



**BACKGROUND FOR THE INTEGRATION OF ENVIRONMENTAL CONCERNS INTO TRANSPORT POLICY IN THE ACCESSION CANDIDATE COUNTRIES**

**FINAL REPORT TO DG ENVIRONMENT**

**PART 1 – FULL REPORT**

**September 2001**

**Prepared by**

**Ian Skinner (IEEP)  
Malcolm Fergusson (IEEP)**

**in collaboration with**

**Jiri Dusik (REC)  
Simona Sulcova (REC)  
Olivia Bina (IEEP)**

**and with contributions from**

**Julia Ruesch (IEEP)  
Peter Hjerp (IEEP)**

**This report can be found on the web at:**

**<http://europa.eu.int/comm/environment/trans/ceec/index.htm>**

**ISBN 1 873906 43 9**

## TABLE OF CONTENTS

Executive summary .....	i
1 Introduction .....	1
1.1 Objectives of this study .....	1
1.2 The EU's integration agenda.....	1
1.3 Transport and environment in CEE.....	3
1.4 Structure and content of the report .....	3
2 Methodology.....	5
2.1 Data collection .....	5
2.2 Fiches on institutional actors and studies in CEE .....	5
2.3 Data analysis .....	6
3 Background to transport and environment in CEE.....	7
3.1 Introduction .....	7
3.2 Transport trends - the use of transport and existing infrastructure.....	7
3.3 Infrastructure development and the TINA infrastructure plans .....	13
3.4 Funding of transport services and infrastructure .....	14
3.5 Environmental effects of transport trends .....	16
3.6 Summary of the background to transport and environment in CEE .....	17
4 International policy developments affecting CEE .....	18
4.1 The Vienna Conference and the London Charter.....	18
4.2 National action plans - NEAPs and NEHAPs .....	19
4.3 Sofia initiatives and impact assessment .....	20
5 Forms of transport and environment integration in CEE.....	22
5.1 Introduction.....	22
5.2 Institutional integration: interministerial cooperation and stakeholder involvement.....	22
5.3 Management integration.....	23
5.4 Market integration: the use of taxes and charges .....	26
5.5 The way forward .....	27
6 Studies and actors relevant to transport and the environment in CEE.....	28
6.1 Studies .....	28
6.2 Actors .....	30
6.3 Analysis.....	32
7 Discussion: CEE and the JEG .....	33
7.1 Accession as a mutual learning process .....	33
7.2 Relationship of CEE approaches to the work of the JEG.....	33
7.3 CEE priorities and the JEG 2001 Work Programme.....	34
7.4 Some specific transport integration issues in CEE.....	36
8 Conclusions and Recommendations .....	38
8.1 Background .....	38
8.2 Overall approach to incorporating the CEE dimension into the JEG.....	38
8.3 Specific issues to be addressed.....	39
9 References .....	41

## **LIST OF APPENDICES**

- Appendix 1: List of studies
- Appendix 2: Study fiches
- Appendix 3: List of actors
- Appendix 4: Actor fiches
- Appendix 5: Questionnaire to high level officials
- Appendix 6: List of transport and environment projects funded by multilateral agencies

## **EXECUTIVE SUMMARY**

### *Background*

Since 1989, there has been a progressive decline in the use of rail and other public transport across CEE, and a corresponding increase in road traffic. Transport trends do however differ significantly from country to country, and rail and public transport modal shares generally remain extremely high by EU standards.

Infrastructure development and renewal are key issues for transport in CEE, with the availability of inward investment acting as a critical determinant of investment priorities. A great deal of policy attention is paid to major projects, especially roads, and new infrastructure appears to threaten biodiversity and important habitats across CEE. Urgent steps are required both to assess the threat fully, and to assist with ameliorative measures such as a possible rebalancing of investment towards repairs and maintenance, small scale projects, and environment-friendly modes.

Urban air quality is a growing problem in many areas of CEE, largely as a result of rising traffic levels. This is receiving increasing policy attention; but there is currently significantly less concern over greenhouse gas emissions. On the other hand there are already examples of good practice in the transport sector, at both project and policy levels, and several international initiatives have stimulated efforts to integrate the environment into transport policy.

### *Relevant actors and studies undertaken*

NGO networks on transport and the environment have developed well over the past decade in CEE, and are able to work effectively on a range of issues. However, by the standards of typical EU NGOs, most suffer from severe funding constraints. There are some notable centres of independent expertise on transport and environment issues across CEE, but they are generally small and thinly spread. Typically they remain focussed principally on national issues, often from a modal or engineering perspective, but capacity to work on the EU dimension of sustainable transport is also now developing. A list of the organisations covered is given in Appendix 3, and a fiche with key details of each of them can be found in Appendix 4.

The project identified nearly 100 relevant studies in the six countries which were the focus of the work, covering both policy analysis and technical papers. A list of these is given in Appendix 1, and a fiche giving details of each of them can be found in Appendix 2. The modal coverage of the studies is primarily on roads, followed by rail, with the other modes receiving significantly less attention. Half of the studies address environmental impacts, typically with coverage of air quality and/or noise, but not climate change, thereby reflecting current policy priorities. The content also reflects the high level of interest in planning-based approaches and infrastructure development, but with far less attention paid to charges and taxation, for example.

## *CEE and the JEG*

The study concludes that the subject matter and working methods of the JEG already present a range of opportunities for the inclusion of representatives from CEE countries. Possible subjects for joint working include strategic planning, environmental assessment techniques, vehicle-related measures, biofuels, targets and indicators, taxes and charges, and investment in infrastructure.

It is proposed that this report be circulated to the relevant ministries in CEE countries for comment, and to help to gauge the level of interest in the work of the JEG. Thereafter, it is argued that the JEG is a particularly suitable vehicle for joint working with CEE officials on transport and environment issues of mutual interest. Some possible ways forward are outlined for further consideration by the JEG's membership.

# **1 INTRODUCTION**

## **1.1 Objectives of this study**

This document is the final report of a study on the *Background for the Integration of Environmental Concerns into Transport Policy in the Accession Candidate Countries*. The study was undertaken by the Institute for European Environmental Policy (IEEP) and the Regional Environmental Center (REC) for Central and Eastern Europe (CEE).

The Commission intends to extend the activities and membership of its Joint Expert Group (JEG), which comprises experts in transport and environment fields from each Member State government, in order to prepare the ground for the integration of environmental considerations into transport policy in an enlarged EU. To do this, a clearer understanding of the state of integration policy in the accession countries, and the consequences of enlargement, is needed.

The aim of this report is to provide DG Environment with a background to transport and environmental integration in the accession countries of CEE. More specifically, it outlines the likely consequences of enlargement for transport policy both in the accession states and for EU Member States. It concludes by offering some conclusions and recommendations on ways forward for the incorporation of accession countries into the work of the JEG.

## **1.2 The EU's integration agenda**

The principle by which environmental concerns are integrated into sectoral policies, including transport, is set out in Article 6 of the Treaty of the European Community. The integration process was initiated at the Cardiff Summit in 1998, where Heads of State asked three Council formations (including transport) to develop integration strategies. The full version of the transport strategy was presented to the Helsinki Council in December 1999. However, a review of this strategy was also to be presented to the Göteborg Summit in June 2001, and in preparation for this, the Transport Council adopted a Resolution on the strategy at its meeting of 4-5 April 2001 (Transport Council, 2001).

As with the original strategy, this Council Resolution is strong in its statement of clear overarching objectives. Three main requirements are set out for a sustainable transport system, including one that it should meet human requirements 'in a manner consistent with human and ecosystem health', and another that it should 'limit emissions and waste within the planet's ability to absorb them'. This is a much stronger and clearer set of criteria than those which appeared in the original strategy, reflecting both environmental protection criteria (eg carrying capacity) and specific aspects of sustainable development concepts (eg intergenerational equity). These basic requirements are identical to those found in an earlier Commission Working Paper published in March.

The Resolution also takes significant steps towards sectoral targets, and is arguably ahead of other sectors in this regard. For example it supports the objective of stabilising modal split at present levels within ten years, and increasing the modal share of environmentally friendly modes thereafter. This is a new objective for the Council, although not yet a firm one, and is of particular significance to the accession countries, for reasons which are outlined below.

More specifically, the Council Resolution calls upon the Commission to ‘elaborate on the possible use of indicative long term and intermediate environmental targets for the transport sector on *[sic]* EU level, taking into account the interaction with other sectors.’ The 2001 Work Plan for the Joint Expert Group on Transport and the Environment, meanwhile, already foresees further work in pursuit of the objectives of the Cardiff strategy on both targets and enlargement.

Development of the TERM indicators, which support the integration agenda, and their extension to the countries of CEE, is ongoing. However, future funding has been identified as an issue, and the Commission is understood to be considering this. Given their particular problems with finance and institutional capacity, the needs of CEE states in this regard will require specific consideration. It should also be noted that the Göteborg Summit Conclusions call explicitly on the European Investment Bank, which is a major inward investor into CEE, to support the objectives of climate change policy and sustainable development through its activities.

A further review of the strategy will take place under the Danish Presidency in the latter half of 2002, and regular reviews thereafter are also envisaged.

Also at the Göteborg Summit, EU Heads of State called for a ‘significant decoupling’ of transport growth and GDP growth, which is a potentially radical requirement. This is to be achieved ‘in particular’ through modal shift to more environmentally-friendly transport modes. For most EU Member States, a ‘significant’ level of decoupling will in fact require direct action to curb the growth of road transport, as well as modal shift. However, in view of the still very high levels of rail and public transport use in most CEE countries, there is likely to be much greater potential for achieving a sustainable modal balance here, primarily by arresting the decline in rail and public transport use.

One particular dimension of integration meriting further comment in this context is climate change. While both climate change and enlargement have been identified as being amongst the key issues for EU transport policy, rather little work has been done on these links. Accession countries were not, for example, involved in the European Climate Change Programme (ECCP). This deficiency was however highlighted in a workshop session at the ECCP Conference of 2-3 July 2001, which concluded that accession states must from now on be involved in the future development of the ECCP. For the transport sector, both voluntary agreements with vehicle manufacturers and prospects for increased use of liquid biofuels were identified as areas for future engagement of candidate countries (DG Environment, forthcoming).



### **1.3 Transport and environment in CEE**

At the same time, negotiations with candidate countries in CEE are already well advanced to determine the terms of their respective accession to the EU. The transport chapter of the negotiations is concerned primarily with promoting common standards and other measures to protect the free movement of goods and passengers. The Commission's Green Paper on fair and efficient pricing, and the more recent White Paper on infrastructure charging, also fall within the chapter of the *acquis*, but do not as yet reflect much legislation with which applicant countries will need to comply, except in respect of the Eurovignette Directive and the Mineral Oils Directives.

Aspects of the environment chapter that relate, directly or indirectly, to transport policy include vehicle emissions standards, requirements for road vehicle testing and the agreement on CO<sub>2</sub> emissions from passenger cars. More recently, the requirements of the End-of-Life Vehicles Directive have been added to this list. Other relevant legislation includes the Environmental Impact Assessment (EIA) Directive, the Strategic Environmental Assessment (SEA) Directive, requirements to designate and protect sites under the birds and habitats Directives and the various air quality standards.

In parallel to this approximation process, many of the countries of CEE are already undergoing significant structural changes as a result of their transitions to market economies. Accession to the EU will bring further changes in many sectors, including transport, where significant developments in travel and trade patterns and traffic levels are expected.

On current trends (discussed in greater detail in Sections 3 and 5), these developments can be characterised as major infrastructure developments associated with a growth in road traffic; increasing congestion and air quality problems in urban areas; a decline in the modal shares of rail and public transport; and generally rather undeveloped policies towards walking and cycle use for short journeys. These changes will be a major challenge for the integration of environmental concerns into the transport policies of the region.

### **1.4 Structure and content of the report**

This report focuses on the original 'first wave' of accession countries in CEE, ie the Czech Republic, Poland, Hungary, Estonia and Slovenia, as well as Slovakia. Many of the observations made will however have relevance to other CEE countries involved in the accession process as well, and specific remarks on other CEE states are included where relevant information is available.

The body of the report begins by outlining the methodology that was used in the study (Section 2) before discussing the trends with respect to transport and environment in CEE and the pressures which are driving these (Section 3). The international policy framework within which transport and environment policies in CEE are being developed is set out in Section 4. Section 5 discusses certain aspects of the state of play with respect to transport and environment policy in CEE countries in greater detail. This is followed by a discussion of the studies that have been undertaken on transport and the environment in the six study countries and the actors involved in transport and environment in these countries (Section 6). Section 7 raises some key issues for the incorporation of the candidate accession countries in the Commission's transport and environmental integration work, before the final section (Section

8) concludes the report with outline recommendations.

