e.g. one major European wagon manufacturer and freight railway undertaking, IRS, went for insolvency and has sold its railway business). The statistics show a slight recover of volumes in 2010 compared to 2009 in all given countries, except Bulgaria and Greece. At the same time 2010-2011 represent the starting point of railway commercial services between China/Korea/Japan and Western and Central Europe through Russian Federation /Belarus/Poland. The southern route - „The Iron Silk Route“ - still suffers over fragmentation and low infrastructure quality.

The international policies translate in pressure on governments to push on unbundling of the sector, not only inside EU. Russian runs an ambitious reforming program and are well advanced in the process while countries like Ukraine, Azerbaijan, Turkey lag behind. Russian has managed recently to successfully privatise Freight One, while Poland, Bulgaria, Romania and Slovakia are in different stages of privatisation.

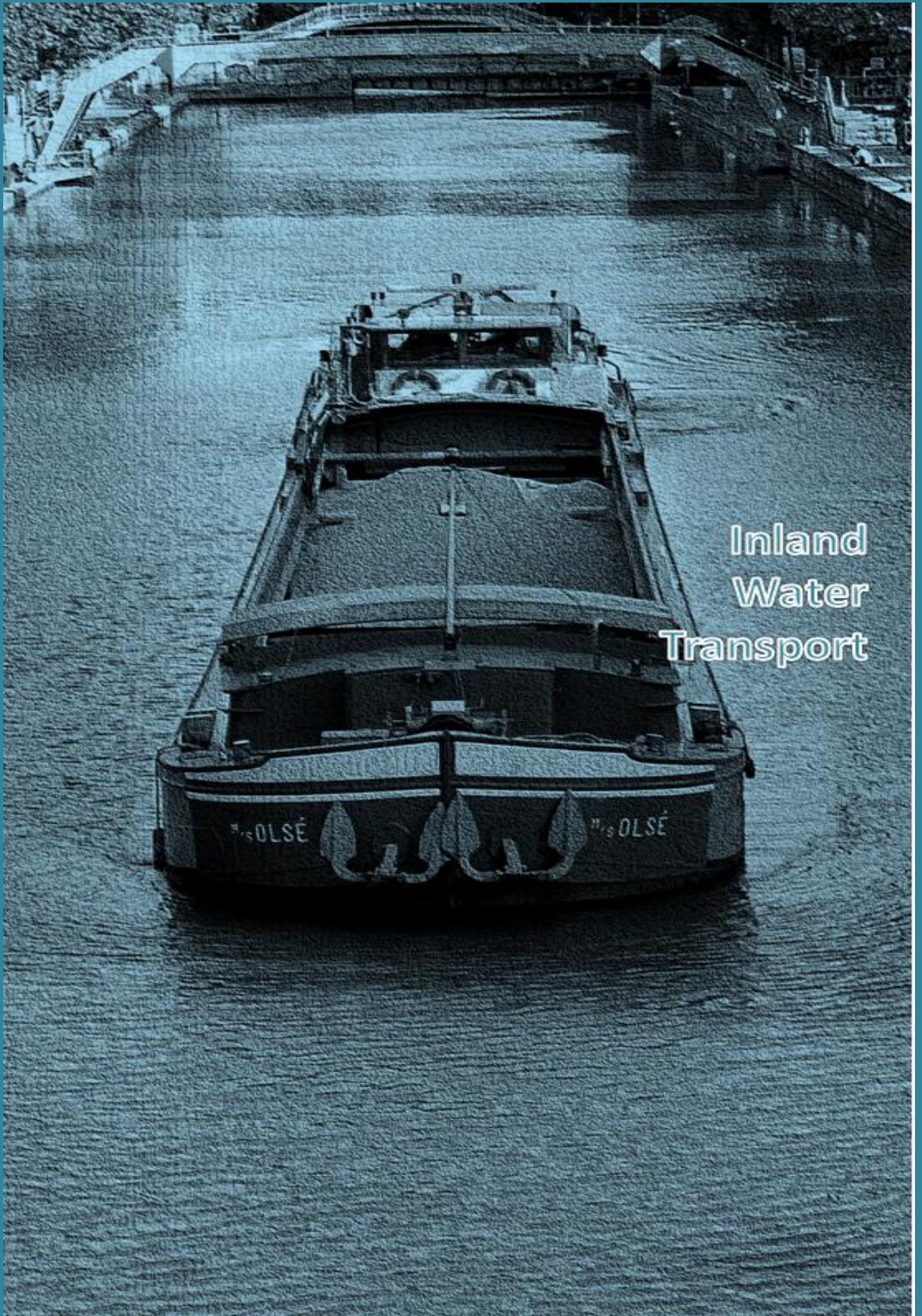
The high ambitions of countries like Russian Federation and Turkey to be international players translate into big investment programs in high-speed lines and international technology partnerships (Alstom, Siemens, General Electric, Knorr-Bremse are only a few of the companies to partner with local manufacturers). Regional players like Kazakhstan, Azerbaijan use their new money to invest both in their own railways and in the ones of their neighbours (e.g. Georgia is the beneficiary of Azeri funds in their sector of Baku-Tbilisi-Kars line).

2012 - a mixed image

The extension of the financial crisis cannot bring peace to the railway players in EEC and CIS. The freight transport can still see dramatic changes as the steel mills show mixed expectations. But with the rise of new Eurasian services and new multimodal platforms railways would become a real solution on the continental platform.

On the other hand, the pressure on public authorities raised by the big dead-lines of the moment (the end of actual European budgetary period, European Football Championship 2012, Olympic Games 2014, etc.) would determine the increase of investments in infrastructure and upgrades in passenger fleets.

Under the pressure of the big international financial organisations (World Bank, International Monetary Fund) the public authorities will proceed with closure of lines, personnel reductions and privatisation of certain activities.



Inland
Water
Transport

CHAPTER 4. Inland Water Transport

Inland Water Transport in the ECE region

260. UNECE works for smooth and efficient Inland Water Transport (IWT) across the region, as well as for further expansion of its network to take advantage of this safe and sustainable mode of transport. UNECE provides a unique platform and policy forum for its 56 member States, where technical and legal issues of IWT are addressed, with emphasis on the Pan-European dimension of inland waterways and ports, intermodal linkages, cross-sectoral issues and establishment of common rules, regulations and benchmarks.

261. Twenty-seven UNECE member States possess inland waterways of international importance which play or could play an important role in international freight and passenger traffic.

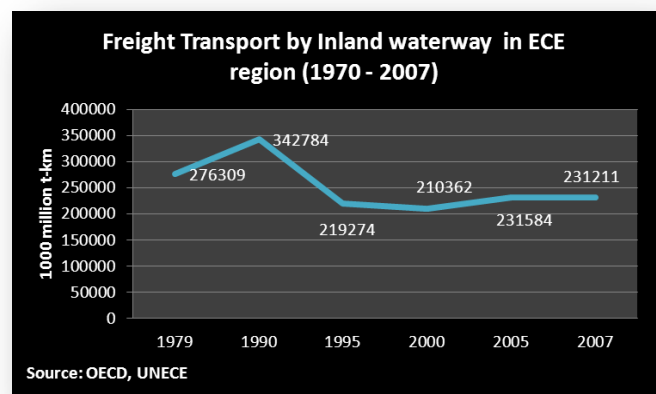
262. The place of IWT in overall freight transport operations in UNECE member countries varies greatly both between the countries and within their borders. The amount of goods transported by IWT is usually fairly modest when compared with other modes of inland transport, such as rail and road.

Transport Trend

Inland Water Transport in the ECE region is losing its market share

263. The recent UNECE White Paper on the Efficient and Sustainable Inland Water Transport in Europe draws attention to the declining market share of IWT in most UNECE countries. The IWT in the EU carried 144.6 billion t-km in 2007. Belgium (9 billion t-km), Germany (64 billion t-km) and the Netherlands (42 billion t-km) together accounted for 80 per cent of this traffic. In the Russian Federation, the volume of cargo carried by IWT in 2007 was 153.4 million tonnes (as compared to 108.9 in 2006), with a turnover of 86 billion t-km (57.7 in 2006). Of these, domestic carriage accounted for 131.6 million tonnes (87.9 in 2006) and international navigation 21.8 million tonnes (21.8 in 2006). In Kazakhstan, the inland fleet in 2007 carried 1,288.8 thousand tonnes of cargo (1,260.4 thousand tonnes in 2006), with an overall freight turnover of 52.0 million t-km (39.9 million t-km in 2006). In the Ukraine in 2007, 15 million tonnes were transported by IWT with a turnover of 18 billion t-km out of a total freight turnover of 496.4 billion t-km. In the USA in 2007, inland and intra-coastal waterway traffic reached

Figure 64. Freight transport by inland waterway in ECE region (1970 – 2007)



Source: OECD, UNECE

thousand tonnes of cargo (1,260.4 thousand tonnes in 2006), with an overall freight turnover of 52.0 million t-km (39.9 million t-km in 2006). In the Ukraine in 2007, 15 million tonnes were transported by IWT with a turnover of 18 billion t-km out of a total freight turnover of 496.4 billion t-km. In the USA in 2007, inland and intra-coastal waterway traffic reached

Environmental
Performance

Transport Trend

IWT is at risk of losing
its environmental
performance

Infrastructure

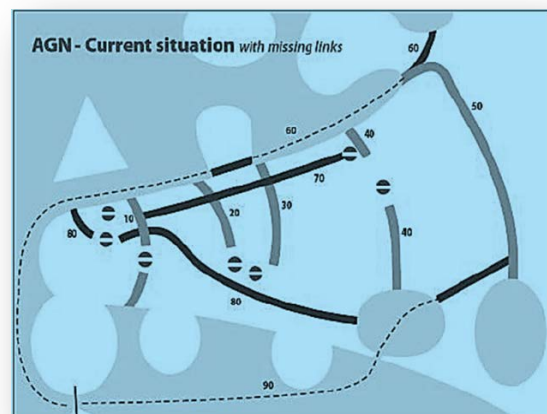
Transport Trend

Infrastructure
Investments in IWT
decreased

622 million tonnes with a turnover of 272 billion tonne-miles.

264. Global warming and carbon emissions have become a key issue for the future of IWT in Europe. First, because IWT can be one of the solutions towards reducing the carbon emissions of the transport sector through a modal shift from road transport, wherever possible. However, in order to maintain this competitive edge, efforts are required to ensure that the continuing reduction of CO₂/t-km (CO₂ intensity) in road transport is paralleled by similar progress in IWT.
265. It is essential for IWT to work on maintaining and increasing its advantage in environmental friendliness through research and innovation, for instance, by considering the use of alternative fuels. At the present time the experts of the Central Commission for the Navigation of the Rhine (CCNR) are studying the possibility of approving liquefied natural gas (LNG) as a fuel in combustion engines for inland vessels.
266. Investigations into monitoring data of air temperature lead to obvious findings in all regions of the Rhine watershed. During the past 100 years, a considerable rise in the air temperature has been recorded (about +1.0°C to +1.6°C). On the other hand, the rise of temperature in summer is less significant (ca. +0.6°C to +1.1°C). This leads to a mean annual rise of temperature in the Rhine watershed between +0.5°C and +1.2°C, which is slightly above the global mean value of +0.56 to +0.9°C/100 years. Due to rising temperatures, glaciers are retreating in Switzerland. Additionally, investigations into snow parameters such as average depth of snow reveal a negative trend. However, with increasing altitude, trends are less distinct⁵.
267. During 1995–2005, investments in transport infrastructure throughout the 15 EU countries amounted to €800 billion, of which 64 per cent was for roads, 32 per cent for rail, 3 per cent for ports and only 1.4 per cent for inland waterways. Studies have shown that the increase in IWT was achieved despite inadequate characteristics of the infrastructure. They suggest that a small transfer of available investment funding in favour of inland waterways to address these infrastructure bottlenecks could

Figure 65. IWT Missing links



Source: UNECE

⁵ Source: Analysis of the state of knowledge on climate changes so far and on the impact of climate change on the water regime in the Rhine watershed - Literature evaluation, International Commission for the protection of Rhine, 2009.

produce a disproportionate impact on modal split.

268. Missing links make up nearly 1500 km, or 5.3 per cent of the E waterway network of 27,900 km. The percentage is small, but the impact of the interruptions significantly weakens the network as a whole. The previous diagram represents the schematic geographic outline of the region covered by the AGN⁶ and the main AG corridors and highlights the missing links, clearly showing the limits of the network in the current situation.

269. The answer to this drawback lies in the phased completion of the infrastructure. The impending start to works on the Seine-Nord Europe Canal, with locks up to 30 m deep and a network of ports, proves the feasibility of building high capacity canals connecting parts of the existing network with significant economic cost-effectiveness, excellent environmental performance and strong acceptance by the regions involved in the project.

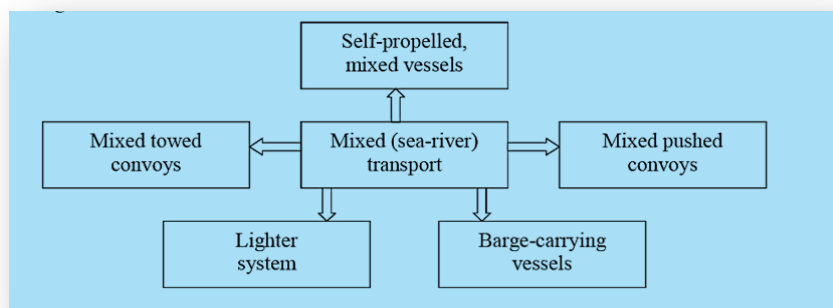
270. Combined river-sea vessels can play an increasingly important role in providing transport for foreign trade. Mixed-navigation vessels now account for a significant portion of the world trading fleet. The main types of vessels of this class have a dead-weight tonnage between 2,000-3,000 and 5,000-6,000 tonnes, and are used to carry goods between river, river-mouth and sea ports along the coasts of Europe and North Africa, with autonomy of 15-20 days. Such vessels generally have constraints related to

River – Sea vessels

Transport Trend

Development of technical requirements for River – Sea vessels

Figure 66. Types of mixed freight transport systems used in IWT



Source: UNECE IWT White Paper

range and seasons of use, permissible distance from harbours and the wave and wind conditions in which they may operate. Accordingly, they are classified as vessels of limited navigation area.

271. There are various types of mixed (sea-river) freight transport systems in use in the world as shown in figure 66. The operation of vessels of any type or designation involves a high level of risks and hazards for the life and health of people, property, the environment, the life and health of animals and water resources.

⁶ European Agreement on Main Inland Waterways, UNECE, Transport Division

272. River Information Services (RIS) represents harmonized information services designed to facilitate information exchange between parties in inland navigation (boat masters, lock/bridge operators, waterway authorities, terminal operators, operators in calamity centres, fleet managers, cargo shippers, consignors, consignees, freight brokers, and supply forwarders) using a variety of available technological solutions (VHF radio, mobile data communication services, Global navigation satellite system, internet, etc.). This facilitated exchange of traffic-related information (e.g. fairway information services, traffic information services, traffic management, calamity abatement reports, information for transport logistics and information for law enforcement, etc.) contributes safe and efficient IWT operations.

273. To ensure the harmonized introduction of RIS services on the pan-European level, UNECE Resolution No. 57 on "Guidelines and Recommendations for River Information Services" (TRANS/SC.3/165) describes the principles and general requirements for planning, implementing and operational use of River Information Services and related systems. These guidelines have been established on the basis of the standards of international expert groups and river navigation commissions.

274. RIS Guidelines are used in conjunction with other, more specialized UNECE Resolutions on the different components of RIS, such as Electronic Chart Display and Information System for Inland Navigation (Inland ECDIS), Standard for Notices to Skippers and for Electronic Ship Reporting in Inland Navigation, Guidelines and Criteria for Vessel Traffic Services on Inland Waterways and International Standard for Tracking and Tracing on Inland Waterways using the Automatic Identification System (AIS).

Implementation of the European NAIADES action programme



Andreas Bäck

Deputy Project Coordinator
of PLATINA

In January 2006, the European Commission launched the multi-annual action programme NAIADES for the promotion of inland waterway transport. The NAIADES action plan is the European Union's initiative to enhance the use of inland navigation, in order to create a sustainable, competitive and environmentally friendly European transport network. This objective was embraced by the inland navigation sector, which, together with the European Commission, has created PLATINA, an EU-financed research project consisting of 22 partners from nine different countries, in order to accelerate the achievement of the NAIADES aims.

Recognising that the implementation of the European NAIADES action programme is a shared responsibility, the PLATINA consortium is dedicated to supporting the European Commission and national authorities in the implementation of selected NAIADES actions. Organised along the lines of the NAIADES action programme, five thematic areas are pursued.

PLATINA has initiated several actions in the fields of fleet innovation, education

and training, image and awareness, River Information Services and infrastructure development. Selected PLATINA activities include the establishment of a central register of inland vessels and steps towards the development of Standards of Training and Certification for Inland Navigation.

