



# Spending on Transport Infrastructure 1995-2011

Trends, Policies, Data



2013

A graphic showing the year '2013' in a large, white, sans-serif font. The numbers are overlaid on a portion of the abstract colorful geometric shapes seen in the main graphic above.

# **Spending on Transport Infrastructure 1995-2011**

Trends, Policies, Data

May 2013



## THE INTERNATIONAL TRANSPORT FORUM

The International Transport Forum at the OECD is an intergovernmental organisation with 54 member countries. It acts as a strategic think-tank, with the objective of helping shape the transport policy agenda on a global level and ensuring that it contributes to economic growth, environmental protection, social inclusion and the preservation of human life and well-being. The International Transport Forum organises an annual summit of Ministers along with leading representatives from industry, civil society and academia.

The International Transport Forum was created under a Declaration issued by the Council of Ministers of the ECMT (European Conference of Ministers of Transport) at its Ministerial Session in May 2006 under the legal authority of the Protocol of the ECMT, signed in Brussels on 17 October 1953, and legal instruments of the OECD.

The Members of the Forum are: Albania, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Canada, Chile, China, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, FYROM, Georgia, Germany, Greece, Hungary, Iceland, India, Ireland, Italy, Japan, Korea, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, Moldova, Montenegro, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Kingdom and the United States.

The International Transport Forum's Research Centre gathers statistics and conducts co-operative research programmes addressing all modes of transport. Its findings are widely disseminated and support policymaking in Member countries as well as contributing to the annual summit.

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## 1. INTRODUCTION

The International Transport Forum statistics on investment and maintenance expenditure in transport infrastructure are based on a survey sent to 52 member countries<sup>1</sup>. The survey covers total investment (defined as new construction, extensions, reconstruction, renewal and major repair) in road, rail, inland waterways, maritime ports and airports, including all sources of financing. For maintenance, the questionnaire covers only expenditures financed by public administrations.

The lack of common definitions and practices to measure transport infrastructure spending hinders comparisons between countries and spending options. Data for road and rail infrastructure are the most comprehensive while data on sea port and airport spending are less detailed in coverage and definition. While our survey covers all sources of financing a number of countries exclude private spending, including Japan and India. Around 65% of countries report data on urban spending while for the remaining countries data on spending in this area are missing. Caution is therefore required when comparing investment data between countries. However, data for individual countries and country groups are consistent over time and useful for identifying underlying trends and changes in levels of spending, especially for inland transport infrastructure. These issues of definitions and methods are addressed in a companion report *Understanding the Value of Transport Infrastructure – Guidelines for macro-level measurement of spending and assets* (ITF/OECD 2013) that aims to improve the international collection of related statistics.

The ITF has collected and published data on this topic since the late 1970s. The latest survey covers years 1995-2011. In order to draw up a summary of aggregate trends for selected countries, data has been calculated in Euro values at both constant (2005) and current prices. In preparation for the International Transport Forum's 2013 Summit on Funding Transport a survey was carried out to collect information on transport policies in ITF member countries and the information obtained is also summarised in the current report. The topics covered in the questionnaire include infrastructure performance indicators, major projects, funding and strategic plans. Over 30 countries responded to the survey. The present report presents aggregate trends in inland transport infrastructure investment and maintenance since 1995 in Chapter 2. Chapter 3 presents some broad conclusions from the survey on transport policies. The Annex presents statistical tables on transport infrastructure investment and maintenance in International Transport Forum member countries for the period 1995-2011. Detailed country data, coverage, country responses from the survey as well as a detailed note on the methodology followed are available on the International Transport Forum website at:

<http://www.internationaltransportforum.org/statistics/investment/inindex.html>

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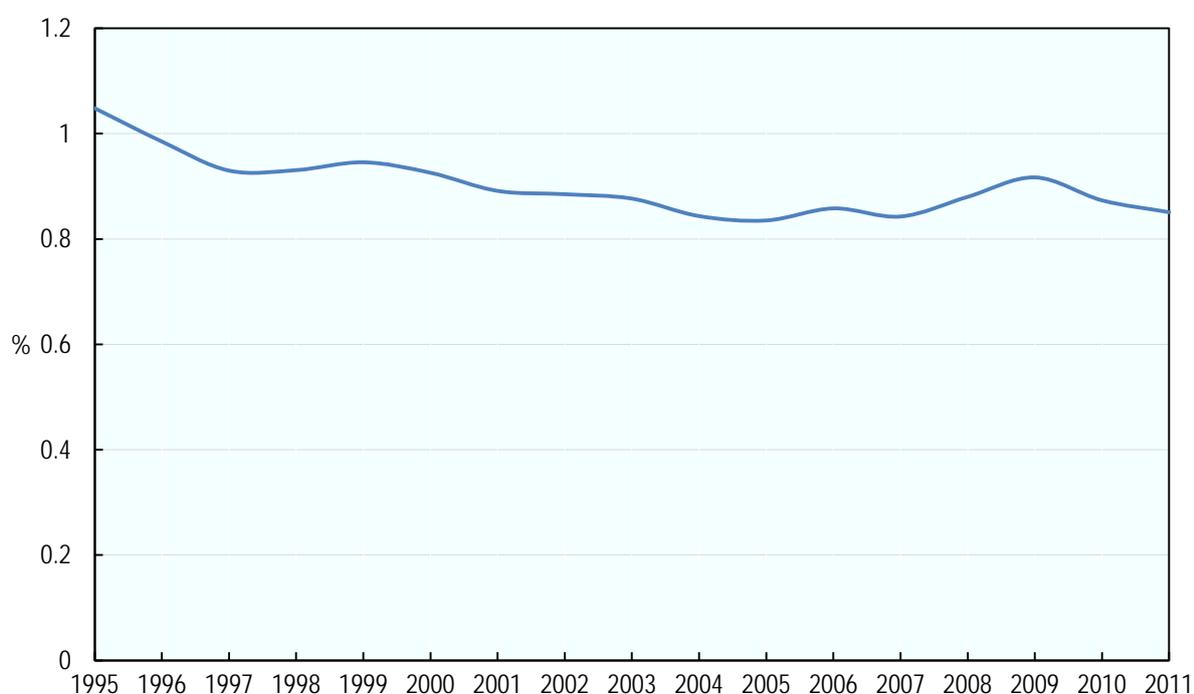
1. Data contacts for new ITF states Chile and China were not yet available at the time of data collection.

## 2. TRENDS IN INLAND TRANSPORT INFRASTRUCTURE SPENDING

### 2.1. Trends in the GDP share

The most recent data on gross fixed capital formation (investment) in inland transport infrastructure (road, rail and inland waterways) as a percentage of Gross Domestic Product (GDP) shows a slowly declining trend for the OECD as a whole over the period since 1995. The investment share of GDP declined steadily from 1.0% in 1995 to 0.85% in 2004 after which it levelled off for few years. The level of investment rose temporarily between 2008 and 2009, likely driven by economic stimulus spending and declining GDP. After 2009, the investment share has declined back to 0.85% in the OECD area (Figure 1).

Figure 1. **Investment in inland transport infrastructure in the OECD 1995-2011**  
(as a percentage of GDP, at current prices and exchange rates)



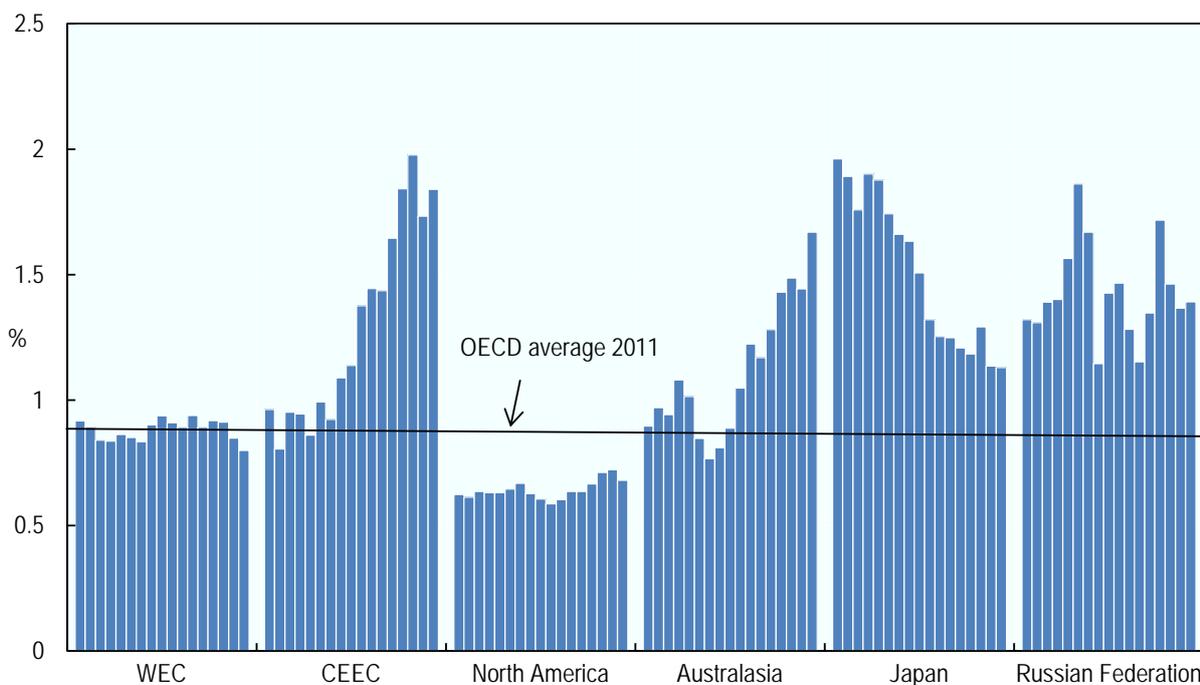
Source: International Transport Forum at the OECD estimate.

Note: OECD includes 31 countries; excludes non-ITF states Israel and Chile (at the time of data collection); no data for Korea. See methodological note on page 54 for details on data and coverage.

The International Transport Forum (and the former ECMT) has collected data on investment and maintenance expenditure on transport infrastructure since the late 1970s. In Western Europe, the investment share of GDP declined steadily from 1.5% in 1975 to 1.2% in 1980 and further to 1.0% in 1982 after which it levelled off. Our latest data show that since 1995 the GDP share of investment in inland transport infrastructure has remained between 0.8% and 0.9% in Western European countries (WEC). There are only few exceptions from this trend, notably Greece, Spain, Switzerland and Portugal which show significantly higher GDP shares over the period (reaching 1.6% – 2.0%). Since 2007, however, Greece and Portugal have converged closer to the WEC average, investments declining to around 1.0% of GDP. Data for North America also show a constant GDP share (0.6%) below the OECD average.

The latest estimates indicate a slight growth in investment as a share of GDP, reaching 0.7% since 2009. These changes are, however, marginal and the investment share of GDP has remained relatively constant both in Western European countries and North America (see Figure 2).

Figure 2. **Investment in inland transport infrastructure by region 1995-2010**  
(as a percentage of GDP, at current prices and exchange rates)



Source: International Transport Forum at the OECD.

Note: WECs include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom. CEECs include Albania, Bulgaria, Croatia, Czech Republic, Estonia, FYROM, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia. North America include Canada, Mexico and the United States. Australasia include Australia and New Zealand. Data for Japan exclude private investment.

Trends for developing and transition economies differ markedly from those described above. The share of investment in inland transport infrastructure in Central and Eastern European countries (CEECs), which until 2002 had remained at around 1.0% of GDP, has grown sharply, reaching 2.0% in 2009 – the highest figure ever reported by these countries. Rising levels of investment in transition economies reflect efforts to meet rising needs especially for road network capital. Investment share of GDP fell to 1.7% in 2010, likely affected by the economic crisis. Data for 2011 show again increase, investment share reaching 1.8%. In the Russian Federation, investment share of GDP has also been high compared with Western European countries but more volatile. Investment in inland transport infrastructure as a percentage of GDP reached 1.9% in 2000 after which it has varied between 1.2% and 1.7%. For the last two years the share has remained at 1.4% of GDP.

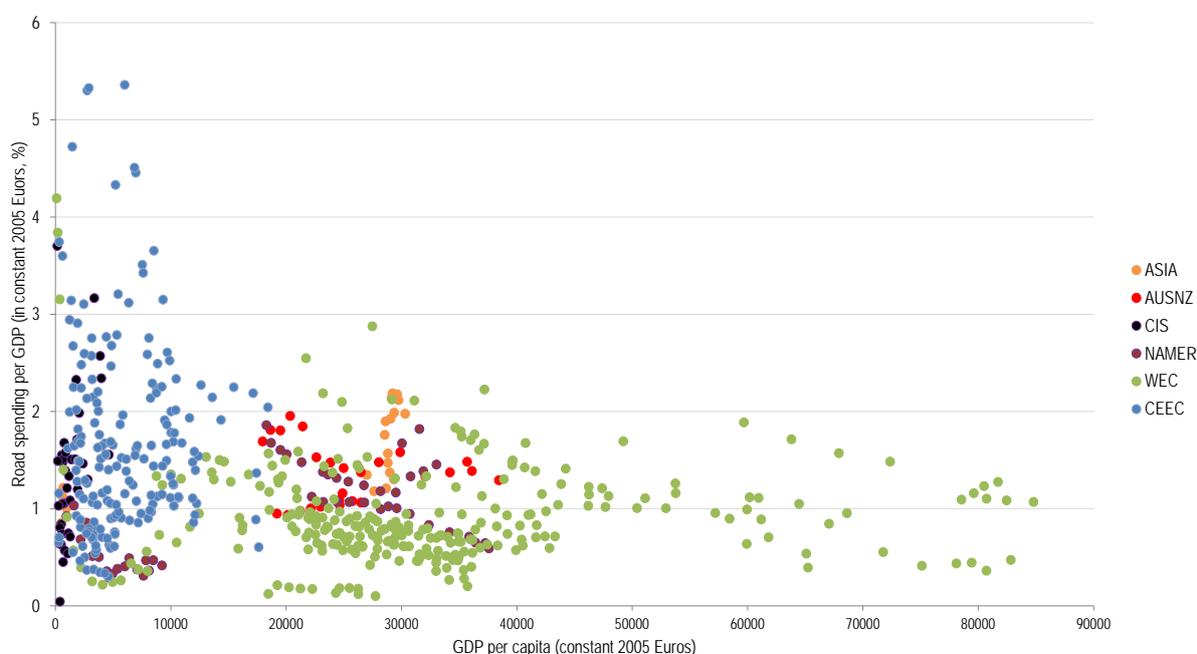
Historically, transport infrastructure investment in Japan was relatively high in relation to GDP but has been in decline since the 1990s. Expenditures were affected by general budget cuts towards the end of the 1990's. Subsequently, modification of the allocation of revenues from gasoline tax, earlier earmarked for highway development and maintenance, has further reduced the level of investment in roads in Japan.

An investment level of 1% per GDP became a *de facto* political benchmark in Western European countries in the 1980s, though with no theoretical basis behind it. The investment needs for transport infrastructure depend on a number of factors, such as the quality and age of the existing infrastructure, geography of the country and transport-intensity of the country's productive sector, among other things. The fact that the share of GDP dedicated to transport infrastructure has tended to remain constant in many countries suggests that investment levels may be affected by factors other than real investment needs. Level of transport spending may be guided by historical budget levels, institutional budget allocation procedures or budgetary constraints taking into account also needs in the other sectors of the economy (e.g. education, health care). The impact of government policy can also be identified, as for example in Japan and in the data for Australasia. Here, the share of infrastructure investment in GDP grew 50% partly as a result of the last five-year investment plan in Australia. Australia added 10% of route-kilometres of railway track mainly to support the development of their mining industry in 2009–2012. New Zealand has invested in state highway network, rebuilding the land transport system in Christchurch and the surrounding Canterbury region following major earthquakes.

The difference between Western European countries and developing economies suggests there is a relationship between transport infrastructure spending and the level of income. Figure 3 plots total spending (investment and maintenance) on road infrastructure as a percentage of GDP against GDP per capita using data for over 40 countries between 1995 and 2011. This panel of over 600 observations gives strong support to the conclusion that the level of (road) spending generally declines with the level of GDP per capita.

There are several potential reasons for this declining trend. Further, as efficiency and productivity increase production becomes less transport intensive, potentially weakening the link between the GDP growth and transport demand and therefore infrastructure investments.

Figure 3. Relationship between road spending and level of income

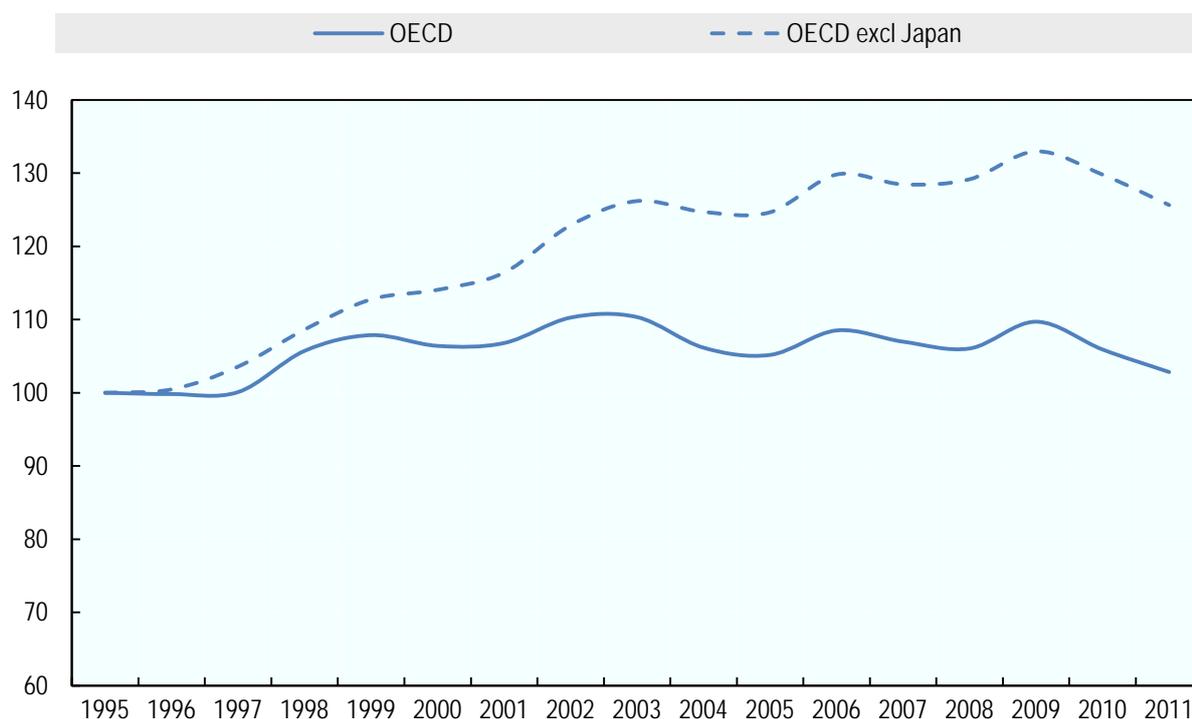


Source: International Transport Forum at the OECD.

