

# *Transport Operations Policy*



**European Bank**  
for Reconstruction and Development

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## TABLE OF CONTENTS

	Page
1 BACKGROUND.....	4
2 THE BANK'S TRANSPORT PORTFOLIO: THE INITIAL FIVE YEARS .....	5
2.1 THE BANK'S MANDATE .....	5
2.2 HOW THE MANDATE SHAPES THE TRANSPORT PORTFOLIO .....	5
2.3 TRANSPORT INFRASTRUCTURE PORTFOLIO .....	6
2.4 TECHNICAL COOPERATION .....	6
3 TRANSITION, ENVIRONMENT AND SUSTAINABILITY .....	7
3.1 TRANSITION.....	7
3.1.1 Role of the Public Sector .....	7
3.1.2 Enterprise Ownership and Control .....	8
3.1.3 Transition Impacts .....	9
3.2 ENVIRONMENT .....	10
3.3 SUSTAINABILITY .....	11
3.4 MOTORISATION AND URBAN TRANSPORT .....	13
3.5 LONG-DISTANCE TRANSPORT .....	14
3.5.1 Aviation .....	14
3.5.2 Railways.....	15
3.5.3 Intermodal Transport.....	17
3.5.4 Road Transport .....	17
4 TESTING THE LIMITS OF COMMERCIAL INFRASTRUCTURE .....	19
4.1 INVESTMENT NEEDS.....	19
4.2 REGIONAL ASPIRATIONS .....	19
4.3 LESSONS OF EXPERIENCE .....	20
4.4 PROSPECTS FOR COMMERCIAL TRANSPORT INFRASTRUCTURE .....	22
4.5 PUBLIC-PRIVATE PARTNERSHIPS .....	23
5 POLICY FOR THE NEXT FIVE YEARS .....	25
5.1 STRATEGY .....	25
5.1.1 EBRD Comparative Advantages.....	25
5.1.2 Guiding Principles .....	25
5.1.3 Cooperation with other Financial Institutions.....	26
5.2 LINES OF BUSINESS.....	27

5.3 BANK OPERATIONS.....	33
5.3.1 Early Stage Transition Countries .....	33
5.3.2 Intermediate Transition Countries.....	34
5.3.3 Advanced Transition Countries.....	35
5.4 BUSINESS DEVELOPMENT INITIATIVES.....	36
5.4.1 Public-Private Partnerships.....	36
5.4.2 Financing Small Projects.....	36

## ANNEXES

- A. EBRD Transport Sector Commitments
- B. Transition Impacts
- C. Private Transport Infrastructure Projects
- D. Major Impediments to Mobilising Private Finance for Transport Infrastructure
- E. Guidelines for EBRD Participation in Privately Financed Transport Infrastructure Projects
- F. EBRD Instruments

## ABBREVIATIONS

ADB	Asian Development Bank
BOT	Build-Operate-Transfer
CIS	Commonwealth of Independent States
EAP	Environmental Action Plan
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECU	European Currency Unit
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EIF	European Investment Fund
EU	European Union
KfW	Kreditanstalt für Wiederaufbau
FSU	Former Soviet Union
GDP	Gross domestic product
IBRD	International Bank for Reconstruction and Development (World Bank)
IFC	International Finance Corporation
IFIs	International Financial Institutions
IRI	International Roughness Index
NGO	Non-governmental organisation
OECD	Overseas Economic Co-operation Fund
PPP	Public-Private Partnership
SEA	Strategic Environmental Assessment
SMEs	Small and medium-sized enterprises
TENs	Trans-European Networks
UK	United Kingdom
US\$	United States dollar

## EBRD COUNTRIES OF OPERATIONS, BY TRANSITION STAGE

<b>Early Stage</b>	Azerbaijan, Belarus, Tajikistan, Turkmenistan.
<b>Intermediate Stage</b>	Albania, Armenia, Bosnia and Herzegovina, Bulgaria, FYR Macedonia, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Romania, Russia, Ukraine, Uzbekistan.
<b>Advanced Stage</b>	Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, Slovenia.