Certain inland waterways vessels require a technical inspection before being allowed to sail on European inland waterways. During technical inspections, authorities register data such as the “Unique European Vessel Identification Number”, the name of vessel. Within PLATINA, a central register of inland vessels, the European Hull Database, which eases the required data exchange, was implemented. At present (January 2012), about 75 per cent of the European Union’s fleet has been made available. After the end of PLATINA, the operation of the European Hull Database needs to be continued in a pan-European way, i.e. all countries issuing certificates need to be able to participate.

Highly qualified personnel are crucial for the efficient operation and competitiveness of tomorrow’s fleet on European inland waterways. As demonstrated in the NAIADES action programme, the lack of skilled labour will pose a major problem to the future development of inland navigation in Europe. A core function of PLATINA is therefore to provide support for the harmonisation of inland waterway transport education and training standards in Europe. As part of this, PLATINA initiated a Joint Working Group (JWG) on professional competencies which was attended by key representatives of the European inland waterway transport sector. A development strategy of the harmonisation of standards has been prepared. It is based on the concept of “Standards of Training and Certification Inland Navigation” (STCIN) which will be elaborated further by the participants of the JWG to support the Social Partners in developing recommendations for harmonised professional profiles within the frame of the Sectoral Social Dialogue.

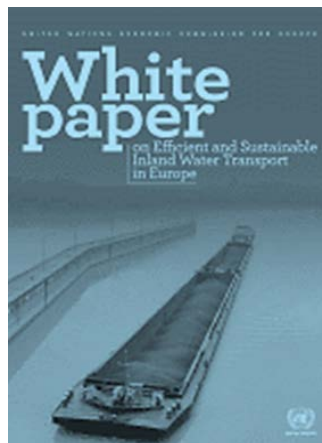
UNECE Publications for Review

Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels – Revision 1



www.unece.org/index.php?id=26687

White Paper on Efficient and Sustainable Inland Water Transport in Europe



www.unece.org/index.php?id=26068

CEVNI – European Code for Inland Waterways - Revision 4



www.unece.org/index.php?id=26061



Intermodal Transport

CHAPTER 5. Intermodal Transport

Albania

Does your Government take specific measures for the development of Logistics industry? Mention some.

275. Albania is perceived as having poor logistic infrastructure. In the short-term, development of logistics and intermodality in Albania will be focused on activities generated by the port of Durres. In the longer-term, it will depend largely on maritime transport and the implementation of several different projects, such as: a) the completion of the railway links on Corridor VIII connecting Durres to the former Yugoslav Republic of Macedonia and Bulgaria; b) the potential development of a large transshipment container port at Vlora; and c) the Energy and Industrial Park adjacent to Porto Romano and development of a new railway connection that will potentially serve them.

276. In addition, there are insufficient connections between Albanian railways and other modes of transport (Customs procedures and development of multimodal terminals).

Armenia

Does your Government take specific measures for the development of Logistics industry? Mention some.

277. The Government of the Republic of Armenia has approved the programme of construction of an international logistics centre and transport infrastructures in the territory adjacent to the "Zvartnots" International Airport. This will be part of a free economic zone and will ensure the transport of passengers from highways and the city of Yerevan to the airport through the construction of a new motor highway and railway. The construction of the logistic centre is expected to last 3 years. The cost will be around €25 million which will be provided by Public Private Partnerships.

Does your Government take specific measures for the development of Logistics industry? Mention some.

Azerbaijan

278. On 3 November 2010 Azerbaijan started the construction of the new Baku International Sea Trade Port. The construction area is 400 hectares. The land allocated to the port complex is 100 hectares. Also the development of an international logistic centre is planned.

Belgium

Does your Government take specific measures for the development of Logistics industry? Mention some.

279. In Belgium resources have been made available for the development of business parks and of certain infrastructure of related sectors including logistics (including budget Trilogiport). It should be noted that AWEX has taken specific actions that have attracted foreign investors in Logistics in Wallonia. In the Flemish Region, the initiative includes "Flanders Port Area" (see www.flandersportarea.be), which sets 10 goals in logistics

and aims to strengthen cooperation among port managers and the private sector.

280. The project “Vlaanderen in Actie (ViA)” – Flanders in Action – is an ambitious project of the Flemish Government that started in 2006. One crucial breakthrough action is to become Europe’s smart logistics hub (www.vlaandereninactie.be). In order to turn Flanders into a smart hub for transport and logistics, as well as a traffic management for citizens and companies, a broad action plan is designed for seven key projects.
- (a.) Organization of a logistics chain;
 - (b.) Provision of infrastructure;
 - (c.) Multi-modal transfer;
 - (d.) Broad policy plan as a compass;
 - (e.) Smart kilometre tax;
 - (f.) Multi-modal counselling; and
 - (g.) Knowledge for logistics with added value.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

281. The Flemish Government in its general policy notes (www.docs.vlaamsparlement.be/docs/stukken/2009-2010/g217-1.pdf) specifies the advantages of Flanders, including the presence of major port in Europe and worldwide.



282. The project “Development of Strategy for Integration of the Bulgarian Railway Infrastructure into the European Intermodal Transport Network” was implemented in 2006. Additionally, appropriate legal measures for different PPP schemes investments in the field of intermodal transport based on EU best practices were identified and proposed.

Does your Government take specific measures for the development of Logistics industry? Mention some.

283. The role of the Government and particularly of the Bulgarian Ministry of Transport, Information Technology and Communications is mainly to create a favourable environment for the development of the logistic industry. Essentially, this is one of the priorities in our transport policy, therefore, different supporting measures were introduced.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

284. The Bulgarian Government believes that the country has competitive advantages from a logistics and transportation point of view, including its geographical location, sustainable political and economic conditions, European support, railway and road network density, “River – Sea” Connection, and PPP opportunities.



285. Canada does not have a master plan aimed solely at logistics or intermodal transport. However, the National Policy Framework for Strategic

Gateways and Trade Corridors (www.canadagateways.gc.ca) provides an overall framework within which regional gateway and trade corridor strategies have been developed:

- (a.) the Asia Pacific Gateway and Corridor Initiative, www.pacificgateway.gc.ca;
- (b.) the Atlantic Gateway and Trade Corridor, and www.atlanticgateway.gc.ca; and
- (c.) the Ontario-Quebec Continental Gateway and Trade Corridor www.continentalgateway.ca.

286. Railways are vital to intermodal transportation in Canada. Canada's rail system is based on two major national railways, both with extensive networks in the United States market.

Does your Government take specific measures for the development of Logistics industry? Mention some.

287. Specific measures to assist in the development of the logistics industry have been taken:
- (a.) Providing grade separation of roads and railways;
 - (b.) Building or improving road interchanges;
 - (c.) Moving road infrastructure to allow for expansion of facilities; and
 - (d.) Expanding value-added cargo services, and increasing handling capacity.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

288. Geography has given Canada certain natural advantages. The North American ports that are closest to Europe and Asia are Canadian. Canada is a Pacific, Atlantic and Arctic nation, with high quality infrastructure, interconnected with the world's biggest economy and our largest trading partner (the U.S.), with infrastructure that reaches deep into the continent's economic heartland.



Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

289. The geographical location of the Republic of Croatia represents a competitive advantage concerning transport. Croatia is well positioned for establishing connections between Western and South-Eastern Europe, and between Central Europe, the Adriatic and the Mediterranean.



290. No measures have been taken for intermodal transport so far in Cyprus.



291. In Czech Republic a strategy for support of logistics from public resources was adopted in 2009. In addition, a programme for the support of combined transport was approved for the period 2005 – 2010. Currently, the Czech Government is preparing a similar programme for the period starting from 2013.

Does your Government take specific measures for the development of Logistics industry? Mention some.

292. The basic measure is investments in transport infrastructure. The above mentioned program envisages a strategy to support freight villages. Currently, the programme for the support of railways revitalization is ongoing (2008 – 2013).

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

293. The Czech Government considers that the logistics sector plays an important role for the national economy. The main advantages are:
(a.) Good geographical position in central Europe;
(b.) Relatively dense and high quality road and rail infrastructure in comparison to other Central East Europe countries; and
(c.) High demand for transport services due to traditional manufacturing.

Denmark

Does your Government take specific measures for the development of Logistics industry? Mention some.

294. The Danish Minister for Transport meets 2-3 times a year with representatives from the Logistics Industry. The purpose of these meetings is to coordinate and develop the Logistic industry with close cooperation between the private and public sector.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

295. Danish shipping companies hold the world's leading position in container shipping. Denmark is recognized by IMD's "Yearbook for competitiveness" as having a very efficient transport system.

Finland

296. International multimodal transport is mainly short sea shipping and road transport. Domestic combined transport by train is very modest and is declining.

Does your Government take specific measures for the development of Logistics industry? Mention some.

297. The Finish Government reported that facilitates the cooperation among the stakeholders of Logistics industry and supports the development of research and development in the sector.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

298. The Finish Government believes its country has a logistics competitive advantage due to its location, which is close to the growing Russian Federation market and is the shortest air-route between Central Europe and Asia. There is also a stable society and there is no congestion.

France

Does your Government take specific measures for the development of Logistics industry? Mention some.

299. The French Government reported the development of an action plan for green industrial sector as measures for the development of the logistics industry. In addition, the logistics and flow management action plan was released in late 2011.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

300. The country reported that it has a competitive advantage on logistics and "green" actions.

Georgia

Does your Government take specific measures for the development of Logistics industry? Mention some.

301. The Georgian Government reported the development of free economic zones and investments in road infrastructure facilitation.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

302. The competitive advantage of the country is its location among Caucasus and Central Asian countries

Germany

303. The Federal Government of Germany has developed a Freight Transport Logistics Action Plan. This plan lays down a concrete transport policy framework for action in the field of freight transport and logistics. It is the central plan setting the course for ensuring efficient infrastructure, while at the same time making transport more efficient in general.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

304. The Government of Germany reported that the Country has a Logistics / Transportation competitive advantage because of its excellent infrastructure, good customs clearance, friendly and excellent environment (e.g. legislation) for small and mid-sized enterprises/businesses.

Greece

Does your government take specific measures for the development of Logistics industry? Mention some.

305. A Logistics Committee – working group established in 2010 under the auspices of the Greek Ministry of Transport and Communications.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

306. Greece holds an important geo-economical position on the transportation map. Due to its borders with three continents (Europe, Asia, and Africa), Greece is an ideal location for the access to emerging South East

European countries and the East Mediterranean.

307. Greece features the transport infrastructure required for the effective and rapid distribution of goods and people, such as:
- (a.) Railway network incorporated to the EU networks;
 - (b.) Road network, consisted of 1,500 km of new national roads;
 - (c.) Maritime network consisted of 16 international ports; and
 - (d.) Air network, consisted of 15 international and 25 domestic flights airports.



308. The Hungarian intermodal development conception was adopted in 2006. The Hungarian logistics action plan was adopted two years ago.

Does your Government take specific measures for the development of Logistics industry? Mention some.

309. The Hungarian Government contributes to investments in logistics centres. More specifically:
- (a.) GOP (Economic Competitiveness Operational Programme); and
 - (b.) KözOP (Transport Operational Programme).

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

310. The Hungarian Government believes that the country has a transport competitive advantage, because:
- (a.) of its geographic position (middle of Carpathian basin);
 - (b.) of its location on the Eastern EU border.



Does your government take specific measures for the development of Logistics industry? Mention some.

311. The Government of Israel promotes the development of an inland port connected by railways to major sea ports.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

312. The geographical location of Israel on the eastern shore of the Mediterranean gives it a potential competitive advantage for freight flow between Europe and Eastern Mediterranean States.



Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

313. The Italian geographic position in the Mediterranean Sea provides potential advantages along Asia-Europe maritime routes.



Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

314. Latvia has a favourable geographical location, which makes it

possible to serve as a bridge between East and West. The Government considers the country to have a well-developed transport infrastructure, which includes three major ports, extensive railway and road network, as well as modern logistics and distribution centres. Many countries use Latvian ports to export their commodities to the EU and other markets. The railway system of Latvia is in compliance with the railway system of Russian Federation and CIS countries (gauge size 1,520 mm). Therefore, there is no need for additional documentation or for changes due to railway wagons gauge.

Lithuania

Does your government take specific measures for the development of Logistics industry? Mention some.

315. The Lithuanian Government reported that four freight villages are under development and that they should be operational in 2012-2013. In addition, a Master Plan for Intermodal Transport / Long-term Strategy (through 2025) of Lithuanian Transport System has been developed.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

316. Lithuania has an external EU border with three countries and is in a very strong geographical position for transit and logistics activities. The well-developed road and rail networks and the good accessibility to all means of transport, as well as the northern-most ice-free deep water Klaipeda seaport in the Baltic and the four international airports are some of the advantages. There are also very competent and well-educated transport specialists.

Monaco

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

317. The construction of a centralized parking place for heavy vehicles close to the motorway with provision for logistics services gives Monaco a competitive advantage. The construction of an urban distribution centre linked with the above –mentioned centralized parking place is another competitive advantage.

Norway

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify

318. The Government of Norway considers its geographical position as a competitive advantage.

Poland

Does your government take specific measures for the development of Logistics industry? Mention some

319. Some specific measures include the development of transport infrastructure (road, rails, seaports), financing of intermodal terminals through the Operational Programme Infrastructure and Environment 2007-2013, and the development of ITS, as well as the creation of special economic zones.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

320. Advantages of Poland:
- (a.) Poland is a transit country on the Europe-Asia corridor;
 - (b.) the connection to the railway system of Ukraine and Russian Federation;
 - (c.) the dense rail network;
 - (d.) access to Baltic sea; and
 - (e.) good seaport infrastructure.

Does your government take specific measures for the development of Logistics industry? Mention some.

321. The Ministry of road transport and infrastructure is currently developing a new strategy for transport and logistics.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

322. The Moldavian Government considers logistics / transportation competitive advantages to be the following:
- (a.) Geographical location;
 - (b.) Access to European transport corridors; and
 - (c.) Presence of all main types of transport.

Republic of
Moldova

Romania

Does your government take specific measures for the development of Logistics industry? Mention some.

323. The Romanian Ministry of Transport and Infrastructure has developed a strategy for the development of the intermodal transport.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

324. The Romanian Government believes that the country's geo-strategic position at the Black Sea and that is being crossed by the most important inland waterway of Europe, the Danube river at a distance of 1,075 km, are country's main competitive advantages. Also, being situated at the confluence of the transport generator poles in Europe, the Balkans and Asia – offers a competitive advantage for the development of intermodal transport, as well as international freight transit.

Russian
Federation

Does your government take specific measures for the development of Logistics industry? Mention some.

325. The Russian Government stated the development of the interregional Sviazhsky multimodal logistics centre (Tatarstan) as a specific measure and the federal target programme "Development of the transport system of the Russian Federation (2010-2015)". In addition, the development of logistics centres in the Moscow region in the framework of the Coordinating Council for the Development of the Moscow transport hub

is an addition measure undertaken.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

326. The competitive advantage of Russian Federation in the field of logistics / transport lies in the benefits of its geographic location in Eurasia and the presence of rail and road routes of high density that ensure Euro-Asian transport links via the shortest distance.

Serbia

Does your government take specific measures for the development of Logistics industry? Mention some.

327. The Serbian Government has developed the Serbian Transport Strategy (2008) where there are several objectives that support the development of intermodal transport and logistics centres in Serbia, such as:

- (a.) Strengthening the institutional framework and raising the awareness of competent state bodies;
- (b.) Making a legal framework for intermodal transport;
- (c.) creating a financial support model; and
- (d.) Liberalization of intermodal transport activities.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

328. Serbia, thanks to its favourable geographical position, has traditionally played the role of a transit country between the Western and South-Eastern Europe. This role was important for the economic development of the country in the past and is expected to be very important in the future. This expectation is further supported by the recent start-up of rehabilitation works on the Pan-European Corridor X and greater integration of the country with Europe.

Slovak Republic

Does your government take specific measures for the development of Logistics industry? Mention some.

329. The Slovak Government reported the construction of terminals for intermodal transport as part of logistics centres as a specific measure that has been undertaken.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

330. The Slovak Republic lies in the centre of Europe, where many international European multimodal corridors pass. Moreover, Slovakia is a transit country for EU and other third countries. The recent developments of the economy create opportunities for the development of global logistics.

Slovenia

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

331. Due to its favourable geographical location, Slovenia has been at the crossroads of land routes between the East and the West, North and South for centuries. With its single port of Luka Koper, it also offers the shortest connection to the Mediterranean, the Middle East and countries in the Far East. The next strategic goal is to make Slovenia a logistics platform for Central and South Eastern Europe. More info: www.mzp.gov.si/en

Sweden

Does your government take specific measures for the development of Logistics industry? Mention some.

332. In 2007, the government appointed the Logistics Council. The council will provide the government with input on matters of importance for the logistics industry, and they are, among other tasks, also responsible for an annual logistics conference.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

333. Sweden has a well-developed, multi-modal transport system, generally with high quality. Sweden has a long coast, with ports capable of accommodating large vessels both on the west and east coast. The Swedish transport system is often ranked high in international comparisons, such as the Logistics Performance Index used by the World Bank, or the Global Competitiveness Index presented by the World Economic Forum.