## 2.2. Volume of investment in inland transport infrastructure

The volume of investment (expenditure in real terms) in the OECD total (excluding Japan) has grown around 30% in the last 15 years. Japan has followed a different trajectory (volume nearly halving in the same period) and its economy is large enough to affect the overall volume for the OECD significantly. If data for Japan are included, the volume of investment in the OECD peaked in 2003 after which it has remained fairly stable slightly above the 1995 level. The latest data show a 6% fall in investment since 2009 as volume declines close to the 1995 level (Figure 4).

Figure 4. **Volume of investment in inland transport infrastructure 1995-2010**  
(at constant 2005 prices, 1995=100)



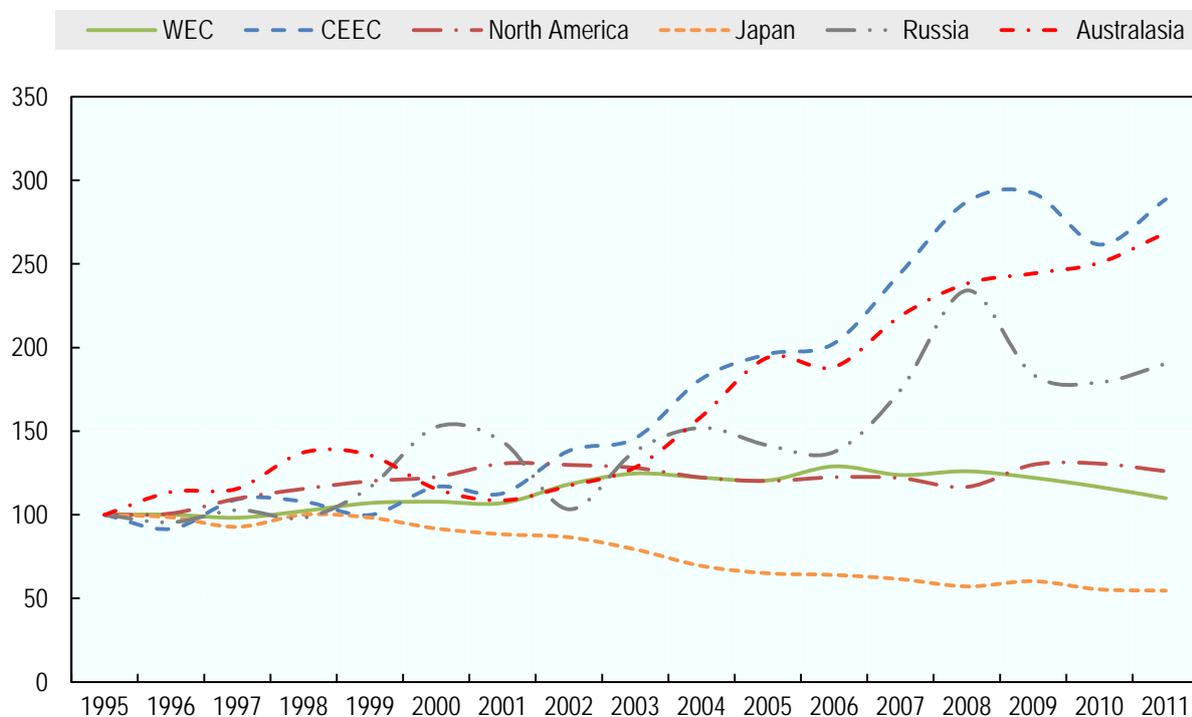
Source: International Transport Forum at the OECD.

In Western European countries, the volume of investment started growing in 2002, and was nearly 30% above the 1995 level in 2006 after which the volume declined. The latest data for 2011 show volume only 10% higher than the 1995 level. The volume of inland infrastructure investment in North America grew by around 30% from 1995 to 2001. Our estimate suggests a slow decline in investment volume that continued all the way through 2008. Recent data indicate growth in the volume of investment in North America, returning to the 2001 level in real terms in 2011 (Figure 5).

The volume of infrastructure investment has accelerated strongly in developing and transition economies, notably in Central and Eastern European countries since 2003. This growth turned negative after reaching a record level in 2009. Investment in inland transport infrastructure declined 11% in real terms from 2009 to 2010. Data for 2011 show a renewed growth as volume of investment grew again by 10% (Figure 5).

Figure 5. **Volume of investment in inland transport infrastructure by region 1995-2010**

(at constant 2005 prices, 1995=100)



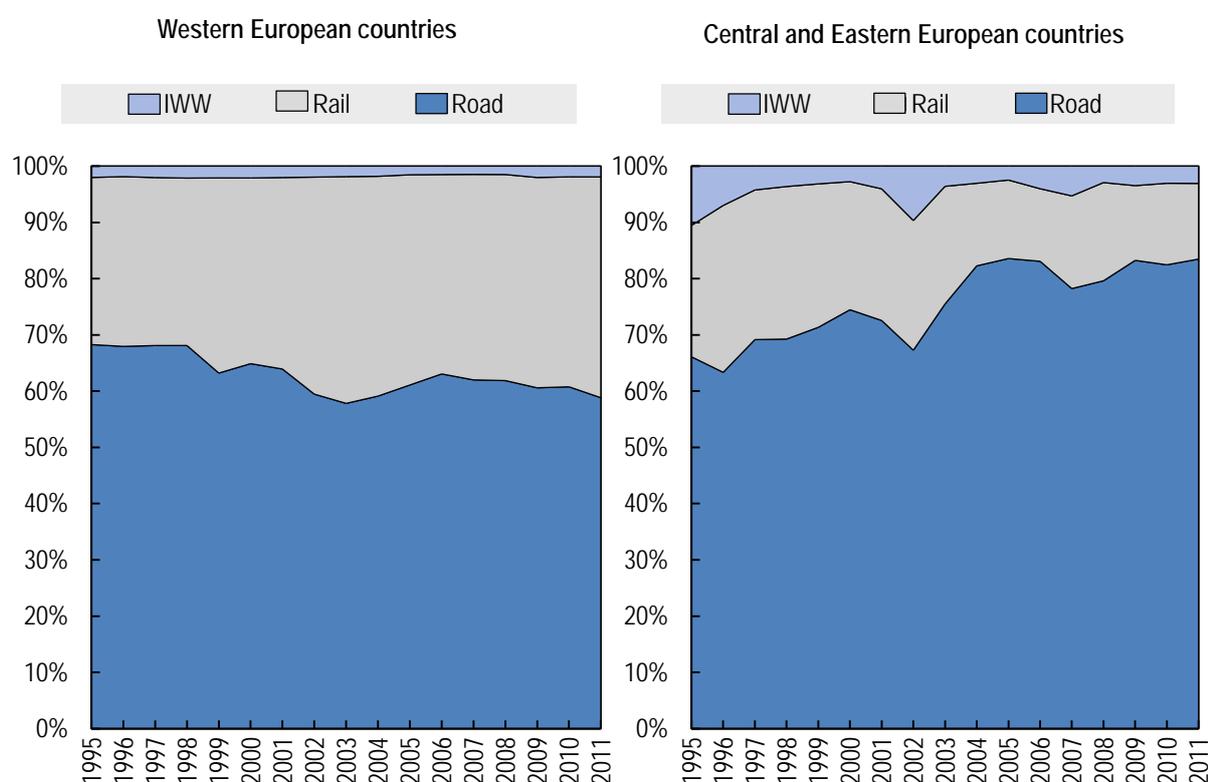
Source: International Transport Forum at the OECD.

## 2.2. Modal split of investment

The share of rail investment of total inland transport infrastructure investment has increased from 17% to 23% for the OECD total from 1995 to 2011, according to our estimates. This trend is mainly determined by developments in Japan and Europe. Data presented in Figure 6 show long-run trends in the modal share of investment in Western European and Central and Eastern European countries. In the Western European countries, the share of investment in rail infrastructure has increased steadily from around 20% of total investment in inland transport infrastructure in 1975 to 30% in 1995 and further to 40% in 2011. The trend observed in our data for Western Europe is partly a reflection of political commitment to development of railways and the most recent data does not seem to indicate any change in this respect.

Whereas Western European countries have increasingly directed their investment toward rail, Central and Eastern European countries are investing more heavily in roads. The share of roads in inland transport infrastructure investment increased from 66% in 1995 to 84% in 2005 in this region. The last few years, however, suggest a stabilisation of the trend and the modal split of investment has remained at 2005 level in 2011 (Figure 5). Russian Federation differs from the above trends. The share of road has declined from 60% in 1995 to around 45% in 2011 of the total inland transport infrastructure investment. Rail share, in turn has increased from 37% to account for over half (53%) in the same period, according to our data.

Figure 6. **Distribution of infrastructure investment between modes**  
(Euros, current prices, current exchange rates)



Source: International Transport Forum at the OECD.

### 2.3. Road maintenance

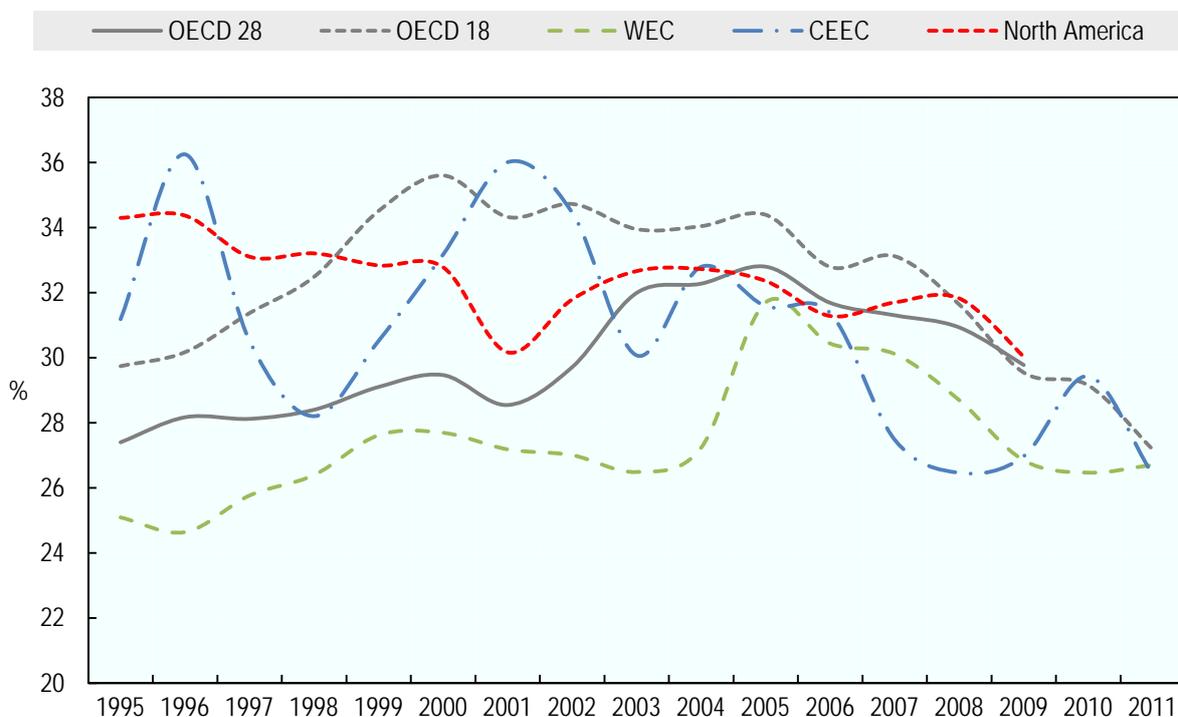
In many countries observers have raised concerns about underfunding of road assets and the state of existing road infrastructure and its impacts on the competitiveness of the economy. Funding for road maintenance, particularly, may be postponed on the expectation that a lack of maintenance will not result in imminent asset failure. This concern is, however, difficult to verify due to lack of data on the condition of road assets.

The available data on road spending suggest that the balance between road maintenance and investment has been relatively constant over time in many regions. The share of public expenditure on maintenance in total road expenditure has remained between 25% and 35%. In the 28 OECD countries for which comparable data are available through 2009, the share of maintenance in total road spending grew overall from 27% in 1995 to 33% in 2005 after which it gradually declined, to 30% in 2009. This declining trend is reinforced by data on 18 OECD countries up until 2011 which suggest further decline to 27% in 2011.

Data further suggest that funds allocated for road maintenance have declined especially in Central and Eastern European countries over the last few years, falling from above 35% in early 2000 to 26% of total road spending in 2011. In the eleven Western European countries for which comparable data are available, data suggest a surge in maintenance spending in 2005 after which the maintenance share has gradually fallen back to previous levels (27% of total spending). Similarly, the road maintenance share in North America has gradually declined from 35% in 1995 to around 30% in 2009 after which lack of comparable data hinders further analysis.

Although these conclusions are affected by the quality and coverage of data, they do suggest an overall declining share of maintenance on total road spending especially over the last few years (Figure 7).

Figure 7. **Public road maintenance share of total road expenditure 2010**  
(Euros, current prices, current exchange rates)



Source: International Transport Forum at the OECD.

Note: OECD 18 include Austria, Canada, Czech Republic, Estonia, Finland, France, Iceland, Ireland, Luxembourg, Mexico, New Zealand, Norway, Poland, Slovakia, Slovenia, Sweden, Turkey and the United Kingdom. WECs include Austria, Finland, France, Iceland, Ireland, Luxembourg, Netherlands, Norway, Sweden, Turkey and the United Kingdom. CEECs include Albania, Croatia, Czech Republic, Estonia, FYROM, Latvia, Lithuania, Poland, Serbia, Slovakia and Slovenia.

### 3. SUMMARY OF POLICY PRIORITIES

A survey was carried out in 2012/2013 to collect information on transport investment policies in ITF member countries. The topics in the questionnaire include infrastructure performance, major projects, funding and strategic plans.

#### 3.1. Infrastructure and performance

All 31 countries participating in the survey emphasise that transport plays a vital role in economic and social development. Regardless of country, it facilitates trade, stimulates economic growth and connects different communities. All countries, both advanced and emerging economies, cite the importance of an efficient and reliable transportation system. Efficient transport infrastructure is seen as important in providing economic and social benefits by improving market accessibility and productivity, ensuring balanced regional economic development, creating employment and promoting labour mobility. Deficiencies in the transport infrastructure and related performance (e.g. reliability, vulnerability), are considered a cost to the economy and society.

The results of the survey show that advanced economies and emerging economies have different priorities for the infrastructure development. Infrastructure construction, network improvement and rolling stock renewal are keywords for many Central and Eastern European countries. Advanced economies, where extensive transport networks are already well developed, stress the importance of improving the performance and safety of infrastructure while minimizing environmental impacts.

Middle income countries focus mainly on construction and rehabilitation of inland transport infrastructure because a network of sufficient quality is either incomplete or the infrastructure is in poor condition. Railways and roads are priorities for construction and rehabilitation. The examples below from the survey reveal an urgent need to construct new infrastructure and improve the quality of existing infrastructure. This is reflected in rising levels of investment in developing economies (see Figure 1) reflecting efforts to compensate for the earlier underinvestment in capital stock, reinforced by growing traffic in growing economies.

- *One third or 2 400 km of road in Montenegro is unpaved. There are no motorways.*
- *Despite Serbia's geographical location on important transport corridors – the cross road of 8 countries in Southeast Europe – its motorway network density is only 4.8 km/1 000 km<sup>2</sup>, compared with Austria (20.97 km/1 000 km<sup>2</sup>) or the Czech Republic (13.3 km/1 000 km<sup>2</sup>).*
- *Although the rail network density in Serbia is comparable to the EU average, Serbian railway lines are affected by extensive speed restrictions. About 50% of the rail network allows maximum speed of only up to 60 km/h.*

- *Rail transport delays in Slovakia occur due to obsolescence and depreciation of materials and equipment, bridges and culverts which are at the end of their technical lifetime.*

The survey shows that advanced economies focus on the quality of transport service and its impact on social well-being in their transport strategies. Seamlessness, efficiency and safety are important considerations in strategic plans. Environment and noise reduction are also important elements of national transport policies, incorporating environmental protection to tackle climate change, with ambitious CO<sub>2</sub> reduction goals. To illustrate the point, Germany and France aim to reduce CO<sub>2</sub> emissions by 40% and 20% respectively by 2020, and 80% and 75% respectively by 2050.