The report also has a number of appendices, which include a list of studies (Appendix 1), study fiches (Appendix 2), a list of actors (Appendix 3), actor fiches (Appendix 4), a copy of the questionnaire that was sent to CEE officials (Appendix 5) and a list of transport and environment projects funded by multilateral agencies (Appendix 6).

## **2 METHODOLOGY**

This report is the result of a study designed to identify the state of play with respect to transport and the environment in CEE. It describes relevant policy developments and the situation on the ground, but also seeks to analyse studies which have already been undertaken on transport and the environment in CEE, and the institutional actors which have an interest in this area.

### **2.1 Data collection**

The project utilised four main means of data collection:

- Internet and literature search
- Completion of study and actor fiches
- Completion of questionnaires by ministry officials
- Participation in regional meeting at the REC

Material from all of these sources was incorporated as appropriate into the report.

### **2.2 Fiches on institutional actors and studies in CEE**

The fiches were filled in by IEEP and the REC and its country offices, with IEEP completing fiches for those actors and studies of which it was aware and the REC's respective country offices completing the remainder. The study fiches requested the following information:

- Title of study
- Study details (author, date, client etc)
- Brief summary of the study
- Classification of areas of relevance to the study (ie modal coverage, dossiers covered and geographical scope)

The information required by most of these is self-explanatory, apart from perhaps the information on the dossiers covered. This refers to both the environmental impacts addressed by the study and the type of instruments addressed (completed study fiches can be found in Appendix 2).

A broad range of relevant actors were also identified by the project team. These included international organisations, governmental organisations and their agencies, independent institutes, consultancies and academic departments or non-governmental organisations (NGOs). The information obtained via the institutional actor fiches is self-explanatory and was as follows (completed actor fiches are set out in Appendix 4):

- Name
- Address and other contact information
- Institution type
- Staff etc involved in transport and the environment
- Brief description of objective/mission statement
- Classification of fields of expertise (ie mode, discipline, type of work and scale of work)

The questionnaires to the ministry officials were not part of the original project plan. These were developed and distributed as part of another project in which the REC was involved. It had received funding to host a meeting of officials from CEE and the newly independent states (NIS) to discuss issues relating to transport, the environment and health of relevance to their respective countries. The aim of the meeting was to develop a common position for these countries with respect to taking forward the joint initiative of the United Nations Economic Commission for Europe (UNECE) and the World Health Organisation (WHO) on transport, environment and health (see Section 4.1).

As a result of the REC's involvement with organising the UNECE/WHO initiative meeting, IEEP staff were also invited to attend the meeting, to present the preliminary results of this project and elicit further responses. IEEP also helped to develop the questionnaire that was to be sent to ministry officials prior to the meeting. As well as contributing to this study, the results of the questionnaire were used at the meeting with the officials from the CEE and NIS to inform and stimulate discussion. A copy of the questionnaire that was sent to ministry officials can be found in Appendix 5.

### **2.3 Data analysis**

The analysis of the fiches was undertaken by IEEP. Where possible, information from the fiches was analysed using SPSS. The aim of this was not to provide statistically significant results but to identify trends which required further investigation. The initial analysis of the questionnaires that were received from ministry officials attending the meeting at the REC, was undertaken by the REC, with a contribution from IEEP.

### **3 BACKGROUND TO TRANSPORT AND ENVIRONMENT IN CEE**

#### **3.1 Introduction**

This section gives an overview of transport trends in CEE and their environmental implications. It summarises the major changes that have occurred since the shift to market economies, details trends in the use and availability of transport infrastructure, in terms of funding, and of current and likely future effects on the environment and human health.

Since 1989, the progressive disintegration of the Soviet bloc and the shift of CEE countries towards market economies have brought about enormous structural changes. Many of these have had significant effects on transport systems and transport patterns in CEE. For example, the collapse of the centrally planned economy led to a wave of closures of heavy industrial plants in particular, and large scale privatisation and restructuring of what remained. This in turn drastically reduced the demand for rail freight, previously used to transport primary products and heavy machinery, often over long distances across the Soviet bloc. Furthermore, the layout of the rail system itself was adapted to the needs of a large centrally-planned economy, and was later to prove less suitable to cater for new patterns of trade, including the substantially increasing trade with the EU.

As elsewhere, institutional structures also played a role. National rail authorities were (and still are) slow to adapt to the needs of a free market economy. The road system, in contrast, proved much more flexible in meeting new patterns of supply and demand, and new or newly privatised road haulage enterprises were able to exploit new market opportunities as the CEE economies transformed and began once more to expand.

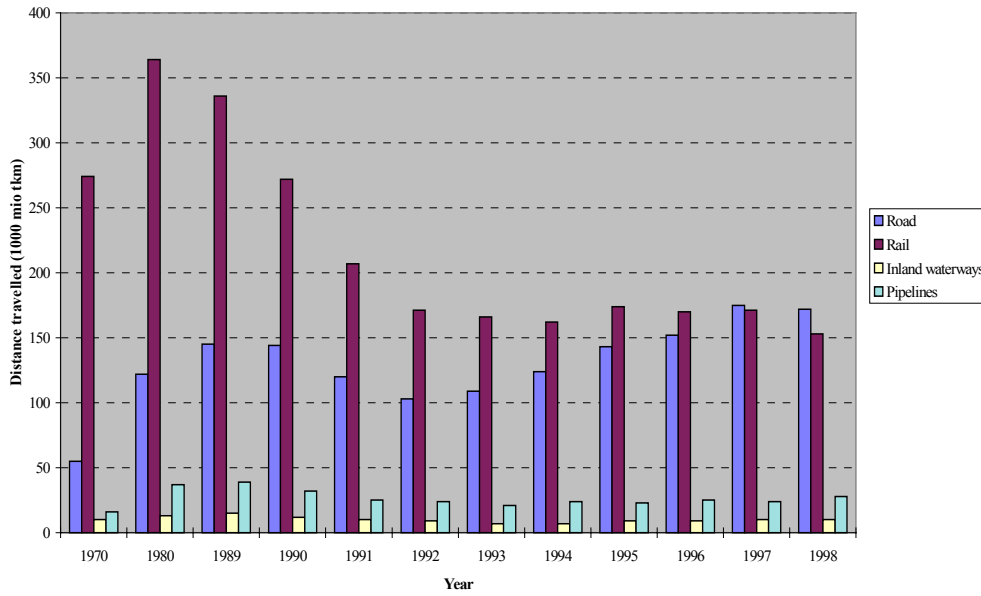
Similar changes were experienced in the passenger sector. Prior to 1989, levels of car ownership were typically extremely low by western European standards, but public transport provision through trams, buses and trains was extremely high. Prices were also very low, as systems relied heavily on government subsidy. Again, economic disruption drastically impaired CEE governments' ability to continue to subsidise public transport, and traditional styles of operation and management were often slow to adapt to change. As a result, the quality and quantity of provision declined, and prices rose rapidly in real terms while average wages stagnated.

At the same time, car ownership levels began to rise rapidly, facilitated by an enormous trade in used cars imported from the EU. Even more so than in EU countries, car ownership was widely regarded not merely as a transport choice, but as a symbol of personal freedom in a democratic and market-based society.

#### **3.2 Transport trends - the use of transport and existing infrastructure**

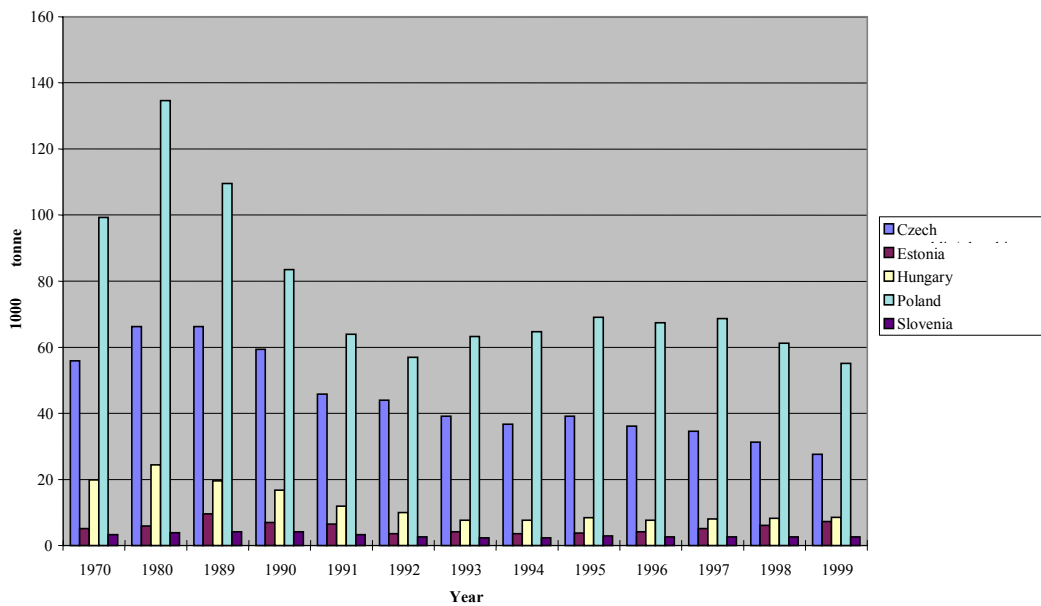
Transport in CEE has been characterised since 1990 by a marked downturn in the use of rail, buses and coaches and an increase in the amount of private road transport undertaken. Figures are available from a variety of sources, such as the ECMT or UNECE, and a useful overview is given on DG TREN's website (DG TREN, 2001) on which much of the following discussion is based.

Figure 1: Freight transport in CEE



Freight transport by rail more than halved in CEE (in this case taken to be Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Slovenia and the Baltic States) between 1989 and 1998 (see Figure 1). Within the countries that are the subject of this project, the patterns are similar to those of the region as a whole, despite a temporary recovery in the mid-90s (see Figure 2). Figures for the larger countries, Poland, Hungary and combined Czech/Slovak Republics show declines in the quantity of rail freight transported of around 50 per cent between 1989 and 1999. Since the break up of Czechoslovakia the decline has been similar in both the Czech Republic and Slovakia. In the two smaller countries, Slovenia and Estonia, the decline has been less, but is still in excess of 20 per cent.

Figure 2: Freight transported by railway by country

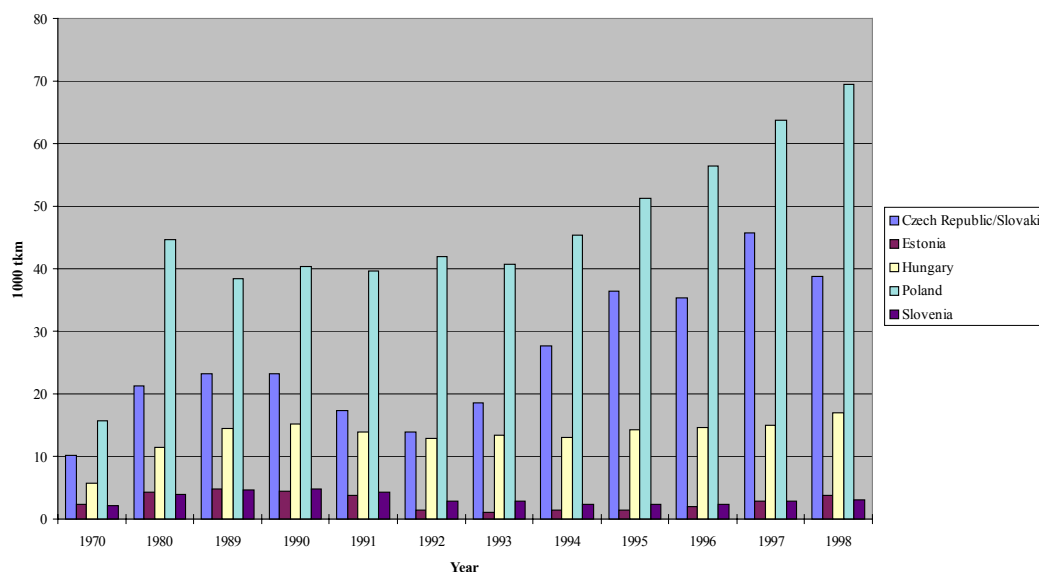


To put this in context, however, the total level of rail freight in the CEE countries is still almost on a par with that of the current EU-15, and remains far higher in proportion to both population and GDP. In spite of its much larger, more populous, and more prosperous land area, the EU recorded only 240mtkm of rail freight in 1998, as against 153mtkm in the CEE states covered.

Inland waterways – notably the Danube corridor – account for a small but significant share of total freight movements. This share has stayed relatively stable, although recent troubles in the Balkans have caused significant disruption. Overall, however, reliance on inland waterways for freight movements is even lower than in the EU.

In the same period, freight transport by road has recovered from a post-1989 slump (in some countries) and has increased by around 70 per cent since 1992 (see Figure 3) to the extent that in 1997, more freight was transported by road in these countries than by rail for the first time. Owing in part to economic structure and to the small size of most of the countries of CEE, levels of road transit traffic are already remarkably high in relation to economic output – much higher than those in the current EU Member States.