Switzerland

Does your government take specific measures for the development of Logistics industry? Mention some.

334. A Master Plan for Logistics is currently being developed. The Master Plan for Intermodal Transport consists of different measures to promote intermodal transport (subsidies and compensation payments to intermodal transport operators, subsidies and interest free loans for intermodal transport terminals, etc.). Details can be found here: www.bav.admin.ch/verlagerung/03063/index.html?lang=de (German, French, Italian) Measures are based on the Freight Traffic Transfer Act (www.admin.ch/ch/d/sr/c740_1.html)

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

335. Switzerland has excellent transport infrastructure on road and rail, including two base tunnels in order to facilitate north-south transit through the Alps. The promotion of intermodal transport and the provision of an excellent terminal infrastructure (Road/Rail/Inland Waterways) is a main focus of the Swiss transport policy.

Tajikistan

336. The organization and development of the logistics industry in Tajikistan are provided by the programme of development of the republic of Tajikistan through 2025.

Does your Government take specific measures for the development of Logistics industry? Mention some.

337. Turkey has developed a programme for increasing the number of freight villages.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

338. Turkey is located at the heart of the most important production and consumption centres of the world and at the crossroads of the three continents. Turkey has huge diversity in terms of geography and topography. Pursuant to this fact, Turkey defined the construction and upgrading of lines on the corridors connecting these three continents to one other as a strategic priority.

Does your Government take specific measures for the development of Logistics industry? Mention some.

339. The country reported the construction of the main hub of the Navoi Airport - International Logistics Center (MITSL) as a specific measure taken. At the end of 2011, "Navoi" handled and transported more than 50 thousand tons of cargo and operated regular flights to 20 destinations (including Bangkok, Bombay, Brussels, Dhaka, Delhi, Dubai, Seoul, Istanbul, Milan, Frankfurt and Shanghai).

340. In addition, the International Logistics Centre in the city of Angra was completed, which will provide a guaranteed year-round transportation link between the regions of the country and the provinces of Fergana valley. At the end of 2011, more than 4 million tonnes goods were serviced (car manufacturing GM Uzbekistan, automotive components, petroleum products and chemicals, etc.).

341. The International Logistics Centre of "Tashkent" (Sergiliysky district) is almost constructed. The MPT "Tashkent" will provide a full range of services for handling, storage, customs clearance, cargo transportation and "door to door" delivery.

Does your Government believe that your country has a Logistics and / or Transportation competitive advantage? Please specify.

342. The country reported that it has a logistics – transportation competitive advantage due to the following reasons:

- (a.) An important geo-strategic position in the heart of Central Asia;
- (b.) Access to the emerging markets of the CIS;
- (c.) The intersection of rail, road and air routes;
- (d.) A skilled workforce;
- (e.) The presence of a modern cargo terminal equipped with the latest equipment and technology for processing of goods; and
- (f.) High rates of economic growth and a stable socio-economic situation in the country.

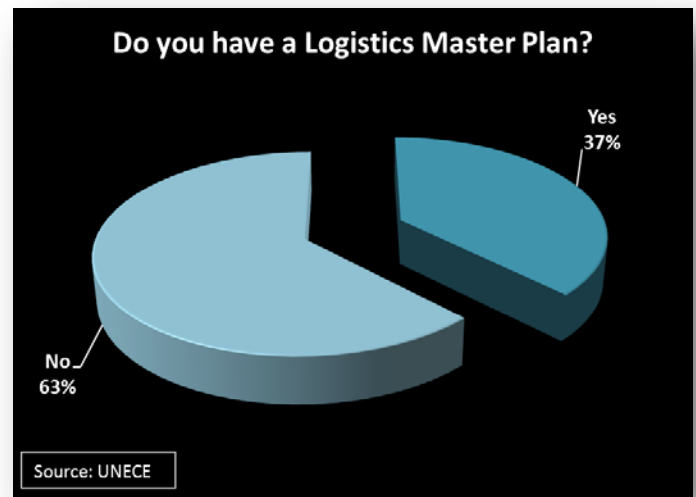
Statistics

Transport Trend

Countries start developing National Logistics Masterplans

343. The 37 per cent (12 countries) that replied to the UNECE Transport Division questionnaire replied positively on the development of a logistics master plan and 63 per cent (20 countries) negatively.

Figure 67. Logistics Master Plan



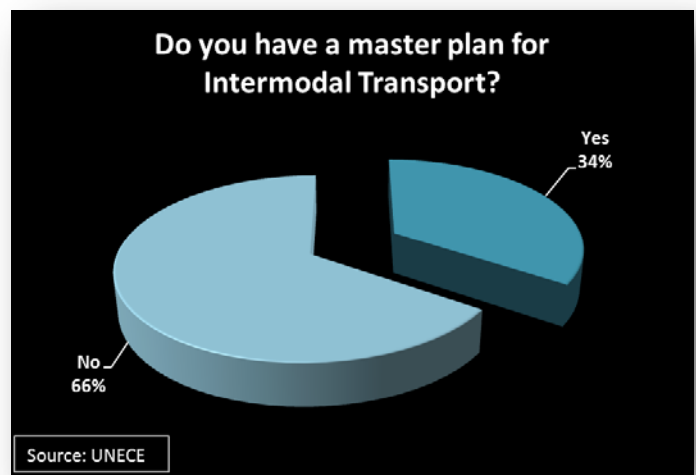
Source: UNECE

Transport Trend

Countries start developing National Master plans for Intermodal Transport

344. Thirty-four per cent (11 countries) that replied to the UNECE Transport Division questionnaire replied positively on the development of a national master plan for Intermodal transport and 66 per cent (21 countries) replied negatively.

Figure 68. Intermodal Transport Master Plan



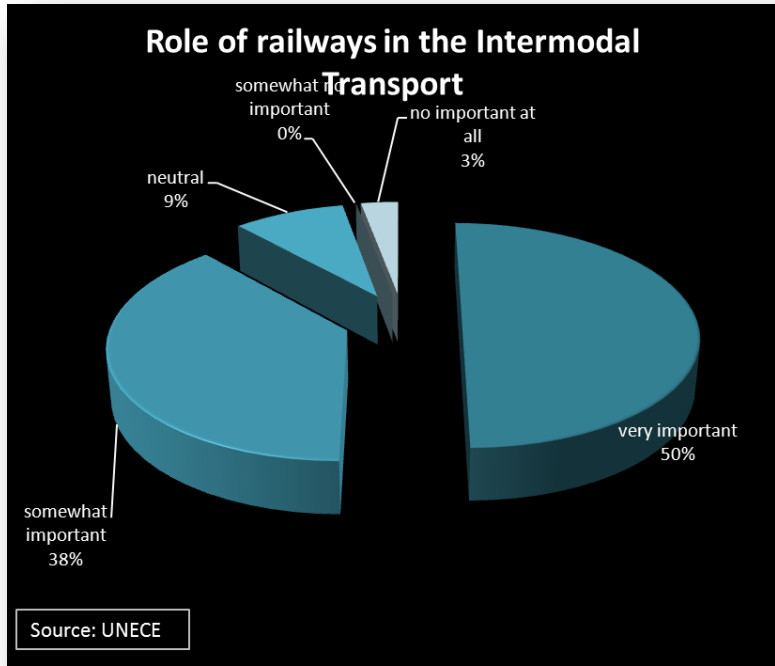
Source: UNECE

Transport Trend

Countries consider the role of Railways as very important for intermodal transport

345. Eighty-eight per cent of the countries (30 countries) replied that the role of railways in intermodal transport it is very important or somewhat important. Only the 9 per cent (3 countries) indicate the role of railways as neutral and only one country (Cyprus) indicated it is not important at all.

Figure 69. Role of railways in the intermodal transport

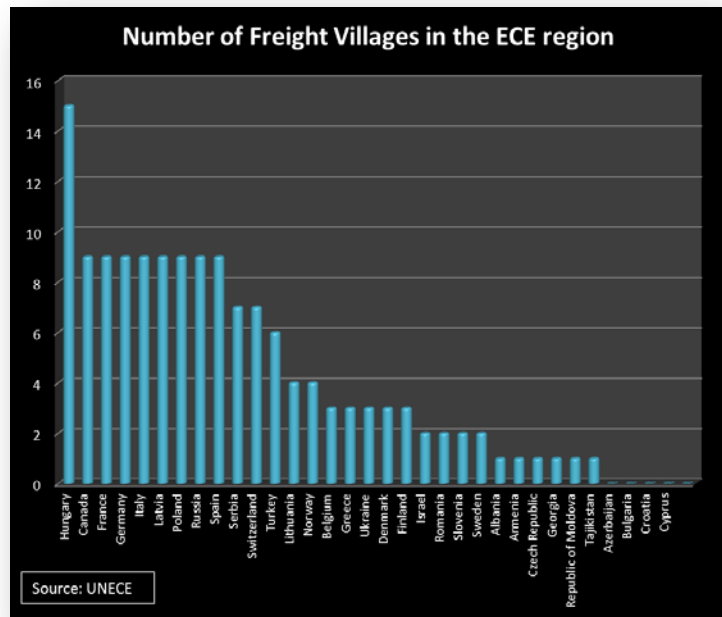


Source: UNECE

Transport Trend

Freight Villages are a reality in ECE region

Figure 70. Number of Freight Villages in the UNECE region

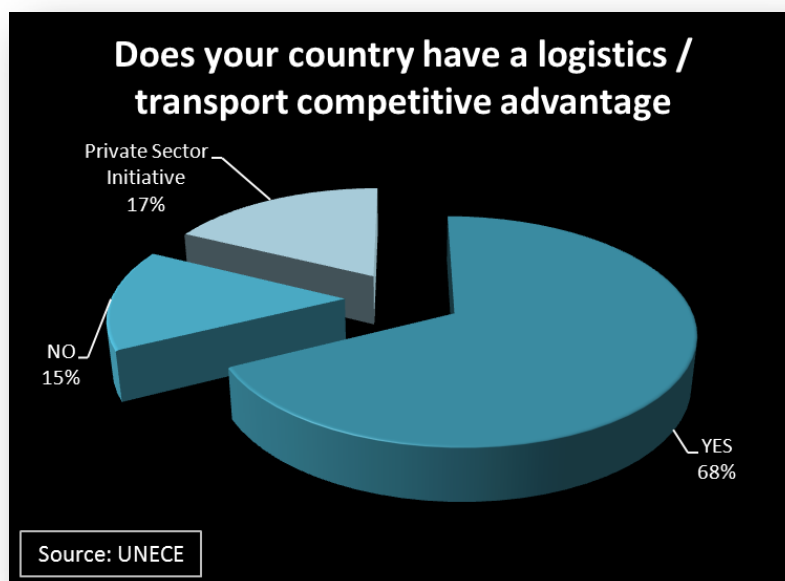


346. At least 144 freight villages exist in the UNECE region. The total number is not definite, since 8 countries selected the “more than 9” freight villages option on the questionnaire. From the replies, it is clear that there needs to be some harmonisation of the terms “freight village”, “logistics centre”, “freight station” etc. among the UNECE member States.

Transport Trend

The majority of ECE countries believe that have a logistics / transport competitive advantage

Figure 71. Countries with logistics – transport competitive advantage



Source: UNECE

347. Sixty-eight per cent of the countries participated in the questionnaire of the Transport Division. Twenty three answered positively on the existence of a logistics – transport competitive advantage. Seventeen per cent of the countries (6 countries) connected their geographical - logistics advantage with private sector initiatives and investments.

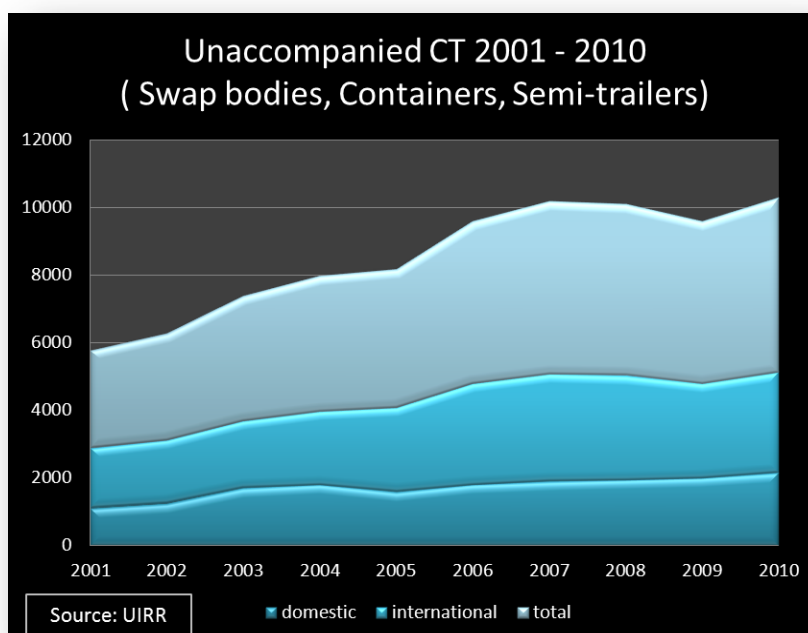
Transport Trend

Combined transport increased its volumes at 38 billion tkm in 2010

348. Despite the slower than anticipated demand during the first half of 2010, UIRR Operators have managed to slightly exceed the turnover of 2008 (including the once-off effects related to one member company in that year), much more quickly than anticipated. Consequently, close to 2.6 million UIRR consignments, or the equivalent of 5.2 million TEUs, were carried, constituting a recovery of half the volume lost during the economic crisis. Traffic performance expressed in tonne-kilometre grew in a similar manner and reached 38.2 billion tkm, of which 78 per cent was achieved through border-crossing services (covering an average distance of 900 km) and with a gross tonnage of 22 per tons consignment. These figures in domestic relations amounted to 443 km and 18 tons⁷.

⁷ UIRR, International Union of combined Road-Rail transport companies 2010, Annual Report

Figure 72. Unaccompanied CT 2001 - 2010



Source : UIRR

349. The Working Party on Intermodal Transport and Logistics (WP.24) and on the basis of a comprehensive presentation made by the UIRR representative, noted that intermodal road-rail transport had recorded, since the late 1990s and until 2008, annual growth rates in the order of 6–7 per cent. (www.unece.org/trans/wp24/wp24-agenda/24age.html ECE/TRANS/WP.24/125, paras. 4–8).
350. In 2010, UIRR companies again recorded a considerable increase in traffic in the order of 8 per cent, both for unaccompanied (containers, swap bodies and semi-trailers) and accompanied transport (rolling road). This amounted to total shipments in the order of 3,03 million consignments or 6,06 million TEU equivalents (5,16 million TEU for unaccompanied and 0,90 million TEU for accompanied traffic). One consignment is equivalent to two, twenty-foot equivalent units (TEU).
351. Intermodal road-rail traffic continued to grow in the first half of 2011. However, this upward trend is already slowing down in the second half of 2011. The outlook for 2012 is bleak, as economic growth in Europe will be negatively affected by the austerity measures taken in a number of European countries. In addition, the scheduled temporary closure of the Brenner railway line in 2012 for maintenance and rehabilitation works will complicate transalpine services and may reduce its reliability and punctuality, while increasing costs.



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Background

We are at the beginning of a political and technological revolution for renewable energy and new transport models, not only because of the crisis. Road freight transport is dominant in Europe, in 2009 most countries reported declines in freight traffic, meanwhile Bulgaria is an exception with 16 per cent growth. Bulgaria has dense rail and road networks. The country ranks 28th in the world for railways per capita and 39th for railway length. At the same time freight transported by rail decrease with 33 per cent in Bulgaria and 27 per cent in Romania. Bulgarian railway infrastructure supports speeds of up to 100 km/h, mainly because of utilizing old technologies, high costs and inaccessible financial resources for maintenance. Furthermore, there are no programmes and initiatives for the development of railway services. Rail freight market has been liberalized, with private companies having 27 per cent of traffic volume. National Railways Cargo carrier is in the process of privatization.

Rail freight in Europe follows the model for integration and privatization of airline carriers through division of large companies and partnerships with regional stakeholders. The leaders in Easter Europe are DB SCHENKER RAIL and Rail Cargo Austria, companies implementing new concepts and providing integrated transport solutions.

The Alternative - Green Balkan Intermodal Corridors

The alternative is 'green' corridors integrating rail and water transport, with minimal impact on the environment. States have the capacity to solve transport problems by natural green corridors and multimodal combined transport solutions for traffic allocation and development of railways. We can formulate three concrete policies for the Balkans:

1. Identifying and adopting common regional strategic and political objectives for rail transport. Regional Transport Plan "Green Transport".
2. Implementing joint projects for building efficient infrastructure by providing financial support and public-private partnerships.
3. Supporting regional and social development and commitment. Clusters, branch organisations and expert support.

Two projects for combined carriage of goods are currently being developed.