Although the transportation system in many developed economies is generally of high quality and efficient, road congestion (and related unreliability) is still a major issue in many countries - particularly in and around major cities. The survey indicates that countries expect to see significant growth in the levels of congestion in the longer term as economies recover from recession. These challenges are different from many Central and Eastern European countries which report bottlenecks due to dilapidated, inadequate road networks which are in urgent need of rehabilitation or complete reconstruction.

Punctuality is perceived as a major rail performance issue and rail capacity faces infrastructure bottlenecks in many regions. For example, punctuality for both passenger and freight trains has been decreasing in Sweden due to infrastructure capacity constraints, especially in the busy Stockholm–Gutenberg and Stockholm–Malmö corridors. Similar capacity problems, including not only infrastructure but also frequency of service, are echoed by the United Kingdom and Austria, reporting passenger crowding during peak hours. The developing economies also cite “obsolete equipment” and dilapidated and insufficient infrastructure as a cause for delays.

Several responses suggested increasing usage of “network intelligence” and better coordination as a measure to improve railway performance. The following examples illustrate these measures:

- *To alleviate congestion in the corridor through the Rocky Mountains, Canada’s two major railways operate in co-production “double tracking” mode, meaning that one railway’s single track line will be used for travel in one direction and the other railway’s track will be used in the other direction.*
- *In Sweden, the combination of traffic with different speeds entails in itself a limitation of capacity – a limitation that can be reduced with more intelligent systems for prioritising and separating different types of traffic.*

Many countries believe that inland waterways could potentially play a bigger role in freight transport to relieve road and rail congestion. It is considered an environmentally sustainable mode of transport. Inland waterways are part of the Trans-European Transport Network (TEN-T) planning. It is also a vital mode of transport in North America, connecting the Great Lakes through St Lawrence Seaway to the Atlantic Ocean.

Overall, there is still capacity reserve for inland waterways despite aging infrastructure in general. In the transition economies, the performance of inland waterways is affected by missing links, such as missing E20–E30 connection (Danube-Oder-Elbe) and E51 (Vah-Odra) sections in Slovakia. Serbia reported 24 critical sections on the Serbian part of Danube which require dredging of riverbed and/or special training on navigation.

In general, central governments play less direct role in the development and financing in aviation and maritime sectors. However, government agencies do normally create a regulatory environment to oversee the commercial activities of airports and seaports, ensuring a certain level of service quality in line with national interests. In many countries, airports and seaports are privatised legal entities and thus investment and maintenance figures may not be publicly available (see Annex tables). Countries covered in the survey reported continuous investment to improve the performance of aviation and maritime infrastructure. Major construction projects are mainly reported in middle income countries where existing infrastructure is in need of upgrade.

Airport punctuality is a concern shared by several countries. To illustrate this, the ten major airports in the United Kingdom recorded more delays than the EU average. London Heathrow runway and passenger terminals operate at full capacity as does Gatwick's runway. Tokyo, with the 3<sup>rd</sup> busiest city airports system, also experiences air-side traffic congestion. To enhance airport capacity, Japan has implemented a range of projects at Narita and Haneda, constructing new runways and terminals. Efforts are also made to improve air traffic control system as part of the projects.

Environmental and social factors may also impact aviation sector performance. For example, Stockholm Arlanda Airport's emissions ceiling and noise pollution requirements lead to considerable limitations of the accessibility of air traffic to the airport and the scope of overall air traffic.

Sea ports are integral to the freight transportation system. Both coastal and landlocked countries acknowledge the importance of multimodal transportation to connect the hinterland to maritime ports. Port capacity and efficiency are critical to economic performance and new tools for performance measurement that better reflect efficiency and reliability are under development in several countries. For example, Canada has introduced new port utilization indicators and supply chain fluidity indicators.

Some seaports are close to capacity, such as Felixtowe container port in the UK and are being expanded coupled with new port development in less constrained conditions elsewhere (London gateway). Even where seaports have additional capacity to handle more cargo, there are often major projects to improve land-side accessibility. Examples include the Port of Antwerp and Port of Zeebrugge in Belgium.

### **3.2. Strategic plans and major projects**

#### ***Strategic plans***

A number of broad conclusions may be drawn from the responses to the survey despite the very diverse economic and social development among member countries. Most countries formulate their strategic plans around three main themes:

- Economic performance;
- Environment; and
- Safety.

All strategic transport policies aim to deliver an effective, efficient, safe and accessible transport system that supports economic growth with minimum adverse environmental impact.

### *Economic performance*

All countries emphasise the vital role of transportation in facilitating trade movement and economic growth, employment and social inclusion. Economic competitiveness is unanimously cited as the first and foremost objective of national transport strategy.

With global supply chains evolving, trade movement on the rise and new markets emerging, governments and private stakeholders emphasise the urgent need to establish or improve both the capacity and efficiency of logistics network. For example, freight transport and logistics are now the 3<sup>rd</sup> largest sector of the German economy with an annual turnover of more than 220 billion Euros and 3 million employees. With its central geographical location in Europe, one of the main objectives of Germany's transport policy is to enhance the competitiveness of Germany as a centre for logistics.

Many responses highlighted the importance of trade corridors and a need to further improve connectivity to ensure efficient and seamless flows of cargo. Maritime transport remains the backbone of international trade, with over 80% of world cargo by volume transported by sea. Ports are therefore critical links in global supply chains. Hinterland connections are increasingly central to the competitiveness of ports and the overall efficiency of the supply chain. High quality road, rail and inland shipping links greatly extend the reach of ports and high volume connections offer the possibility of locating key services – warehousing and even customs processing – away from constrained waterfronts.

### Canada's gateways and trade corridors: a system-wide approach

To strengthen Canada's economic competitiveness and facilitating more international trade, the Canadian government released the National Policy Framework identifying three strategic gateways and corridors:

- Asia-Pacific Gateway and Corridor Initiative;
- Ontario-Québec Continental Gateway;
- Atlantic Gateway and Trade Corridor.

Canada's gateways and trade corridors



Each gateway/corridor focuses on Canada's external trade with particular regions. Strategic transportation infrastructure projects have been laid out to develop a sustainable, secure and efficient multimodal transportation system that supports businesses. Since 2007, substantial information gathering, analysis and consultation with private stakeholders has allowed Transport Canada to identify real issues and challenges which impact the efficiency of the corridors.

A fluidity indicator was developed in 2008 in order to evaluate how gateways and strategic trade corridors interact together operationally. This indicator examines end-to-end supply chain performance by focusing on the time component – measuring the total transit time of inbound containers from overseas markets to strategic North American inland destinations via various Canadian gateways. Initial phases of this indicator project targeted inbound container movements for Pacific Gateway markets (British Columbia ports) with future phases to cover inbound movements and outbound movements at other gateways.

Several major transport infrastructure projects initiated in Central and Eastern European Countries (CEEC) aim to complete the core network within the Trans-European Transport Network (TEN-T) corridor. Establishing an efficient trans-European transport network constitutes a key element in the re-launched Lisbon Strategy for competitiveness and employment in Europe and plays an equally central role in the attainment of the objectives of the Europe 2020 Strategy. The European Union is supporting implementation of Europe's strategic TEN-T transport network through several financial instruments – the TEN-T programme, the European Cohesion Funds, the European Regional Development Fund and the European Investment Bank's loans and credit guarantees, including its new Project Bond.

### **Major transport infrastructure projects in the Czech Republic**

The basic core network to support development of the TEN-T corridors is scheduled to be completed by 2030 and with the comprehensive network to be completed by 2050. A list of selected transport infrastructure projects in the Czech Republic follows:

- Modernisation of Class 1 roads with a focus on building expressways and by-passes for towns and in sections with sufficiently dense traffic flows, with the reconstruction of selected Class 1 roads into motorways (by 2050);
- Completion of railway transit corridors (by 2018) and modernisation of the other routes within the TEN-T network and tracks of national importance (connection of all regions to high-capacity railway infrastructure by 2050);
- Modernisation of railway junctions on the TEN-T network (by 2018, the Prague and Brno junctions by 2030);
- Modernisation of routes which are important for servicing large industrial zones (e.g. Mladá Boleslav, Kvasiny, Nošovice and others);
- Ensure interoperability of the railway network, introduction of GSM-R (Global System for Mobile Communications – Railway), ensure interoperability of the railway network, introduction of European Train Control System;
- Construction and modernisation of inland water routes within the core TEN-T network;
- Development of the logistics of freight transport, building a network of multimodal transport terminals to parameters based on the AGTC agreement (European Agreement on Important International Combined Transport Lines and Related Installations) ;
- Support for the introduction of intelligent transport system in all modes of transport including on-board applications (on an ongoing basis).

## Environment

Countries participating in the survey acknowledge environmental protection as one of the main elements in their strategic transport policies. Many advanced economies have set ambitious targets for achieving environmentally sustainable transport systems, aiming for an efficient transport system which is also highly resilient towards climate change and contributes to achieving a low carbon economy to ensure long term sustainable development. For example, South Korea, emphasised strategies for green transportation addressing climate change in its 2<sup>nd</sup> Revised National Intermodal Transport Plan in 2011. Transport policy will play an even greater role in protecting the environment and tackling climate change. Emerging economies also stress the importance of minimizing environmental impacts although the transport policies are more directed towards physical construction of infrastructure.

Achieving environmental sustainability does not necessarily require extensive investments and countries proposed a number of measures for improving the carbon footprint of the transport system. These include:

- *Improve local public transport in urban and rural areas – individual trips account for the largest percentage of energy consumption and increase avoidable congestions.*
- *Shift more traffic to railways and waterways where this is viable and appropriate - truck transportation uses significantly more fuel per tonne-kilometre of freight moved than does freight transport on waterways and railways.*
- *Make smarter use of existing infrastructure and bring it to optimum level of use by creating an integrated network and developing electronic traffic management systems and other technological solutions.*

### Emission reduction strategies and targets in Germany

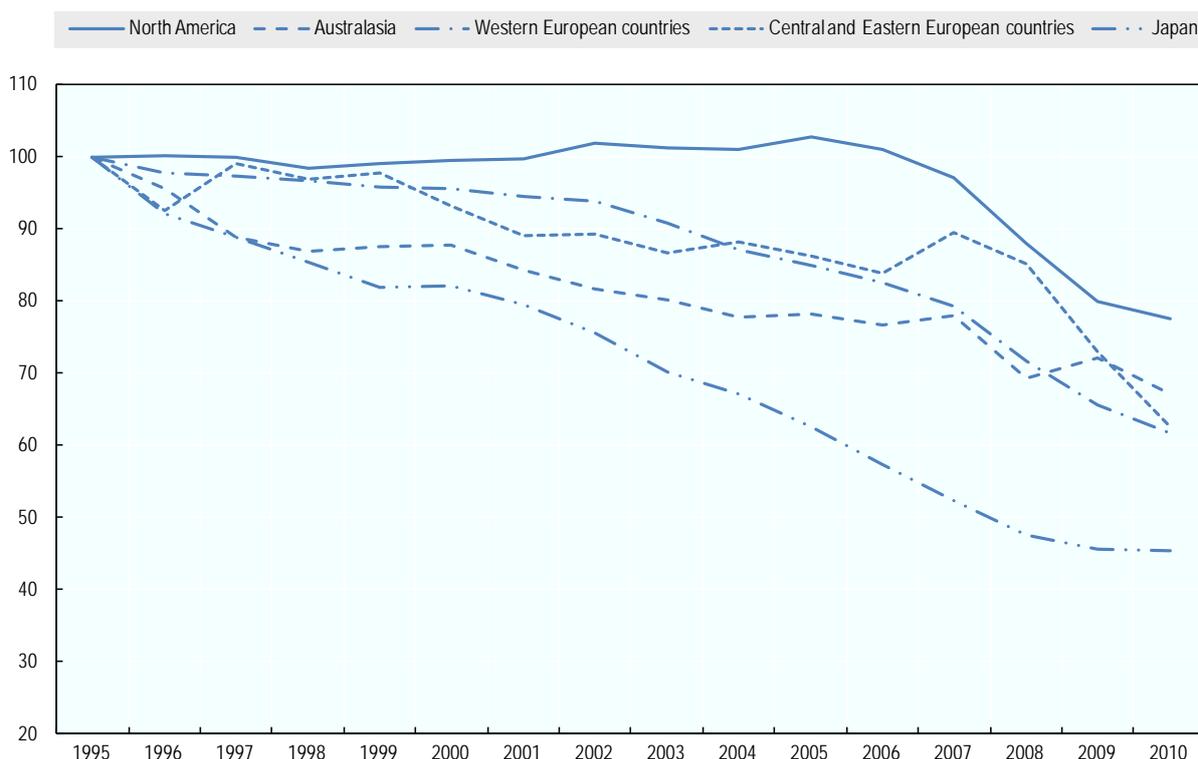
Across all sectors, the German Government is committed to reducing CO<sub>2</sub>-emissions by 40% by 2020 and by 80% by 2050. As a consequence, besides expanding the use of alternative fuel options, the Government is keen on mainstreaming battery-electric and Hydrogen-powered drive trains as a major component towards reducing transportation's dependency on fossil fuels and CO<sub>2</sub> emissions, especially in connection with a shift of the energy system towards renewable sources.

In May 2011, the German Federal Government adopted a comprehensive Electric Mobility Programme as part of an overall strategy towards turning mobility into a more environmentally and climate-friendly direction. The Federal Government has joined forces with the private sector, academia, the Federal States, municipalities and other stakeholders and is providing substantial funding for a wide range of research and demonstration projects for advancing vehicle technology and establishing the corresponding infrastructure. To achieve a more sustainable transport system, the Government's policy approach is based on a triangle of knowledge provision, research and innovation and investment in modern infrastructure. Taking care of social inclusion and aiming for an optimized share between alternative transport modes based on their specific qualities is an integral part of the approach.

## Safety

Several countries identify road safety as a priority and have set quantitative targets to reduce road fatalities. Indeed, road deaths continue to decrease in most of the countries, carrying forward the significant reductions in the number of road deaths accomplished already. The average annual reduction in the number of deaths between 2001 and 2010 has been higher than in the three preceding decades. Increasingly effective road safety policies have contributed to this development.

Figure 8. Road fatalities 1995-2010 (1995=100)



Source: International Transport Forum at the OECD.

Countries have different policies and implement various measurements to ensure safe and secure transport. The examples below illustrate projects to improve traffic safety:

- *Projects in Iceland to improve traffic safety include widening sections of three major roads connecting to the capital area to separate opposing traffic flows, replacing old mountain roads by a tunnel project in Dýrafjörðurt and constructing a network of bicycle infrastructure with over and underpasses to connect all the municipalities in the capital area.*
- *Establishment of a disaster resistant regional network in Japan by developing high standard arterial highways that connect major cities and developing ring roads to secure routes for evacuation, rescue and logistics in case of a large scale earthquake in Tokyo, in addition this will alleviate congestion.*

## Major projects

Major transport projects mentioned in the survey reflect the three strategic themes above. The majority of transport infrastructure investments are directed on roads (see also Chapter 2.2). Major projects include investment in national roads and motorways, by means of new construction, expansion of existing infrastructure and improvement of infrastructure quality.

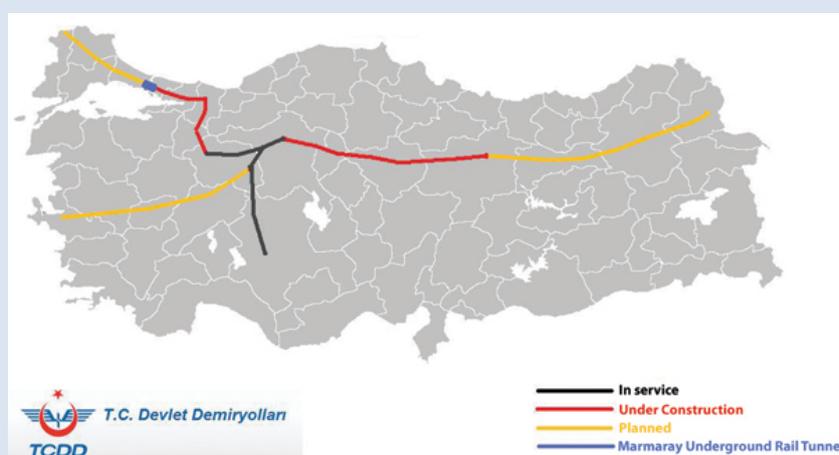
Other common projects involve building bypasses or city tunnels to relieve bottlenecks around urban areas (e.g. Sweden) and the development of ring roads in major metropolitan areas to alleviate traffic congestion (e.g. Japan). Many projects are also related to the construction and rehabilitation of tunnels and bridges (e.g. Gotthard road tunnel and Belchen road tunnel in Switzerland, new bridges connecting Ontario to Michigan and the island of Montréal to the South Shore in Canada).

Railways have in recent years received increasing attention in all regions. Electrification and modernisation of tracks to accommodate higher speed trains are priorities for several Central and Eastern European countries, including Slovenia, Slovakia, Serbia, Czech Republic and Moldova. Railways have an important role in Russian transport policy connecting western Russia to its Eastern territories. Western European countries, including Germany, France and the United Kingdom as well as Japan and South Korea all have current and future projects to expand their high speed rail networks. In Switzerland, the new Lötschberg rail tunnel was opened to traffic in June 2007 and the new Gotthard Base tunnel will be operational at the end of 2016.

### Current and future railway projects in Turkey

Turkey has an extensive rail infrastructure investment program, including High Speed Rail projects, construction of new lines and double-tracking, renewal and rehabilitation of existing tracks as well as electrification and signalization projects. The High Speed Rail projects will significantly reduce the journey time between major cities. Construction of new conventional lines and double-tracking projects involve nearly 200 kilometres of new tracks with overall future length of the second tracks extending more than 330 kilometres. More than 6 400 kilometres of tracks have been renewed in the last nine years while the plans for 2012 include more than 100 kilometres of tracks to be renewed.