Figure 3: Freight transported by road by country

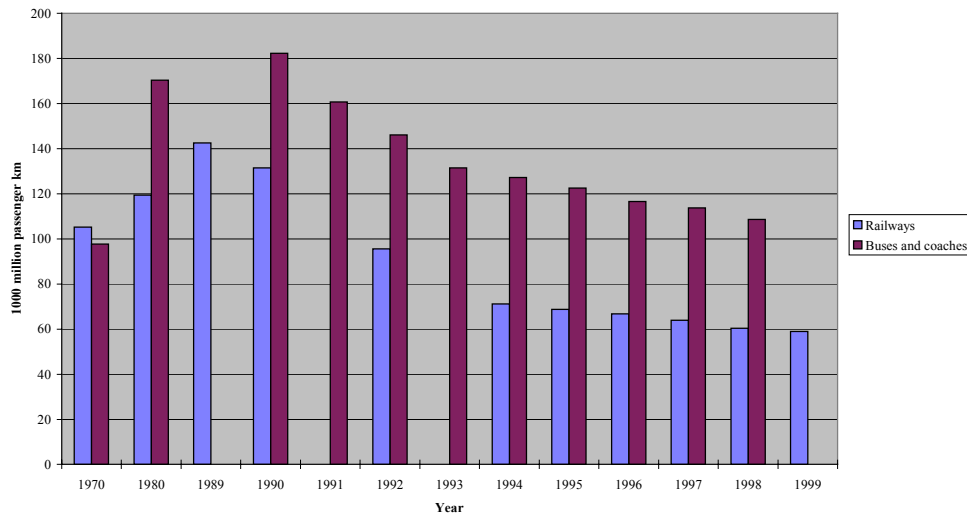


Again, however, comparison with the EU situation gives a rather different perspective. As noted above, rail and road still enjoy more or less equal modal shares in surface freight in spite of recent changes. For the EU, in contrast, recent policy guidelines on the review of the Common Transport Policy seek to maintain the modal share for rail, which has now fallen to one fifth of the road total.

In each country the overall pattern was similar, and in all cases, the situation has changed markedly from a situation in which rail freight far outweighed road freight in the 1970s and, to a lesser extent, the 1980s. It is important, however, to note the significant differences in this evolution as well. For example, the largest increase between 1993 and 1998 was in

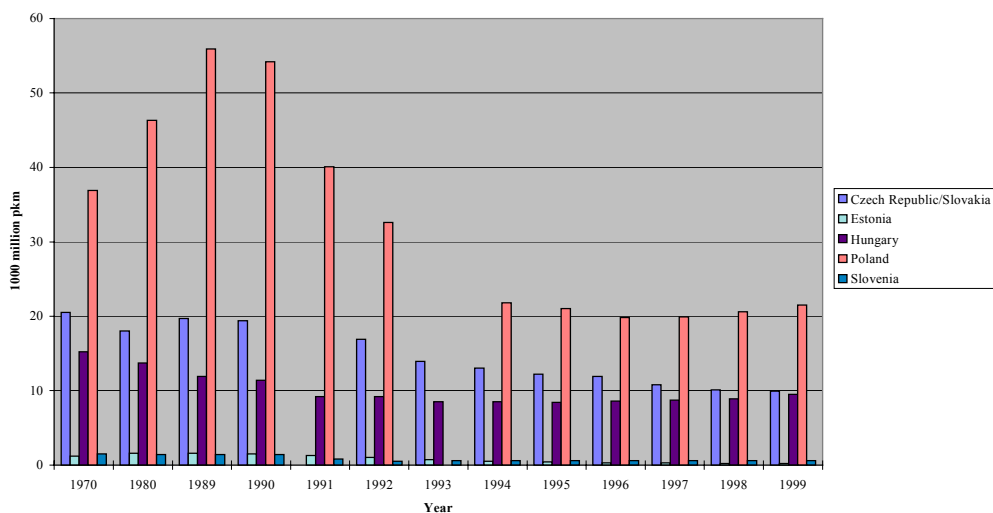
Estonia, which saw the volume of freight traffic on its roads grow by more than 240 per cent in this period. The second largest increase was in the Czech Republic (161 per cent), followed by Poland (71 per cent), Hungary (27 per cent) and Slovenia (11 per cent). Slovakia was the exception in the region as freight transport by road in the country has actually declined by 13 per cent since the division of the former Czechoslovakia. The level of road freight transport in the two smaller countries, Estonia and Slovenia, has not yet recovered to the levels that existed in 1989, when both were part of larger federations. Slovenia was unusual in that, as early as 1980, road freight was already beginning to outstrip rail, but both fell into decline during subsequent economic and political disruptions.

Figure 4: Public transport use in CEE



The use of public transport on rail and road has also declined steadily in the region as a whole over the same period, as can be seen in Figure 4. The use of railways has more than halved since 1990, while bus and coach use has declined by more than 40 per cent. By country, the decline in levels of passenger travel on the railways from 1990 to 1999 was between 87 per cent (Estonia) and 17 per cent (Hungary), while the equivalent figures for bus and coach travel show declines of between 68 per cent (Slovenia) and 22 per cent (Hungary) (see Figures 5 and 6 respectively).

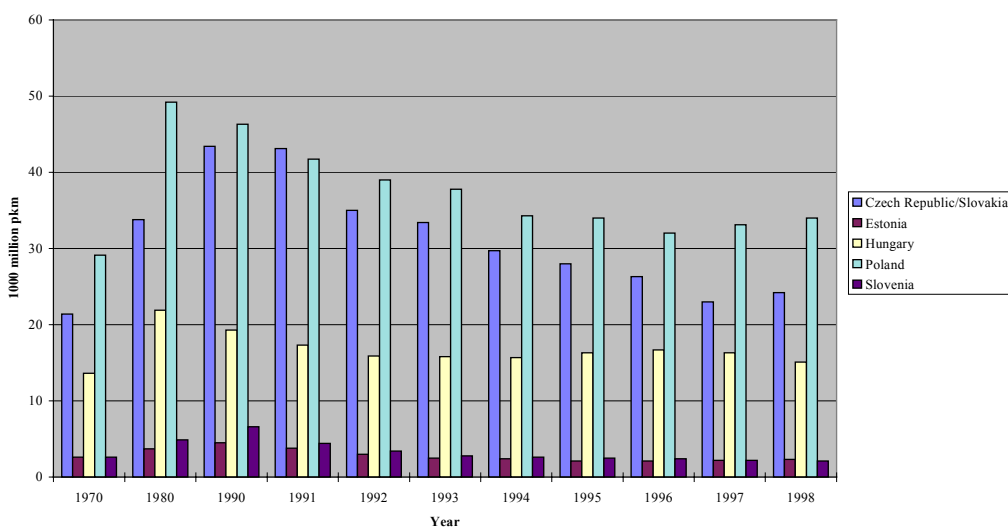
Figure 5: Passenger rail use by country





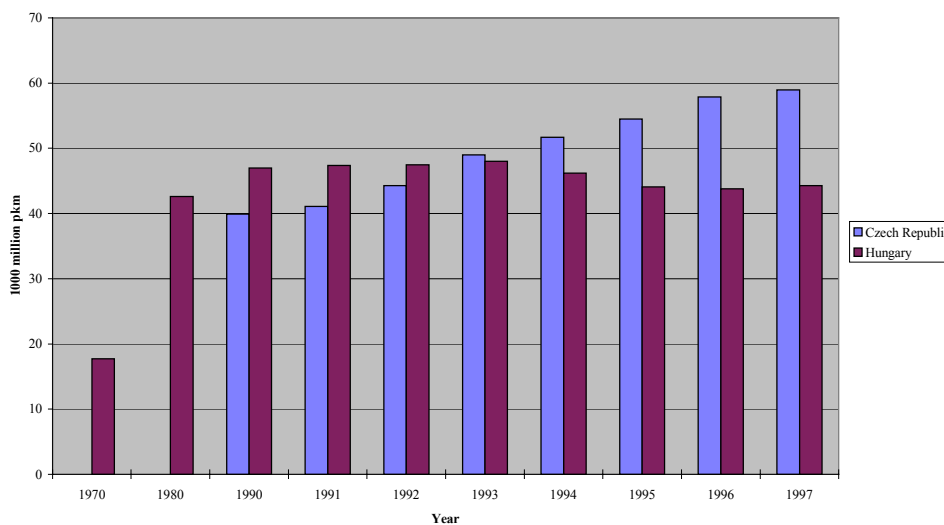
As with freight traffic, however, modal shares to public transport remain very high by EU standards, although a full modal shares comparison is difficult. Furthermore, over the last few years, there have also been some signs of recovery for rail passenger travel in some countries. For example, in both Hungary and Poland, there has been increases in each of the last three years, bringing use to around 10 per cent higher in 1999 than it was in 1996.

Figure 6: Bus and coach use by country



Comparable data for private car use is not available from the same sources in a consistent time series, but numbers of privately owned cars have risen enormously, especially in the countries bordering the EU, and in some areas car ownership levels are approaching those found within the EU itself. Estimates also suggest that between 1990 and 1997 the number of passenger kilometres undertaken in private passenger cars increased by 35 per cent.

Figure 7: Passenger car use in Czech Republic and Hungary

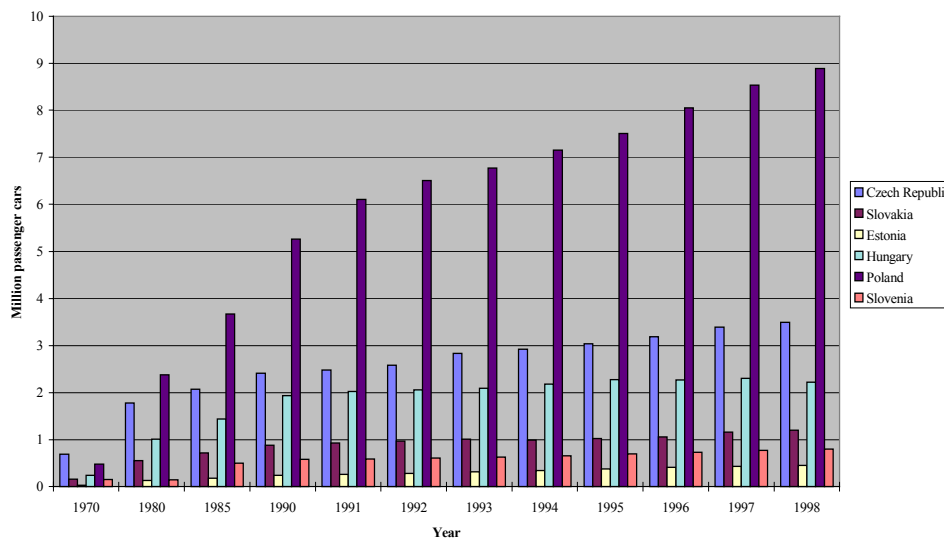


However, data for two countries reveals significantly different trends (see Figure 7). In the Czech Republic, passenger use of private cars increased by 50% between 1990 and 1997, whereas in Hungary it fell by 6 per cent. Neither of these countries is typical of the trend across CEE, however. The distance travelled by person by car in the Czech Republic and Hungary (5731 km and 4380 km, respectively) are respectively nearly double and 50 per cent above the regional average of 2974 km. These figures underline that those countries close to the existing EU border have been experiencing transport growth well above that in the region as a whole.

Reflecting the growth in car use, car ownership levels are also increasing across CEE. By far the largest car fleet is in Poland, which already had an unusually high level of private ownership by 1989. Despite the decrease in car use between 1990 and 1997, the passenger car stock in Hungary grew by 19 per cent in the same period, although this was the lowest growth rate recorded in the six countries highlighted in this report. Elsewhere the passenger car stock grew by between 32 per cent (Slovakia) and 79 per cent (Estonia) (see Figure 8).

However, the levels of car use in these countries are still significantly below those of the EU (around 10,000km on average) and even in the poorer cohesion countries (6,500km to 9,000km). This should be compared to a 3,000km average for CEE as a whole, and the highest total of 5,731km in the Czech Republic. This underlines not only the significantly lower car ownership levels in some countries, but also in most cases the lower levels of car use even amongst those who do have access to cars.

Figure 8: Passenger car stock by country



As elsewhere, overall patterns disguise significant local differences. Although car ownership and use is increasing rapidly, especially on the periphery of the EU, a very significant portion of the CEE population remains without access to a private car. Many of these people remain wholly dependent on public transport services which have declined in frequency, risen in cost and deteriorated in quality over the past decade.