1. Europe – Bulgaria Danube Bridge Vidin, ferry Varna – Russian Federation, The Eurasian Union, China
2. Europe - Bulgaria Danube Bridge Vidin – Greece, Turkey (Asia)

To realize these projects it is essential to improve the infrastructure and construct intermodal terminals in all states involved. Bulgarian terminals include Burgas, Varna, Sofia (Yana), Ruse and Vidin. Currently there is combined transport, linear routes and processing of containers and unaccompanied trailers from Koper, Slovenia to Sofia, Bulgaria, from Austria and Germany to Bulgaria, Turkey and Greece.

Bulgaria – Europe's alternative gateway to Russian Federation, The Eurasian Union and China

Through a new transport corridor connecting the rail network with transcontinental rail and ferry lines from the Black Sea to Russian Federation (Varna – Caucasus), Ukraine and Georgia (Poti), Bulgaria could comfortably become Europe's alternative gateway to Russian Federation, The Eurasian Union and China.

Successful projects are a mixture of common interests between governments and business, reasonable deadlines and budgets feasibility.



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Currently the transport system does not meet the requirements of sustainable development. The trend of the last decade, translated into the continuing growth of the road freight share, is the result of policies that swung between public interventionism and liberalism. Technological progress, sometimes unpredictable, has been and will continue to change the distribution of flows (material, energy and informational) on each network. Therefore, a global vision for the assembly of technical infrastructures of the society must come into being.

The transport system, with its specific infrastructure, cannot be decoupled from the other technical infrastructures of the territory. Although the infrastructure is relevant for the potential of the transfer capacity, the role of vehicles and technologies cannot be omitted either. All of them provide the service function of the transport infrastructure network. Exactly this function has been deeply damaged by the institutional separation between rail infrastructure and rail operators; this explains the diminishing attractiveness of the rail transport, unable to meet customers' requirements and expectations.

The state, as manager of the infrastructure, through poor maintenance of the rail infrastructure, has severely affected the performance of the rail operation. The slow technical speeds, the lack of network capillarity and the degradation of the connections with other transport modes, in Romania, for example led to permanent performance losses. The competition among transport modes is dominant and the cooperation quasi-inexistent.

The inability of the state to provide fair competition on the transport market is obvious. The lack of a common pricing principle for infrastructure access, the disregard of the social costs, the lack of minimal responsibilities for the technical performance of the rail infrastructure, the absence of prioritization of the infrastructure investments according to technical, financial and economic efficiency are only some of the issues that we will have to consider to achieve the sustainability goals.

Taking into account the requirements of sustainable development, achieving high speed railways in South-Eastern Europe is more appropriate than highway construction.

The use of loading units and performing feeder services in multi-modal "hub and spoke" networks could satisfy the long and medium distance freight demand even in the absence of highways.

A systemic strategy concerning the evolution of the technical infrastructures within a territory, avoiding the waste of resources and protecting the natural and human environment meets the objectives of sustainable development. For this, a lot of professionalism and political responsibility are required.



Transport
Infrastructure

CHAPTER 6. Transport Infrastructure

Introduction

352. Infrastructure investment is important for effective service delivery and long term growth. In order to support this type of investment, a number of governments with a relatively strong fiscal position provided grants for capital expenditures, which accelerated the pace of infrastructure.

353. During 2011, amounts invested by UNECE Governments for transport infrastructure declined. The majority of the countries replying to our questionnaire declared infrastructure financing and administration processes as the main obstacle for transport infrastructure investments over the last year. The economic crisis, in combination with difficulties implementing flexible financing laws, i.e. Public Private Partnerships, were the two main obstacles that Governments mentioned for transport infrastructure development during 2011.

TEM and TER revised Master Plan 2011

354. In 2011, UNECE published the Trans European Motorway (TEM) and the Trans-European Railway (TER) revised Master Plan. TEM and TER projects are flagship UNECE infrastructure projects. The objectives of the Master Plan revision were (a) to analyse the results of the road and rail infrastructure development in 25 participating countries from Central, Eastern and South-Eastern Europe and the Caucasus in the period 2005 to 2010, (b) to describe the existing status of road and rail networks and (c) to set out the road and rail networks development programme until the year 2020.

Transport Trend

In 2020, based on TEM status map, the motorway network will be in full operation in 11 countries

355. According to the TEM status map, it is possible to assume that in 2020 the TEM Master Plan backbone network with motorway or dual carriageway sections will be in full operation in 5 countries, and with a few exceptions in another 6 countries. There also seems to be some hope for its completion in the foreseeable future in another 5 countries, while in the remaining 9 countries, the chance seems to be rather low.

Transport Trend

In 2020, based on TER status map, 17 countries will have railway sections with a design speed of 160 km/h

356. According to the TER status map, railway sections with a design speed of 160 km/h currently exist in 9 out of the 25 countries participating in the revision. In 2015, this number is expected to grow to 14 and in 2020 to a total of 17 countries. It seems possible that by 2020, a few more continuous 160km/h main lines may exist in the region, interconnecting most of the countries of Central and Eastern Europe.

Euro Asian Transport Linkages Project (EATL)

357. Inter-country cooperation under the EATL Project promoted by UNECE encourages cooperation among 27 countries along the Euro-Asian land bridge for the coordinated development of Euro-Asian inland transport links. The project has so far produced tangible results and potential for the development and operation of safe, secure and efficient Euro-Asian transport solutions addressing both physical and non-physical obstacles to transport. Results include an investment strategy for developing 404 priority transport infrastructure projects identified along the main Euro-Asian routes, together with analysis of non-physical obstacles to transport, elaboration of focused studies, development of a GIS database and related applications, as well as policy recommendations

Transport Trend

EATL Expert Group proposed 146 road projects with value of \$113 billion

Transport Trend

EATL Expert Group proposed 121 rail projects with value of \$75 billion

The World Bank

Transport Trend

The World Bank, for fiscal year 2011, lent 4 per cent of its budget for transportation projects to Europe and Central Asia region

358. Four hundred twenty one projects were proposed by the participating countries with total cost amounting to approximately \$271 billion: 311 projects have been identified along the approved and proposed EATL Phase II Routes, while 110 projects are of national importance (Reserve Category).

359. One hundred forty six are road projects (47 per cent of total), with a value of \$113 billion, representing 53 per cent of the total investment cost, of which:

- 57 per cent belong to Category I, with a value of \$22.3 billion, representing 20 per cent of the total investment cost for road projects;
- 27 per cent belong to Category II, with a value of \$88.3 billion, representing 78 per cent of the total investment cost for road projects;
- 2 per cent belong to Category III, with a value of \$0.3 billion, representing 0.3 per cent of the total investment cost for road projects; and
- 14 per cent belong to Category IV, with a value of \$1.9 billion, representing 1.7 per cent of the total investment cost for road projects.

360. One hundred twenty one are railway projects (39 per cent of total), with a value of \$75 billion, representing 35 per cent of the total investment cost, of which:

- 62 per cent belong to Category I, with a value of \$28.3 billion, representing 38 per cent of the total investment cost for rail projects;
- 16 per cent belong to Category II, with an estimated value of \$9.2 billion, representing 12 per cent of the total investment cost for rail projects;
- 2 per cent belong to Category III, with a value of \$2.7 billion, representing 4 per cent of the total investment cost for rail projects;
- 19 per cent belong to Category IV, with a value of \$31.3 billion, representing 42 per cent of the total investment cost for rail projects; and
- 1 per cent has been completed, with a value of \$3.6 billion, representing 5 per cent of the total investment cost for rail projects.

361. According to the World Bank, the countries in the UNECE region need to increase competitiveness, improve productivity and strengthen regional integration. The Bank supported regulatory reforms and public finance management in Croatia and Poland, helped stabilize the financial sector in Serbia, and increased access to finance for small and medium enterprises in Armenia and Turkey. The Bank supported road improvements in Belarus, Kazakhstan, Kyrgyzstan and the South Caucasus and public sector reforms to improve governance and transport and energy delivery in Romania.

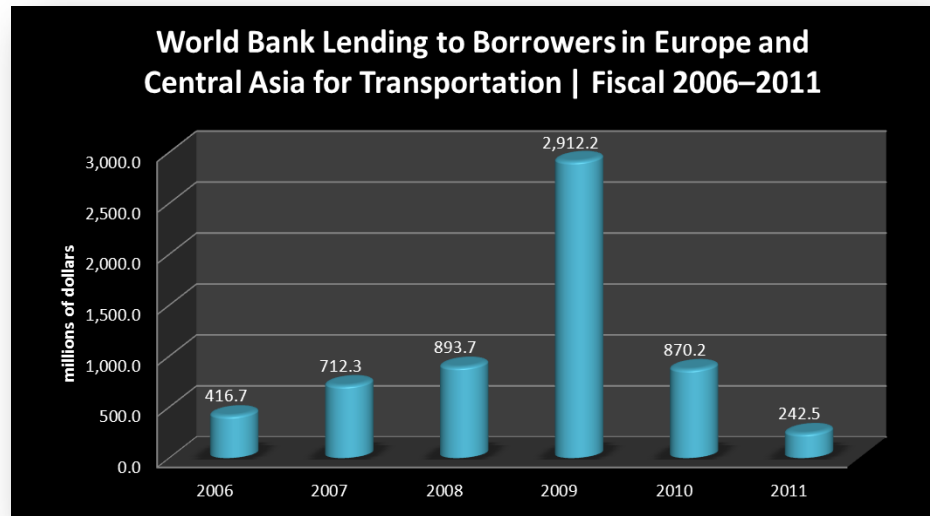
362. Bank support reached \$6.1 billion this fiscal year (2011), including \$5.5 billion from IBRD and \$655 million from IDA. Turkey (\$1.4 billion), Poland (\$1.1 billion) and Romania (\$1.1 billion) were the largest borrowers. Sectors receiving the most funding were energy and mining (\$1.9 billion); Public Administration, Law, and Justice (\$1.7 billion) and Health and other Social Services (\$1.2 billion).

363. Bank lending to countries in Europe and Central Asia for transportation projects has dramatically decreased: from 2.912 millions of dollars in 2009 to 242.5 millions of dollars in 2011.

Transport Trend

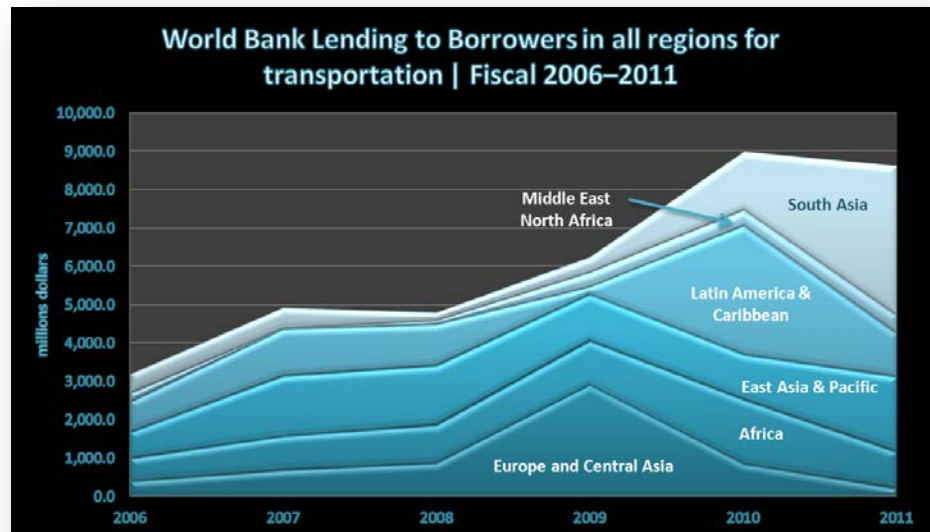
The World Bank, lending to borrowers in Europe and Central Asia for transportation has dramatically decreased from 2,912 millions \$ in 2009 to 242 millions \$ in 2011

Figure 73. World Bank lending to borrowers in Europe and Central Asia for transportation | Fiscal 2006 - 2011



Source: World Bank , UNECE

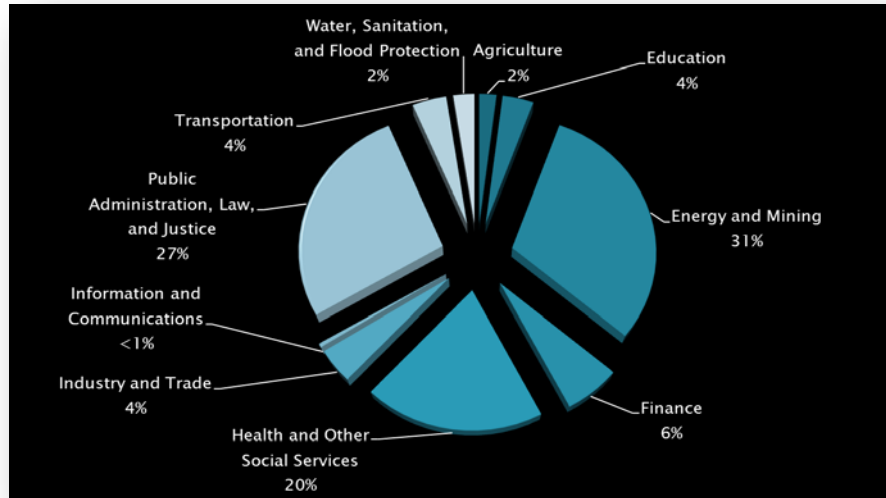
Figure 74. World Bank lending to borrowers in all regions for transportation | Fiscal 2006 - 2011



Source: World Bank , UNECE

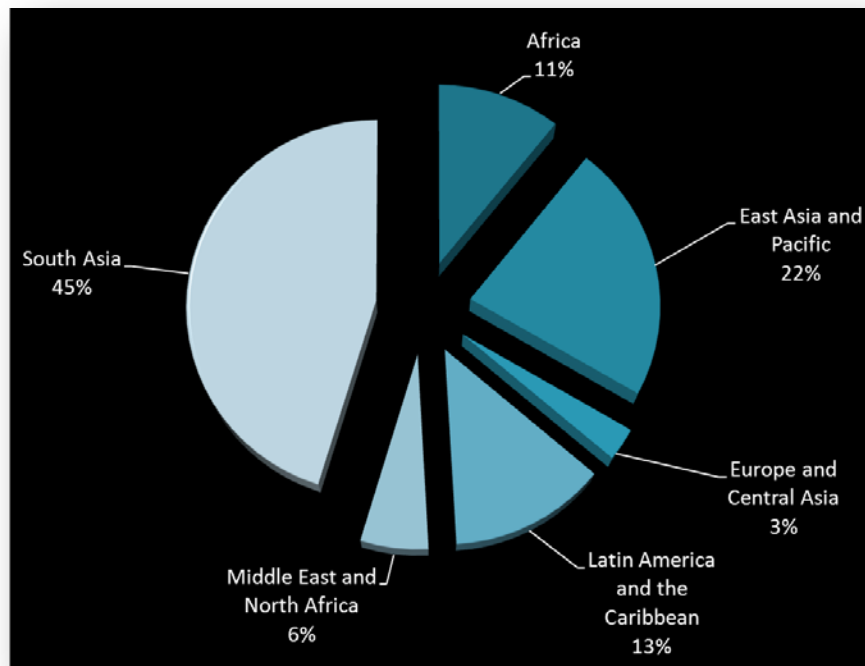
364. South Asia gets the largest amount with 3.914 million \$ for 2011. South and East Asia and the Pacific are the only regions that received larger amounts in 2011 compared to 2010. The total amount that the World Bank lent to borrowers from 2006 to 2011 for transportation projects was increasing getting its highest pick in 2010 with a total of 8.585 million \$. In 2011, there was a decrease to 8.155 million \$.

Figure 75. Europe and Central Asia lending by Sector | Fiscal 2011
Share of Total Lending of \$6.1 Billion



Source: World Bank , UNECE

Figure 76. Transportation lending by region | Fiscal 2011 Share of Total Lending of \$8.6 Billion



Source: World Bank , UNECE



365. Approval of the Sustainable Transport Initiative Operational Plan placed ADB at the forefront of sustainable transport in developing member countries. The 2010 ADB Transport Forum discussed issues related to urban transport, mainstreaming climate change, cross border transport and logistics, and road safety and social sustainability. The Kathmandu Sustainable Urban Transport Project was approved, serving as a showcase for support in urban transport.

Transport Trend

Asian Development Bank in 2010 lent \$1,3 billion for transport infrastructure projects in Central Asia

366. Improved connectivity through investments in transport and logistics, energy security and efficiency, upgraded urban services, and public sector reforms are at the heart of the ADB strategy in the sub region (Central and West Asia). More than \$1.2 billion has been directed at energy supply and transmission, with the same amount for transport infrastructure. The Central Asia Regional Economic Cooperation Program reached major milestones in 2010.

367. About \$1.3 billion provided for transport infrastructure, mostly under multitranche financing, including a \$340 million regional road project in Afghanistan, and \$456 million for CAREC corridors in Kazakhstan and \$115 million in Uzbekistan.