#### High Speed Rail Projects



Major projects on inland waterways focus mainly on building new locks, upgrading canals systems and connecting the missing sections within the TEN-T corridor in Europe. Parallel to the trend in Europe, where the transport policy increasingly emphasises the use of inland waterways, the United States Transportation Secretary launched the "America Marine Highway program" in 2010 to improve the use of inland waterways and coastal shipping.

### America Marine Highway program

The America Marine Highway program consists of 11 corridors, 4 connectors and 3 crossings. This is the first step of efforts to gradually use waterways and coast lines to relieve congestion along surface corridors; the vast majority of American freight movements are transported by truck. It will also achieve reduced greenhouse gas emissions and energy savings. The project can potentially create new employment for skilled mariners and shipbuilders, and help start businesses along the corridors, with federal grants made available to support the initiatives. There are specific initiatives in upgrading aging locks and other infrastructure along the St Lawrence and Great Lakes seaways.

#### USA Marine Highway Corridors



Projects for upgrading and modernizing airports and seaport facilities are underway in all countries. As with airports, the performance of a seaport relies heavily on its accessibility. First rate facilities and efficient operations in the port are not sufficient, intermodal accessibility with to a reliable logistics network is required. Inland transport, especially road and rail usually forms the backbone network, facilitating the fluidity of freight cargo transported to/from the ports. Several countries report major investment projects both in airport and seaport capacity. Examples of these include:

- *BAA (now Heathrow) is investing over GBP 5 billion between 2008-2014 period in various upgrades, which include GBP1 billion for the construction of a new Terminal 2 to accommodate 20 million passengers per year.*

- *Zurich Airport has several current and future projects including upgrading its passenger terminal, renovating facilities and replacing its obsolete noise baffles to a new fully enclosed noise protection hangar.*
- *In December 2008, the EBRD and European Investment Bank signed a loan agreement worth 45.25 million Euros with Chisinau Airport (Moldova) for its modernization project.*
- *One of the major projects in Mexico is the expansion of the Port of Lazaro Cardenas, one of the largest deep-water ports. Over USD 400 million will be invested to triple the port container handling capacity, build a new terminal for mineral bulk cargo and to construct 180 metres of dock and other dredging works for 15 new berths. In addition, 53 million USD has been set aside for bridge construction to better connect the port to the highway network.*

### 3.3. Funding

Public budgets remain the principal source of funding for transport infrastructure investment. However, the survey indicates that countries are increasingly looking for alternative ways for funding transport infrastructure. Nearly all countries indicated the use of Public-Private Partnership (PPP) in transport infrastructure projects. The level of private participation differs widely by type of asset. Other sources of funding, mainly for CEECs, include financial arrangements under various EU programmes, the European Investment Bank, and EBRD and World Bank loans.

Road investments are generally publicly financed. Investment funds, used in some countries, are usually financed through a combination of contributions from the general state budget and gasoline and diesel tax revenues. Other revenues include automobile import tariffs (e.g. South Korea), driver license fees (e.g. Canadian provinces and American states) or motorway charges (e.g. Switzerland).

Significant private finance is raised for local road investment funds and airports through the sales of state and municipal bonds (e.g. in the USA). With the tightening of limits on spending under state budgets, private investment through public-private partnerships are increasing solicited for the development and investment of road transport projects, mainly on motorways, bridges and tunnels. The regulatory framework for public-private partnerships has recently been reformed in a number of countries to create standard model contracts (e.g. India) and limit contingent liabilities (e.g. UK) (see *Better Regulation of Private-Public Partnerships for Transport Infrastructure*, International Transport Forum 2013). Some countries that have so far seen relatively little use of private-public partnerships for transport infrastructure, such as the USA, may see a significant increase in the volume of transactions in the future. More generally, transactions are suppressed by a shortage of debt finance as a result of the financial crisis. Some countries have made very limited, or no use of PPPs for road infrastructure, including Sweden, New Zealand, Iceland and the Swiss Confederation.

In the railway sector, infrastructure investments are most often financed by the government. The USA and Canada are notable exceptions. In most European countries, railway operators are state owned enterprises. In Germany, for example, the Federal government is responsible for funding new construction and upgrading the infrastructure. However, railway infrastructure companies have to bear the maintenance cost of the rail network through a charge for the use of the network according to the European Union regulation on track access charges. In Japan, the construction costs of high speed rail lines

are shared by the national and local government. Whilst maintenance and renewal of the trunk lines is the responsibility of the privatised railways, for extensions and new lines that are not able to generate a commercial return, funds are given to JRJT (Japan Railway Construction, Transport and Technology Agency) to construct the lines. On completion, JRJT leases the tracks to operators. In the United States, the major party responsible for investment, maintenance and capacity enhancement are the Class 1 freight railroads. On projects where a major public benefit is possible, local/state/federal governments may share funding of improvements.

Investment in inland waterways in Europe and North America (e.g. St Lawrence and the Great Lakes seaways system) are funded mainly by public money.

Funding for airports and seaports depends very much on their legal ownership but usually large hub-airports are financially independently through (usually regulated) landing charges while small aerodromes receive public funding. Depending on the country, major airports and seaports are either privately owned (e.g. UK) or state own enterprises or entities with a public-private partnership status (e.g. most continental European countries) while minor aerodromes and ports are usually owned by local municipalities. Airport costs are covered by user charges, i.e. passengers and airline, and increasingly by non-aviation related revenues, i.e. parking, retail, advertising, food and beverages, rents for the use of airport property – hotels, warehousing etc. Other sources of funding include public funds or bonds (e.g. USA).

Seaport revenues come generally either from fixed or variable port tariffs and other dockage or wharf charges. In Mexico, ports operate under a public-private association scheme, which is adapted from the Build-Operate-Transfer (BOT) model. Ports are often self-sufficient and make their own investments. Private investments are normally geared to the construction or upgrade of operation facilities (e.g. cargo terminals, warehouses) while long term port investment like entrance channels, coastal protection and breakwaters are entirely financed by public money.

The recent economic crisis has had an impact on funding on transport infrastructure in most of the countries examined. In addition to increased interest in public-private partnerships, the reported impact general falls under one of three categories:

- A certain level of austerity is in place, with a budget squeeze on transport funding;
- Transport infrastructure spending has increase because of economic stimulus packages;
- Following the crisis and slow-down in the construction sector, costs fell below anticipated levels and this lead to the acceleration of some infrastructure development projects.

**ANNEX: STATISTICAL TABLES 1995-2011**

Table A1. Investment in road infrastructure, million Euros, current prices and exchange rates

Table A2. Investment in rail infrastructure, million Euros, current prices and exchange rates

Table A3. Investment in inland waterway infrastructure, million Euros, current prices and exchange rates

Table A4. Investment in sea port infrastructure, million Euros, current prices and exchange rates

Table A5. Investment in airport infrastructure, million Euros, current prices and exchange rates

Table B1. Maintenance expenditure in road infrastructure, million Euros, current prices and exchange rates

Table B2. Maintenance expenditure in rail infrastructure, million Euros, current prices and exchange rates

Table B3. Maintenance expenditure in inland waterway infrastructure, million Euros, current prices and exchange rates

Table B4. Maintenance expenditure in sea port infrastructure, million Euros, current prices and exchange rates

Table B5. Maintenance expenditure in airport infrastructure, million Euros, current prices and exchange rates

Table C1. Gross Domestic Product, 1000 billion Euros, current prices and exchange rates

Table C2. Population

Table C3. Deflators

Table C4. Euro conversion rates

X = Data not applicable

Table A1. Investment in road infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania		15	14	28	73	108	108	65
Armenia								
Australia	2 424	2 926	3 332	3 536	3 930	3 697	3 259	3 429
Austria	457	426	365	430	391	475	640	532
Azerbaijan					1	30	48	47
Belarus								
Belgium	1 069	987	954	1 134	1 253	1 300	1 173	995
Bosnia								
Bulgaria								
Canada	3 576	3 335	3 478	3 155	3 210	3 728	4 396	3 981
Croatia	71	135	185	341	340	304	305	616
Czech Republic	283	306	382	374	323	309	303	518
Denmark	352	404	400	388	419	455	497	399
Estonia	8	12	10	17	21	22	22	47
Finland	457	429	436	443	458	488	508	520
France	10 439	10 504	10 390	10 164	9 924	10 545	10 376	10 160
FYROM	36	35	31	29	29	29	29	37
Georgia						18	33	42
Germany	10 216	11 126	10 916	10 850	11 146	11 967	11 558	11 100
Greece						1 402	1 604	1 692
Hungary	131	123	299	281	209	177	237	283
Iceland	75	69	81	140	110	129	109	123
India								
Ireland	283	281	375	446	606	780	908	1 084
Italy	4 980	5 052	5 144	6 258	6 365	6 930	4 582	5 071
Japan	71 561	62 572	60 876	60 366	69 806	79 260	67 594	59 979
Korea							72	69
Latvia	3	4	2	2	6	13	16	12
Liechtenstein	14	28	26	27	23	24	30	30
Lithuania	15	24	40	96	130	109	70	112
Luxembourg	114	107	101	113	146	166	186	213
Malta	3	7	10	8	7	11	8	16
Mexico	579	540	1 287	806	1 112	1 283	1 150	1 447
Moldova	1	10	14	8	2	2	1	2
Montenegro								1
Netherlands			1 122	1 350	1 500	1 727	1 847	2 279
New Zealand							169	181
Norway	826	782	869	952	1 002	909	1 018	1 161
Poland	638	180	227	299	297	1 019	1 094	1 035
Portugal	737	748	970	905	552	961	1 685	1 620
Romania	356	394	456	487	441	631	736	634
Russia	1 883	2 452	3 108	2 348	1 665	2 579	2 345	2 078
Serbia	28	75	148	75	33	57	80	139
Slovakia	53	79	315	300	204	227	201	260
Slovenia	186	284	293	263	352	372	284	337
Spain	4 263	4 010	3 977	4 787	4 328	4 792	5 558	6 874
Sweden	912	1 014	891	1 046	926	912	1 007	1 295
Switzerland	2 520	2 419	2 336	2 298	2 603	2 716	2 765	2 847
Turkey	157	281	503	401	361	408	331	348
Ukraine								
United Kingdom	5 224	4 864	5 082	4 783	4 758	5 564	5 930	6 247
United States	30 335	32 522	40 438	42 780	49 231	61 267	69 359	63 701

Table A1. Investment in road infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
61	91	68	175	253	500	487	242	210	Albania
									Armenia
4 086	5 194	6 736	6 973	8 025	9 263	9 196	11 200	13 792	Australia
650	720	687	802	870	875	665	390	303	Austria
34	48	82	260	374	1 327	1 272	1 545	1 562	Azerbaijan
									Belarus
1 118	1 432	1 562	1 508	1 281	1 432	1 432			Belgium
									Bosnia
		272	166	134	169	101	281	344	Bulgaria
3 938	4 174	5 497	6 780	7 810	8 751	10 891	15 394	15 061	Canada
1 047	877	750	875	1 066	1 101	909	515	466	Croatia
627	1 031	1 415	1 491	1 493	2 041	1 985	1 721	1 294	Czech Republic
587	728	928	1 191	1 029	936	714	937		Denmark
48	56	102	130	126	142	119	137	158	Estonia
533	599	595	650	802	973	922	890	932	Finland
10 448	11 271	11 355	12 099	12 489	12 623	12 648	11 942	11 876	France
42	28	23	23	39	45	43	32	38	FYROM
41	40	62	91	122	124	219	232	216	Georgia
10 790	10 710	10 200	10 730	10 845	11 410	12 160	11 710	11 610	Germany
1 636	1 507	1 592	1 845	1 946					Greece
243	1 427	1 704	584	646	976	1 564	841		Hungary
171	143	152	211	186	242	121	79	39	Iceland
	2 332	3 832	4 606	5 403	5 817	6 235			India
1 169	1 190	1 153	1 495	1 425	1 319	1 173	841	463	Ireland
6 874	7 572	9 169	14 280	13 664	13 051	5 641	3 389		Italy
49 862	43 290	40 103	36 585	31 560	31 861	37 207	35 774		Japan
67	57	60	61	58	19				Korea
58	63	161	181	241	265	135	140	224	Latvia
25	26	27							Liechtenstein
142	137	165	242	312	437	448	422	343	Lithuania
188	135	128	176	157	138	148	183	220	Luxembourg
13	10	8							Malta
1 683	1 999	2 854	2 542	2 164	2 545	3 023	3 938	3 912	Mexico
2	4	2	6	28	26	13	14		Moldova
1	4	3	37	51	11	23	18	15	Montenegro
2 328	2 334	1 636	1 654	1 680	2 194	2 363	2 300	2 287	Netherlands
200	269	347	396	487	512	579	732	840	New Zealand
1 074	1 138	1 463	1 474	1 718	1 985	2 396	2 622	2 724	Norway
1 010	1 237	1 875	2 605	3 443	4 508	5 340	6 510	8 319	Poland
1 537	1 933	2 112	1 940	1 453	1 366	951	1 511		Portugal
707	1 095	1 331	1 950	2 806	3 891	3 105	2 850	3 283	Romania
2 113	3 182	3 790	4 872	7 299	9 899	6 240	6 210	8 414	Russia
169	185	174	351	406	379	252	229	339	Serbia
210	240	360	411	520	567	662	342	432	Slovakia
470	496	450	573	666	694	406	221	128	Slovenia
7 321	7 244	8 580	8 411	8 077	8 522	8 588	7 818	5 911	Spain
1 399	1 443	1 298	1 407	1 423	1 604	1 574	1 653	1 871	Sweden
2 734	2 730	2 766	2 711	2 674	2 840	2 997	3 388		Switzerland
377	634	921	1 967	1 947	2 233	2 918	5 419	5 181	Turkey
									Ukraine
5 195	4 949	5 632	6 341	6 202	6 043	6 583	6 472	5 147	United Kingdom
53 075	48 959	52 890	58 538	54 360	53 576	56 711	59 893	55 532	United States

Table A2. Investment in rail infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania		3	1	1	2	2	1	6
Armenia								
Australia	571	803	748	648	565	411	367	663
Austria	521	590	710	979	1 120	1 199	1 071	1 191
Azerbaijan				10	6	5	9	25
Belarus								
Belgium	668	537	635	637	764	1 012	856	1 049
Bosnia								
Bulgaria	44	27	14	23	22	78	78	51
Canada	291	276	411	480	512	608	474	452
Croatia	7	13	29	25	25	19	21	36
Czech Republic	112	160	280	302	269	371	394	473
Denmark	726	1 034	872	818	635	564	460	478
Estonia	4	0	0	15	24	19	15	18
Finland	226	192	224	254	264	233	204	225
France	2 766	2 963	3 024	2 879	2 891	2 955	2 444	3 045
FYROM	8	8	7	7	9	9	7	9
Georgia								42
Germany	5 747	5 200	4 745	4 423	7 350	5 305	5 481	7 437
Greece						591	304	983
Hungary	85	103	80	136	188	197	228	278
Iceland	X	X	X	X	X	X	X	X
India						789	2 408	2 490
Ireland	29	2	9	4	5	85	141	237
Italy	1 950	2 013	2 078	2 170	3 681	4 549	4 856	5 525
Japan	8 456	7 520	6 198	6 187	8 309	10 139	9 590	9 095
Korea							31	35
Latvia	7	10	21	27	26	38	30	36
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	4	17	22	29	20	18	25	58
Luxembourg	23	168	29	36	30	39	72	69
Malta	X	X	X	X	X	X	X	X
Mexico	168	157	234	282	382	430	365	338
Moldova	5	4	5	3	1	1	2	8
Montenegro								
Netherlands			487	503	488	710	816	1 348
New Zealand								
Norway	324	489	390	349	197	363	199	189
Poland	248	282	307	337	237	198	113	108
Portugal	196	260	476	536	342	401	418	523
Romania	72	51	43	46	30	43	57	106
Russia	1 161	1 482	1 722	982	1 180	2 612	3 271	2 053
Serbia	13	17	20	32	16	3	4	6
Slovakia	59	107	121	64	37	53	170	241
Slovenia						16	15	20
Spain	767	816	686	944	1 391	1 840	2 456	3 652
Sweden	1 141	1 049	701	763	683	590	557	666
Switzerland	1 079	1 170	1 232	1 290	1 343	1 463	1 644	2 012
Turkey	45	48	61	68	81	73	58	72
Ukraine								
United Kingdom	2 414	2 734	3 363	3 909	4 820	4 874	5 876	6 749
United States	3 301	4 111	5 169	6 058	5 668	7 021	6 891	6 097