### **3.3 Infrastructure development and the TINA infrastructure plans**

The decade or so since 1990 has also seen significant developments in relation to the provision of transport infrastructure in CEE. The scale and alignment of the region's infrastructure was not considered to be sufficient to bring the two halves of the continent together nor to facilitate the movement of goods and people. As a result the second pan-European conference of transport ministers, which was held in Crete in 1994, identified nine major transport corridors across central and eastern Europe which would require priority development. This approach was regarded as important for the reunification of Europe and the development of free trade, and was confirmed and refined at the third pan-European conference at Helsinki in 1997, resulting in the adoption of what became known as the 'Helsinki corridors'.

In parallel to this, the EU established its own approach to transport networks and enlargement, in order to begin developing a system to accommodate states which were already in line for accession to the EU within the framework of the trans-European Transport Networks (TEN-T). An integral element of the EU's approach to the development of transport networks in the accession candidate countries was the Transport Infrastructure Needs Assessment process (TINA), which was designed to establish what would be the priorities for future infrastructure needs, and to explore how these might be funded. After lengthy discussions, analysis and consultations, the initial results of this process were published by the TINA Secretariat in 1998, with a final report in November 1999 (TINA Secretariat, 1999), identifying a backbone network and a number of additional projects which were considered worthy of priority. The TINA assessment clearly indicates that TINA is closely modelled upon the development of the TEN-T, and shares many of its underlying assumptions (for example, on the importance of the network in delivering 'sustainable mobility'; in pursuing 'projects of common interest'; in eliminating bottlenecks, and in developing links to underdeveloped areas). The report further makes it clear that 'the network should be in line with the criteria laid down in the EU guidelines for the development of the TENs'. It can also be regarded as a direct extension of the aims of TEN-T, in that links across CEE can help to connect current EU Member States, particularly those in Scandinavia and the Balkans.

Already the TINA network is being used as a basis for establishing funding priorities, attracting funds for various infrastructure developments. This was fully anticipated, by analogy to the existing guidelines for the TEN-T within the EU which identify projects of 'Community interest'. There is, however, an important distinction between the TINA network and the TEN-T guidelines which set out the routes of TEN-T. The latter are embodied in a Decision of the Community institutions – that is, they constitute a legal instrument which has been scrutinised by both the Council of Ministers and the European Parliament. The TINA network, however, has no such official status either within the EU or in the individual states of CEE. As such it has not been subject to open debate or parliamentary scrutiny, and for this reason it has been criticised, particularly by NGOs, as an inadequate basis for major transport funding decisions.

The final report of the TINA process clearly envisaged further follow up of its work, including better environmental and socio-economic assessment of the proposed network. This was to take the form of a 'TINA II' process (Transport Infrastructure Network Adaptation).

### **3.4 Funding of transport services and infrastructure**

The identification of the infrastructure needs of CEE is only part of the process to their provision, the other essential element being the funding arrangements for their completion. The availability and rules governing the provision of funding have a significant affect on the prioritisation of infrastructure development in CEE, both in terms of particular corridors, but also in relation to the mode for which infrastructure is provided. This section considers these aspects of transport funding, especially in the context of inward investment.

Questionnaire responses indicate that most CEE countries spend the majority (between 50 and 70 per cent) of their transport funding on roads and highways. Between 4 and 10 per cent is spent on rail, while 10 per cent goes to other public transport. Estonia is apparently an exception to this in that it supports public transport with 47 per cent of domestic resources available for transport, as is Slovakia which uses more than 50 per cent of its domestic transport funds to support the railways. Poland also spends a significant amount of its domestic transport funding (26 per cent) on rail.

In most of the countries of CEE, domestic resources are severely constrained owing to the limited tax base available to governments. Therefore to finance improvements and restructuring in transport systems, in particular through major infrastructure developments, inward investment is a critical factor. Inward investment into CEE is estimated to have made up 41 per cent of all transport investment in the recipient countries over the period 1991-95 - a significant proportion of the total. Inward investment comes in the form of loans, grants, and private investment. The principal institutional sources of funding to CEE have been the European Investment Bank (EIB) plus the European Investment Fund (EIF); the European Bank for Reconstruction and Development (EBRD); the Phare and other funding programmes of the EU, and the World Bank, in descending order of scale of funding.

More recently, in June 1999, additional EU funding for CEE countries was established by the ISPA instrument under Regulation 1267/1999. This fund is the Instrument for Structural Policies for Pre-Accession (ISPA), from which 50 per cent of the funds available are expected to be spent on transport. This fund is closely modelled on the Cohesion Fund, which was designed to help Spain, Portugal, Greece and Ireland to catch up economically when they joined the Community. Past analysis by BirdLife (Bina and Fergusson, 1997) has illustrated the disproportionate and potentially distortionary effect of inward investment which is already apparent in Cohesion countries. This analysis also suggested that the various sources of inward investment have diverted scarce national and local sources of funding towards large-scale infrastructure projects, possibly to the detriment of other priorities, either in the transport sector or elsewhere. A more recent update by Bankwatch (2001) also supports these conclusions, while providing additional information on the situations in particular countries.

Note that article 2.2 excludes projects of under Euros 5 million ‘in principle’ from ISPA funding. This provision has attracted significant criticism in that it excludes small scale projects which might be advantageous in terms of sustainability. In response the Commission has announced that this cost threshold will no longer be applied. Nevertheless, these provisions of the regulation remain unamended, and it is understood that no transport projects below the cost threshold have yet been funded.

The tables in Appendix 6 list recent funding initiatives by the main inward investment sources for transport infrastructure in CEE. The main points to be derived from these tables are as follows.

- Only seven out of 147 projects funded in the accession countries in the last three years by the EBRD have been transport projects. Of these, three related to urban areas, while a further two addressed port infrastructure. Transport funding amounted to around Euros 60 million a year and EBRD funding made up less than 15% of the total funds needed for the seven projects.
- The EIB continues to make a much more substantial contribution through loans for major infrastructure projects. Of the 38 projects approved in accession countries in 1999, 14 were transport infrastructure projects. Of these, roads made up nearly half of the total, while rail counted for half of the remainder. Total funds allocated to transport projects in 1999 amounted to Euros 1,403 million.
- Over 80 ISPA projects have now been approved by the ISPA Management Committee, of which 29 relate to transport infrastructure projects, while another nine provide for technical assistance in the field of transport. Of the 29 infrastructure projects, road and rail predominate in roughly equal measures. The estimated ISPA contribution to these projects was in the region of Euros 1,300 million.
- Between 1998 and 2000, the Phare Programme contributed funding to 52 transport infrastructure projects in the Accession Countries. Around 60% of these were road projects. Total spending averaged around Euros 120 million a year.
- In 2000 and to date in 2001, the World Bank has only contributed to three transport projects in the accession countries. This reflects an increasing focus of World Bank activities on the Newly Independent States of the former Soviet Union, as the EU and other institutions provide greater support in CEE. For each World Bank project for which information was attainable, the amount contributed was in the order of Euros 35 to 40 million.

The relationship between infrastructure policy and inward investment can be argued to be crucial to the priorities of transport policy in the CEE countries. For example, the Commission's 1997 Communication on the pan-European transport networks makes clear the continuing importance of inward investment in realising the TINA network, while the TINA Secretariat report of 1999 confirms the very high level of national investment which will also be needed to co-fund the building of TINA. The target of 1.5 per cent of national GDP to be allocated to TINA is described by the Secretariat as 'realistic and affordable'; but it is comparable to *total* transport investment as a percentage of GDP in the (much wealthier) EU Member States. These sums of money have not been readily available to date, and as a result, even though the TINA process also involves upgrading key elements of existing infrastructure, in general the majority of existing infrastructure remains in a poor state of repair. There is, furthermore, a very real danger that available national funding will largely be diverted to providing matching funds for inward investment in major projects, starving out potentially more productive and less environmentally damaging small scale local investments (eg public transport services, repairs and maintenance, facilities for walking and cycling, etc).

### 3.5 Environmental effects of transport trends

Existing transport trends in CEE, as outlined in Section 3.2, particularly in road transport where both car and truck traffic will continue to rise strongly, are likely to continue and will be stimulated further by the provision of new infrastructure (see Session 3.3). This is likely to lead to a doubling or tripling of emissions from this sector, and very high abatement costs for applicant countries, according to the European Environment Agency. Figures for the mid-1990s show that by sector road transport was already the principal source of NO<sub>2</sub> and NMVOCs in CEE countries, contributing 36 and 41 per cent, respectively. The transport sector is, however, as yet a relatively minor contributor to CO<sub>2</sub> emissions in CEE as in the mid-1990s it contributed around 8 per cent of the region's emissions (OECD, 1999). Growing use of road transport will increase these shares and pose particular issues for urban air quality, which is a matter of growing concern across the region. Here the problems of traffic growth are compounded by increasing congestion and long vehicle lifetimes. The older vehicle stock in these countries leads to higher average emissions of certain key pollutants such as NO<sub>x</sub>, hydrocarbons and particulates. Other effects, such as noise, congestion and health impacts are receiving greater attention as traffic levels rise, particularly in urban areas.

In fact, the officials' responses to the questionnaires show that the main environmental issues that appear to occupying policy-maker's attention in CEE with respect to transport, the environment and health, are urban air quality and noise. This suggests that the focus of concern is in urban areas. Congestion and traffic levels were also raised, but nowhere near as regularly, as was the age of the vehicle fleet in relation to the adverse effect of the use of old vehicles on air quality because of poorer emission standards. Accident rates were also regarded as an important issue as these are high by EU standards and many of the problems are alcohol-related. Issues relating to the transport of hazardous substances and land use (including fragmentation, biodiversity and soil contamination) were also raised by some, but only one mention was made of carbon dioxide emissions from transport and that was as part of a list of general pollutants from transport. This indicates that, unlike in the EU, concern over CO<sub>2</sub> emissions from transport in CEE has not yet become an important political issue as other problems are still of more overriding importance.

Increasing traffic levels and a changing economic structure are now associated with a strong interest amongst CEE governments and the Commission in the modernisation and development of transport infrastructure - most notably through the Transport Infrastructure Needs Assessment (TINA) process, which is discussed in greater detail below. There are widespread concerns, particularly amongst NGOs, that new transport infrastructure will threaten natural habitats and that adequate environmental safeguards (through EIA and SEA) are deficient or lacking. Indeed, infrastructure developments are of particular concern in CEE in light of the high conservation value of natural areas in these countries. The European Commission's *Agenda 2000* Communication of 1997 reflects this point as follows:

'CEECs still have large extensive habitats of major importance for Europe: forests, wetlands and steppes. They also have areas of biodiversity-rich farmland, which supports important populations of globally threatened species, such as the corncrake and great bustard, as well as large numbers of commoner farmland birds, such as the skylark, which are declining rapidly in western Europe'.

### **3.6 Summary of the background to transport and environment in CEE**

Since 1989, the shifts of the countries of central and eastern Europe towards market economies has had a significant effect on their respective transport systems. Section 3.2 illustrated the substantial shift from public to private transport during this period, both for freight and passenger transport, although levels are still significantly below the EU average and, in most cases, below the lowest figures of the fifteen EU Member States. At the same time, priorities for infrastructure development have been identified, mainly in relation to the facilitation of long-distance travel and trade. The provision of this infrastructure has been stimulated by additional European funding that is available for the development of infrastructure of pan-European importance. However, the increase in transport has had accompanying adverse environmental effects, which are likely to increase as the growth of road transport in particular, both for both freight and passenger journeys, is likely to continue.

## **4 INTERNATIONAL POLICY DEVELOPMENTS AFFECTING CEE**

The adverse effects of transport on the environment in CEE have not, however, gone unnoticed by policy-makers. Action in CEE has been influenced both by policy developments at the pan-European level and by joint initiatives undertaken by the countries of the region. This section looks at these developments in more detail.

### **4.1 The Vienna Conference and the London Charter**

Transport was identified as a key priority for national and international action by Agenda 21, which was adopted in 1992 at the United Nations Conference on Environment and Development in Rio. The UNECE launched a preparatory process, which culminated in the adoption of the Vienna Declaration and its Programme for Joint Action at the Regional Conference on Transport and the Environment in 1997 (UNECE/WHO-ROE, 2001). This was the first sectoral and regional follow-up conference to the process initiated at Rio. Subsequently, there have been annual Joint Meetings on Transport and the Environment (JMTE) held in Geneva to take the programme forward.

A separate process was also underway under the auspices of WHO's Regional Office for Europe (ROE), which brought together environment and health ministers from Member States in a common process of joint ministerial conferences. The first such conference was held in Frankfurt in 1989 followed by the second in Helsinki five years later. In the preparation for the third Ministerial Conference, which was held in London in 1999, issues relating to transport, environment and health were identified as key priorities. As a result, negotiations were started which led to the adoption in London of the Charter on Transport, Environment and Health, in which countries committed themselves to making transport sustainable for health and the environment and to the follow-up and monitoring of the Charter's Programme of Joint Action (POJA) (UNECE/WHO-ROE, 2001).