Note: see EBRD *Transition Report* 1996

## GLOSSARY

<b>Additionality</b>	requires the Bank to bring elements to a project that alternative sources (if any) would not bring on reasonable terms. Additionality should be judged in relation to the magnitude and quality of the Bank's impact on the existence, design or functioning of a project and whether such impact would have been provided by other sources of finance on reasonable terms and conditions in the absence of the Bank's involvement.
<b>Country portfolio ratio</b>	is the ratio of private sector to public sector commitments by the EBRD in a given country. The Agreement Establishing the Bank, together with various decisions of the Board, mean that each country must achieve a country portfolio ratio of at least 60:40 respectively within five years of the first Bank commitment in that country (subject to review by the Board on a case-by-case basis).
<b>Sound banking principles</b>	require assurance that the Bank's investment is secure and provides an adequate return.
<b>Transition impact</b>	an assessment of the transition impact of a project should be based on an analysis of the impact of a project on the creation, expansion and improvement of markets, the establishment and strengthening of institutions, laws and policies that support the market, and the adoption or acquisition of conduct and skills that underpin well-functioning markets and enterprises.
<b>Baltic States</b>	Estonia, Latvia and Lithuania.
<b>Commonwealth of Independent States</b>	The countries of the former Soviet Union excluding the Baltic States.
<b>Eastern Europe</b>	Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, FYR Macedonia, Hungary, Poland, Romania, Slovak Republic and Slovenia.
<b>Former Soviet Union</b>	Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

## 1 BACKGROUND

Transport is big business. Spending on transport typically represents 12-15 per cent of gross domestic product (GDP), including value added in the transport sector, the cost of operating vehicles and own-account transport. Total expenditure on transport in the Bank's countries of operations is probably at least ECU 75 billion equivalent per year.

Safe passenger transport is important for commuting, business and leisure industries. Efficient, reliable and secure freight transport services are essential to enable enterprises to compete effectively in domestic and international markets.

The Bank's first transport sector loan was signed in March 1992, less than one year after the Bank opened for business. A Transport Operations Policy was approved by the Board in the same month and has guided the Bank's activities since that time.<sup>1</sup> Whereas the initial Transport Operations Policy was drafted before any transactions were concluded, this updated policy draws on over five years' experience, a portfolio of 46 operations, and Bank commitments of nearly ECU 1.5 billion to the sector.

This document sets out Bank policy with respect to transport infrastructure and services, but excludes pipelines and manufacturing industries. Since the Bank's resources are modest in relation to overall needs and to total financial flows, the document aims to identify where the Bank can use its comparative advantage to best effect. The document does not attempt to prescribe transport policies for the Bank's countries of operations - countries' needs are diverse, with some aspiring to join the European Union (EU) in the foreseeable future, while others (such as in Central Asia) face very different challenges.

Section 2 of this document reviews the Bank's transport portfolio and its evolution over the initial five years. Section 3 examines how the Bank's transport sector activities foster transition, implement its environmental mandate and promote sustainability. Section 4 explores the role and limits of private sector transport infrastructure financing. Finally, Section 5 sets out the Bank's transport sector strategy for the next five years.<sup>2</sup>

<sup>1</sup> The 1992 Transport Operations Policy document contained an attachment entitled "Transport Sector Issues and Options". The latter was updated in March 1993 to reflect better the Bank's environmental mandate. In addition, an informal document entitled "Russia, Belarus, Ukraine and Kazakstan: A Strategy for Transport" was produced in January 1993.

<sup>2</sup> The Bank's Environmental Advisory Council (ENVAC) reviewed a draft of this paper at its meeting in Zagreb on 28 October 1996.

## 2 THE BANK'S TRANSPORT PORTFOLIO: THE INITIAL FIVE YEARS

### 2.1 THE BANK'S MANDATE

Article 1 of the Agreement Establishing the Bank defines the Bank's purpose as being: "to foster the transition towards open market-oriented economies and to promote private and entrepreneurial initiative...." in the Bank's countries of operations.