Table A2. Investment in rail infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
1	2	2	1	1	1	0	0	1	Albania
									Armenia
749	1 106	1 493	1 252	1 962	1 727	2 285	3 612	5 492	Australia
1 145	1 335	1 330	1 489	1 505	1 683	2 062	1 936	2 143	Austria
5	7	19	12	4	11	2	3	3	Azerbaijan
									Belarus
959	976	916	1 012	1 009	1 223	1 223			Belgium
									Bosnia
26	31	46	39	44	72	50	130	90	Bulgaria
490	356	572	599	646	617	493	699	842	Canada
104	128	94	122	92	126	98	83	81	Croatia
417	411	485	465	612	1 217	740	564	447	Czech Republic
338	342	241	178	232	373	357	396	863	Denmark
16	20	20	21	30	23	37	35	94	Estonia
275	328	281	234	211	327	361	288	355	Finland
3 634	3 680	4 118	4 214	4 505	5 119	5 047	4 915	5 148	France
3	0	1	1	1	2	4	2	0	FYROM
19	11	14	62	212	48	80	78	249	Georgia
7 228	6 404	3 411	3 971	3 836	3 816	3 412	3 807	3 920	Germany
1 699	1 786	278	239	253					Greece
280	155	171	91	376	298	317	275		Hungary
X	X	X	X	X	X	X	X	X	Iceland
1 314	1 504	1 425	1 328	1 437	1 501	2 515	2 994	3 080	India
247	184	184	172	244					Ireland
7 403	8 809	10 175	8 970	7 702	7 109	5 687	4 773		Italy
7 523	6 217	6 057	6 736	6 883	7 367	9 602	11 308	10 198	Japan
34	30	38	38	37					Korea
41	33	40	33	37	61	64	78	54	Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
85	70	68	50	76	85	67	107	116	Lithuania
88	107	127	104	138	150	172	157	150	Luxembourg
X	X	X	X	X	X	X	X	X	Malta
201	192	223	370	563	498	438	435	649	Mexico
10	6	9	6	10	25	8	7	7	Moldova
									Montenegro
1 298	1 051	1 100	703	845	820	778	1 097	1 136	Netherlands
									New Zealand
200	222	193	258	310	286	358	479	528	Norway
194	220	236	353	647	904	650	690	925	Poland
704	484	415	307	329	392	360	403	333	Portugal
99	58	109	102	311	316	177	169	161	Romania
3 231	3 648	4 021	4 168	5 436	9 507	6 575	9 066	9 861	Russia
5	4	4	4	2	2	6	12	7	Serbia
91	91	160	225	287	215	175	273	293	Slovakia
21	59	42	13	53	129	100	131	106	Slovenia
3 791	4 368	5 764	6 336	8 345	8 981	9 780	8 255	7 581	Spain
652	943	1 124	1 061	1 253	1 319	1 319	1 434	1 400	Sweden
2 004	2 116	2 191	2 351	2 329	2 622	2 888	3 036	3 414	Switzerland
116	222	226	451	499	672	756	1 493	1 470	Turkey
									Ukraine
7 493	5 450	5 758	7 940	7 733	7 562	6 342	6 387	6 652	United Kingdom
6 042									United States

Table A3. Investment in inland waterway infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania					0	0	0	0
Armenia								
Australia	X	X	X	X	X	X	X	X
Austria	3	0	0	0	0	0	0	1
Azerbaijan								
Belarus								
Belgium	151	125	181	129	139	152	153	153
Bosnia								
Bulgaria								463
Canada	5	5	7	6				
Croatia				1	1	2	2	2
Czech Republic	1	0	2	6	3	11	9	17
Denmark	X	X	X	X	X	X	X	X
Estonia	X	X	X	X	X	X	X	X
Finland	2	2	1	0	1	0	3	4
France	107	59	69	85	104	114	114	115
FYROM	X	X	X	X	X	X	X	X
Georgia	X	X	X	X	X	X	X	X
Germany	711	757	741	828	849	828	844	810
Greece	X	X	X	X	X	X	X	X
Hungary	1	1	0	0	0	0	7	6
Iceland	X	X	X	X	X	X	X	X
India								
Ireland	X	X	X	X	X	X	X	X
Italy	10	9	9	22	11	30	26	16
Japan	X	X	X	X	X	X	X	X
Korea	X	X	X	X	X	X	X	X
Latvia	X	X	X	X	X	X	X	X
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	1	0	0	0	0	0	0	0
Luxembourg	0	0	3	1	0	1	1	2
Malta	X	X	X	X	X	X	X	X
Mexico	X	X	X	X	X	X	X	X
Moldova								
Montenegro								X
Netherlands			203	261	319	402	379	512
New Zealand	X	X	X	X	X	X	X	X
Norway	X	X	X	X	X	X	X	X
Poland	10	X	X	X	X	X	X	X
Portugal	1	6	9	1	0	1	1	9
Romania	244	150	110	107	96	105	169	104
Russia	73	66	87	62	28	48	91	62
Serbia	12	14	15	12	4	5	6	14
Slovakia	21	19	19	10	3	1	1	1
Slovenia	X	X	X	X	X	X	X	X
Spain	X	X	X	X	X	X	X	X
Sweden	X	X	X	X	X	X	X	X
Switzerland	8	7	39	39	17	17	0	4
Turkey	X	X	X	X	X	X	X	X
Ukraine								
United Kingdom								
United States	1 176	1 329	1 475	1 691	1 926	4 427	4 088	3 893

Table A3. Investment in inland waterway infrastructure, Million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
0	0	0	0	0	0	0	0	0	Albania
									Armenia
X	X	X	X	X	X	X	X	X	Australia
3	12	7	7	4	3	5	11	8	Austria
									Azerbaijan
									Belarus
153	153	156	162	178	188	188			Belgium
									Bosnia
38	26	85	197	405	0	0	0	0	Bulgaria
									Canada
2	3	2	1	2	2	4	3	3	Croatia
12	12	10	19	14	22	59	58	22	Czech Republic
X	X	X	X	X	X	X	X	X	Denmark
X	X	X	X	X	X	X	X	X	Estonia
2	4	1	2	5	2	2	2	1	Finland
132	109	108	162	168	141	182	188	197	France
X	X	X	X	X	X	X	X	X	FYROM
X	X	X	X	X	X	X	X	X	Georgia
825	790	790	800	820	905	1 180	1 100	1 040	Germany
X	X	X	X	X	X	X	X	X	Greece
7	1	2	4	4	0	3	1		Hungary
X	X	X	X	X	X	X	X	X	Iceland
									India
X	X	X	X	X	X	X	X	X	Ireland
35	51	53	56	29	34	27	42		Italy
X	X	X	X	X	X	X	X	X	Japan
X	X	X	X	X	X	X	X	X	Korea
X	X	X	X	X	X	X	X	X	Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
0	0	0	2	3	4	1	1	2	Lithuania
1	1	0	1	0	0	0	1	1	Luxembourg
X	X	X	X	X	X	X	X	X	Malta
X	X	X	X	X	X	X	X	X	Mexico
									Moldova
X	X	X	X	X	X	X	X	X	Montenegro
479	486	284	312	263	270	361	252	263	Netherlands
X	X	X	X	X	X	X	X	X	New Zealand
X	X	X	X	X	X	X	X	X	Norway
X	14	7	7	13	21	25	25	29	Poland
6	8	20	13	10	7	5	1	1	Portugal
164	191	140	213	359	490	536	423	519	Romania
87	140	73	51	58	102	59	68	301	Russia
12	19	15	30	24	36	19	21	26	Serbia
1	1	1	1	0	1	2	3	1	Slovakia
X	X	X	X	X	X	X	X	X	Slovenia
X	X	X	X	X	X	X	X	X	Spain
X	X	X	X	X	X	X	X	X	Sweden
0	1	0	0	0	0	0	0	0	Switzerland
X	X	X	X	X	X	X	X	X	Turkey
									Ukraine
									United Kingdom
2 349									United States

Table A4. Investment in sea port infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania			2	1	4	6	8	13
Armenia								
Australia	60	101	185	215	135	96	169	180
Austria	X	X	X	X	X	X	X	X
Azerbaijan								
Belarus	X	X	X	X	X	X	X	X
Belgium	152	129	139	164	167	186	157	189
Bosnia								
Bulgaria							5	4
Canada	62	109	54	66	60	166	179	115
Croatia	1	0	1	6	10	7	24	28
Czech Republic	X	X	X	X	X	X	X	X
Denmark	61	54	31	57	52	57	96	10
Estonia	19	21	12	22	10	17	27	21
Finland	41	51	43	56	70	59	72	55
France	235	195	178	189	174	197	296	320
FYROM	X	X	X	X	X	X	X	X
Georgia								
Germany	506	491	562	450	409	562	506	1 020
Greece						166	178	98
Hungary	X	X	X	X	X	X	X	X
Iceland	18	17	17	22	31	20	19	28
India								
Ireland	30							
Italy	212	199	221	250	247	231	272	494
Japan								5 136
Korea							11	14
Latvia								46
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	6	8	21	19	11	13	33	29
Luxembourg	X	X	X	X	X	X	X	X
Malta								
Mexico	133	123	170	165	238	315	757	456
Moldova	X	X	X	X	X	X	X	X
Montenegro								0
Netherlands								
New Zealand								
Norway	68	76	78	82	106	123		36
Poland	30	1	3	7	10	11	12	11
Portugal	62	51	72	86	86	93	31	22
Romania	6							
Russia	146	139	156	92	220	243	270	375
Serbia	X	X	X	X	X	X	X	X
Slovakia	X	X	X	X	X	X	X	X
Slovenia	0	0	0	1	5	2	6	4
Spain	481	460	479	533	605	891	1 175	1 403
Sweden								31
Switzerland	X	X	X	X	X	X	X	X
Turkey	7	14	13	13	14	9	2	3
Ukraine								
United Kingdom	199	184	289	355	380	336	375	375
United States								

Table A4. Investment in sea port infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
8	8	11	6	1	3	3	4	10	Albania
									Armenia
194	419	577	701	702	1 057	1 171	1 765	3 256	Australia
X	X	X	X	X	X	X	X	X	Austria
								59	Azerbaijan
X	X	X	X	X	X	X	X	X	Belarus
233	260	184	159	203	219	219			Belgium
									Bosnia
3	1	5	8	46	7	8	5	5	Bulgaria
104	119	108	160	175	184	299	320	249	Canada
10	9	17	14	17	52	77	51	63	Croatia
X	X	X	X	X	X	X	X	X	Czech Republic
40	102	68	105	67	71	66	49		Denmark
59	66	24	31	57	41	75	39	18	Estonia
89	118	136	195	221	238	100	69	76	Finland
483	377	283	261	226	410	394	229	218	France
X	X	X	X	X	X	X	X	X	FYROM
					30	24	24	13	Georgia
440	430	570	580	640	630	685	965	925	Germany
105	86	61	75	60					Greece
X	X	X	X	X	X	X	X	X	Hungary
15	34	23	34	37	23	20	14	17	Iceland
	17	28	56	66	55	65	74	98	India
									Ireland
1 817	2 447	2 062	848	1 179	940	1 278	1 345		Italy
3 839	3 601	3 208	2 800	2 506	2 849	4 656	2 169	2 423	Japan
14	16	21	24	23	2				Korea
45	98	62	90	149	262				Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
23	16	30	30	26	42	16	21	27	Lithuania
X	X	X	X	X	X	X	X	X	Luxembourg
									Malta
228	527	565	513	438	579	383	487	542	Mexico
X	X	X	X	X	X	X	X	X	Moldova
1	0	1	1	2	3	2	3	3	Montenegro
									Netherlands
									New Zealand
24	72	100	73	123	9	81	19		Norway
21	14	9	14	17	30	4	27	64	Poland
22	84	44	114	157	128	100	112	83	Portugal
									Romania
275	300	279	236	197	413	183	115	326	Russia
X	X	X	X	X	X	X	X	X	Serbia
X	X	X	X	X	X	X	X	X	Slovakia
6	4	2	3	7	10	54	13	6	Slovenia
1 680	1 942	2 258	2 432	2 573	2 871	2 508	2 247	1 902	Spain
65	76	37	43	81	60	72	107		Sweden
X	X	X	X	X	X	X	X	X	Switzerland
5	7	10	14	23	30	20	16	34	Turkey
									Ukraine
448	298	336							United Kingdom
									United States

Table A5. Investment in airport infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania		5	15	9	1	1	2	0
Armenia								
Australia								
Austria	92	86	79	62	96	82	81	102
Azerbaijan				39	43	11	4	1
Belarus								
Belgium	88	38	35	37	125	127	127	73
Bosnia								
Bulgaria					5	6	1	4
Canada						777	1 243	1 152
Croatia	7	16	12	11	18	5	7	9
Czech Republic	73	80	71	22	17	28	50	39
Denmark	48	21	34	293	136	118	62	106
Estonia	2	0	0	4	0	1	1	0
Finland	51	49	43	78	97	65	63	51
France	570	572	643	731	628	783	821	951
FYROM	49	11	3	1	11	14	4	8
Georgia								
Germany	1 156	895	977	1 115	1 314	1 411	1 329	1 010
Greece						52	51	64
Hungary	33	30	46	27	18	27	17	47
Iceland				4	6	12	10	5
India								
Ireland							107	75
Italy	276	248	298	299	387	355	415	558
Japan		2 526	1 845	1 672	2 029	2 795	2 570	2 178
Korea							3	3
Latvia						18	25	12
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	19	5	3	6	2	1	1	1
Luxembourg	0	0	1	1	1	3	4	1
Malta								
Mexico	21	140	59	88	176	185	156	163
Moldova	0	0	0	1	1	7	2	2
Montenegro								0
Netherlands								
New Zealand								
Norway	70	62	81	77	72	73		111
Poland	27	33	50	43	45	70	89	58
Portugal	67	95	128	185	135	150	172	112
Romania	12	21	5	3	3	7	7	14
Russia	263	378	348	184	131	240	243	498
Serbia	0	0	0	0	0	0	0	0
Slovakia	4	5	6	5	5	4	4	3
Slovenia	7	1	1	2	6	3	2	1
Spain	496	415	513	518	506	556	992	1 387
Sweden	76	95	88	99	199	315	348	227
Switzerland	131	149	125	131	193	411	500	422
Turkey	53	101	184	290	177	420	125	78
Ukraine								
United Kingdom	703	779	1 128	991	1 022	1 196	1 105	1 358
United States	4 761	5 923	6 776	8 938	10 904	13 212	15 048	14 090

Table A5. Investment in airport infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
6	6	7	1	2	0	0	0	0	Albania
									Armenia
									Australia
158	240	362	217	187	306	221	174		Austria
28	9	100	96	71	82	28	201	164	Azerbaijan
									Belarus
69	47	68	88	135	116	116			Belgium
									Bosnia
3	3	2	2	2	4	1	2	2	Bulgaria
1 009	777	786	829	741	810	731	608	613	Canada
31	12	19	24	20	21	28	28	19	Croatia
52	150	237	71	77	325	92	81	40	Czech Republic
19	27	35	37	64	20	92			Denmark
0	6	4	10	31	56	19	3	6	Estonia
43	48	48	60	74	108	76	45	44	Finland
837	838	860	978	1 052	820	739	777	999	France
0	0	0	2	0	1	0	0	102	FYROM
				27	0	0	0	1	Georgia
1 130	540	700	720	1 620	1 140	1 510	1 480	1 815	Germany
91	94	68	52	34					Greece
46	20	115	9	2		11	50		Hungary
4	3	7	5	5	12	5	2	2	Iceland
	4	63	4	17	21	133	213	213	India
48	80	105	147	271	403	509	243	83	Ireland
386	307	806	234	124	126	117	634		Italy
2 003	2 027	2 154	2 548	2 278	2 265	2 538	2 362	1 327	Japan
3	3	3	3	3	1				Korea
5	5	17	20	17	19	3	3	6	Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
5	3	4	18	53	11	29	8	15	Lithuania
18	23	26	71	64	47	19	7	12	Luxembourg
									Malta
85	167	602	345	191	326	179	271	226	Mexico
1	1	1	2	4	12	4	0	2	Moldova
0	4	3	1	4	0	2	28	4	Montenegro
									Netherlands
									New Zealand
76	104	21	154	238	205	251	203		Norway
38	49	131	133	85	79	63	132	206	Poland
89	170	134	103	82	135	151	127	102	Portugal
3	2	2	15	42	9	6	1	2	Romania
576	684	268	398	436	441	269	471	434	Russia
1	1	0	1	0	0	1	1	0	Serbia
6	11	32	14	16	30	56	70	33	Slovakia
2	3	1	11	24	5	13	7	3	Slovenia
2 212	2 020	1 512	1 829	2 164	2 132	1 773	1 744	1 235	Spain
149	81	85	88	118	108	87	79	126	Sweden
250	159	104				169	211	327	Switzerland
104	93	218	632	175	138	569	520	426	Turkey
									Ukraine
2 085	2 203	2 602							United Kingdom
11 328									United States

Table B1. Maintenance expenditure in road infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania				3	3	4	6	7
Armenia								
Australia	1 457	1 823	2 036	1 765	1 871	1 852	2 158	2 320
Austria	532	478	463	533	527	508	520	294
Azerbaijan							16	16
Belarus								
Belgium	381	403	396	351	390	406	410	464
Bosnia								
Bulgaria								
Canada	3 293	3 404	4 121	4 020	4 607	5 887	5 294	5 304
Croatia	22	78	62	84	120	316	132	171
Czech Republic	133	188	178	173	186	202	272	280
Denmark	555	574	505	557	582	586	648	674
Estonia	23	21	26	25	14	14	15	16
Finland	599	526	564	549	527	534	543	634
France	178	180	186	185	210	228	221	233
FYROM							15	18
Georgia						8	9	7
Germany								
Greece								
Hungary	97	91	135	158	128	107		
Iceland	14	16	16	16	21	25	23	24
India								
Ireland			123	130	143	102	51	52
Italy	4 856	4 927	5 016	5 799	8 258	9 720	5 506	5 896
Japan	18 757	16 773	15 979	15 914	18 488	22 269	19 848	17 788
Korea							14	14
Latvia	10	24	36	58	75	45	39	38
Liechtenstein	3	4	4	4	4	4	4	4
Lithuania	11	27	60	60	67	61	74	107
Luxembourg	23	23	22	19	28	26	31	33
Malta	3	4	2	4	5	5	4	2
Mexico	196	261	309	365	475	474	511	565
Moldova	14	16	18	11	5	7	6	8
Montenegro								
Netherlands			475	494	521	524	549	639
New Zealand								370
Norway	475	473	475	467	477	554	608	936
Poland	287	98	134	111	136	449	666	791
Portugal	125	152	126	197	210	128	229	181
Romania	105						341	234
Russia								
Serbia	19	48	49	49	24	25	61	107
Slovakia	25	45	56	51	54	67	68	69
Slovenia	53	96	101	93	101	79	66	68
Spain								
Sweden	502	558	545	735	702	747	755	805
Switzerland	1 209	1 180	1 103	1 152	1 307	765	1 410	1 453
Turkey	18	30	66	61	98	99	82	51
Ukraine								
United Kingdom	3 837	3 670	4 080	4 077	4 447	5 119	5 150	5 164
United States	14 515	15 393	17 937	18 850	21 097	25 958	26 549	26 347