The plan of action itself included a number of activities at the international and national levels. One of these was that national governments should develop national strategies and programmes which should include the 'establishment of national targets for the reduction of the environmental impact of transport, based on international conventions and other legally binding documents' (UNECE, 1997). As a result of the London Charter and POJA, WHO and UNECE were called upon to provide an overview of existing agreements and legal instruments and recommend further steps to be taken to achieve the Charter's aims.

This included an examination of the 'possibility of new non-legally binding actions and the feasibility, necessity and content of a new legally binding instrument (eg a convention on transport, environment and health)' (UNECE/WHO-ROE, 2001). This report was published in early 2001 (*ibid*) and recommended the establishment of a new Convention on transport, environment and health. Its findings were discussed at a High Level Meeting on Transport, Environment and Health, held in Geneva on 4 May 2001 and the subsequent 4th session of the JMTE on 6 June 2001 in Geneva. Thus far no definite course of action has been adopted regarding a new Convention, but further decisions are expected to be taken at a second High Level Meeting, to be convened before the Rio+10 summit in Johannesburg in autumn 2002.



## 4.2 National action plans - NEAPs and NEHAPs

In 1991, at the first ‘Environment for Europe’ Ministerial Conference in Dobris, ministers from all parts of the continent requested the preparation of an Environmental Action Programme for Central and Eastern Europe (EAP). It was felt that this was needed to address the severe environmental problems which had been revealed by the collapse of the old communist regimes and the disintegration of the Soviet Union. The EAP was subsequently developed and was endorsed at the second pan-European conference in Lucerne in 1993. Its goal was to address the environmental problems of CEE as cost-effectively and as efficiently as possible through a mix of policy tools, institutional strengthening and targeted investment. At Lucerne an EAP Task Force was established to:

- Promote analysis and exchange of experience
- Develop guidelines and best practice
- Identify ways to integrate environmental policy reform with social and political reform
- Work with donors to build capacity, implement demonstration projects and remove investment obstacles; and
- Cooperate with governmental and non-governmental bodies to build public and political support for environmental protection (OECD, 2001).

Since 1998, the REC has taken the lead in implementing the CEE component of the EAP, while the OECD has focussed on the NIS. The EAP is effectively a methodology which countries can use to develop National Environmental Action Programmes (NEAPs), which should provide a comprehensive framework for the implementation of environmental policy, institutional strengthening and investment. Table 1 below indicates the state of development of NEAPs as it stood in 1998, illustrating both early progress in some cases, and a lack of complete information on the process.

**Table 1: CEE progress on NEAP development**

	<b>Initial document</b>	<b>Follow-up</b>
CY	No information	No information
HU	Short and Medium Term EAP (1991)	
PL	New Environmental Policy (1991)	Implementation Plan for Environmental Policy (1994)
EE	National Environmental Strategy (1996)	National Environmental Action Programme (1997)
CZ	Rainbow Programme (1991)	State of Environmental Policy (1995)
SI	Rainbow Programme (1991)	National Environmental Action Programme (undated)
M	No information	No information
RO	Environmental Protection Strategy (1995)	National Environmental Action Programme (1995)
SK	Strategy, Principles and Priorities of the National Environmental Policy (1993)	National Environmental Action Programme (1996)
LV	National Environmental Policy Plan (1995)	National Environmental Action Programme (1997)
LT	National Environmental Strategy (1996)	
BG	Environmental Protection Act with new principles for environmental policy (1991)	Environmental Strategy Study (1991/94)

*Source: OECD (1998)*

A NEAP developed using the EAP methodology typically comprises a number of features, including a mix of command and control and economic instruments, public participation, free access to information and the development of monitoring systems. Another feature of NEAPs

is that, although the development is likely to be co-ordinated by the national environment ministry, it is drafted in close co-operation with the other relevant government departments, including transport. As a result the programme that is eventually adopted can be seen to be of the whole government, rather than of the environment ministry alone (REC, 1995).

The formulation of National Environment and Health Action Plans (NEHAPs) started at the second Ministerial Conference on Environment and Health, which was held in Helsinki in 1994. At that conference, ministers adopted the Declaration on Action for Environment and Health in Europe and endorsed the Environmental Health Action Programme for Europe, within the framework of which they committed their respective ministries to the development of National Environment and Health Action Plans (NEHAPs) (WHO, 1995). Six countries, including Hungary, Latvia and Bulgaria, were involved in a pilot project to develop NEHAPs by 1997, but NEHAPs have since been developed by other countries, including the Czech Republic and Slovakia (WHO - ROE, 2001). NEHAPs should contain a number of objectives for the transport sector, including:

- to reduce road traffic injuries and deaths by 25 per cent by 2000 compared with 1990;
- to reduce gaseous and particulate emissions to levels consistent with current air quality guidelines;
- to abate noise from traffic and congestion;
- to set and enforce speed limits and undertake tests to catch drink drivers;
- to check the roadworthiness of all vehicles;
- to safeguard the rights of pedestrians;
- to regulate traffic to reduce accidents, pollution and noise; and
- to thoroughly investigate car accidents (WHO, 1997).

The third pan-European Ministerial Conference of environment ministers in Sofia in 1995 recommended that NEAPs should be developed to be compatible with the objectives and implementation of NEHAPs. Since then, representatives of the two secretariats have been present at each other's meetings on NEAPs and NEHAPs and such co-ordination has already taken place at a national level in some countries (OECD, 1998). However, further consideration should be given to the complementary nature of these international initiatives, also in the light of the activities of UNECE and WHO since the Vienna Declaration (see above), and their recent recommendation for a new Convention on transport, environment and health. As always, attention will have to be given to balancing the use of limited resources in terms of funding, time and expertise. Especially in terms of having to follow up the strategic planning efforts with the often much more demanding task of implementation, including the translation of guiding principles from the international arena to the concrete planning and implementation phases at national, regional and local levels. To date, it seems that several international initiatives are still to make a clear impact on regional and local levels of planning and implementation.

### **4.3 Sofia initiatives and impact assessment**

Prior to the Ministerial Conference in Sofia in 1995, high level officials from CEE set up the Sofia Initiatives in co-operation with the EAP Task Force in order to accelerate the implementation of the EAP in CEE. Four initiatives were instigated on economic instruments, biodiversity, local air pollution and environmental impact assessment, with the intention of

sharing positive experiences within the region (REC, 2001a).

The Sofia Initiative on Economic Instruments (SIEI) contributes to the EAP goal of improving the integration of the environment and the economy through the use of economic instruments. It includes a newsletter on Green Budget Reform and the maintenance of a database on economic instruments used in environmental policy in 13 CEE countries. The Sofia Initiative on Local Air Pollution (SILAQ) addresses the EAP objective of improving air quality in CEE and puts special emphasis on the promotion of unleaded petrol in the region and the significant reduction of sulphur and particulate emissions. Its three main objectives are:

- To exchange information on local air pollution control strategies and their implementation;
- To harmonise policies, standards and regulations with respect to international practices and EU accession; and
- To develop and implement national or local strategies for the least cost reduction of airborne lead, particles and sulphur, as well as public information and participation (REC, 2001a).

The Sofia Initiative on Environmental Impact Assessment (EIA) aims to support the development and upgrading of EIA systems through co-operation and exchange of experience, as well as developing the regional capacity for EIA. It complements the work done on EIA capacity building under the UNECE Espoo Convention on EIA in a transboundary context. Discussions under the initiative have revealed that there is also a significant experience in CEE and NIS of the application of strategic environmental assessment (SEA) on regional and local land use plans, but limited experience of this at the national level. The Sofia Initiative on EIA is therefore going to prepare a regional study to define procedures and processes for the application of SEA in the region.

More recently, the UNECE has proposed a Draft Protocol on SEA (UNECE, 2001) which could complement the new European Directive on SEA, by emphasising the need for SEA in transboundary contexts, the importance of specifically considering health impacts as well as 'traditional' environmental effects, and the need to apply SEA to policies, as well as plans and programmes. This too should (if adopted) help to reinforce CEE experience of SEA prior to accession to the EU.

## **5 FORMS OF TRANSPORT AND ENVIRONMENT INTEGRATION IN CEE**

### **5.1 Introduction**

Having set out the background in terms of the main trends of CEE's transport sector, including funding and overall environmental implications, this section discusses a number of approaches and policy developments intended to promote integration of transport and the environment in the region.

As a background, it should be borne in mind that CEE countries inherited an institutional legacy of environmental policy approaches which prevailed prior to 1989. The OECD (1998) report characterised these as follows:

- Ideological, over-ambitious planning goals based on unrealistic standards;
- 'command and control' legislation combined with a lack of enforcement capacity;
- centralised decision-making and regulated allocation of resources;
- focus on technological solutions;
- restricted access to information and lack of public participation.

The report goes on to note that responsibilities for environmental protection tended to be dispersed amongst sectoral agencies, and that only in the late 1980s and early 1990s did consolidated environmental agencies begin to emerge – and then often with only limited powers and resources. The nature and scope of the approaches discussed below is therefore not necessarily as wide as that of some EU countries, as it reflects the continuing confidence in planning as a central tool for transport development and for addressing the environmental and health implications of this sector. This is partly due to the quite recent experience of planned economies as noted above, which focused essentially on regulatory tools rather than economic tools. Furthermore, the general emphasis on the upgrading and building of new infrastructure has meant that mechanisms such as environmental assessment have been given great prominence in the responses to this study.

### **5.2 Institutional integration: interministerial cooperation and stakeholder involvement**

There is an element of interministerial cooperation in the development of more sustainable transport policies in many CEE countries. In most cases, ministries cooperate during the preparation of new legislation or regulations within the governmental commissions for EU accession or in national commissions for sustainable development or the interministerial councils for the implementation of NEAPs and NEHAPs.

For example, in Slovakia, a working group was established in 1997 to deal with the implementation of an Action Plan on Transport and the Environment. Representatives of eight ministries, the national statistical office, regional and local authorities participate in the working group. A similar coordinating body exists for the implementation of the NEHAP and there is also a procedure to involve other stakeholders.

However, most countries do not yet have procedures for involving stakeholders in the decision-making process underlying transport, environment and health, relying on EIA and, in some cases SEA, to involve the public. Experience to date suggests, however, that these can often represent only weak and indirect opportunities for public participation in the overall policy process.

### **5.3 Management integration**

#### ***5.3.1 Transport and environment strategies, targets and indicators***

As discussed in section 4.2, the CEE countries are currently at various stages of completion of NEAPs and NEHAPs (for example, Romania has both, and Albania has completed a NEHAP), which often include sections on environment, health and transport issues. These have provided an excellent trigger for consultation and cooperation amongst different ministries involved with transport and the environment however their potential as a tool for integration has yet to be maximised. Furthermore, the integration between national and regional transport plans, NEAPs and NEHAPs, as well as broader sustainability initiatives and plans, needs to be strengthened. The on-going discussions in the context of UNECE and WHO's work on transport environment and health could provide support in this direction (see above).

At the time of writing, only a minority of countries, including Poland, Lithuania and Estonia, have a legal requirement to produce an integrated transport, environment and health strategy. In Poland, the requirement is relatively recent and aims to promote an ecologically sustainable transport system. In other countries this is optional or there is a proposal to make it a requirement. Slovakia has an Action Plan on Transport and the Environment, as noted above. It should however be noted that these requirements do not necessarily translate in concrete proposals, at least as yet, and are often poorly implemented due to a mixture of institutional and budgetary obstacles.

The inherited central planning culture has also meant that urban plans are a common feature throughout CEE. These instruments include the consideration of the transport dimension in land-use planning, which is also now being strongly promoted in the EU. However, urban plans in CEE tend not to include environmental goals, and are unlikely therefore to address issues such as urban sprawl adequately

A number of other relevant findings arose from the questionnaires circulated in advance of the recent meeting of High Level Officials on Transport Suitable for Environment and Health, at the REC in Szentendre, Hungary (REC, 2001b), as follows.

- While ministries from most CEEs responded with an integrated or coordinated response, some sent separate responses, and a few of these separate departmental replies were mutually contradictory in some respects.
- Most countries have established general goals and targets on urban air quality in particular, but current policies focus mainly on stationary sources. Policy on mobile sources relies mainly on technical measures (e.g. fuel quality and emissions standards). Climate-related targets are far less common or well developed.
- Few ministries laid claim to a 'seamless' interdepartmental cooperation, although many

suggested that it was improving. Slovakia appeared to be an outstanding case, in that it has since 1997 had a Working Group to develop its Action Plan for Transport and Environment. This involves eight ministries, plus regional and local government officials.

- Stakeholder consultation during plan formulation appears still to be exceptional and quite limited. There appeared to be few established participative procedures, except through specific mechanisms such as EIA.