Article 2 states that "the Bank shall assist the recipient member countries to implement structural and sectoral economic reforms, including demonopolisation, decentralization and privatization to help their economies become fully integrated into the international economy...". Article 2 also requires the Bank to "promote in the full range of its activities environmentally sound and sustainable development."

### 2.2 HOW THE MANDATE SHAPES THE TRANSPORT PORTFOLIO

The Bank's initial priority was to build up its portfolio and implement high-impact projects quickly. The first transport sector operation (with the airline CSA in the Czech Republic) was signed in March 1992. This was followed in the same year by a sovereign loan to co-finance the Budapest M0 Orbital Motorway. Highlights during 1993 included the Bank's first railway and urban transport projects, plus the first private sector shipping and motorway concession projects. The portfolio developed strongly through 1994-96 (Table 2.1). Bank commitments to the sector reached the ECU 1 billion mark during 1995. A schedule of the Bank's signed transport sector operations appears in Annex A.

Table 2.1: EBRD Signed Transport Sector Operations

Year	No. of Bank operations	Total investment (ECU million)	EBRD financing (ECU million)
1992	2	133	45
1993	10	1,181	388
1994	11	562	224
1995	11	1,977	343
1996	12	1,940	475
Cumulative to end-1996	46	5,793	1,475

As the portfolio evolved, fostering *transition* became a prime objective in all Bank-financed operations,<sup>3</sup> while, more recently, considerations of country exposure and country portfolio ratio<sup>4</sup> are strongly influencing project selection and design.

As at 31 December 1996, transport sector commitments accounted for 19 per cent of the Bank's total portfolio. The average transaction size was ECU 32 million. The evolution of transport portfolio commitments (in ECU equivalent) with respect to transition stage is shown in Table 2.2:

<sup>3</sup> See EBRD *Transition Report*; October 1994.

<sup>4</sup> The term "portfolio ratio" refers to the ratio of private:public Bank commitments - see glossary.

**Table 2.2: Evolution of EBRD Transport Portfolio by Transition Stage (per cent)**

Year	Early	Russia	Intermediate	Advanced	Total
1992	0	0	0	100	100
1993	1	0	28	71	100
1994	27	22	9	42	100
1995	6	18	20	56	100
1996	11	30	45	14	100
<b>Cumulative to end-1996</b>	<b>9</b>	<b>17</b>	<b>28</b>	<b>46</b>	<b>100</b>

Note: The transition classification of some countries changed in 1996. Operations are allocated in the table according to the transition classification at the time of signing.

### 2.3 TRANSPORT INFRASTRUCTURE PORTFOLIO

The Bank has invested more than ECU 1.2 billion in transport *infrastructure*, representing about 16 per cent of the Bank's overall portfolio (Table 2.3). Transport infrastructure is taken here to include airports and air navigation, but to exclude airlines; to include ports, but to exclude shipping; to include railway network and train operating assets, but exclude manufacturing. The average transaction size of transport infrastructure operations was ECU 34 million. The high percentage of financing committed to the roads sector during the early years of operations reflected the backlog of investment in the region. However, the portfolio has focused more recently on aviation and railway projects, and nearly half of all commitments in 1996 were to the railway sector (Bank commitments of ECU 231 million to co-finance total investment of over ECU 1 billion).

**Table 2.3: EBRD Transport Infrastructure Operations**

Sector	No. of Bank operations	Total operation cost (ECU million)	EBRD financing (ECU million)	EBRD financing (per cent)
Aviation	11	233	150	12
Ports and Waterways	3	115	62	5
Railways	7	2036	343	26
Roads and Motorways	16	2466	684	53
Urban Transport	1	164	52	4
<b>Total</b>	<b>38</b>	<b>5014</b>	<b>1291</b>	<b>100</b>

### 2.4 TECHNICAL COOPERATION

The Bank has provided a wide range of technical cooperation to prepare investments, and optimise project effectiveness and transition impact. Examples include studies related to the rescue of the Port of Aktau (Kazakhstan) from inundation by the Caspian Sea; railway restructuring policy and investment studies in Russia and elsewhere; a feasibility and forecasting study of intermodal transport in Hungary; and assistance in drafting concession legislation in Poland and Romania. Overall, the Bank has undertaken more than 80 technical cooperation projects in the transport sector, valued at approximately ECU 30 million.