368. ADB and its partners—including the European Bank for Reconstruction and Development (EBRD), the Islamic Development Bank, and the World Bank—approved sub regional transport and energy projects worth \$2 billion. These covered the CAREC Corridor (Zhambyl Oblast Section) in Kazakhstan and the Talimarjan Power Project in Uzbekistan. Under an agreement signed by Kyrgyzstan and Tajikistan in December to facilitate the cross-border transport of goods and people, trade facilitation bodies were established, including the CAREC Federation of Carrier and Forwarder Association.

Railway infrastructure trends in Europe



Libor Lochman

Community of European Railways and Infrastructure Companies (CER)
Executive Director

The European railway infrastructure suffers from insufficient coordination of investments, which results in a patchwork of lines that are not connected to the backbone network. Whilst this represents a certain obstacle for international passenger traffic, it poses a serious barrier for efficient rail freight transport.

The implementation of rail freight corridors has seen problems all over Europe due to the lack of commitment of member States to provide funding on time.

The European Commission recognises this situation and published the Regulation concerning a European rail network for competitive freight in 2010. This regulation comprises a list of nine initial freight corridors which take priority in terms of investments and coordinated management.

The tendency to support rail as the sustainable transport mode has been confirmed in 2011 when the European Commission presented two important political projects for European transport infrastructure: The Transport White Paper of March 2011, which gives a clear vision for a competitive and sustainable Single European Transport Area and especially for a Single European Railway Area, and the proposal for a revision of the Trans-European Transport Network (TEN-T) Guidelines published in October 2011.

The proposed core network connects EU capitals, ports, airports and key land border crossings, as well as other economic centres through the use of multimodal corridors which, with the help of improved standardisation and harmonization at EU-level, are to carry large volumes of freight and passengers with high efficiency and low emissions throughout Europe.

There is however persistent discrepancy between financing needs and available funds. The dominance of investments in road – especially in the new member states (EU-12) – is particularly striking.

The European transport network clearly requires substantial financial resources at a time when governments are under immense pressure to reduce their public budgets. In order to meet the expected demand for transport, the European Commission has

estimated that over 1.5 trillion EUR are needed for the period 2010-2030 for transport infrastructure alone.

In order to mobilise the large amount of funds needed for the implementation of the TEN-T network, alternative sources of funding from both public and private investors will have to be explored. These should include the full internalisation of all external costs for all modes, the application of the polluter-pays and user-pays principle, and the elimination of tax distortions.

Transport Infrastructure developments along the Euro Asian Transport Linkages



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The Euro-Asian Transport Links (EATL) project during its Phase I was a joint effort by the United Nations Economic Commission for Europe (UNECE) and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). Phase I was carried out from 2002 to 2007 with participating countries Afghanistan, Armenia, Azerbaijan, Belarus, Bulgaria, China, Georgia, Greece, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Moldova, Romania, Russian Federation, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan. UNECE is implementing Phase II during a four-year period from 2008 to 2012. Finland, Germany, Latvia, Lithuania, Luxembourg, Mongolia, Pakistan, and the former Yugoslav Republic of Macedonia are the new participating countries.

One of the main achievements of the study is related to the selection of the transport infrastructure projects along the approved EATL routes by the participating countries, and involves all transport modes: road, rail, inland waterways, transshipment points and ports. The identified EATL inland transport routes, for specific origins-destinations are - in terms of distance-up to three times shorter and often quicker than the respective maritime routes. In addition, the study has developed an international investment plan of the identified priority transport infrastructure projects along the specified EATL routes. It includes an extensive inventory of specific road, rail, inland waterway, maritime port, inland terminals and other infrastructure projects for the 27 participating countries, together with their estimated budget and pragmatic investment time plan for their implementation, according to four implementation time periods, each related to a specific time horizon going beyond 2020.

A total of 311 infrastructure projects were proposed under the EATL Phase II Study, the majority of which being related to the road network. The implementation of the EATL network as a whole would require the approximate sum of \$213 billion, out of which only 33 per cent has secured funding to this date. Currently, new transport infrastructure is being constructed in some parts of the inland EATL routes. During the years 2009 and 2010, only 1 per cent of the EATL Network was completed, while over half of the proposed projects (60 per cent) are planned to be completed within the upcoming period 2012- 2013. More specifically, in the following two years (2012- 2013) will see the completion of 57 per cent of road projects and 62 per cent of the railway projects. On a country basis, the completion of all planned infrastructure projects by year 2013 is expected in Azerbaijan, Greece, Kazakhstan, and Lithuania, while most of the projects' development would have been realised in Bulgaria, Islamic Republic of Iran, Latvia, Romania, Ukraine and Uzbekistan.

Today, maritime transport dominates the transport of goods from Asia to Europe, while there are significant unutilized capacities along some parts of the EATL road and railway routes running east-west and north-south. There is a high political commitment for the development of EATL inland transport routes by the concerned governments and

various international and sub-regional organizations are promoting relevant initiatives. Moreover, the study showed that Euro-Asian rail transport and its combination with maritime and road transport is a feasible and competitive transport option. To this end, the real development potential of EATL inland transport connections lies upon their capacity to become part of the main EATL supply chains, functioning complementary among various transport modes. Thus, transport logistic services related to the end-to-end transportation cost-and-time efficiency and reliability are required. These necessitate urgent trade and cross-border facilitation to be undertaken in the EATL countries, as well the introduction of appropriate measures to reduce transport cost and time along the EATL routes.

Sustainable Transport Networking in ECO Region



**Dr Esmail
Tekyeh Sadat**
Director of Transport
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ECO Secretariat

Accessible, safe and secure road/ Rail corridors are the main concern of suppliers and customers and impact reliability in time and cost and accordingly sustainability of flow of trade in the world. Initiatives of such type of corridors and networking will enhance collective thinking and accordingly social development which will be the main task of United Nation. This study very briefly would like to demonstrate the volume of Trade in the world and more specify the geo strategic position of Economic Cooperation Organization (ECO) for initiating reliable infrastructure connectivity. That means the on-going ECO transport projects for revitalizing of Silk Road which always recognized to be as accessible, safe and secure Rail/Road Corridors.

The research design and methodology is based upon the key questions on Rail / Road corridors in Euro- Asian routes which could be applied in ECO due to inland hegemony and connectivity. The study also enriched with primary data which generated through face to face meetings, working panels and observations from the findings of ECO Truck Caravan. The research finding shows the gaps still remain in the process of initiating dynamic transport networking in ECO Region and it would be as a priority to make at the first stage interconnection among key stakeholders (forwarders, Customs, Transport ...) for enhancing reliable ECO Rail/Road corridors networking and at the second stage to enhance capacities of each members to adopt with this networking. The more important modalities which are required for enhancing capacity for initiating ECO sustain transport networking in each member states could be consider the role of creating container operating terminals networking in ECO region for better interconnectivity , monitoring and services to border crossing transit facilitation.

There are a quite numbers of strategic implemented and planed Rail/Road Corridors in ECO Region. Below are some of strategic Rail/Road corridors which could be expected to impact on flow of Trade through ECO inter-operability management mechanism. We call it Rail/Road corridors, because the most Road corridors in ECO Region have had a significant privilege to be use as a Rail Corridors and this significant privilege will impact on time and cost efficiency in interoperability of fright management system in ECO Region.

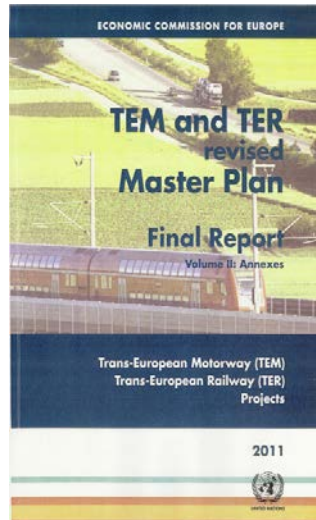
- 1- From Turkey via Iran to Pakistan (Istanbul - Islamabad)
- 2- From Turkey via Iran, Turkmenistan, Uzbekistan to Kazakhstan (Istanbul to Dostyk (Almaty))
- 3- From Azerbaijan to Iran (Yalama - Bandar e Emam Khomeyni)
- 4- From Kazakhstan via Turkmenistan to Iran (Tobol to Bandar e Abbas)
- 5- From Kazakhstan via Uzbekistan, Turkmenistan to Iran (Astana to Bandar Abbas)

UNECE Publications for Review

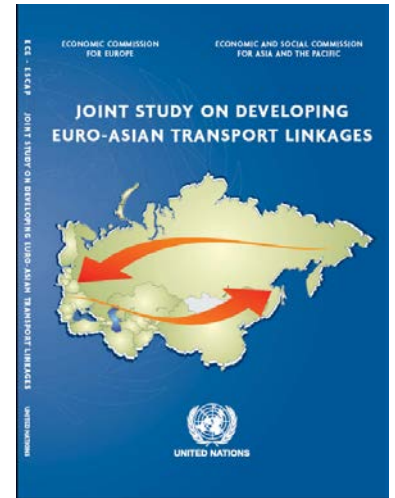
TEM and TER revised Master Plan Final Report , Volume I: Main text



TEM and TER revised Master Plan Final Report , Volume II: Annexes



Joint study on developing EURO-ASIAN TRANSPORT LINKAGES





Vehicles
Regulations

CHAPTER 7. Vehicles Regulations

Introduction

369. In 2011, the UNECE World Forum for Harmonization of Vehicle Regulations (WP.29) adopted new regulations aimed at improving vehicles' safety and their environmental performance, while also continuing to update the existing regulations. More than 100 amendments were adopted in 2011, some of which were designed to adapt the existing vehicle regulations to an adequate level of technical progress, while others introduced more severe limits. Among them, provisions were made to protect occupants of electric vehicles in case of collisions. New provisions for side facing bus seats were also completed in 2011. In addition, the World Forum adopted new provisions for adaptive driving beams to reduce glare caused by headlamps.

370. The main trends for vehicles regulations for 2011 – 2012 are summarized below:

Electric Vehicles

371. The technology of electric propulsion is fairly mature, but recent advances in energy storage (batteries, capacitors, flywheels) have largely improved electric vehicles' performance and made them a valid choice for consumers. There is considerable potential for further developments in automotive energy storage. Electric vehicles, like hydrogen and fuel cell vehicles, represent a promising technology in terms of addressing climate change, improving air quality and cutting oil dependency. The on-going regulatory efforts to reduce the emissions of gaseous pollutants, particulates and CO₂ are helping to drive an increasing market penetration of electric vehicles. Thus, many governments support the development and deployment of electric vehicles by financing research or offering incentives for consumers. Consequently, the automotive industry is investing in research and development, as well as the production capacity for electric vehicles, at a scale not seen in the past. It is important to note that while electric vehicles are currently on the market and regulators are moving forward with setting applicable technical requirements, the technology is still evolving. This on-going technology development needs a flexible yet solid regulatory framework - one that is performance-oriented, based on the best available data and scientific research and analysis.

Transport Trend

Development of a UN
Global Technical
Regulation on electric
vehicles

372. With this aim, WP.29 adopted provisions for electric vehicles into the UN Regulations annexed to the 1958 Agreement to pave the way for quick penetration of new electric vehicles into the market.

373. In the long-term, there will be a shift in the automotive sector from the use of fossil energy to innovative propulsion systems, alternative energy sources and integration of less energy demanding technologies. It is obvious that this shift alone will not solve the problem, if the generation of electricity and the production of hydrogen are not also sustainable. It is important to note that the effectiveness of an integrated approach for green vehicles depends on the energy sector ensuring the sustainable and cost-effective generation of electricity and production of hydrogen. Electricity generators need to develop a more sustainable electricity supply and electricity distributors have to adapt their grids to the new users with the possibility of slow and fast recharging of electric vehicles.

Audibility of quiet vehicles

Transport Trend

Development and harmonization of "quiet vehicle" audible acoustic signaling techniques

Automatic Emergency Braking System (AEBS)

Transport Trend

Establishment of uniform provisions for advanced emergency braking systems (AEBS)

Lane Departure Warning Systems (driver assistance)

Transport Trend

Development of lane departure warning systems

Light Emitting Diodes (LED)

374. The advent of road transport vehicles that rely, in whole or in part, on alternative drive trains (e.g. electromotive propulsion) are serving to significantly reduce both air and noise pollution and their adverse impacts on citizens throughout the world. However, the very positive environmental benefits achieved to date by these "hybrid or pure electric" road vehicles have resulted in the unintended consequence of removing a source of audible signal that is used by various groups of pedestrians, (e.g. in particular blind and low vision persons), to signal the approach, presence and/or departure of road vehicles.

375. The World Forum WP.29 has determined that road transport vehicles propelled in whole or in part by electric means, present a danger to pedestrians. Further, the World Forum has mandated its subsidiary Working Party on Noise (GRB) to assess and determine what, if any, steps might be taken to mitigate potential pedestrian hazards through the use of acoustic means, recognizing that other means of communication may also be appropriate.

376. Automatic emergency braking systems automatically detect a potential forward collision, provide the driver with a warning and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating the severity of a collision in the event that the driver does not respond to the warning. The system shall only operate in driving situations where braking will avoid or mitigate the severity of an accident, and shall take no action in normal driving situations.

377. In the case of a system failure the safe operation of the vehicle shall not be endangered. The system provides as a minimum an acoustic or haptic warning, which may also be a sharp deceleration, so that an inattentive driver is made aware of a critical situation.

378. During any action taken by the system (the warning and emergency braking phases), the driver can, at any time through a conscious action, e.g. by a steering action or an accelerator kick-down, take control and override the system.

379. "Lane departure warning system (LDWS)" warns the driver of an unintentional drift of the vehicle out of its travel lane. "Lane" means one of the longitudinal strips into which a roadway is divided.

380. "Visible lane marking" are delineators intentionally placed on the borderline of the lane and directly visible by the driver while driving (e.g. not covered by snow, etc.). Whenever the system is active, the LDWS warns the driver if the vehicle crosses over a visible lane marking for the lane in which it is running.

381. LED light sources are consuming less electric energy than filament lamps used in the past on vehicles for lighting and light signalling purposes.

382. The use of LED light sources can reduce the energy consumption of new vehicles and therefore contribute to the reduction of CO₂ emissions.

Transport Trend

Uniform provisions concerning the approval of light emitting diode (LED) light sources for use in approved signaling lamp units on power – driven vehicles and their trailers.

Pedestrian Safety

Transport Trend

Development of global technical regulation to reduce the number of pedestrian fatalities.

Safety provisions of Hydrogen and Fuel Cell Vehicles

Transport Trend

Set of regulations for Hydrogen and Fuel Cell Vehicles

383. In this respect, the World Forum has developed a new UN Regulation, under the 1958 Agreement, on uniform provisions concerning the approval of LED light sources.

384. Each year, thousands of pedestrians and cyclists are struck by motor vehicles. Most of these accidents take place in urban areas where serious or fatal injuries can be sustained at relatively low speed, particularly in the case of children. In the most representative pedestrian to car accidents, the pedestrian is in normal walking posture, meaning that the pedestrian is standing sideways to the vehicle, and is struck by the vehicle from the side.

385. In this respect, the World Forum has developed, in the framework of the 1998 Agreement, a UN GTR (Global Technical Regulation) that will significantly reduce the levels of injury sustained by pedestrians involved in frontal impacts with motor vehicles. The same provisions are being transposed into a new UN Regulation under the 1958 Agreement.

386. In the on-going debate over the need to identify new sources of energy and to reduce greenhouse gas emissions, companies around the world have explored the use of various alternative fuels, including compressed natural gas, liquefied propane gas and hydrogen. Hydrogen has emerged as one of the most promising alternatives due to its vehicle emissions being virtually zero. For decades scientists, researchers and economists have pointed to hydrogen, in both compressed gaseous and liquid forms, as a possible alternative to gasoline and diesel as a vehicle fuel.

387. Ensuring the safe use of hydrogen as a fuel is a critical element in successful transitioning to a global hydrogen economy. The safe use of hydrogen, particularly in the compressed gaseous form, lies in preventing catastrophic failures involving a combination of fuel, air and ignition sources as well as pressure and electrical hazards.

388. The development of globally harmonized technical requirement for hydrogen and fuel cell vehicles occurred within the framework of activities of WP.29. The goal is to develop and establish UN GTRs on hydrogen-fuelled vehicles that: (i) attain or exceed the equivalent levels of safety of those for conventional fuelled vehicles; (ii) is performance-based and (iii) does not restrict future technologies.

389. The GTRs will include, amongst others, vehicle crash performance requirements for hydrogen storage systems and fuel lines to limit hydrogen releases and leakages. Furthermore, the GTR will provide

technical requirements for electrical isolation to protect occupants and others against electric shock. Both set of requirements are tested in in-use and post-crash conditions.

390. The World Forum will also address the issue of reusability, recyclability and recoverability of hydrogen vehicle components.

391. Children will be safer when transported in passenger cars thanks to new provisions for child seats in a new Regulation currently in progress by the World Forum WP.29.

392. The new UN Regulation on Child Restraint Systems (CRS) will increase the safety of the child restraint system and ease its handling for users and reduce its misuse. Its implementation will increase the level of safety and reduce the injury risk of children in case of road accidents.