Thus, not surprisingly, the meeting concluded that the production of integrated transport, environment and health (TEH) strategies (policies, plans and programmes) should be a priority in CEE/NIS (REC, 2001b). These should incorporate social, economic, environmental and health concerns, in partnership with all TEH authorities and relevant stakeholders. They also recommended the further development of land-use planning systems as a tool for the promotion of integration.

The High Level Meeting also highlighted the need to identify and promote environment and health objectives for the transport sector:

‘Clear environment and health goals and targets for transport should be established. More attention should be paid to mobile source pollution (urban air quality and carbon dioxide emissions), noise, urban sprawl, landscape fragmentation. The health goals and targets for transport should be addressed, including the safety of pedestrians, cyclists and automobile passengers and improving the vehicle safety’.

Linked to this issue is the need for the definition and greater use of international standards and indicators for monitoring and evaluating the effectiveness and impacts of proposed policies and plans. In this respect, the on-going work of the EEA on TERM, and more specifically its extension to cover CEE, will be of great value.

### ***5.3.2 Policies towards public transport, walking and cycling***

Under the centrally planned economies, public transport was promoted and heavily subsidised, but the ‘soft’ modes of walking and cycling typically received far less attention. As noted above, centralised support for public transport has diminished owing to a range of pressures, but conversely, walking and cycling now receive more attention in many towns and cities. The integration of health considerations through the NEHAP process has reinforced the latter trend.

As a result, policies towards public transport, walking and cycling appear to be converging with those adopted in many EU cities. Generally they are not yet as well developed, but examples of good practice exist at all levels, as noted below. For example, Slovakia’s national Action Plan on Transport and the Environment includes policies designed to improve public transport and to promote non-motorised modes, while the Czech Republic has a stated policy aim to stabilise the number of passengers using public transport. A further report by the ECMT (1996) illustrates early developments in these directions in several CEE countries.

Other ‘best practice’ measures being undertaken include the provision of new infrastructure

(eg underground stations in the Czech Republic, the intercity rail network in Hungary and the development of cycling infrastructure in Poland and Hungary), subsidies for public transport (eg Estonia and Hungary) and pedestrian zones in city centres and traffic restriction in residential areas. In the latter category, a recent report of the Central European Initiative (1999) highlights pedestrian and city bus projects in Banská Bystrica in Slovakia.

At a recent conference on transport and environment policy in CEE, two particular examples of best practice were highlighted (T&E, 2000), as follows:

- In Cracow, a new season ticket at 20% lower price was introduced and has been heavily taken up. A partnership between the local authority and the bus company includes clear quality criteria which affect the level of subsidy given; new rolling stock has been introduced for buses and tramways; bus shelters have been upgraded with private sector sponsorship, and timetable information has been improved and made more widely available, including via the internet. The results have been judged successful by both customer satisfaction and objective criteria, and have not required increased subsidy owing to increased service use and hence increased revenue.
- Some benchmarking of road haulage services has been undertaken in Hungary, but significantly, it has thus far been confined to joint ventures involving transnational companies from outside Hungary. This is still in its infancy, and requires further effort to be rolled out to other companies.

The strengthening of this aspect of transport policies, and their relevance to integration, is closely linked to progress and improvement in the other areas mentioned above, and in turn, to their impact on the final use of funds and loans.

### **5.3.3 *Environmental assessment***

A range of assessment types are used in CEE to integrate environmental and health concerns into various policy areas.

Not surprisingly, given the fact that CEE countries are emerging from long periods of centrally-planned economies, the use of SEAs is relatively common in CEE. This has been often applied at a regional and local level, and several countries now also require SEAs of national transport and regional development plans. In Poland and Slovakia an SEA for both is legally required, while in the Czech Republic an SEA is required for the national transport plan, but is only optional for regional development plans, as is the case in Hungary. Poland and Slovakia also require an SEA to be undertaken of municipal land use plans, while similar legislation has been proposed in the Czech Republic.

EIAs of transport infrastructure projects are also a legal requirement in many countries, including those in the first wave of accession candidate countries. Concern over the links between environment and health has also led to some countries undertaking Health Impact Assessments of land use and/or transport plans. For example, this is a legal requirement for urban land use plans in Estonia and optional in the Czech Republic and Slovakia.

The widespread reference to SEA and the presence of legal requirements for it in several countries is very promising, but the effectiveness of strategic assessments to date has been

very mixed. The scope of SEAs is not always as wide and comprehensive as would be expected from good practice, and the level of influence on the final decision-making phase remains weak in many cases. The rising importance of national and regional development plans linked to European funding (notably the SEA Directive requirement for SEA of future rounds of Structural Funds) provides a useful focus for future efforts to apply effective SEAs, particularly since these plans tend to include a section on transport, which itself incorporates TINA recommendations and other transport priorities of the EU. Capacity building and an improvement of the legal frameworks for environmental assessment are considered a priority.

Particular attention should be given to the issue of SEA and TINA. In the Secretariat's final report on TINA (TINA secretariat 1999) it was recognised that it would be necessary to undertake an SEA of TINA, but that no methodology was yet available to do this. Since then, considerable progress has been made both through the Framework Research Programmes (Fourth and Fifth, see, for example ECMT (2000), and the manual on SEA of transport (European Commission, 1999) and through pilot studies such as the five transport corridor SEAs reviewed by DG Environment (European Commission, 2001)). Nonetheless, little progress appears to have been made on a more detailed institutional assessment of TINA. This has implications in terms of the adequacy and acceptability of the TINA network as a basis for funding and infrastructure development, and a recent report by BirdLife International highlights serious concerns in this regard (Fisher and Waliczky, 2001).

It is clear from the text of Article 2 of the Instrument for Structural Policies for Pre-Accession (ISPA) Regulation (1267/1999) that it will continue to fund major transport infrastructure measures in CEE, by analogy to the earlier Cohesion Fund. TINA is mentioned in the 9th paragraph of the preamble to the ISPA regulation, which states that the TINA assessment 'should facilitate the process of selecting priority measures for developing a pan-European transport network during the pre-accession period'. However, given the lack of reliable assessments currently available, it is not clear how this requirement can be met in a sustainable way.

#### **5.4 Market integration: the use of taxes and charges**

In the responses to the questionnaires circulated during this project, most of the officials from the countries in the study said that it was a policy of their respective governments to internalise external costs. However, in practice the main taxes introduced for environmental reasons are to differentiate between various motor fuels and to discourage the import of older vehicles. A good overview of taxation in CEE can be found on the REC's website, which has been developed under the SIEI (see Section 4.3), and the following discussion includes information obtained from this source (REC, 1999).

The use of differentiated taxes to increase the price of leaded petrol relative to unleaded petrol is currently used by both Poland and Slovenia, but not in either the Czech Republic or Estonia. Such a measure is no longer required in Hungary or Slovakia as both have already phased out the use of leaded petrol. Despite the lack of differentiation in the Czech Republic, the country is reportedly on course to phase out the use of leaded petrol this year (ie 2001), as is Poland, while Slovenia intends to phase out its use next year. In all six countries there is a tax differential between unleaded petrol and diesel and, except in the case of Slovenia, this is in favour of diesel. In this respect, Slovenia is part of a small set of European countries,



including the UK and Switzerland, that favour unleaded petrol over diesel. The Czech Republic, Estonia and Poland also have a tax differential between some alternative fuels and standard motor fuels. In the only example of its kind in CEE, Slovenia has introduced a CO<sub>2</sub> tax on motor fuels equivalent to Euros 34.1 per 1000 litres of petrol (both unleaded and leaded) and Euros 40.4 per 1000 litres of diesel.

As a point of interest, the tax rates only exceed the minimum EU rates, as set out in Directive 92/82/EEC, in Hungary and Slovenia for diesel, leaded and unleaded petrol and in the Czech Republic for unleaded petrol only.

In an effort to stop the import of highly polluting older cars, three countries of the six - Estonia, Hungary and Poland - have import duties differentiated on the basis of the age of the car being imported and in the case of the former two on the basis of the presence or otherwise of a catalytic converter. Some degree of differentiation exists for other taxes in some countries, but there is no explicit environmental objective. For example, in the Czech Republic there are highway tolls, differentiated by a vehicle's weight, but only three bands cover all vehicles from passenger cars up to heavy duty vehicles. Road taxes in the country have revenue raising as the main objective, but there is some variation in taxes in relation to engine capacity, weight and the number of axles. Similarly, in Slovakia and Poland, the annual vehicle tax is based on engine size or capacity, while in Hungary it is based on a vehicle's weight (Euros 0.24 to 0.40 per kg), but the revenue is earmarked for the central road fund to be spent on road development.

## **5.5 The way forward**

The most promising instruments identified by CEE respondents to questionnaires were strategies or plans, including NEAPs, NEHAPs and joint strategies, while the second most popular instruments were SEA and EIA.

Other instruments only received a small number of mentions each. Of these, the use of economic instruments, including the internalisation of external costs, was highlighted as a promising instrument, as was public participation. Other instruments mentioned included technical measures, inter-ministerial bodies, the promotion of other modes, and restrictions on car use.

The research showed that it is widely recognised that more needs to be done to strengthen the institutions involved in order to improve the integration of environment and health concerns into transport policy. Means of doing this that were mentioned include the establishment of interministerial bodies to address sustainable transport and the implementation of integrated strategies and action plans on transport and the environment. It was also felt that the role of SEA in the decision-making process needs to be strengthened and the requirement to undertake health impact assessments for transport and municipal land use plans need to be extended. A need for capacity building and adequate monitoring and reporting mechanisms was also identified. The exchange of best practice was highlighted as an important tool in encouraging local authorities and municipalities to introduce demand management measures.

## 6 STUDIES AND ACTORS RELEVANT TO TRANSPORT AND THE ENVIRONMENT IN CEE

### 6.1 Studies

The project identified nearly 100 studies in the six countries - Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia - which were the focus of the work. A list of these is given in Appendix 1, and a fiche giving key details for each of them can be found in Appendix 2. Each study is not discussed in detail, but this section brings out the main points and reviews the findings.

In general, there are two types of study that have been identified by the research. The first of these, which makes up the majority, is a technical, project-related study, usually undertaken for a government department or agency, that focuses on infrastructure, land use and the resultant environmental impacts.

The second type of study is a more general policy analysis, sometimes in the form of a government White Paper or similar policy statement. Aside from the latter, however, many of these more general policy analyses have been undertaken by NGOs or independents and not for a particular client. This has important implications in terms of the ownership, and therefore likely influence, of such research. It appears to suggest a divergence of views and priorities between governmental and other policy actors and a lack of constructive dialogue on some of the broader issues. It may also suggest that governmental authorities should expand their research effort to more strategic and long term issues of transport policy and sustainability questions, and improve their efforts at stakeholder dialogue and engagement.

The analysis by country showed a similar split in the type of studies commissioned (see Table 2 below).

**Table 2: Study characteristics by country**

	Study type	Characteristics
<b>Czech Republic</b>	Type 1	Statements of government policy
	Type 2	General sustainable transport policy studies
<b>Estonia</b>	Type 1	Focus on public transport, cycling and walking NGO produced
	Type 2	Project-based studies for government focused on environmental impacts
<b>Hungary</b>	Type 1	Policy analyses on sustainable transport
	Type 2	Project specific
<b>Poland</b>	Type 1	General policy studies on sustainable transport for non-governmental clients
	Type 2	Focus on inter-urban transport, infrastructure, land use and environmental impact
<b>Slovakia</b>	Type 1	Project based EIA studies for the environment ministry
	Type 2	Technical studies undertaken by the national transport research institute for the transport ministry
<b>Slovenia</b>	Type 1	Studies focus on spatial planning and environmental impact mainly for the national environment and spatial planning ministry

The coverage of modes and subject areas of the studies are set out below in Tables 3 and 4, respectively. Note that percentages do not total to 100 per cent, as many studies cover several topics.

**Table 3: Modal coverage of studies**

<b>Mode</b>	<b>Coverage</b>
Road, private passenger	74%
Road, freight	70%
Road, public passenger	63%
Rail, passenger	53%
Rail, freight	46%
Walking or cycling	26%
Aviation	24%
Inland waterway	22%
Maritime	15%

**Table 4: Dossier coverage of studies**

<b>Type of instrument</b>	<b>Coverage</b>
Infrastructure development	57%
Integrated strategies	42%
Land use	42%
Urban/public transport	36%
Charges and taxation	13%
Funding	8%
<b>Effect</b>	<b>Coverage</b>
All environmental impacts:	50%
• <i>Emissions/air quality</i>	37%
• <i>Noise</i>	28%
• <i>Safety</i>	26%
• <i>Waste</i>	16%
• <i>Climate change</i>	12%

The modal coverage of the studies (Table 3) is focused primarily on roads, followed by rail, with the other modes receiving significantly less attention. This is perhaps not surprising, given the focus on road development, both in terms of planning and funding. The majority of studies addresses infrastructure development in some way (Table 4), while a significant number also focus on the development of strategies and land use. Half of the studies address certain environmental impacts, and the coverage of effects reflects the priorities highlighted in previous sections, such as air quality and noise.