Table B1. Maintenance expenditure in road infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
6	7	7	6	6	8	9	7	8	
									Albania
									Armenia
2 359	2 624	2 893	2 239	2 720	3 237	3 192	4 471		Australia
388	458	443	495	486	467	516	559	494	Austria
17	35	33	55	31	35	25	23	26	Azerbaijan
									Belarus
482	491	470	492	458	499	523			Belgium
									Bosnia
			108	215	203	69	100	71	Bulgaria
5 251	5 403	5 246	5 413	6 879	6 948	6 551	8 703	5 816	Canada
209	244	242	155	158	168	144	195	212	Croatia
265	296	351	544	589	611	578	670	570	Czech Republic
704	737	767	705	729	716	866	1 058		Denmark
21	23	25	28	32	38	39	38	39	Estonia
627	587	600	612	611	673	684	667	658	Finland
239	239	2 189	2 235	2 294	2 286	2 601	2 431	2 746	France
17	7	6	4	14	13	12	16	15	FYROM
7	6	6	10	11	12	11	9	13	Georgia
									Germany
									Greece
	254	283	1 256	1 367	444	454			Hungary
26	26	34	32	35	52	30	29	29	Iceland
	2 379	3 774	5 156	5 382	5 296	6 255	9 312	8 831	India
53	51	53	54	50	55	45	42	35	Ireland
11 596	11 241	12 549	13 452	9 764	10 756	6 008	6 437		Italy
15 466	14 630	14 030	11 773	11 373	10 875	13 529	13 966		Japan
17	11	14	18	15					Korea
64	71	80	129	211	225	133	120	126	Latvia
4	4	4							Liechtenstein
122	122	125	161	125	134	125	160	153	Lithuania
43	32	35	24	23	27	30	34	36	Luxembourg
5	2	3							Malta
396	377	478	472	465	690	672	802	821	Mexico
8	10	8	11	11	18	17	37	676	Moldova
									Montenegro
587	611	725	1 040	1 091	1 231	827	1 209	323	Netherlands
417	482	570	543	616	579	607	720	787	New Zealand
843	906	993	1 054	1 109	1 149	1 223	1 499	1 670	Norway
721	1 055	1 263	1 670	1 515	2 006	2 341	2 636	2 678	Poland
221	233	177	203	192	141	124	102		Portugal
268	379	426	1 041	1 337					Romania
									Russia
100	184	259	260	300	331	259	229	205	Serbia
72	82	100	130	156	161	192	175	160	Slovakia
75	77	99	140	139	148	151	137	122	Slovenia
									Spain
756	758	788	809	836	859	787	983	925	Sweden
1 492	1 476	1 520	1 534	1 410	1 611	1 817	2 036		Switzerland
84	71	89	157	278	309	411	360	674	Turkey
									Ukraine
4 832	5 450	5 662	5 857	5 639	5 057	4 409	3 989	3 719	United Kingdom
22 822	21 037	23 569	25 004	22 513	22 642	23 088			United States

Table B2. Maintenance expenditure in rail infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania								
Armenia								
Australia								
Austria			384	378	364	347	338	339
Azerbaijan				2	1	2	2	12
Belarus								
Belgium	292							
Bosnia								
Bulgaria	0	0	6	1	0	14	11	5
Canada								
Croatia	43	47	46	57	71	48	83	93
Czech Republic	207	217	212	226	240	257	292	385
Denmark								
Estonia								
Finland	119	114	117	113	113	115	125	135
France			2 561	2 531	2 622	2 617	2 642	2 914
FYROM			13	15	14	13	12	13
Georgia								101
Germany								
Greece								
Hungary	138				64	79		
Iceland	X	X	X	X	X	X	X	X
India						8 436	8 588	8 494
Ireland	10	38	36	42	63	115	187	128
Italy	2 155	2 225	2 297	2 210	3 531	5 363	5 234	5 619
Japan								
Korea								
Latvia	25	23	27	27	27	48	50	53
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	28	35	39	39	41	48	49	75
Luxembourg	81	87	65	64	67	88	110	100
Malta	X	X	X	X	X	X	X	X
Mexico								
Moldova								
Montenegro								
Netherlands			635	607	599	604	594	655
New Zealand								
Norway	220	249	295	300	316	336	382	418
Poland	585	406	249	118	83	59	45	39
Portugal	49	43	44	40	41	52	56	54
Romania	203						13	64
Russia								
Serbia	4	10	12	10	9	9	10	15
Slovakia	6	5	4	6	4	8	5	9
Slovenia						7	5	3
Spain								
Sweden	258	264	271	229	242	305	301	372
Switzerland	350	327	305	381	444	468	563	889
Turkey	80	78	95	101	115	150	109	111
Ukraine								
United Kingdom								
United States								

Table B2. Maintenance expenditure in rail infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
									Albania
									Armenia
									Australia
335	341	302	362	325	356	348	344	451	Austria
13	12	6	8	12	21	30	22	19	Azerbaijan
									Belarus
									Belgium
									Bosnia
4	6	31	29	30	58	38	36	33	Bulgaria
									Canada
103	113	107	108	112	106	76	90	87	Croatia
225	213	236	256	253	353	372	359	365	Czech Republic
									Denmark
									Estonia
137	155	156	156	167	180	196	195	197	Finland
3 411	3 592	3 568	3 225	3 377	3 672	3 730	3 770	3 804	France
10	11	10	10	0	5	3	2	2	FYROM
103	91	101	94	133	133	132	138	23	Georgia
									Germany
									Greece
	211	234	1 237	1 288	457	398			Hungary
X	X	X	X	X	X	X	X	X	Iceland
7 683	7 774	8 814	8 851	9 707	11 396	12 444	14 916		India
126	121	127	135	144					Ireland
7 324	7 807	8 919	9 492	8 282	8 036	7 832	7 829		Italy
									Japan
	1	8	9	15					Korea
42	56	60	70	89	125	136	104	110	Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
93	96	105	105	115	166	132	143	151	Lithuania
95	115	112	127	108	115	126	120	124	Luxembourg
X	X	X	X	X	X	X	X	X	Malta
									Mexico
									Moldova
912	1 037	1 118	1 547	1 367	1 175	1 410	1 690	1 798	Montenegro
									Netherlands
389	353	360	404	422	447	534	676	729	New Zealand
68	77	82	67	100	36	157	213	239	Norway
56	91	100	115	122	122	127	135		Poland
19	20	58	38	96					Portugal
									Romania
									Russia
24	22	22	18	20	21	16	13	17	Serbia
8	9	10	10	15	14	15	12	6	Slovakia
3	3	7	8	8	9	1	1	8	Slovenia
									Spain
455	467	490	509	540	598	590	724	701	Sweden
580	862	683	702	847	475	534	588	671	Switzerland
123	137	164	180	192	207	178	223	195	Turkey
									Ukraine
									United Kingdom
									United States

Table B3. Maintenance expenditure in inland waterway infra, mill. Euros, current prices and exch. rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania								
Armenia								
Australia	X	X	X	X	X	X	X	X
Austria							17	17
Azerbaijan								
Belarus								
Belgium	25	27	35	30	31	48	51	51
Bosnia								
Bulgaria								470
Canada								
Croatia				1	1	2	2	6
Czech Republic	4	5	4	4	4	4	3	4
Denmark	X	X	X	X	X	X	X	X
Estonia	X	X	X	X	X	X	X	X
Finland	14	21	21	23	23	27	19	17
France	24	26	33	33	37	46	40	41
FYROM	X	X	X	X	X	X	X	X
Georgia	X	X	X	X	X	X	X	X
Germany								
Greece	X	X	X	X	X	X	X	X
Hungary	48							
Iceland	X	X	X	X	X	X	X	X
India								
Ireland	X	X	X	X	X	X	X	X
Italy	10	9	9	24	29	38	41	27
Japan	X	X	X	X	X	X	X	X
Korea	X	X	X	X	X	X	X	X
Latvia	X	X	X	X	X	X	X	X
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	1	1	1	1	1	1	1	1
Luxembourg	0	0	0	0	0	0	0	0
Malta	X	X	X	X	X	X	X	X
Mexico	X	X	X	X	X	X	X	X
Moldova	0	0	0	0	0	0	0	0
Montenegro								X
Netherlands			414	357	222	362	334	441
New Zealand	X	X	X	X	X	X	X	X
Norway	X	X	X	X	X	X	X	X
Poland	15							
Portugal								
Romania	13						7	6
Russia								
Serbia	1	4	5	4	1	1	2	4
Slovakia	4	5	5	10	5	7	4	4
Slovenia	X	X	X	X	X	X	X	X
Spain	X	X	X	X	X	X	X	X
Sweden	X	X	X	X	X	X	X	X
Switzerland								
Turkey	X	X	X	X	X	X	X	X
Ukraine								
United Kingdom								
United States								

Table B3. Maintenance expenditure in inland waterway infra, mill. Euros, current prices and exch. rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
									Albania
									Armenia
X	X	X	X	X	X	X	X	X	Australia
17									Austria
									Azerbaijan
									Belarus
61	61	66	67	76	87	131			Belgium
									Bosnia
544	293	507	619	788	2	1	1	2	Bulgaria
									Canada
7	4	4	1	2	3	1	1	1	Croatia
26	10	2	1	3	2	2	2	2	Czech Republic
X	X	X	X	X	X	X	X	X	Denmark
X	X	X	X	X	X	X	X	X	Estonia
13	14	15	15	16	17	26	17	14	Finland
48	43	55	61	58	60	61	60	61	France
X	X	X	X	X	X	X	X	X	FYROM
X	X	X	X	X	X	X	X	X	Georgia
									Germany
X	X	X	X	X	X	X	X	X	Greece
	1	1	25	33	2	1			Hungary
X	X	X	X	X	X	X	X	X	Iceland
									India
X	X	X	X	X	X	X	X	X	Ireland
108	121	481	498	98	83	82	81		Italy
X	X	X	X	X	X	X	X	X	Japan
X	X	X	X	X	X	X	X	X	Korea
X	X	X	X	X	X	X	X	X	Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
1	1	2	2	2	3	1	1	1	Lithuania
1	1	0	1	0	0	0	0	0	Luxembourg
X	X	X	X	X	X	X	X	X	Malta
X	X	X	X	X	X	X	X	X	Mexico
0	0	0	0	0	4	1	0		Moldova
X	X	X	X	X	X	X	X	X	Montenegro
410	289	604	377	492	583	693	544	343	Netherlands
X	X	X	X	X	X	X	X	X	New Zealand
X	X	X	X	X	X	X	X	X	Norway
	9	14	8	2	2	3	8	17	Poland
									Portugal
13	8	6	17	28					Romania
									Russia
4	6	6	7	11	13	11	13	23	Serbia
3	2	2	1	1	4	2	2	2	Slovakia
X	X	X	X	X	X	X	X	X	Slovenia
X	X	X	X	X	X	X	X	X	Spain
X	X	X	X	X	X	X	X	X	Sweden
									Switzerland
X	X	X	X	X	X	X	X	X	Turkey
									Ukraine
									United Kingdom
									United States

Table B4. Maintenance expenditure in sea port infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania								
Armenia								
Australia								
Austria	X	X	X	X	X	X	X	X
Azerbaijan								
Belarus	X	X	X	X	X	X	X	X
Belgium	44	102	103	103	101	129	130	130
Bosnia								
Bulgaria							5	4
Canada	39	54	64	58	64	78	78	77
Croatia	0	0	0	3	1	2	3	4
Czech Republic	X	X	X	X	X	X	X	X
Denmark								
Estonia								
Finland	66	75	82	90	92	94	80	91
France		51	51	53	56	56	53	51
FYROM	X	X	X	X	X	X	X	X
Georgia								
Germany								
Greece								
Hungary	X	X	X	X	X	X	X	X
Iceland								
India								
Ireland								
Italy	1 173	1 101	1 226	1 186	880	1 151	1 470	1 078
Japan								
Korea							2	3
Latvia								14
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	1	2	1	3	2	4	5	4
Luxembourg	X	X	X	X	X	X	X	X
Malta								
Mexico								
Moldova	X	X	X	X	X	X	X	X
Montenegro								
Netherlands								
New Zealand								
Norway	25	26	27	27	28	30		
Poland	26	6	1	11	11	16	13	12
Portugal	1	1	3	3	1	3	1	3
Romania	11							
Russia								
Serbia	X	X	X	X	X	X	X	X
Slovakia	X	X	X	X	X	X	X	X
Slovenia								2
Spain								
Sweden								
Switzerland	X	X	X	X	X	X	X	X
Turkey								
Ukraine								
United Kingdom								
United States								

Table B4. Maintenance expenditure in sea port infrastructure, million Euros, current prices and exch. rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
									Albania
									Armenia
									Australia
X	X	X	X	X	X	X	X	X	Austria
									Azerbaijan
X	X	X	X	X	X	X	X	X	Belarus
130	130	130	130	130	130	135			Belgium
									Bosnia
3	1	5	0	27	0	5	1	1	Bulgaria
75	73	92	110	114	128	138	151	26	Canada
4	5	4	5	8	5	4	3	3	Croatia
X	X	X	X	X	X	X	X	X	Czech Republic
									Denmark
									Estonia
88	88	93	88	89	82	107	106	134	Finland
51	50	50	50	44	48	48	53	53	France
X	X	X	X	X	X	X	X	X	FYROM
					0	0	1	2	Georgia
									Germany
									Greece
X	X	X	X	X	X	X	X	X	Hungary
									Iceland
	105	116	135	171	158	132	194	168	India
									Ireland
1 379	1 244	3 074	2 469	1 394	1 163	1 287	1 098		Italy
									Japan
2	2	3	3	3					Korea
6	8	29	34	54	58				Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
5	3	5	3	4	6	2	7	2	Lithuania
X	X	X	X	X	X	X	X	X	Luxembourg
									Malta
									Mexico
X	X	X	X	X	X	X	X	X	Moldova
									Montenegro
									Netherlands
									New Zealand
									Norway
8	5	9	3	6	6	10	10	15	Poland
1	2	2	1	1	1	1	1	4	Portugal
									Romania
									Russia
X	X	X	X	X	X	X	X	X	Serbia
X	X	X	X	X	X	X	X	X	Slovakia
1	1	1	2	1	1	2	2	3	Slovenia
									Spain
7	12	13	21	28	1	23	27		Sweden
X	X	X	X	X	X	X	X	X	Switzerland
									Turkey
									Ukraine
									United Kingdom
									United States

Table B5. Maintenance expenditure in airport infrastructure, million Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania								
Armenia								
Australia								
Austria								
Azerbaijan						6	10	9
Belarus								
Belgium	26							
Bosnia								
Bulgaria					5	6	1	4
Canada						408	441	418
Croatia	1	1	1	0	1	1	0	0
Czech Republic	7	4	6	8	9	13	14	12
Denmark								
Estonia								
Finland	86	95	127	127	135	143	149	151
France								
FYROM								
Georgia	0	0	0	0	0	0	0	0
Germany								
Greece								
Hungary	28							
Iceland								
India								
Ireland							29	29
Italy	194	175	210	197	94	221	510	1 321
Japan								
Korea								
Latvia								
Liechtenstein	X	X	X	X	X	X	X	X
Lithuania	5	1	1	1	1	1	3	3
Luxembourg	2	2	3	3	3	3	3	3
Malta								
Mexico								
Moldova								
Montenegro								
Netherlands								
New Zealand								
Norway	26	29	32	33	32	34		
Poland	149	0	4	0	1	1	2	2
Portugal					4	6	7	5
Romania	23						0	9
Russia								
Serbia								
Slovakia	1	1	1	1	1	1	1	2
Slovenia								
Spain								
Sweden							37	30
Switzerland								
Turkey	7	17	33	40	38	62	22	10
Ukraine								
United Kingdom								
United States								

Table B5. Maintenance expenditure in airport infrastructure, million Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
									Albania
									Armenia
									Australia
									Austria
2	7	44	11	10	7	11	4	7	Azerbaijan
									Belarus
									Belgium
									Bosnia
3	3	2	2	2	0	1	2	2	Bulgaria
477	491	548	603	630	630	600	707	699	Canada
0	1	1	2	2	2	3	2	3	Croatia
11	14	14	8	13	12	13	14	7	Czech Republic
									Denmark
162	181	181	203	218	232	230	240	267	Estonia
									Finland
									France
0	0	0	0	0	1	0	0	0	FYROM
									Georgia
									Germany
			646	659					Greece
									Hungary
									Iceland
	64	77	85	211	117	168	231	167	India
30	30	33	35	37	37	33	34	29	Ireland
223	190	178	197	113	98	100	102		Italy
									Japan
	0	0	0	0					Korea
									Latvia
X	X	X	X	X	X	X	X	X	Liechtenstein
3	3	3	3	4	12	2	1	1	Lithuania
3	3	4	4	6	3	5	8	7	Luxembourg
									Malta
									Mexico
									Moldova
									Montenegro
									Netherlands
									New Zealand
									Norway
1	1	2	4	6	20	4	5	21	Poland
4	4	4	5	5	18	14	9	16	Portugal
1	1	0	1	2					Romania
									Russia
		0	0					0	Serbia
2	2	2	1	2	2	3	5	2	Slovakia
									Slovenia
									Spain
31	37	34	36	32	34	31	26	17	Sweden
									Switzerland
8	11	3	2	2	3	5	7	2	Turkey
									Ukraine
									United Kingdom
									United States