393. The World Forum WP.29 is developing a regulation to reduce the risk of serious and fatal injury of vehicle occupants in side impact crashes by limiting the forces, accelerations and deflections measured by anthropomorphic test devices in pole side impact crash tests as well as by other specified means.

394. Whiplash injuries are a set of common symptoms that occur in motor vehicle crashes involving the soft tissues of the head, neck and spine. Symptoms of pain in the head, neck, shoulders, and arms may be present along with damage to muscles, ligaments and vertebrae. In many cases, lesions are not evident. The onset of symptoms may be delayed and may only last a few hours. However, in some cases, effects may last for years or even be permanent. The relatively short-term symptoms are associated with muscle and ligament trauma, while the long-term ones are associated with nerve damage.

395. WP.29 is taking a comprehensive approach to determining the most appropriate regulatory requirements for testing head restraints and seats of vehicles to mitigate minor neck injuries and to improve those requirements already existing in the UN GTR addressing the whiplash issue.

Child Restraint Systems

Transport Trend

Development of harmonized technical provisions on Child Restraint Systems

Protection against pole side impact crashes

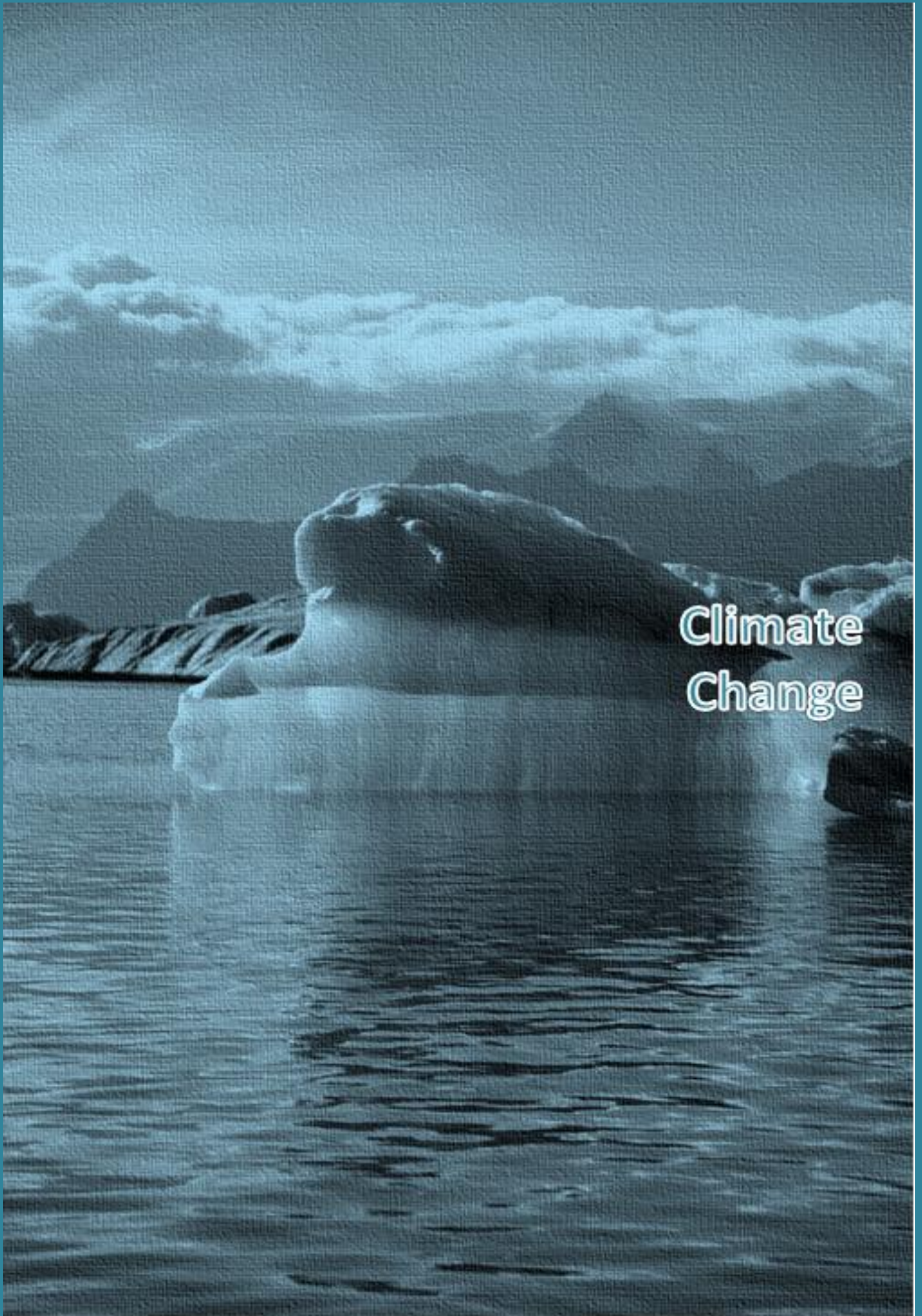
Transport Trend

Regulation to reduce the risk of serious and fatal injury of vehicle occupants in side impact crashes

Protection against whiplash injuries

Transport Trend

Identification of a set of regulations regarding protection against whiplash injuries



Climate
Change

CHAPTER 8. Climate Change

Introduction

396. Thirty Governments replied that they are taking measures on climate change. Sixty per cent of these countries are taking measures for both mitigation and adaptation of climate change, while forty per cent only for mitigation.

397. An increasing trend over the last 30 years is the occurrence of natural disasters. An increase in the atmospheric surface air temperature is also a long-term trend.

Albania

398. The important documents or resources for climate change policies and measures in Albania are:

- (a.) National Environmental Strategy;
- (b.) Environment sector and cross-cutting strategy;
- (c.) Law "on environment protection";
- (d.) Strategy and Action Plan for Biodiversity;
- (e.) The strategic action plan (SAP) for Shkodra / Skadar lake Albania & Montenegro;
- (f.) Strategy for forestry development; and
- (g.) Fourth national report to the United Nations Convention on Biological Diversity.

399. Online sources: www.moe.gov.al; www.mete.gov.al

Armenia

400. The Republic of Armenia has made initial steps towards adaptation and mitigation of climate change affects: several legal reforms have been made to mitigate the potential influence of emissions and to control the technical state of vehicles to minimize pollution or other possible negative effects. Efforts are being made to develop and implement specific strategies and action plans for the Republic of Armenia.

Belgium

401. The Government of Belgium reported the following measures on climate change mitigation and adaptation:

- (a.) Since 2007, the deductibility of company cars is based on CO2 emissions classification;
- (b.) Since 2010, the benefit in kind of a company car is calculated based on CO2 emissions;
- (c.) Since fiscal 2010, employers granted a compensation of 0.20 euro / km tax-free for commuting by bicycle;
- (d.) In 2011, the Government of Belgium decided that the purchase discount for new vehicles would be 15 per cent of the purchase value with a maximum of € 4640 (after indexation) when emissions are less than 105 g CO2/km and 3 per cent (maximum 870 EUR) when emissions are between 105 and 115 g CO2/km;
- (e.) In the Walloon region, an eco-bonus of 600 Euros is granted for the use of a new or used vehicle emitting between 0 and 98 grams of CO2 per km, with special arrangements for large families and Liquefied Petroleum Gas (LPG) vehicles;
- (f.) An eco-penalty ranging from 100 to 1,500 Euros is projected, depending on the level of emissions of the vehicle being used, the

Bulgaria

- average emissions of vehicles in circulation and the level of emissions of the vehicle being replaced;
- (g.) Since 2009, the Flemish Region has granted a bonus for the installation of a particulate filter on used diesel cars.

402. The Second National Plan on Climate Change (Second NAPCC) is a governmental plan to streamline and guide the efforts of the Bulgarian government in mitigating climate change. In the NAPCC, the individual sector mitigation policies and measures are described in detail, including the estimation of the emission reduction and requirements for implementation.

403. Currently, the Ministry of Environment and Waters is coordinating the development of the Third National Action Plan on Climate Change (to be implemented in 2011-2012 and 2013-2020) under a project for international cooperation funded by the Norwegian programme for cooperation and development called "Holistic approach to the reduction of GHG in Bulgaria".

404. Online resources:

www.moew.government.bg/recent_doc/international/climate/NAPCC_Final_English.doc

www.moew.government.bg/recent_doc/climate/npdik/broshuraNPDIK.pdf

www.eeagrants.org/id/13?act=search&numprpage=10&country=Bulgaria&mainsector=all&subsector=all&funds=all&freetext=Free+text&casenumber=Case+number&orderby=casenumber&orderdir=asc

Canada

405. The Government of Canada is applying a sector-by-sector regulatory approach to address domestic greenhouse gas (GHG) emissions as a key factor to meet Copenhagen and Cancun reduction targets of 17 per cent by 2020 based on 2005 levels. This includes regulations targeting the transportation sector.

406. Canada will spend \$149 million over the next five years on climate change adaptation initiatives to help frame a credible, science-based response to the impact of climate change on Canada's economy, health and security, as well as northern and Aboriginal communities.

407. Online resources: www.ec.gc.ca/default.asp?lang=En&n=56D4043B-1&news=B67A7995-A1CA-4DE3-89D2-E4E3C0E24BFB

408. Regarding the rail sector, Canada entered into a voluntary MOU with the rail industry to reduce air emissions, including GHGs: www.tc.gc.ca/eng/programs/environment-ecofreight-rail-menu-424.htm Rail-Annual Report.

409. Canada has also delivered a suite of clean transportation initiatives through its eco TRANSPORT Strategy. Further details on these programs are available at: www.tc.gc.ca/eng/programs/environment-ecotransport-menu-604.htm .

410. In October 2010, Canada announced final regulations for GHG emissions from new light - duty vehicles for model years 2011-2016, aligned with the U.S. Details are available at: www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=3C7732ED-B2B7-

Croatia

411. The 2008-2011 Air Quality Protection and Improvement Plan for the Republic of Croatia (Official Gazette 61/2008) defined 33 measures for climate change mitigation which are currently either in preparation or being implemented. An accompanying GHG emission trend for the period 1990-2008 indicates an obvious deceleration of emission increases over recent years, which is partly an outcome of measures taken to fulfil the commitments under the Kyoto Protocol.

Czech Republic

412. On the regional level, there is a master plan for emission reduction as well as a master plan for the improvement of air quality. Each master plan contains specific indicators and goals for the reduction of emission production for the transport sector. Other activities, such as finance benefits or taxes supporting environmental friendly transport, alternative fuels, and low CO₂ emission cars are under consideration.

Denmark

413. The Danish Government is working to reduce CO₂ emissions by 40 per cent in 2020 compared to 1990. In the transport sector, the Government is promoting public transport and bicycle transport in order to reduce CO₂ emissions. More than two-thirds of the investments budget goes to the rail sector. www.kemin.dk/en-US/Sider/frontpage.aspx

Finland

414. The Finish Government has developed a climate policy programme for the transport sector (Ministry of Transport and Communications). All information needed can be found at the following link: www.lvm.fi/web/fi/julkaisu/-/view/1198918

France

415. The French Government has developed a specific action plan for both mitigation and adaptation for climate change. More information can be found at the following links:
www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020949548
www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020949548

416. For climate change adaptation:
www.developpement-durable.gouv.fr/IMG/pdf/ONERC-PNACC-complet.pdf

Georgia

417. Georgia is working to adopt the MARPOL Annex-VI Regulations for the Prevention of Air Pollution from Ships.

Germany

418. The German Government has taken several measures regarding climate change. More information can be found at:
www.bmvbs.de/EN/TransportAndMobility/TransportPolicy/TransportAndEnvironment/transport-and-environment_node.html  http://www.bmvbs.de/DE/VerkehrUndMobilitaet/Verkehrstraeger/Wasser/Klima-UndUmweltschutz/klima-und-umweltschutz_node.html

Greece

419. The Greek Government has taken the following measures regarding climate change mitigation:

- (a.) Design and construction of environmentally friendlier and energy efficient transport means and systems;
- (b.) Adoption of regulatory and administrative actions;
- (c.) Incentives for the use of new technology vehicles;
- (d.) Application of EU regulations and directives;
- (e.) Enhancement of multimodality;
- (f.) Deployment of freight villages;
- (g.) Encouragement for the use of alternative transport means (bicycle);
- (h.) Incentives for hauliers' fleet replacement with newer technology vehicles;
- (i.) Institutional measures;
- (j.) Effort to extend the use of renewable energy sources; and
- (k.) Use of ITS for more efficient and greener mobility.

Hungary

420. The Government of Hungary has taken two measures :
- (a.) Electrification works on rail lines (Boba-Bajánsenye/Hodos – 101 kms and Szombathely-Szentgotthárd – 56 kms) were finished last year;
 - (b.) The Ro-La (rolling road) operating grant helped to carry 30,742 trucks on rail in 2010.

Israel

421. The Government of Israel has taken several measures such as "green" taxation, public transport promotion, plans for Railway electrification, and congestion toll feasibility studies.

Italy

422. The Government of Italy highlights its measures taken for climate change on the following website: www.minambiente.it

Latvia

423. Latvia promotes the use of bio fuel and it has performed a feasibility study on railway electrification (www.ldz.lv/?object_id=4385). In addition, the country has performed the national Reform Programme of Latvia for the implementation of the "Europe 2020" strategy. Information about the policy measures for climate change can be found at the following website: www.em.gov.lv/images/modules/items/LV_NRP_eng.pdf

Lithuania

424. The Government of Lithuania has encouraged the development of environmentally friendly transport modes, improved transport infrastructure, and established green corridors and freight villages.

Norway

425. Measures taken by the Norwegian Government for climate change can be found at the following website: www.klif.no, www.cicero.uio.no, www.regjeringen.no/en/dep/md/

Poland

426. Country's policies on mitigation following EU directives can be found at the following link: www.cdr.eionet.europa.eu/pl/eu/ghgpro/envtejd5g UN FCCC V-the report (English) http://unfccc.int/resource/docs/natc/pol_nc5.pdf UN FCCC In-depth review of the V-the report (English) http://unfccc.int/resource/docs/natc/pol_nc5.pdf . The Polish Government prepares country's strategy for climate change adaptation (for all sectors), which is expected in the second half 2012.

Romania

427. Romania, as a member state of the European Union, implemented the Directive 2008/101/EC of the European Parliament and of the Council of

19 November 2008, amending Directive 2003/87/EC to include aviation activities in the scheme for GHG allowance trading within the community. The measures are to be applied in 2012.

Russia
Federation

428. Decree of the President of the Russian Federation of 17 December 2009 p N861-approved "Climate Doctrine of the Russian Federation" (<http://Kremlin.ru/acts/6365>)

Serbia

429. The Republic of Serbia is member of the UN Framework Convention on Climate Change, 10 June 2001. The first report of Republic of Serbia under the Convention represents not only one of the government activities to contribute to mitigating climate change globally, but also adapting to changing climatic conditions at the national level. Online resources can be found at the following websites: Ministry of Environment, Mining and Spatial Planning www.ekoplan.gov.rs / Designated National Authority of the Republic of Serbia (DNA) www.ekoplan.gov.rs/DNA

Slovenia

430. Integrated public passengers transport system, reconstruction of railways, green public procurement, and adaptation of system of taxation are some of the measures taken by Slovenia. More information can be found on the Government Office of Climate Change's website: www.svps.gov.si/en/.

Spain

431. The Spanish Government has developed country's strategy and local urban sustainability (2011). (Estrategia española de sostenibilidad urbana y local(2011).) www.marm.es/es/calidad-y-evaluacion-ambiental/participacion-publica/sostenibilidad_local.aspx / The Spanish Strategy for Climate Change and Clean Energy (Estrategia española de cambio climático y energía limpia (2007-2012-2020)) can be found at the following link: www.marm.es/es/cambio-climatico/publicaciones/documentacion/cle_ene_pla_urg_mea_tcm7-12478.pdf / Estrategia de ahorro y eficiencia energética en España 2004-2012. www.marm.es/en/cambio-climatico/publicaciones/documentacion/resumen_plan_accion_2008_2012_tcm11-12656.pdf / Planes de Energías Renovables 2005-2010 y 2011-2020 www.idae.es/index.php/id.670/reلمenu.303/mod.pags/mem.detalle / Plan de ahorro, eficiencia energética y reducción de emisiones en el transporte y la vivienda www.fomento.gob.es/MFOM/LANG_CASTELLANO/GABINETE_COMUNICACION/OFCINA_DE_PRENSA/NOTICIAS1/2011/ABRIL/110406-01.htm / Plan de Acción del Vehículo Eléctrico 2010-2012 (Plan MOVELE) www.movele.es/

Sweden

432. Information regarding measures that the Swedish Government has taken regarding climate change mitigation and adaptation can be found at the following website: www.sweden.gov.se/sb/d/5745/a/21787

Switzerland

433. The Swiss Government has taken several measures on mitigation and adaptation of climate change. For mitigation the revision of the CO₂ law for the period after 2012 is currently in parliamentary debate, and is available at the following website: www.bafu.admin.ch/klima/00493/index.html?lang=fr. For adaptation, the Federal Administration is currently developing a National Adaptation Strategy, Link: www.bafu.admin.ch/klima/00493/06573/index.html?lang=fr

Tajikistan

434. Regarding climate change the Government of the Republic of Tajikistan has taken the following steps:
- (a.) Adopted a decision on accession to the UN Framework Convention on Climate Change and the ratification of the Kyoto Protocol;
 - (b.) Adopted a national plan of action to mitigate climate change;
 - (c.) Developed a State program for the study of glaciers from the period 2010-2030 (May 3, 2010); and
 - (d.) The Republic of Tajikistan, has been selected by the Subcommittee Climate Investment Fund as a pilot country for participation in the program to adapt to climate change, which is implemented by the World Bank in 2009.