The relatively small number of studies that address climate change, particularly compared with the number that address air quality and noise, is also indicative of the differing priorities with respect to transport and environment in CEE, as noted previously.

Overall, the outcome of this analysis also reflects the earlier discussion with respect to the emphasis placed on planning-based approaches on one hand, and the high priority given to infrastructure development in most CEE countries on the other. Similarly, the relatively low number of studies that address charges and taxation reflects the relatively recent engagement with policy instruments of this type rather than more traditional ‘command and control’

measures.

## 6.2 Actors

The study identified around 120 actors, of which 88 were agreed to be sufficiently important to be included in fiches. Of these, 27 were international in nature or based in the current EU: the balance were based in the six countries in the study. A list of all the actors can be found in Appendix 3 and a fiche for each of the actors is in Appendix 4. As with the studies (Section 6.1), each actor is not discussed in detail here. Instead this section provides a general overview and brings out the main points.

The overall finding is that there are, as one would expect, the full range of government actors within the CEE countries, including a national transport research institute in each country. However, the study identified relatively few consultancies, independent institutes or academic actors working on transport and the environment in CEE states by comparison to the position in most EU countries. NGOs are widespread and quite well developed, although varied in coverage and focus.

### 6.2.1 Government actors

For each country, there is a fiche for the relevant ministries of the environment and transport, and we have also identified the organisation responsible for the preparation of the national ‘state of the environment’ reports. The respective fiche numbers are given in Table 5, along with the fiche numbers for the respective national transport research institutes.

**Table 5: Government Actors**

Country	Transport ministry	Environment ministry	Organisation responsible for State of Environment report	National transport research institute
<b>Czech Republic</b>	A08	A07	Ministry of Environment (A07)	Center for Transport Research (A10)
<b>Estonia</b>	A12	A11	Estonian Environmental Information Center (A17)	None
<b>Hungary</b>	A19	A18	Ministry of Environment (A18)	Transport Inspectorate (A20)
<b>Poland</b>	A24	A25	State Environmental Inspector (A25)	The Motor Transport Research Institute (A25)
<b>Slovakia</b>	A28	A27	Slovak Environment Protection Agency (A29)	Transport Research Institute Zilina (A30)
<b>Slovenia</b>	A32	A31	Ministry of Environment (A31)	Traffic Technical Institute

*NB: Table references refer to fiche numbers. The fiches can be found in Appendix 4*

### 6.2.2 Non-governmental organisations and industry associations

A fiche has been completed for a number of international NGOs, as these have an interest in transport and environment in CEE as well as in the EU (fiche numbers A51 to A61). Similarly, fiches have been completed for international industry organisations for the same reason (fiche numbers A81 to A87).

The national NGOs for which a fiche has been completed are generally the main NGO in each country with an interest in transport and the environment (fiche numbers A62 to A68) and are therefore members of T&E (fiche A51), the European umbrella for transport and environment NGOs. T&E already has a well developed network of member groups and associates in CEE. It has a full-time CEE coordinator in Brussels, and two of its board members are from CEE NGOs.

The Bankwatch network (fiche A55) also maintains close and effective scrutiny of inward investment in CEE. On top of these, a number of other NGOs have been listed and described (fiches A69 to A77). The strong representation of membership and campaigning NGOs reflects the important role of environmental NGOs in CEE, both before and since 1989. The well-developed nature of pan-European networks (Bankwatch and T&E) further reflects an early appreciation of the EU and other multilateral institutions as critical factors in the transport and environment policies of CEE countries.

While many national industry associations have an interest in environment and transport (eg car manufacturers in Poland and Hungary in particular), these are represented at the European level. Consequently, no national association was identified that was particularly active in this area, and no fiches are included.

### **6.2.3 *Independent actors***

There are few academic departments, independent institutes or consultancies that work on transport and the environment in CEE. Poland has more than its fair share of academic departments, but as can be seen from the list of actors (Appendix 3, fiches A101 to A109) these are mainly engineering departments that have branched out into environmental protection. There are a small number of independent institutes and consultancies that are based in CEE countries (eg Institute for Environmental Policy in Prague (A124) and Eko-Konsult in Poland (A147)), whereas other are linked to institutes and companies with their origins in the EU (eg Stockholm Environment Institute (SEI) in Tallinn (A123), which is linked to the original SEI in Stockholm but is increasingly independent, and DHV CR Ltd (A149) part of the Dutch DHV consultancy (A151)).

### **6.2.4 *Fields of expertise and focus of work***

Not surprisingly, the work of the actors based in the six study countries was focused at the national or local level. Road transport, first private then public, was the mode most commonly cited as the main focus of the work of the actors, followed in turn by rail, walking/cycling and air, and finally inland waterway and maritime transport. The main disciplines in which actors expertise lay was planning, followed by economics.

### **6.3 Analysis**

In brief, NGO networks on transport and the environment have developed well over the past decade, and are able to work effectively on a range of issues. However, by the standards of typical EU NGOs, most suffer from severe funding constraints. There are some notable centres of independent expertise on transport and environment issues across CEE, but they are generally small and thinly spread. Typically they remain focussed principally on national issues, often from a modal or engineering perspective, but capacity to work on the EU dimension of sustainable transport is also now developing. However there is some evidence to suggest that dialogue between the different stakeholders (e.g. national government, industry and NGOs) is less well developed than in some EU Member States.

## 7 DISCUSSION: CEE AND THE JEG

### 7.1 Accession as a mutual learning process

As earlier parts of this report illustrate, there are both similarities and differences between CEE countries and those of the EU in relation to many aspects of transport and environment policy. Furthermore, any generalisations such as those made above inevitably conceal or simplify important differences or even contrasts between the situations in the various Candidate Countries (CCs) or parts thereof.

Equally, there are major differences in history, geography, culture, etc between the various CCs, which help to shape their policy styles, priorities and approaches – just as there are between current EU Member States. Thus, as with earlier Accession processes, the incorporation of the CCs into the EU will inevitably be a learning process. Different approaches to policy development will need to be accommodated, and will also provide learning opportunities for all the states involved.

This should in principle apply both to the CCs and to the current Member States, in a two-way learning process. That is, clearly the CCs will need to adapt themselves to the legal and technical requirements of the EU and to its working methods and procedures. At the same time, however, this process will be greatly facilitated for the future if the existing Member States themselves try to understand the particular problems, priorities and working styles of the various CCs, and, where relevant, to assimilate best practice examples from the CCs.

Given its particular structure, content and orientation, we consider that the JEG presents an unusually good opportunity to advance this process, possibly from an early date. This is particularly the case because the JEG addresses a broader integrative agenda which goes well beyond the *acquis*, and encompasses the sorts of plans and procedures of which there is already distinctive experience in the CCs, as outlined in Chapter 5.

### 7.2 Relationship of CEE approaches to the work of the JEG

As argued above, the historical background of the CEE states – most specifically as centrally planned economies – has generated several features which are quite compatible with the general integration remit of the JEGs. In recent years, moreover, some of these features have been reinforced by the requirement to develop and implement the NEAPs, in particular. The following are features of particular interest.

- ***A strong tradition of strategic planning*** can be observed in most if not all of the CCs. This, we would argue, is quite compatible with the work of the JEG in the context of the Cardiff integration strategy.
- ***An emphasis on spatial planning as an integrative tool*** is also a prominent feature of the governmental systems in CEE. The importance of spatial planning is referred to in various strategic documents of the EU including the Cardiff strategy and the draft Sustainable Development Strategy, although it has yet to feature as a major element of Community policy.
- ***A distinctive track record of environmental assessment, at both project and strategic levels*** is an important but easily overlooked element of integration practice in CEE. Aligning practice and cross-fertilisation of ideas potentially provide important

opportunities to strengthen Community practice in the implementation of both EIA and SEA Directives. For the latter, this might be undertaken at an early stage in the implementation of the Directive.

- ***Good experience of interministerial consultation and joint working*** in CEE countries is clearly of central relevance to the working methods of the JEG. Although it is always difficult to evaluate the effectiveness of such practices on an objective basis, our experience suggests that cooperation between transport and environment ministries in the CCs is, on balance, at least as good as in many current EU Member States. This, therefore, should not represent a barrier to the incorporation of the CCs into the structures and work of the JEG.

### 7.3 CEE priorities and the JEG 2001 Work Programme

This section provides some comments on the relationship of the state of policy action on transport and environment in CEE, with specific reference to the JEG Work Programme for 2001. Although the latter is largely completed at the time of writing, there might still be merit in seeking reactions from CC officials to the outcomes in order to identify any distinctive ‘CEE dimension’ to the working groups’ conclusions. This would serve either to confirm the validity of the approach for CEE, or to give an opportunity to extend or modify it in order to better reflect the circumstances of the CCs.

#### 7.3.1 General priorities of the JEG

Clearly officials from the CEE countries could already usefully contribute to the ‘exchange of information and experience’ activities of the JEG. More specifically, the following aspects of the general priorities of the JEG merit further comment in relation to the CCs.

- Given their strong interest in strategic planning on the one hand, and the fact that both the ***Common Transport Policy White Paper*** and the ***Cardiff integration strategy*** are likely to be still in effect at the time of Accession, it would seem appropriate to involve CC representatives in any discussions of these topics at an early stage.
- There is already a growing interest in ***good practice in sustainable transport*** in many CEE countries and, in spite of the many difficulties noted above, good examples already exist in the CEE states, and should be adequately represented in the proposed conference format. For example, a workshop session at a recent conference on Transport and Enlargement concluded that good practice should address all levels of transport policymaking and should not be confined to the project level. It also identified a number of good practice examples in CEE, including cycling provision and a new public transport package in Krakow, and benchmarking of road freight services in Hungary. Further details are provided in Section 5.3.2.
- Although the use of LPG is quite widespread in CEE, the authors have no information on the use of ***biofuels for transport*** in the region. From this we conclude (very tentatively) that they do not currently feature very strongly in the current fuel mix. Nonetheless, the substantial agricultural resources of Poland and other CEE countries, and the significant changes which will result from integration of the CCs into the CAP regime, are clearly important factors which will need to be taken into account in any future EU biofuels programme. This point was endorsed at the CEE workshop at the ECCP conference of June 2001.



### **7.3.2 Working Group 1 – Environmental targets**

Use of objectives and targets has long been a feature of strategic planning in many countries in the CEE region. There may therefore already be relevant targets to be taken into account in the WG's conclusions, and representatives from CCs might have a useful input to make on this difficult question. Furthermore, the specific characteristics of transport systems and trends in CEE will need to be taken into account in any future targets arising from the work of the WG. Regardless of the outcome of the working group's deliberations in respect of the EU 15, it may well be that specific objectives and targets will be needed to guide a transition to sustainable transport systems in the CEE region, and this consideration is highly relevant to the question of the specificities of possible targets.

More recently, the White Paper on the CTP has included an objective to stabilise the current modal shares in CEE countries, and the implications of this will need to be considered.

### **7.3.3 Working Group 2 – TERM**

Although some indicator development is believed to have been undertaken in CEE countries, we do not conclude (on the basis of current knowledge) that such work is widespread or particularly well developed. On the other hand, the EEA is currently involved in work to extend the scope of TERM to cover CEE, and this will clearly be of ongoing relevance and interest to the JEG.

### **7.3.4 Working Group 3 – e-commerce**

The authors have obtained no specific information on the degree of development of e-commerce in CEE. On the other hand, capabilities for the use of email and the internet have developed very rapidly over the past decade across CEE, often leapfrogging the use of more conventional means of communication since the break up of the former eastern bloc. Given the specific conditions of transport and communication systems (which combine a high level of IT infrastructure and use with a relatively low level of reliance on road transport infrastructure) and, more generally, the relatively rapid transformation and growth towards a tertiary economy, it is very likely that there will be an important enlargement dimension to be reflected in the WG's work on e-commerce.

### **7.3.5 Working Group 4 – Enlargement**

It is assumed that this report will provide a first input to assist the JEG in developing its CEE work priorities as defined in its work programme. It is, however, essential that the analysis in this report be validated by representatives of the CCs themselves, as they will no doubt be able to provide additional material and alternative perspectives, which will in itself deliver some progress in the absence of formal WG activities in this area.

Some additional comments on specific issue areas are included in the next section, as these may prove relevant to the future work of this WG in relation to identifying threats, opportunities and recommendations for future measures.

## **7.4 Some specific transport integration issues in CEE**

### **7.4.1 NEHAPs**

The development of NEHAPs could provide a basis for sharing of information, experience and good practice between the CCs and EU Member State experts, given that CEE countries will have specific interests and expertise to contribute. In the event that a WHO/UNECE Convention on transport, environment and health is established, this would represent a particular platform for exchange of experience on transport and environment policy, possibly involving the JEG.