Table C1. Gross Domestic product, 1000 billion Euros, current prices and exchange rates

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania	2	3	2	2	3	4	5	5
Armenia	1	1	1	2	2	2	2	3
Australia	300	344	386	349	401	444	436	462
Austria	175	181	184	192	199	208	214	221
Azerbaijan	2	3	3	4	4	6	6	7
Belarus	8	11	12	13	11	11	14	15
Belgium	208	212	221	230	239	253	260	269
Bosnia	1	2	3	4	4	6	6	7
Bulgaria	10	8	9	12	12	14	16	17
Canada	452	483	563	550	620	785	799	777
Croatia	17	18	21	23	22	23	26	28
Czech Republic	44	51	52	57	58	64	72	83
Denmark	139	145	150	155	163	174	179	185
Estonia	3	4	4	5	5	6	7	8
Finland	96	99	107	117	122	132	139	144
France	1 196	1 227	1 265	1 321	1 367	1 440	1 496	1 543
FYROM	3	4	3	3	3	4	4	4
Georgia	3	2	3	3	3	3	4	4
Germany	1 849	1 875	1 913	1 960	2 000	2 048	2 102	2 132
Greece	89	98	108	117	125	135	145	155
Hungary	35	36	41	43	45	50	59	70
Iceland	5	6	7	7	8	9	9	9
India	282	307	373	380	426	508	539	536
Ireland	54	59	68	79	91	106	118	131
Italy	952	1 009	1 054	1 098	1 134	1 198	1 256	1 302
Japan	4 080	3 706	3 815	3 500	4 161	5 130	4 647	4 228
Korea	406	451	470	320	434	579	564	611
Latvia	4	4	6	6	7	8	9	10
Liechtenstein	2	2	2	2	3	3	3	3
Lithuania	5	7	9	10	10	12	14	15
Luxembourg	15	16	16	17	20	22	23	24
Malta	6	7	7	8	9	10	10	11
Mexico	240	287	388	412	495	691	761	754
Moldova	1	1	2	2	1	1	2	2
Montenegro								1
Netherlands	305	320	342	362	386	418	448	465
New Zealand	48	54	61	51	56	58	60	66
Norway	114	126	140	135	149	183	191	204
Poland	106	123	139	153	157	186	212	210
Portugal	88	93	101	110	119	127	134	141
Romania	29	29	31	37	34	41	45	49
Russia	236	306	354	242	184	282	342	366
Serbia	8	14	18	14	9	8	13	16
Slovakia	19	22	24	26	28	31	34	37
Slovenia	10	12	14	15	17	19	21	23
Spain	447	474	504	539	580	630	680	729
Sweden	194	218	223	227	243	268	254	267
Switzerland	248	246	240	249	257	278	293	305
Turkey	174	192	226	239	234	290	218	243
Ukraine	28	35	44	37	30	34	42	45
United Kingdom	885	961	1 207	1 305	1 411	1 600	1 640	1 699
United States	5 626	6 130	7 301	7 797	8 727	10 718	11 427	11 199

Table C1. Gross Domestic product, 1000 billion Euros, current prices and exchange rates (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
5	6	7	7	8	9	9	9	9	Albania
2	3	4	5	7	8	6	7	7	Armenia
494	545	610	650	719	715	726	969	1 089	Australia
225	235	245	259	274	283	276	286	301	Austria
6	7	11	17	24	33	32	40	46	Azerbaijan
16	19	24	29	33	41	35	42	40	Belarus
276	291	303	319	336	346	341	356	370	Belgium
8	8	9	10	11	13	12	13	13	Bosnia
18	20	23	26	31	35	35	36	38	Bulgaria
767	798	911	1 019	1 042	1 028	965	1 190	1 249	Canada
30	33	36	40	43	48	45	45	45	Croatia
85	92	105	118	132	154	142	150	156	Czech Republic
189	197	207	219	228	235	224	236	239	Denmark
9	10	11	13	16	16	14	14	16	Estonia
146	152	157	166	180	186	172	179	189	Finland
1 588	1 656	1 718	1 798	1 887	1 933	1 886	1 937	1 997	France
4	4	5	5	6	7	7	7	7	FYROM
4	4	5	6	7	9	8	9	10	Georgia
2 148	2 196	2 224	2 314	2 429	2 474	2 375	2 496	2 593	Germany
171	184	193	209	223	233	232	227	215	Greece
74	82	89	90	99	105	91	97	100	Hungary
10	11	13	13	15	12	9	9	10	Iceland
523	576	674	755	881	885	960	1 267	1 364	India
141	150	163	178	189	179	161	156	159	Ireland
1 342	1 398	1 436	1 493	1 554	1 575	1 520	1 553	1 580	Italy
3 809	3 749	3 683	3 469	3 182	3 316	3 624	4 145	4 217	Japan
570	581	680	761	766	638	601	767	803	Korea
10	11	13	16	21	23	19	18	20	Latvia
3	3	3	3	3	3	3	4	4	Liechtenstein
17	18	21	24	29	32	27	28	31	Lithuania
26	27	30	34	37	39	37	40	43	Luxembourg
11	11	11	12	13	6	6	6	6	Malta
620	611	681	756	755	745	634	779	830	Mexico
2	2	2	3	3	4	4	4	5	Moldova
2	2	2	2	3	3	3	3	3	Montenegro
477	491	513	540	572	594	573	589	602	Netherlands
74	82	92	88	99	89	85	108	117	New Zealand
199	209	245	271	288	310	270	315	349	Norway
192	204	244	272	311	363	311	355	370	Poland
143	149	154	161	169	172	169	173	171	Portugal
53	61	80	98	125	140	118	124	136	Romania
381	476	615	789	949	1 136	880	1 123	1 335	Russia
17	19	20	23	28	33	29	28	31	Serbia
41	45	49	55	61	67	63	66	69	Slovakia
25	27	29	31	35	37	36	36	36	Slovenia
783	841	909	986	1 053	1 088	1 048	1 049	1 063	Spain
279	292	298	318	338	333	292	350	388	Sweden
296	301	309	323	329	358	367	416	476	Switzerland
268	315	387	419	472	499	440	550	555	Turkey
44	52	69	86	104	123	84	103	119	Ukraine
1 642	1 768	1 847	1 956	2 064	1 810	1 574	1 710	1 747	United Kingdom
9 803	9 485	10 099	10 604	10 187	9 668	9 964	10 877	10 770	United States

Table C2. Population, thousand

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania	3141	3113	3092	3079	3073	3072	3077	3090
Armenia	3223	3172	3135	3109	3091	3076	3066	3061
Australia	18072	18311	18517	18711	18926	19153	19413	19651
Austria	7948	7959	7968	7977	7992	8012	8042	8082
Azerbaijan	7685	7763	7838	7913	7983	8049	8111	8172
Belarus	10194	10160	10117	10069	10035	10005	9970	9925
Belgium	10137	10157	10181	10203	10226	10251	10287	10333
Bosnia	3332	3306	3366	3480	3601	3694	3748	3776
Bulgaria	8406	8363	8312	8257	8211	8170	8020	7868
Canada	29354	29672	29987	30248	30499	30770	31082	31362
Croatia	4669	4494	4572	4501	4554	4426	4440	4440
Czech Republic	10327	10315	10304	10294	10284	10272	10236	10205
Denmark	5233	5263	5285	5304	5322	5340	5359	5376
Estonia	1437	1416	1400	1386	1376	1370	1364	1359
Finland	5108	5125	5140	5153	5165	5176	5188	5201
France	59555	59799	60042	60299	60495	60911	61356	61803
FYROM	1963	1973	1983	1992	2001	2009	2016	2022
Georgia	4734	4616	4532	4487	4453	4418	4386	4357
Germany	81678	81915	82035	82047	82100	82212	82350	82488
Greece	10634	10709	10777	10835	10883	10917	10950	10988
Hungary	10329	10311	10290	10267	10238	10211	10188	10159
Iceland	267	269	271	274	277	281	285	288
India	964486	982553	1000558	1018471	1036259	1053898	1071374	1088694
Ireland	3609	3638	3674	3713	3755	3805	3866	3932
Italy	56844	56860	56890	56907	56916	56942	56977	57157
Japan	125439	125761	126091	126410	126650	126870	127149	127445
Korea	45093	45525	45954	46287	46617	47008	47357	47622
Latvia	2485	2457	2433	2410	2390	2373	2355	2339
Liechtenstein	31	31	32	32	32	33	33	34
Lithuania	3629	3602	3575	3549	3524	3500	3481	3469
Luxembourg	409	414	419	425	430	436	442	446
Malta	370	373	375	378	379	381	393	396
Mexico	92273	93858	95441	97002	98514	99960	101330	102634
Moldova	3675	3668	3660	3653	3647	3640	3631	3623
Montenegro	643	644	643	639	636	633	630	629
Netherlands	15459	15530	15611	15707	15812	15926	16046	16149
New Zealand	3673	3732	3781	3815	3835	3858	3881	3949
Norway	4359	4381	4405	4431	4462	4491	4514	4538
Poland	38595	38624	38650	38663	38660	38454	38248	38230
Portugal	10030	10058	10091	10129	10172	10226	10293	10368
Romania	22684	22619	22554	22507	22472	22443	22132	21803
Russia	148141	147739	147304	146899	146309	146303	145950	145300
Serbia	7739	7709	7650	7568	7540	7516	7503	7500
Slovakia	5362	5373	5383	5391	5396	5389	5379	5379
Slovenia	1990	1989	1986	1982	1983	1989	1992	1995
Spain	39387	39478	39582	39721	39926	40263	40720	41314
Sweden	8827	8841	8846	8851	8858	8872	8896	8925
Switzerland	7041	7072	7089	7110	7144	7184	7230	7285
Turkey	58865	59822	60783	61743	62693	63628	64545	65446
Ukraine	51512	51057	50594	50144	49673	49176	48684	48203
United Kingdom	58019	58167	58317	58487	58682	58893	59108	59326
United States	266278	269394	272657	275854	279040	282162	284969	287625

Table C2. Population, thousand (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
3107	3125	3142	3157	3170	3181	3193	3204	3216	Albania
3061	3063	3066	3070	3074	3079	3085	3092	3100	Armenia
19895	20127	20395	20698	21073	21499	21952	22300	22621	Australia
8121	8172	8228	8269	8301	8337	8365	8390	8419	Austria
8234	8307	8392	8485	8581	8763	8947	9054	9168	Azerbaijan
9874	9824	9776	9733	9702	9602	9507	9490	9473	Belarus
10376	10421	10479	10548	10626	10710	10796	10896	11008	Belgium
3783	3781	3781	3782	3779	3774	3768	3760	3752	Bosnia
7824	7781	7740	7699	7660	7623	7585	7534	7476	Bulgaria
31676	31995	32312	32576	32930	33319	33730	34126	34483	Canada
4440	4439	4442	4440	4436	4434	4429	4418	4407	Croatia
10207	10216	10236	10269	10334	10424	10487	10520	10546	Czech Republic
5391	5405	5419	5437	5461	5494	5523	5548	5574	Denmark
1354	1349	1346	1344	1342	1341	1340	1340	1340	Estonia
5213	5228	5246	5266	5289	5313	5339	5363	5387	Finland
62242	62702	63176	63618	64012	64371	64720	65076	65437	France
2028	2033	2038	2043	2048	2053	2057	2061	2064	FYROM
4329	4318	4361	4398	4388	4384	4411	4453	4486	Georgia
82534	82516	82469	82376	82266	82110	81902	81777	81726	Germany
11024	11062	11104	11148	11193	11237	11283	11316	11304	Greece
10130	10107	10087	10071	10056	10038	10023	10000	9971	Hungary
290	292	297	304	312	317	318	318	319	Iceland
1105886	1122991	1140043	1157039	1173972	1190864	1207740	1224614	1241492	India
3997	4070	4160	4260	4357	4426	4459	4474	4487	Ireland
57605	58175	58607	58941	59375	59832	60193	60483	60770	Italy
127718	127761	127773	127756	127771	127704	127558	127450	127817	Japan
47859	48039	48138	48372	48598	48949	49182	49410	49779	Korea
2325	2313	2301	2288	2276	2266	2255	2239	2220	Latvia
34	34	35	35	35	36	36	36	36	Liechtenstein
3454	3436	3414	3394	3376	3358	3339	3287	3203	Lithuania
452	458	465	473	480	489	498	507	517	Luxembourg
399	401	404	406	409	412	414	416	419	Malta
103903	105176	106484	107835	109221	110627	112033	113423	114793	Mexico
3613	3604	3595	3586	3577	3570	3566	3562	3559	Moldova
628	627	627	627	628	629	630	631	632	Montenegro
16225	16282	16320	16346	16382	16446	16530	16615	16696	Netherlands
4027	4088	4134	4185	4228	4269	4316	4368	4405	New Zealand
4565	4592	4623	4661	4709	4768	4829	4889	4952	Norway
38205	38182	38165	38141	38121	38126	38152	38184	38216	Poland
10441	10502	10549	10584	10608	10622	10632	10637	10637	Portugal
21742	21685	21634	21588	21547	21514	21480	21438	21390	Romania
144599	143850	143150	142500	142100	141950	141910	141920	141930	Russia
7481	7463	7441	7412	7382	7350	7321	7291	7261	Serbia
5380	5382	5387	5391	5397	5407	5419	5430	5440	Slovakia
1996	1997	2000	2007	2018	2021	2040	2049	2052	Slovenia
42005	42692	43398	44116	44879	45556	45909	46071	46235	Spain
8958	8994	9030	9081	9148	9220	9299	9378	9453	Sweden
7339	7390	7437	7484	7551	7648	7744	7826	7907	Switzerland
66339	67236	68143	69064	69993	70924	71846	72752	73640	Turkey
47813	47452	47105	46788	46509	46258	46053	45871	45706	Ukraine
59566	59868	60224	60596	60987	61394	61811	62231	62641	United Kingdom
290108	292805	295517	298380	301231	304094	306772	309350	311592	United States

Table C3. Deflators

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania	61.3	62.7	72.7	77.7	79.9	90.5	93.3	92.1
Armenia	54.1	64.6	76.1	84.2	84.3	83.1	86.5	87.1
Australia	76.5	76.4	77.1	77.8	78.4	81.8	84.4	87.9
Austria	75.1	77.5	79.4	79.0	80.5	87.2	88.4	89.2
Azerbaijan	23.5	46.0	59.8	52.3	49.0	62.4	64.5	64.1
Belarus	0.4	0.6	1.0	1.7	7.1	20.1	36.2	52.4
Belgium	85.4	85.7	86.4	88.1	88.3	90.1	91.9	93.8
Bosnia	60.4	56.5	65.8	64.0	67.5	87.8	91.9	96.5
Bulgaria	1.6	3.5	36.7	45.3	47.0	50.1	66.2	68.1
Canada	81.9	83.2	84.2	83.9	85.3	88.9	89.8	90.8
Croatia	63.7	66.0	70.8	76.6	79.4	83.1	86.5	89.6
Czech Republic	56.9	63.5	70.8	77.2	81.0	84.6	88.7	91.6
Denmark	70.4	73.1	75.9	77.2	79.7	85.8	88.1	89.7
Estonia	59.6	69.8	75.9	80.4	82.0	83.6	87.3	89.0
Finland	76.2	76.1	77.8	79.1	80.2	86.1	88.3	89.9
France	97.7	92.5	89.4	86.3	88.9	92.5	96.0	94.8
FYROM	71.9	73.9	76.9	77.9	80.1	86.6	89.7	92.8
Georgia	60.1	56.6	60.3	64.5	70.8	74.1	78.0	82.7
Germany	93.9	94.5	94.7	95.3	95.5	94.8	95.9	97.3
Greece	66.4	71.3	76.1	80.0	82.5	85.3	87.9	90.9
Hungary	37.6	46.9	56.2	62.2	68.7	76.3	83.1	86.8
Iceland	64.8	67.8	71.0	73.5	75.2	77.4	81.9	88.1
India	60.2	64.5	68.7	74.1	77.0	79.7	82.1	85.2
Ireland	72.6	72.9	74.1	74.9	75.4	79.3	86.3	90.6
Italy	76.5	80.2	82.2	84.4	85.9	87.6	90.1	93.0
Japan	101.3	101.2	102.0	100.2	99.2	99.6	97.8	96.9
Korea	75.9	79.7	82.8	86.9	86.0	86.8	90.2	93.1
Latvia	63.1	69.2	77.5	86.7	92.1	89.0	85.3	82.3
Liechtenstein	92.4	93.1	93.6	93.6	94.4	95.9	96.8	97.4
Lithuania	111.6	104.2	99.7	95.5	91.9	95.5	90.6	93.2
Luxembourg	80.1	82.5	81.0	80.7	85.0	86.7	86.7	88.6
Malta	80.6	81.4	82.0	82.3	82.8	87.7	90.5	93.0
Mexico	31.3	40.9	48.1	55.5	63.9	71.7	75.9	81.1
Moldova	21.4	27.3	30.8	33.7	47.1	59.9	67.1	73.7
Montenegro	84.1	49.8	52.2	51.4	56.9	67.4	81.1	83.6
Netherlands	77.4	78.4	80.5	82.0	83.5	86.9	91.4	94.9
New Zealand	76.0	77.7	77.0	78.2	79.2	82.2	86.2	88.4
Norway	74.7	76.0	77.2	78.8	81.2	85.1	87.7	89.7
Poland	52.0	61.3	69.8	77.5	82.2	88.1	91.2	93.2
Portugal	73.5	77.8	80.1	76.4	79.1	90.2	93.0	93.4
Romania	3.3	4.8	11.3	16.7	25.0	35.8	50.3	61.4
Russia	9.6	14.0	16.2	19.2	33.0	45.5	53.0	61.2
Serbia	4.2	7.2	8.8	11.7	16.7	29.6	55.8	68.2
Slovakia	44.6	51.3	56.2	61.1	67.9	72.5	78.9	83.4
Slovenia	53.3	59.3	64.3	68.9	73.4	77.2	83.9	90.3
Spain	67.5	69.2	70.4	68.8	70.9	83.1	82.3	82.2
Sweden	77.4	78.2	78.9	81.0	81.7	85.1	88.4	91.1
Switzerland	83.9	84.1	84.0	86.4	91.4	96.3	98.3	95.3
Turkey	2.4	4.2	8.0	13.8	21.5	30.7	48.2	65.4
Ukraine	16.2	27.0	31.8	35.7	45.4	55.9	61.5	64.6
United Kingdom	65.4	66.7	68.6	70.6	71.9	75.8	77.8	82.4
United States	71.0	73.2	74.7	74.0	75.9	81.8	82.1	80.2