Turkey

435. Turkey became a party to UNFCCC on 24 May 2004. Turkey has developed the "National Climate Change Strategy" and the "Climate Change Action Plan" to contribute to global efforts to reduce the impacts of climate change, taking into account its own special circumstances and capacity. The "National Climate Change Strategy" has an investment plan, while the "Climate Change Action Plan" has not been politically accepted yet. Additions resources can be found on the following websites: <http://iklim.cob.gov.tr/iklim/Files/Stratejiler/National%20Strategy.pdf> and <http://iklim.cob.gov.tr/iklim/Files/IDEP/IDEPENG.pdf>.

Ukraine

436. The Ukrainian Government has developed a National Action Plan to implement the provisions of the Kyoto Protocol to the United Nations Convention on Climate Change (<http://zakon2.rada.gov.ua/laws/show/272>)

Uzbekistan

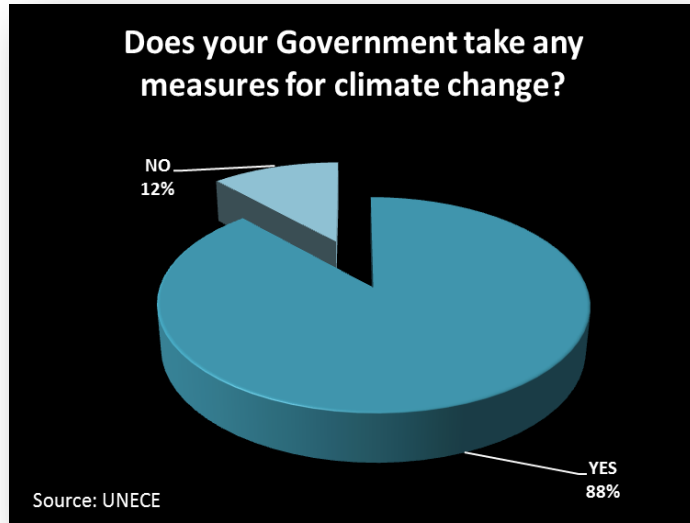
437. In accordance with the laws of the Republic of Uzbekistan "On Environmental Protection" and "On Air Protection", the State Committee carried out significant work aimed at reducing the emissions of pollutants into the air, as well as GHG from transport sources. In the period from 2008 to 2010, total emissions decreased by 1.5%. With regard to transport sources for the same period, total emissions decreased by 2.6%. These results were mainly due to:
- (a.) measures taken to conserve fuel and energy resources, particularly of motor fuel;
 - (b.) change of vehicles of the Republic with others of alternative energy sources;
 - (c.) updating the fleet;
 - (d.) improving the quality of roads and motor fuel; and
 - (e.) the implementation of other major environmental measures.

Statistics

Transport Trend

The majority (88 per cent) of UNECE member States participating in our research have taken measures on climate change during 2011

Figure 77. Did your Government take any measures against climate change?



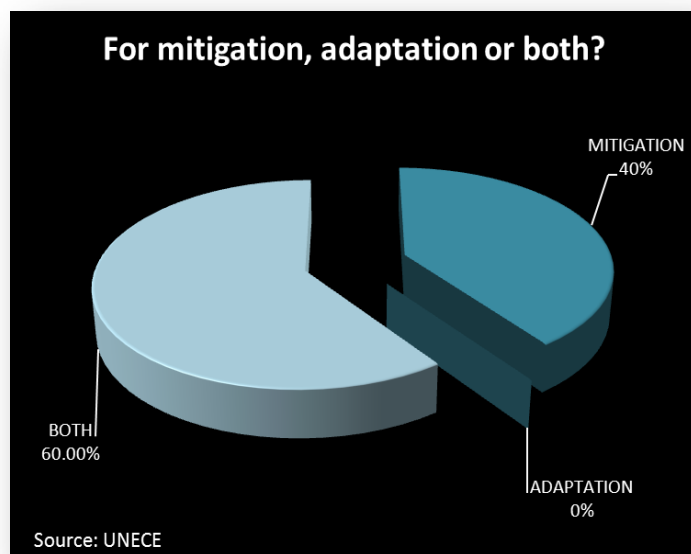
Source: UNECE

438. The majority (31 countries) of UNECE member States participating in the questionnaire replied positively on measures taken for climate change. Only four countries replied that no measures have been taken on climate change.

Transport Trend

The majority of UNECE member States that are taking measures for climate change (18 countries) they are doing so for both mitigation and adaptation

Figure 78. For mitigation or adaptation?



Source: UNECE

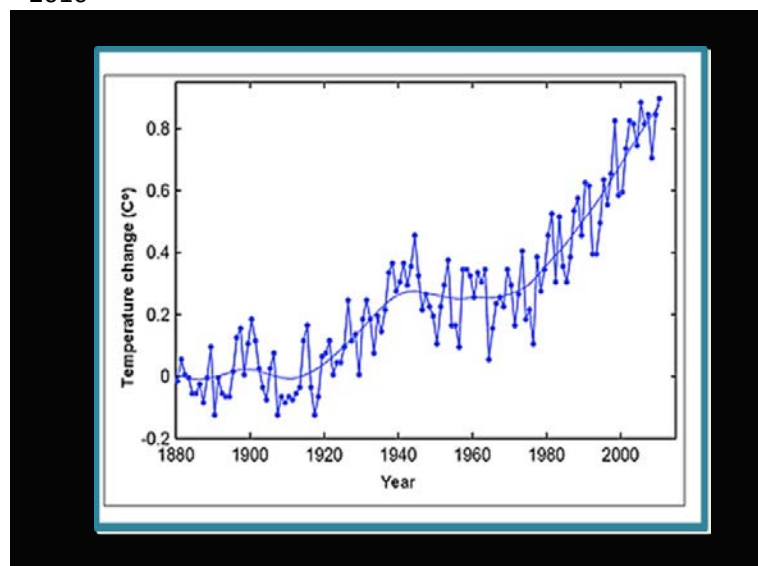
439. Sixty per cent of the 30 countries that replied positively regarding measures for climate changes are taking measures for both mitigation and adaptation to climate change. Forty per cent of them are taking measures only for mitigation of climate change. There were no countries taking measures for adaptation only.

Transport Trend

A long-term increasing trend is clear and inevitable for the atmospheric surface air temperature

440. A long-term trend toward an increase in atmospheric surface air temperature is clear, (see figure 79). This is in accordance with previous Intergovernmental Panel on Climate Change (IPCC) forecasts (IPCC, 2001). Concerning temperature projections for the end of the 21st century, it is expected that the temperature will increase between 1.8 and 4.0 degrees Celsius, depending on the emission scenario used. Climate does not change uniformly. Temperatures are rising faster close to the poles than at the equator, whereas precipitation is changing in a much more complex manner, with some regions becoming wetter and others drier. This trend is expected to pick up pace in the future. For example, mean rainfall in the Eastern Mediterranean has been predicted to decrease by up to 25 per cent in the decade 2020-2029, compared to the period from 1990-1999 (IPCC, 2007a).⁸

Figure 79. Change of mean temperature in the period 1880-2010



Source: Data from NASA (Rahmstorf, 2011).

Transport Trend

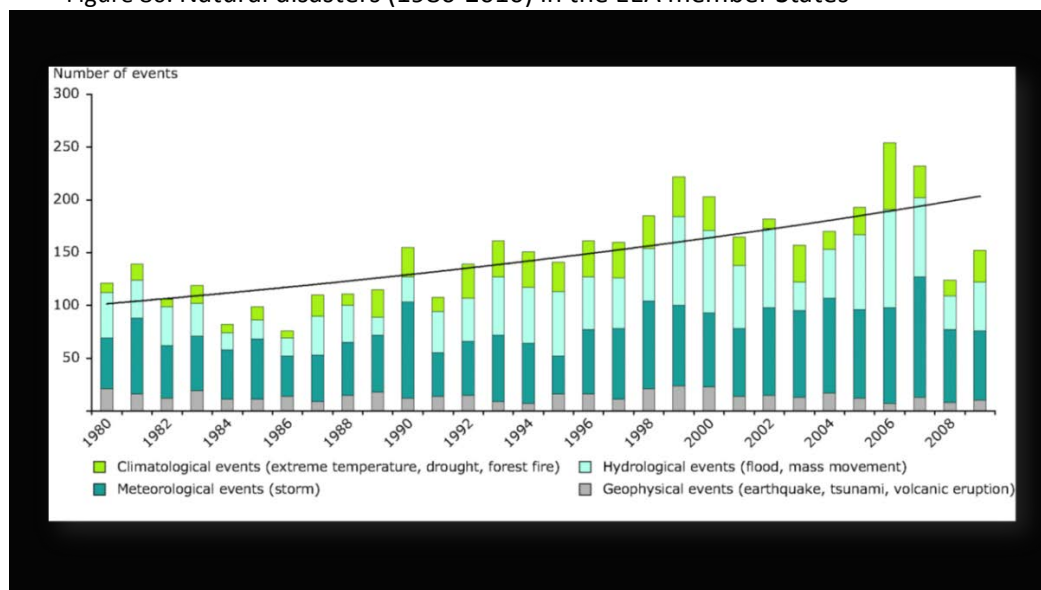
Increasing trend of natural disasters the last 30 years in the ECE region

441. Changes in the frequency/intensity of extreme events and the patterns of 'natural' variability may have even more severe socio-economic effects upon human societies than changes in the mean variables. This is particularly true since societies are dependent on predictable, long-term climatic patterns. The figure illustrates natural disasters that have occurred in European Environment Agency (EEA) member States from 1980 to 2010. An increasing trend can be discerned due to more extreme storms, floods, mass movements/landslides, heat waves, droughts and forest fires. The number of natural disasters induced by geophysical events has remained more or less

⁸ Report of the UNECE Transport Division Expert Group on climate change impacts and adaptation on international transport networks, 2011-2012

stable during this period (EEA, 2010).

Figure 80. Natural disasters (1980-2010) in the EEA member States



Source: EEA 2011

442. Extreme events have consequences that are difficult to predict. The variability of extreme events covers a large spectrum, e.g. sudden and transient temperature changes, rapid retreats of sea and lake ice, bouts of abnormally high precipitation, intensive storms, extended droughts, heat waves and wildfires, as well as sudden water release from melting glaciers and permafrost slumping. These events have severe impacts (e.g. Post et al., 2009).⁹

Transport Trend

Development and use of a standard monitoring and assessment tool for CO₂ emissions in inland transport

Assessing CO₂ emissions For Future Inland Transport Systems (ForFITS Project)

443. There is a strong need for the development and use of a standard monitoring and assessment tool for CO₂ emissions in inland transport, including a transport policy converter for Governments. The UNECE Transport Division initiated a project to study the impact of inland transport on climate change and reached out to the UN Development Account (UNDA) for funds to initiate this project in collaboration with all UN regional commissions. The participation of all UN commissions is key, since climate change is a global problem which requires a global solution. The funds for this 3- year project have been released and the work activities are in progress. The implementation of this project started in January 2011 and will conclude in December 2013.

444. The main objective of the project is to enhance international cooperation and planning on sustainable transport policies through the development and use of a standard monitoring and assessment tool for CO₂ emissions in inland transport, including a transport policy converter. This first activity within this project is to develop an information and analysis tool

⁹ Report of the UNECE Transport Division Expert Group on climate change impacts and adaptation on international transport networks, 2011-2012

based on a uniform methodology for the evaluation of the emissions of carbon dioxide (CO₂) in the inland transport sector (road, rail and waterways except national and international aviation and maritime transport), taking into account climate-relevant indicators, new transportation trends and the implementation of regional, national or local policy measures.¹⁰

Transport Trend

UNECE member States started developing adaptation strategies to climate change impacts

Adaptation to Climate Change Impacts

445. The term adaptation refers to the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damage, to take advantage of opportunities, or to cope with the consequences. Adaptation responses have generally not been given as much priority as mitigation. However, it is imperative that policymakers and stakeholders focus on this aspect of the climate change challenge.

446. Developing effective adaptation strategies for climate change impacts on international transport requires both policy action and collaborative research. UNECE is taking coordinated steps to address climate change adaptation in the field of transport. At its seventy-third session in March 2011, the Inland Transport Committee agreed to establish a Group of Experts on climate change impacts and adaptation for international transport networks.¹¹ The work of the expert group will focus on the identification of potential climatic impacts on transport infrastructure, the determination of the costs of climatic impacts for international inland transport networks and the identification of existing best practices in national policies and risk management.

¹⁰ For more information: http://www.unece.org/trans/theme_forfits.html

¹¹ For more information: http://www.unece.org/trans/main/wp5/wp5_ge3_intro.html



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Transport nodes (seaports, river ports and inland ports) are crucial linkages between transport modes, both maritime and inland. Hence, transport nodes affected by climate changes would bear substantial economic costs by disrupting inland transport systems and regional development, notably in Asia. By 2070, 90 per cent of the asset exposure in large port cities would be concentrated within eight countries with six being Asian (Nicholls et al., 2008). Asian transport nodes are highly vulnerable to climate changes, though there is a general misunderstanding, and negligence, of such challenges. Here the major problems, and the way forward, of Asian transport nodes in adapting climate changes are discussed.

What: In Asia, the exact impacts are still unclear. For example, China has a very long coastline and three of the world's longest rivers, and thus the impacts are diversified due to specific local characteristics: what will be affected (seaports, river ports or inland ports)? How will they be affected (flooding or icy water so as to affect safe shipping routes)?

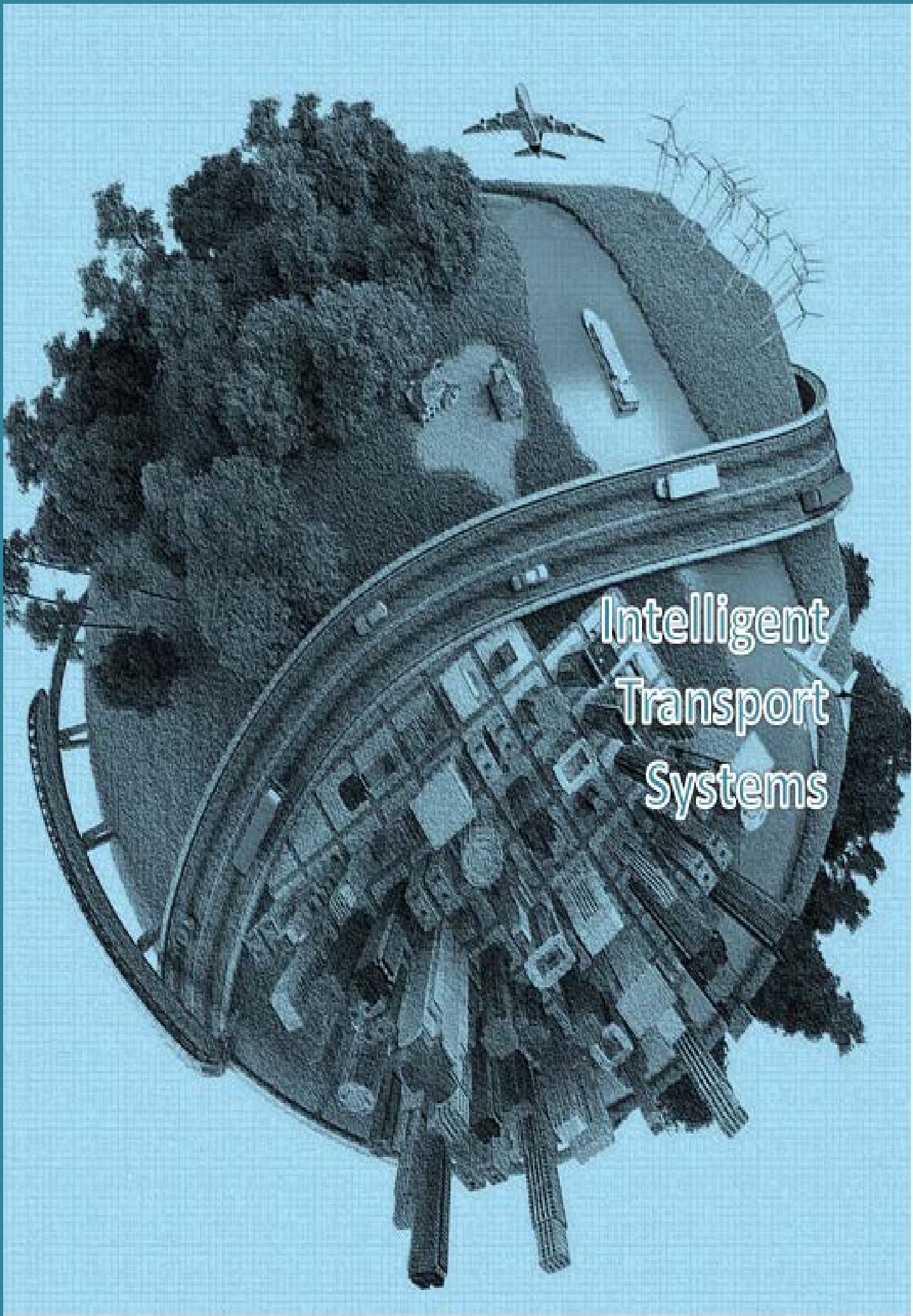
Willingness: The impacts on transport nodes (like flooding seaports) are often relatively moderate and implicit against other aspects of lives (like flooding the urban areas and farms), thus posing the question on whether adaptation by transport nodes is a priority. For example, in 2010 alone, serious flooding happened in 16 Chinese provinces. So far, incentives for transport nodes to adapt are inadequate.