### **7.4.2 Strategic environmental assessment**

There is already a strong tradition of SEA in some CEE countries on regional and local land use plans, but limited experience at the national level. CEE governments may therefore be well placed to contribute to any future work on the implementation of the SEA Directive at Member State level.

At Community level it should be noted that, if a full SEA of the TEN-T (incorporating the TINA network) is to be undertaken in the coming years, the appropriate CEE experts could usefully contribute their experience to this process.

### **7.4.3 Infrastructure and inward investment**

As noted above, inward investment remains a critical determinant of the future trajectory of transport systems in CEE. This may be either threat or opportunity, but in either case will need to be addressed in a more holistic way, ensuring that transport and economic objectives are integrated with environmental and social ones from the most strategic planning level, down to the individual projects. Greater balance should be achieved if the sustainability of CEE transport systems is to be maintained and improved effectively. Local measures for maintaining and improving existing local infrastructure now require a much higher priority.

The Gothenburg Summit invited the EIB to promote EU sustainable development and climate change policies. As the EIB is a major investor in transport infrastructure in CEE (and the one which has attracted perhaps the strongest criticism of its environmental policies from NGOs), this is potentially an important development. The Board of Governors and the Board of Directors of the EIB are mainly nominated by the current EU Member States, so the JEG could provide a forum for an exchange of views between experts from CEE and the Member States, possibly developing some guidelines or recommendations which could be provided to the EIB through the Member States in order to further these new priorities for the transport sector.

#### **7.4.4 Ageing Vehicle Fleets**

Urban air quality problems in CEE arise strongly (and increasingly) from emissions in the transport sector. A particular dimension to this problem is the preponderance of ageing vehicles predating modern emissions standards. Owing to the likely slow renewal rate of existing fleets, EU emission standards will have only a limited impact on this problem in the short to medium term, and it may become more acute as CCs adopt the *acquis* with respect to air quality standards. The problems experienced in CEE may, however, bear similarities to those encountered in certain EU Member states, including the Cohesion states, and there are opportunities for exchange of ideas and experience in this area in particular.

The future implementation of the End-of-Life Vehicle Directive will also be of relevance to this issue.

## **8 CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 Background**

- Since 1989, there has been a progressive decline in rail and other public transport across CEE, and a corresponding increase in road traffic, although patterns differ somewhat from country to country. At the same time, rail and public transport modal shares remain extremely high by EU standards. Thus there is both a threat and an opportunity for the enlarged EU in terms of meeting its modal shift targets.
- Infrastructure development and renewal are key issues for transport in CEE, with the availability of inward investment acting as a critical determinant of investment priorities. A great deal of policy attention is paid to major projects, especially roads, and there is a need to rebalance investment towards repairs and maintenance, small scale projects, and environment-friendly modes.
- New infrastructure appears to threaten biodiversity and a number of important habitats in CEE countries, and urgent steps are required both to assess the threat fully, and to assist with ameliorative measures.
- Urban air quality is a growing problem in many areas of CEE, largely owing to traffic levels. This is receiving increasing policy attention; but there is currently significantly less concern over greenhouse gas emissions.
- In spite of the many problems, there are already examples of good practice in the transport sector, at both project and policy levels.
- Several international initiatives have stimulated efforts at the institutional and strategic policy levels to integrate the environment into transport policy. Approaches to strategic environmental assessment is also well developed in some areas.
- While governmental authorities are of necessity gearing up for enlargement and for some aspects at least of environmental integration, this is not always the case for other institutions. We were not able to identify a great number of consultancies, universities or other institutions with significant expertise in the relevant fields. There are, however, very effective networks of NGOs working on transport and environment issues in the context of enlargement.

### **8.2 Overall approach to incorporating the CEE dimension into the JEG**

This report has outlined the background to transport and environmental integration in CEE, highlighting some key policy developments, issues and actors. Clearly it is a matter for the JEG's membership to decide how best to proceed in the context of enlargement, and this report can only seek to inform such decisions. However, some additional observations are included below.

- This report itself provides a first step in the integration process as it affects the CEE countries and the JEG. It is therefore proposed that copies should be sent to the ministerial contacts listed for each of the CCs covered, and that comments and suggestions be invited. This would perform four important functions: to validate the report by confirming, expanding or modifying its findings; to help to gauge the level and locus of interest in various issues; to secure further engagement in the relevant issues in the CCs and to encourage their input to the JEG; and to help the Commission to identify suitable and interested experts within the CC governments for possible future

involvement in the JEG or its workgroups.

- The unique status and working methods of the JEG provide an excellent setting for mutual learning on transport and environment issues between accession states and the existing Member States. The informal status and working style of the JEG also suggest that it may provide a useful opportunity for early joint working on some issues.
- It may therefore be appropriate to invite CC representatives to attend the JEG's plenary sessions from an early stage, as the various integrative processes described in Section 4 have already identified lead contacts in the various ministries for integration purposes.
- Alternatively, a more piecemeal approach might be preferred, in which a number of CEE experts were first invited to participate in Work Groups on particular issues of interest and relevance. Some suggestions on specific issues are provided in Section 8.3, based on the discussions in Sections 7.3 and 7.4. The same approach could be applied in relation to the JEG's Work Programme for 2002, either in establishing priorities or in identifying the CEE dimension once it has been agreed. This approach could also be incremental, in that it need not involve representatives of all the CCs from the outset. Instead, a more selective approach could engage a few interested officials, and/or representatives from especially relevant CCs, on any particular issue.
- A new enlargement Work Group within the JEG could provide a strategic overview of the degree of inclusion of CEE representatives in the wide range of Community integration processes of relevance to transport and environment, and/or the extent to which integration policy within the CCs is consistent with the Transport Council's Cardiff integration strategy. These activities would form an important element of the mandate of the Belgian Presidency to the JEG following the joint informal Council meeting of 14-16 September to help to monitor the implementation of the Cardiff strategy.
- More broadly, such a group might have a role in monitoring the extent to which the enlargement dimension has been addressed in various Community initiatives. Thus for example, biofuels have been identified above as a field with a distinctive CEE dimension, so it is important that this be taken into account in future policy development. Care would need to be taken to avoid duplication in this area, in that DG Enlargement and enlargement units within each DG already monitor transposition of the acquis, so such activity would need to be focussed on broader and/or pre-legislative initiatives. In areas where insufficient account was found to have been taken of the CEE perspective, the Work Group could make recommendations and provide contact points for suitable government representatives or sources of independent expertise.

### **8.3 Specific issues to be addressed**

Notwithstanding the above, a case by case approach is likely to be needed in considering how best to integrate the CCs into work on specific topics. In some cases the issues and priorities for CCs and EU Member States will clearly be quite similar, and full incorporation of their participation should be possible. For other areas of works there will be quite different issues or circumstances to be dealt with, and parallel working may be desirable. Taking a variety of different approaches could itself form a part of the learning process.

- Some issues of interest to the JEG, and which were specified in its work plan for 2001 (ie targets, TERM and e-commerce), have a clear enlargement dimension, and so early engagement of CC officials to respond to the work these groups may be appropriate.
- In some other respects (eg strategic planning, assessment and other integrative

mechanisms), past experience in CEE countries equips them well for early involvement in the strategic integration work of the JEG, including development of the Cardiff Strategy and relevant elements of the Common Transport Policy.

- SEA has in addition been identified as a highly topical integrative mechanism, and one in which a number of CCs may have a distinctive and useful contribution to make. Thus some forum to promote sharing of good practice could be of benefit to both existing and prospective Member States.
- More generally, examples have been included of good practice in CEE in a number of areas of transport policy. It is thus important that these be fully reflected in the JEG's future work on good practice, and in particular that CC representatives from all stakeholder groups be engaged in the planned conference on good practice.
- Taxes and charges have been argued to be an area where further progress is needed. Although the CCs will be subject to the Mineral Oils Directive on accession, relatively low duty rates will continue to pose problems for current EU Member States and encourage fuel tankering and fuel tourism. It could also hamper the Commission's efforts to harmonise diesel rates for hauliers unless more effort is made to encourage the CCs towards better internalisation of external costs. Incorporation of the CEE perspective in developing plans for infrastructure charging will also be needed.
- Finally, infrastructure priorities and funding have been identified as a critical issue for the integration of environmental concerns into future CEE transport priorities. The JEG could also consider establishing some suitable forum for an exchange of views on this subject, and possible future actions to promote sustainable infrastructure developments.

There are in addition some specific problems for transport and environment (eg fuel smuggling and some road safety issues) which are quite specific to CEE countries and may not therefore be suitable to be tackled by the JEG as a whole. They will, however, be of growing importance to the Community itself as accession approaches, and existing Member States may have expertise which would be of assistance to CEE countries. Therefore, if no appropriate forum currently exists in which these problems can be dealt with, then the JEG might wish to consider how it might best facilitate the CEE states in their efforts in these areas.

## 9 REFERENCES

- Bankwatch (2001) *Billions for Sustainability? II*, [www.bankwatch.org/downloads/billions2.pdf](http://www.bankwatch.org/downloads/billions2.pdf), Bankwatch, Brussels
- Bina O and Fergusson M (1997) *Funding for Sustainable Transport*, BirdLife International, Brussels
- Central European Initiative (1999) *Towards Sustainable Transport in the CEI Countries*, CEI Executive Secretariat, Trieste
- DG TREN (2001), <http://europa.eu.int/comm/transport/tif/contents.htm#Central and Eastern European Countries>
- DG Environment (forthcoming), <http://europa.eu.int/comm/environment/climat/eccp.htm>
- ECMT (1996) *Sustainable Transport in Central and Eastern European Cities*, ECMT, Paris
- ECMT (2000) *Strategic Environmental Assessment European Conference of Ministers of Transport*, Paris: ECMT Publications distributed by OECD.
- European Commission (1999) *Manual on Strategic Environmental Assessment of Transport Infrastructure Plans* report by DHV Environment and Infrastructure BV, Brussels.
- European Commission (2001) *Strategic Environmental Assessment of Transport Corridors: Lessons learned comparing the methods of five Member States* prepared by Olivia Bina, Environmental Resources Management, for the European Commission, DG Environment, January 2001. Published on the web at <http://europa.eu.int/comm/environment/eia/sea-support.htm>.
- Fisher I and Waliczky Z (2001) *An assessment of the potential impact of the TINA network on Important Bird Areas in the accession countries*, BirdLife International, Brussels
- OECD (1998) *Evaluation of Progress in developing and implementing National Environmental Action Programmes (NEAPs) in CEEC/NIC*, Paris
- OECD (1999) *Towards Sustainable Transport in the CEI Countries* Paris <http://www.oecd.org/env/ccst/est/pastact/cei.htm>
- OECD (2001), <http://www.oecd.org/env/eap/eaptf/index.htm>
- REC (1995) *Status of National Environmental Action Programmes in Central and Eastern Europe* Budapest <http://www.rec.org/REC/Publications/NEAPstatus/cover.html>
- REC (1999) *Database on Environmental Taxes and Charges* Budapest [http://www.rec.org/REC/Programs/SofiaInitiatives/EcoInstruments/Database/SIEI\\_database.html](http://www.rec.org/REC/Programs/SofiaInitiatives/EcoInstruments/Database/SIEI_database.html)

REC (2001a) <http://www.rec.org/REC/Programs/SofiaInitiatives/SI.shtml>

REC (2001b) *Conclusions of a Meeting of High Level Officials on Transport sustainable for Environment and Health*, Meeting on 26-27 March 2001, REC, Szentendre

T&E (European Federation for Transport and Environment) (2000) *Conference Proceedings: T&E Conference on transport, enlargement and the environment*, Report no T&E 00/3, T&E, Brussels

TINA Secretariat (1999) *Final Report of the TINA Senior Officials Group* TINA Secretariat, Vienna

Transport Council (2001) *Conclusions of the meeting held on 4 and 5 April 2001* Luxembourg <http://ue.eu.int/newsroom/main.cfm?LANG=1>

UNECE (1997) *Programme of Joint Action* Geneva <http://www.unece.org/doc/ece/rcte/ece.rcte.conf..3.final.e.pdf>

UNECE (2001) *Draft Elements for a Protocol on Strategic Environmental Assessment* Advance Copy MP.EIA/AC.1/2001/3, United Nations Economic and Social Council 8 March 2001.

UNECE/WHO-ROE (2001) *Overview of Instruments relevant to Transport, Environment and Health and Recommendations for further steps: Synthesis Report* Geneva.

WHO (1995) *Environmental Health Newsletter*, Geneva <http://www.who.int/peh/ehn/ehn25.htm>

WHO (1997) *National Environmental Health Action Plans*, Copenhagen <http://www.who.dk/nehap/ehap/ehap630.htm>

WHO-ROE (2001), <http://www.who.dk/nehap/Country.htm>