Table C3. Deflators (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
94.7	98.4	100.0	101.8	106.8	108.0	106.8	107.2	108.6	Albania
91.1	96.9	100.0	104.6	109.0	115.5	118.5	127.7	133.1	Armenia
95.1	97.1	100.0	106.2	108.9	118.0	123.0	125.2	142.0	Australia
91.3	95.0	100.0	108.1	111.5	121.7	119.6	124.4	131.4	Austria
75.1	85.3	100.0	110.1	129.5	159.8	128.8	168.1	224.4	Azerbaijan
68.5	84.1	100.0	110.8	125.0	151.5	160.2	177.9	281.8	Belarus
95.6	97.7	100.0	102.3	104.8	107.0	108.3	110.5	112.7	Belgium
97.9	100.0	100.0	106.0	112.8	121.1	121.2	123.0	124.8	Bosnia
55.8	74.1	100.0	127.1	160.7	167.0	161.5	177.7	142.2	Bulgaria
93.8	96.8	100.0	102.7	105.9	110.3	108.2	111.4	115.0	Canada
93.2	96.8	100.0	104.0	108.3	114.4	117.7	118.8	121.3	Croatia
93.6	96.9	100.0	102.8	106.8	111.7	113.8	114.1	113.3	Czech Republic
91.8	94.8	100.0	105.2	109.7	118.3	114.0	118.6	124.6	Denmark
90.1	94.8	100.0	106.1	114.9	118.3	111.8	109.8	111.4	Estonia
91.9	95.2	100.0	105.7	110.8	119.5	117.1	120.3	127.6	Finland
94.4	97.3	100.0	103.4	111.0	106.4	96.7	92.0	94.0	France
95.6	96.4	100.0	103.3	111.0	119.3	120.1	124.7	125.4	FYROM
85.5	92.6	100.0	108.5	119.0	130.6	127.9	138.9	151.7	Georgia
98.3	99.4	100.0	100.3	101.9	102.7	103.9	104.9	105.8	Germany
94.5	97.3	100.0	102.5	106.2	111.2	114.3	116.2	118.1	Greece
91.7	95.9	100.0	107.4	113.6	120.3	124.3	126.6	129.7	Hungary
91.1	94.8	100.0	107.9	118.3	135.3	155.9	162.2	171.3	Iceland
88.3	95.9	100.0	106.4	112.5	122.3	129.6	140.6	151.8	India
92.3	96.7	100.0	105.0	109.5	112.8	111.4	112.2	112.4	Ireland
95.9	98.2	100.0	101.7	104.1	106.8	109.0	109.4	110.8	Italy
97.5	98.6	100.0	101.7	103.7	106.8	103.9	101.7	99.7	Japan
96.4	99.3	100.0	99.9	101.9	104.9	108.5	112.4	114.4	Korea
80.9	85.7	100.0	120.2	149.6	170.3	149.6	146.6	150.9	Latvia
98.1	98.8	100.0	101.1	101.8	104.3	103.8	104.5	104.7	Liechtenstein
94.3	98.8	100.0	101.7	105.8	94.4	83.1	92.2	97.1	Lithuania
93.9	95.6	100.0	106.7	110.6	115.5	115.6	121.2	127.0	Luxembourg
96.3	97.5	100.0	102.0	105.2	108.3	111.0	114.3	116.9	Malta
88.1	95.9	100.0	106.8	112.8	119.9	124.8	129.8	137.6	Mexico
84.7	91.5	100.0	113.4	131.5	143.6	146.7	162.9	175.0	Moldova
90.5	95.8	100.0	109.1	122.9	132.3	135.5	137.7	141.7	Montenegro
96.9	97.6	100.0	101.8	103.6	105.9	106.0	107.1	108.4	Netherlands
89.8	94.3	100.0	104.8	107.9	112.6	120.2	124.9	131.1	New Zealand
92.7	96.2	100.0	104.1	110.7	119.8	120.9	124.7	132.1	Norway
93.6	97.4	100.0	101.5	105.5	108.8	112.8	114.4	118.0	Poland
94.3	96.8	100.0	104.4	107.3	112.9	108.6	112.7	119.2	Portugal
71.5	87.7	100.0	110.6	119.2	139.4	143.6	148.1	160.0	Romania
69.7	83.8	100.0	115.2	131.1	154.6	157.7	175.9	203.7	Russia
77.1	86.4	100.0	112.5	123.9	139.5	147.8	155.0	168.0	Serbia
89.1	95.4	100.0	104.1	107.5	113.4	117.5	119.9	121.7	Slovakia
95.3	98.4	100.0	102.1	106.4	110.8	114.8	113.5	114.6	Slovenia
83.2	89.9	100.0	108.7	116.5	123.5	124.4	126.9	134.3	Spain
93.4	96.3	100.0	105.4	111.9	117.4	118.4	121.5	125.6	Sweden
95.4	98.0	100.0	104.9	108.4	110.2	107.2	107.8	111.2	Switzerland
79.3	91.2	100.0	116.2	126.1	142.6	135.6	143.9	161.9	Turkey
69.8	80.3	100.0	114.8	140.9	181.2	204.7	233.0	269.5	Ukraine
86.9	93.5	100.0	105.9	111.8	123.5	123.5	130.1	137.9	United Kingdom
81.9	88.8	100.0	110.8	117.2	133.3	123.1	129.7	131.1	United States

Table C4. Euro conversion rates (NC per Euro)

Country	1995	1996	1997	1998	1999	2000	2001	2002
Albania	121.24	132.61	168.53	168.57	146.96	132.57	128.44	132.19
Armenia	531.05	525.57	556.28	565.93	570.87	498.10	497.03	541.35
Australia	1.76	1.62	1.53	1.78	1.65	1.59	1.73	1.74
Austria	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Azerbaijan	1.16	1.09	0.90	0.87	0.88	0.83	0.83	0.92
Belarus	15.07	16.79	29.42	52.22	263.95	802.38	1243.72	1695.03
Belgium	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Bosnia	1.96	1.96	1.96	1.97	1.96	1.96	1.96	1.96
Bulgaria	0.09	0.22	1.89	1.97	1.96	1.95	1.95	1.95
Canada	1.79	1.73	1.57	1.67	1.58	1.37	1.39	1.48
Croatia	6.84	6.90	6.98	7.13	7.58	7.64	7.48	7.41
Czech Republic	34.69	34.46	35.93	36.10	36.85	35.61	34.05	30.85
Denmark	7.33	7.36	7.48	7.50	7.44	7.45	7.45	7.43
Estonia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Finland	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
France	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FYROM	49.16	50.09	56.34	61.06	60.62	60.73	60.91	60.98
Georgia	1.26	1.60	1.47	1.56	2.16	1.83	1.86	2.07
Germany	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Greece	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hungary	164.35	193.72	211.51	239.63	252.58	260.15	256.57	243.04
Iceland	84.67	84.66	80.43	79.60	77.17	72.66	87.47	86.31
India	42.39	44.98	41.15	46.15	45.87	41.42	42.26	45.81
Ireland	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Italy	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Japan	122.97	138.13	137.13	146.39	121.34	99.38	108.80	118.05
Korea	1008.42	1021.11	1077.21	1566.31	1264.39	1041.98	1155.63	1179.04
Latvia	0.69	0.70	0.66	0.66	0.63	0.56	0.56	0.58
Liechtenstein	1.55	1.57	1.64	1.62	1.60	1.56	1.51	1.47
Lithuania	5.23	5.08	4.54	4.48	4.26	3.70	3.58	3.46
Luxembourg	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Malta	0.46	0.46	0.44	0.43	0.43	0.40	0.40	0.41
Mexico	8.39	9.65	8.98	10.24	10.18	8.71	8.37	9.10
Moldova	5.88	5.85	5.25	6.05	11.18	11.49	11.52	12.82
Montenegro								1.00
Netherlands	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
New Zealand	1.99	1.85	1.71	2.09	2.02	2.03	2.13	2.04
Norway	8.28	8.20	8.02	8.44	8.31	8.11	8.05	7.53
Poland	3.17	3.42	3.72	3.92	4.23	4.01	3.67	3.86
Portugal	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Romania	0.27	0.39	0.81	1.00	1.63	1.99	2.60	3.13
Russia	6.05	6.56	6.62	10.85	26.23	25.92	26.12	29.54
Serbia	6.20	6.52	6.70	11.25	22.81	50.41	60.12	60.63
Slovakia	38.88	38.91	38.10	39.41	44.07	42.61	43.30	42.69
Slovenia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Spain	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sweden	9.33	8.51	8.65	8.92	8.81	8.45	9.26	9.16
Switzerland	1.55	1.57	1.64	1.62	1.60	1.56	1.51	1.47
Turkey	0.06	0.10	0.17	0.29	0.45	0.57	1.10	1.44
Ukraine	1.93	2.32	2.11	2.77	4.39	5.03	4.81	5.03
United Kingdom	0.83	0.81	0.69	0.68	0.66	0.61	0.62	0.63
United States	1.31	1.27	1.13	1.12	1.07	0.92	0.90	0.95

Table C4. Euro conversion rates (NC per Euro) (cont.)

2003	2004	2005	2006	2007	2008	2009	2010	2011	Country
137.47	127.64	124.27	123.08	123.72	122.87	132.09	137.69	140.28	Albania
654.05	662.48	570.55	521.40	468.01	450.31	507.34	495.84	518.23	Armenia
1.74	1.69	1.63	1.67	1.64	1.75	1.78	1.44	1.35	Australia
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Austria
1.11	1.22	1.18	1.12	1.18	1.21	1.12	1.07	1.10	Azerbaijan
2321.92	2685.27	2683.14	2692.56	2941.69	3143.87	3889.68	3950.53	6884.47	Belarus
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Belgium
1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	Bosnia
1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.96	1.96	Bulgaria
1.58	1.62	1.51	1.42	1.47	1.56	1.59	1.37	1.38	Canada
7.57	7.50	7.40	7.32	7.34	7.22	7.34	7.29	7.44	Croatia
31.78	31.92	29.77	28.35	27.77	24.97	26.47	25.27	24.57	Czech Republic
7.43	7.44	7.45	7.46	7.45	7.46	7.45	7.45	7.45	Denmark
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Estonia
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Finland
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	France
61.26	61.34	61.30	61.19	61.17	61.52	61.28	61.52	61.48	FYROM
2.43	2.38	2.26	2.23	2.29	2.19	2.33	2.36	2.35	Georgia
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Germany
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Greece
253.40	251.73	247.97	264.09	251.33	252.15	280.72	275.17	279.07	Hungary
86.64	87.21	78.14	87.74	87.72	128.66	171.80	161.90	161.37	Iceland
52.63	56.30	54.81	56.87	56.60	63.61	67.25	60.56	64.94	India
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Ireland
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Italy
130.98	134.37	136.83	146.05	161.20	151.16	130.00	116.23	111.09	Japan
1345.48	1422.86	1272.92	1194.70	1272.38	1609.51	1771.23	1530.29	1541.39	Korea
0.64	0.67	0.70	0.70	0.70	0.70	0.71	0.71	0.71	Latvia
1.52	1.54	1.55	1.57	1.64	1.59	1.51	1.38	1.23	Liechtenstein
3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	Lithuania
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Luxembourg
0.43	0.43	0.43	0.43	0.43	1.00	1.00	1.00	1.00	Malta
12.19	14.02	13.53	13.69	14.96	16.31	18.76	16.73	17.29	Mexico
15.75	15.33	15.69	16.49	16.61	15.29	15.49	16.40	16.33	Moldova
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Montenegro
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Netherlands
1.95	1.87	1.77	1.94	1.86	2.08	2.22	1.84	1.76	New Zealand
8.00	8.37	8.01	8.05	8.02	8.26	8.74	8.01	7.79	Norway
4.40	4.53	4.02	3.90	3.78	3.51	4.33	3.99	4.12	Poland
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Portugal
3.76	4.05	3.62	3.53	3.34	3.68	4.24	4.21	4.24	Romania
34.67	35.80	35.15	34.13	35.02	36.34	44.10	40.22	40.88	Russia
65.06	72.55	82.89	84.16	79.99	81.51	93.89	102.91	101.91	Serbia
41.53	40.04	38.58	37.22	33.79	31.25	1.00	1.00	1.00	Slovakia
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Slovenia
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Spain
9.12	9.12	9.28	9.25	9.25	9.62	10.62	9.54	9.03	Sweden
1.52	1.54	1.55	1.57	1.64	1.59	1.51	1.38	1.23	Switzerland
1.69	1.78	1.68	1.81	1.79	1.91	2.16	2.00	2.34	Turkey
6.03	6.61	6.39	6.34	6.92	7.71	10.86	10.53	11.09	Ukraine
0.69	0.68	0.68	0.68	0.68	0.80	0.89	0.86	0.87	United Kingdom
1.13	1.24	1.24	1.26	1.37	1.47	1.39	1.33	1.39	United States

## METHODOLOGICAL NOTE

### About the statistics

The International Transport Forum statistics on investment and maintenance expenditure on transport infrastructure for 1995-2010 are based on a survey sent to 52 member countries. The survey covers total gross investment (defined as new construction, extensions, reconstruction, renewal and major repair) in road, rail, inland waterways, maritime ports and airports, including all sources of financing. It also covers maintenance expenditures financed by public administrations.

The Secretariat has collected and published data on this topic since the late 1970s. The latest survey covers the years 1995-2010. Member countries supply data in current prices. In order to draw up a summary of aggregate trends for selected countries, data has been calculated in Euro values at both constant (2005) and current prices. In order to ensure comparability, the Secretariat has devoted a significant amount of effort to collecting relevant price indices in order to make calculations at constant prices. Where available, a cost index for construction on land and water is used. Where these indices are not available, a manufacturing cost index or a GDP deflator is used.

The lack of common definitions and practice to measure transport infrastructure spending hinders comparisons between countries and between sources of finance. Data for road and rail infrastructure are the most comprehensive while data on sea port and airport spending are less detailed in coverage and definition. While our survey covers all sources of finance, a number of countries exclude private spending from the data reported, including Japan and India. Around 65% of countries report data on urban spending while for the remaining countries these data are missing. Indicators such as the share of GDP needed for investment in transport infrastructure, depend on a number of factors, such as the quality and age of existing infrastructure, maturity of the transport system, geography of the country and transport-intensity of its productive sector. Caution is therefore called for when comparing investment data between countries. However, data for individual countries and country groups are consistent over time and useful for identifying underlying trends and changes in levels of spending, especially for inland transport infrastructure.

### Aggregates

*OECD*: Excludes non-ITF states Israel and Chile (at the time of data collection). Data are not available for Korea.

*WECs*: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

*CEECs*: Albania, Bulgaria, Croatia, Czech Republic, Estonia, FYROM, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia.

*North America*: Canada, Mexico and the United States.

*Australasia*: Australia and New Zealand.

### **Estimations for missing data**

In order to arrive at aggregates, the following investment data are estimated based on other available data: Austria inland waterways 2011, Belgium 2011, Denmark road 2011, Greece 1995-1999 and 2008-2011, Hungary 2011, Ireland rail 2008-2011, Italy 2011, Japan road 2011, Netherlands 1995-1996, New Zealand road 1995-2000, Norway 2011, Portugal road 2011, Switzerland road 2011, United States 2004-2011 private rail investment based on U.S. Census Bureau data on Construction Spending. Public rail investment estimated based on Bureau of Economic Analysis data on Investment in Government Fixed Assets (transportation). Inland waterways investment estimated based on data from U.S. Census Bureau data on Construction Spending. Japan does not include private investments. New Zealand does not include rail.

This summary covers only aggregate trends in inland transport infrastructure (road, rail, inland waterways). Detailed country data together with more detailed data descriptions and a note on the methodology are available on the International transport Forum website at: <http://www.internationaltransportforum.org/statistics/investment/invindex.html>

## **Spending on Transport Infrastructure 1995-2011**

### **Trends, Policies, Data**

Transport infrastructure is a vital social and economic asset. Its construction and maintenance absorb significant resources while decisions on infrastructure have impacts that last for decades.

The International Transport Forum has collected statistics on investment and maintenance expenditure in transport infrastructure since the late 1970s. This report presents aggregate trends in inland transport infrastructure investment and maintenance since 1995 and provides data on road, rail, inland waterway, sea port and airport spending for the International Transport Forum member countries for the period 1995-2011.

In preparation for the International Transport Forum's 2013 Summit on Funding Transport, a survey was carried out to collect information on transport policies in member countries. The report presents broad conclusions on these policies, as well as on infrastructure performance, funding and strategic plans.

#### **International Transport Forum**

2 rue André Pascal  
75775 Paris Cedex 16  
France  
T +33 (0)1 45 24 97 10  
F +33 (0)1 45 24 13 22  
Email : [itf.contact@oecd.org](mailto:itf.contact@oecd.org)  
Web: [www.internationaltransportforum.org](http://www.internationaltransportforum.org)