Capacity: resources (not just financial) have been inadequate to effectively develop and implement appropriate solutions: reliable database and scientific research. Thus, it poses a question on whether transport node managers really understand the issue, not to mention the implementation of effective solutions. For example, based on my research, in China, there is often a mix-up of the issue, and considerable resources are used for 'slowing down', rather than 'enhancing resilience', to climate changes.

In conclusion, so far, Asian transport nodes still lack organizational resilience: preparedness, protection, response and recovery. Given the diversified characteristics between Asian regions, adaptation is a highly localized issue what needs more than just international best practices. In 2012, we should facilitate open and transparent information sharing, effective cooperation with local authorities and enhance the ability for managers to apply international practices locally. Also, scientific research and database building - comprehensively investigate the impacts of climate changes and effective adaptation strategies by transport nodes, thus averting misunderstanding and low social awareness on this issue - should be strongly supported.

Reference

Nichols, R.J., Hanson, S., Herweijer, C., Patmore, N., Hallegatte, S., Corfee-Morlot, J., Chateau, J. and Muir-Wood, R. (2008): 'Ranking port cities with high exposure and vulnerability to climate extremes: exposure estimates'. OECD Environment Working Papers No. 1 (ENV/WKP(2007)1).



Intelligent Transport Systems

CHAPTER 9. Intelligent Transport Systems

Introduction

447. Intelligent Transport Systems (ITS) are increasingly considered to be an important part of the solution to current and future transport challenges. They are becoming widely accepted as an instrument towards achieving efficient, safe and overall sustainable mobility, while at the same time contributing to a better quality of life.
448. In achieving its mission, the Inland Transport Committee (ITC) and the UNECE secretariat launched a strategic review on how ITS can contribute to this goal and how UNECE can promote the use of ITS solutions. The review package consists of:
- (a.) A background paper that has the primary objective to share information (including best practices) and raise awareness about the values ITS solutions can deliver;
 - (b.) A strategic note that identifies the main gaps in and impediments to the broader use and faster dissemination of ITS applications irrespective which organizations, institutions or bodies can or will fill the gap; and
 - (c.) This Road Map that outlines the areas and lists the activities UNECE can embark upon either as a continuation of on-going tasks or as new initiatives.¹²

Selected Countries best practices based on the responses on the Transport Division Questionnaire.

Bulgaria

449. The Bulgarian Government reported ITS implementation in urban transport such as virtual tables - information about the timing of public transportation vehicles in real time.
450. Bulgaria has implemented the BULRIS (Bulgarian River Information System), which implements harmonized River Information Services (RIS) in the Danube.

Canada

451. The projects undertaken by the Canadian Government have involved each of the service areas outlined in the ITS Architecture for Canada, including:
- (a.) Traveller Information;
 - (b.) Traffic Management;
 - (c.) Public Transportation Management;

¹² UNECE, Transport Division, ITS Road Map ECE/TRANS/WP.15/2011/12–ECE/TRANS/WP.29/2011/114, www.unece.org

- (d.) Electronic Payment;
- (e.) Commercial Vehicle Operations;
- (f.) Emergency Management;
- (g.) Advanced Vehicle Safety Systems;
- (h.) Information Management; and
- (i.) Maintenance and Construction Management

More information on Transport Canada's role in supporting ITS can be found at the following website: www.tc.gc.ca/eng/innovation/its-menu.htm .

Croatia

452. Concerning urban public transport, the city of Zagreb implemented the traffic management and monitoring system that encompasses city buses and trams. The system consists of real-time vehicle location monitoring, communication (through digital radio-communication TETRA system) between the traffic centre and buses and trams, audio-visual information for on-bus and on-tram passengers and dynamic passenger information on bus and tram timetables that passengers can read on displays installed at most bus and tram stations.

453. Concerning road transport, communication and information systems for the control and management of traffic are in use on motorways in the entire Croatian territory.

454. Concerning inland navigation, River Information Services (RIS), modern traffic management systems enhancing a swift electronic data transfer between water and shore through in-advance and real-time exchange of information will soon not only cover the Croatian parts of Danube and Drava Rivers, but also the Sava River.

Czech Republic

455. The Czech Government reported that the Nation-wide Information System on Timetables (NISTT) provides State guaranteed data on public passenger transport for the general public, transport customers and carriers.

456. The majority of public transport carriers offer passengers an electronic travel document on a data carrier in the form of contact-less chip card. A number of transports provide the passengers with text message ticket, in cooperation with all mobile operators.

Lithuania

457. The main information provided by ITS deployment in public transport is:

- (a.) Deployment of electronic ticketing (smartcards) systems and real time traffic information screens, (www.sviesoforai.lt);
- (b.) Timetable planning and synchronisation project.

Romania

458. ITS applications in Romania include:

- (a.) real time information;
- (b.) predicted and forecast information;
- (c.) exchanged information using DATEX2 standard;
- (d.) passenger travel information;
- (e.) traffic management information;

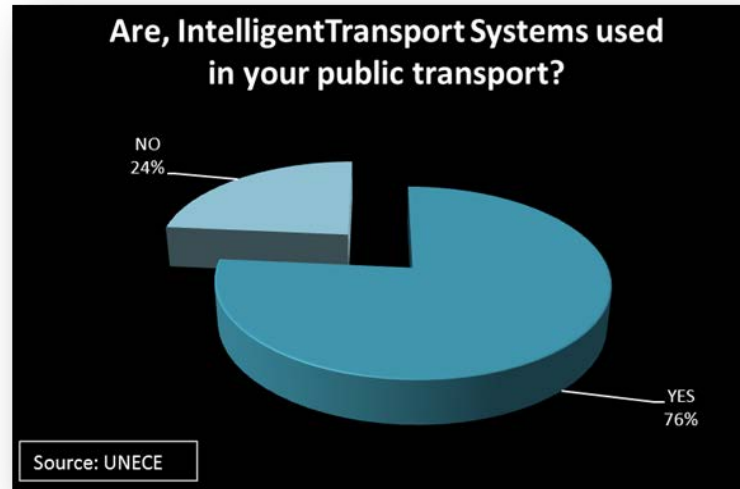
- (f.) electronic ticketing; and
- (g.) an electronic interlocking system.

Statistics -Trends

Transport Trend

The majority of ECE countries are using ITS systems on their public transport systems

Figure 81. Do countries use Intelligent Transport Systems?



Source: UNECE

459. Seventy six per cent (27 countries) of the countries participating in the UNECE questionnaire replied positively on the use of ITS in their public transport. Twenty four per cent (8 countries) replied negatively.

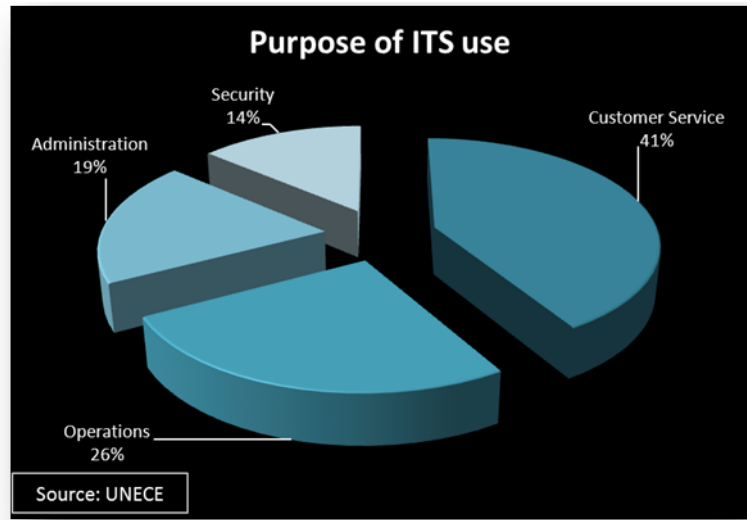
460. It appears from the country replies that the terms and applications that make up ITS systems need to be harmonized.

461. Forty one per cent of the countries replied that are using ITS to facilitate customer service and 26 per cent to facilitate the operation of their public transport. With 19 per cent and 14 per cent respectively administration and security are the third and fourth purposes for implementing ITS.

Transport Trend

Customer Service and operations facilitation are the main purposes for ITS implementation in the ECE region

Figure 82. ITS purpose

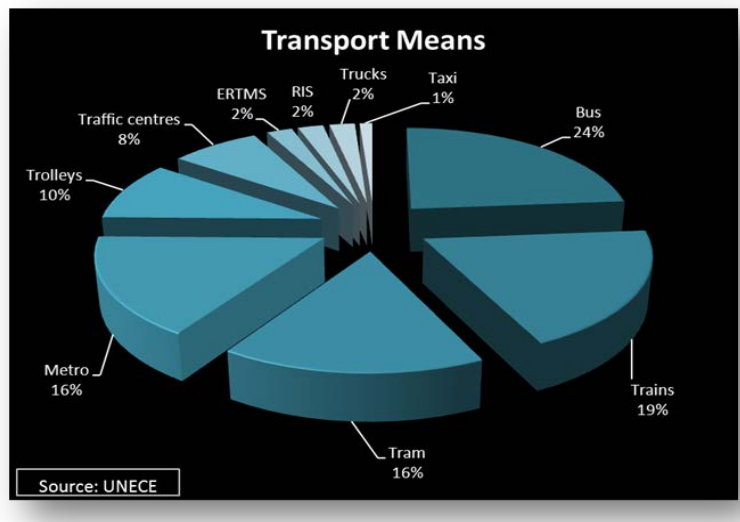


Source: UNECE

Transport Trend

Buses, trains, trams and metro are the most popular transport means for the implementation of ITS

Figure 83. Transport means that use ITS



Source: UNECE

462. Buses with 24 per cent and trains with 19 per cent are the most popular transport means for the implementation of ITS, followed by trams (16 per cent) and metro (16 per cent).

Transport Trend

Reaching a common definition for Intelligent Transport Systems

463. Applying information technologies in inland transport is generically named “Intelligent Transport Systems” (ITS). However, the ITS framework, which provides the ability to gather, organize, analyse, use and share information about transportation systems have different boundaries. Different economic and development priorities of Governments and institutions drive ITS deployment in different directions. Accordingly, this leads to a lack of understanding about ITS. A commonly agreed-upon definition of ITS is badly needed.

464. A myriad of variations exists and different definitions of ITS

are currently being used. As a global partner, UNECE is working to facilitate the dialogue about ITS deployment, which should lead to a common definition used by all stakeholders. This definition should be designed in a holistic way.¹³

Transport Trend

Interoperability and the ITS architecture should be facilitated

465. Innovative technologies in various transport fields are rapidly developing and available. Given that the design and industrial development cycle of innovative technologies is shorter than the policy cycle, national regulatory authorities often lag behind. This is particularly evident at the international level. This leads to technical fragmentation and eventual interoperability issues within and across the countries. Therefore, efforts to speed up development and implementation of regulations and agreements on technical and technological compatibility are warranted.

466. Additionally, through the sharing of data, services and information, the overall cost and the cost of providing each component of the system are reduced. The ability for the private sector to operate effectively is enhanced because already available data from existing systems could be shared at a lower cost.

467. The EU ITS Action plan is an encouraging step towards the systematic and comprehensive implementation of ITS in the EU member countries. However, the full effect and the benefits of ITS implementation can only be achieved and multiplied if a complementary strategy is developed for all other non-EU, UNECE member countries at the pan-European level. It is with this objective that the UNECE Road Map and Strategy for promoting ITS was developed to harmonize and ensure full coverage and implementation of the commonly adopted strategy throughout its 56 member countries.¹⁴

Transport Trend

Promoting vehicle-to-vehicle and vehicle-to-infrastructure communication

468. As a basic innovation, cooperative systems bring together infrastructure and vehicle-related intelligent transport devices that are active and 'cooperate' in order to perform a common service. Consequently, in cooperative systems, communication could be vehicle-to-vehicle or vehicle-to-infrastructure.

469. Vehicle to vehicle (V2V) communication can be defined as the cooperative exchange of data between vehicles through wireless technology, with the objective of improving road safety, mobility, efficiency and improving the use of road capacity.

470. Cooperative systems are expected to make use of state-of-the-art communication facilities to allow the driver access to all road and traffic information.¹⁵

471. Intelligent Transport Systems integrate information and

¹³ UNECE, Transport Division ITS Roadmap

¹⁴ UNECE, Transport Division ITS Roadmap

¹⁵ UNECE, Transport Division ITS Roadmap

Transport Trend

UNECE puts ITS on the international transport agenda

communication technology between vehicles, transport infrastructure and the user. But ITS is more than just technology. ITS is the “heartbeat” of future enhanced mobility, bringing in a new culture for doing business and new tools that will enable Governments to accomplish their objective of building more sustainable, efficient and better quality transport services and international organisations to maximise their contribution to these national objectives.

472. Since 2008, the Transport Division intensified its promotion of its work on ITS outside the UN. In 2010, UNECE hosted an ITS side event at the International Transport Forum in Leipzig where the main challenges facing Governments and international organizations in fostering the deployment of ITS were addressed.

473. Intelligent Transport Systems constitute a major challenge for governments and international organizations. ITS in the transport systems of the future will have implications beyond just advanced technology, but will also provide the link to build infrastructure and enhance mobility, while impacting global economies and further greening the transport sector.

474. In May 2011 the UNECE paper on "Transport for Sustainable Development in the UNECE region" was published, identifying ITS as one important link for future transports. Within the interaction of the three pillars of sustainable transport - that are social, economic and environmental and the five UNECE working areas which are accessibility, affordability, safety, security and environmental – ITS are an integrator and the tool for modal shift, sustainability and the mobility change¹⁶.

ITS in Europe

Trends of ITS in Europe for the past years (2010-2011), as well as expectations regarding developments for 2012



Martin Böhm
Head of Unit ITS
Deployment at

In the last years, the whole field of ITS became highly visible within Europe first with the publication of the ITS Action Plan (December 2008) resulting in the ITS Directive (August 2010), secondly with the publication of the Transport White Paper (February 2011), and finally with the Draft TEN-T Guidelines (October 2011). All mentioned publications see an important role in ITS for reaching our goals to make Europe’s mobility more sustainable, safer and more efficient.

The major fields are the following:

Traveller Information Systems and Services: This kind of service is well covered by the ITS Directive Priority Area 1 and as well addressed by Transport Commissioner Sijm Kallas who launched in June 2010 the challenge for a European wide Journey Planner. While solutions for European wide traveller information are feasible through commonly agreed interfaces for information exchange between authorities, operators, and service providers (as demonstrated in 2011 in the In-Time project, www.in-time-project.eu),

¹⁶ UNECE Transport Division I.T.S. background paper, I.T.S. strategic note, I.T.S. Road Map

European wide booking-services are still a future challenge.

Traffic Management: New standards in data and information exchange between different operators are finalised in 2011 (DATEX II). These standards will help all operators in providing improved Traffic Management Services by having as well knowledge on the neighbouring transport networks. This is a big step for providing seamless interoperable services for the European traveller.

Intelligent Truck Parking: An important topic for freight and logistics operators is Intelligent Truck Parking (ITP) solutions to make parking lots safer and securer. Until the end of 2012 the European Commission has planned to provide specifications for ITP information services. The European EasyWay programme (www.easyway-its.eu) has already defined different levels of ITP services, which serve as basis for harmonised deployment of ITP services.

Cooperative Systems: For car-to-car communication-systems and infrastructure-to-vehicle communication-systems 2011 was a high important year in Europe as the day 1 systems to be implemented first have been defined and agreed between the relevant stakeholders. In 2012 the communication standard to be used will be finalised and at the ITS World Congress in October 2012 in Vienna a demonstration of the functionality and the benefits of cooperative systems could be the kick-off for the deployment.

eCall: Here it is expected that by end of 2012 the European Commission will present specifications for the implementation of eCall in Europe.