## 3 TRANSITION, ENVIRONMENT AND SUSTAINABILITY

### 3.1 TRANSITION

The infrastructure that was inherited from the command system in eastern Europe and the former Soviet Union (FSU) was heavily influenced by the priorities and methods of the old regimes, and existing infrastructure is often poorly suited to the needs of a market economy. Facilities were characterised by priorities for heavy goods production, scant concern for the consumers' preferences, excessive specialisation and economic integration across countries of the region for reasons of political control, limited concern for economic costs, and indifference towards the environment. One of the central tasks of a market-oriented transition, therefore, is to encourage a more commercial approach to infrastructure and the environment.

Transition to a market economy involves changes in the way people and organisations behave. Economic behaviour is influenced by the prevailing framework of incentives and penalties. The most important economic incentives are tied to ownership, security, prospects for profit and loss, and the cultural values encouraged by a country's laws and society at large. Competition is the key to stimulating responsiveness of producers to consumers; private ownership is the key to maximising asset values.

#### 3.1.1 Role of the Public Sector

The Bank's countries of operations are emerging from an era in which the state planned the size, nature and distribution of the transport task, regulated the transport system, designed and constructed all the infrastructure, and provided most services. Yet there is no single model for such countries to follow.

In contrast, transition to a market economy requires governments to focus on the creation and supervision of competitive markets, with the minimum regulation necessary to protect the public interest and allow companies to work efficiently. Governments should determine transport policy and encourage a market environment in which customer choice can be freely exercised, and private individuals and firms can maximise their rewards by responding to those choices. Governments should create regulatory frameworks that protect consumers against abuse of market power, allow adequate response to market failures, and ensure compliance with environmental and health and safety standards.

Governments will continue to have a role in the strategic development of transport systems (for example, the location of major airports, seaports, strategic motorway and rail links) and will negotiate international aviation and other agreements. Governments may choose to retain ownership of strategic transport assets where privatisation might create concentrations of private market power that cannot be regulated satisfactorily or that are publicly unacceptable. But it is increasingly recognised that this justification usually applies only to infrastructure assets (public ownership of transport operating assets is rarely necessary).

Under former regimes, transport services were often used as an instrument of social policy to redistribute resources through travel privileges (free or reduced tariff travel). Transport was viewed as a public service and was not expected to be financially viable. The Bank encourages central governments and municipal authorities to place transport services on sound financial foundations. Public authorities are free to pursue the social policies of their choice (for example to ensure the mobility of pensioners or the maintenance of basic services in rural areas). However, in such cases, the client authority should purchase social services from commercial suppliers on a contractual basis, making maximum use of competitive tendering to achieve value for money. Transport operators should not be required to bear the costs of social policies decided by others.



### 3.1.2 Enterprise Ownership and Control

The first transition step in the transport sector is often to *corporatise* a publicly owned operational entity (for example an airport). In the interests of transparency and financial discipline, the Bank generally requires the “unbundling” of activities and the creation of a corporate entity for each major function (in this example, the separation of airline and airport activities). Sometimes a government may decide that such entities should remain under public ownership and operate commercially. While commercialisation can reduce the risk of overinvestment in technical standards or excessive capacity, experience suggests that corporatisation alone does not create the same strength of efficiency incentives as private ownership and only limits rather than prevents political interference in operational decisions. Nevertheless, the Bank supports corporatisation as a first step along the transition path.

A second transition step may be to *privatise* some or all of the equity in a corporate entity. Privatisation concentrates attention on shareholder value, and minimises the scope for compromising efficiency and market focus through the partial pursuit of political goals, which characterises state-owned companies. To encourage the company to act in a market-responsive manner, it must be accountable to its owners and face a credible threat of bankruptcy.

Transition is being achieved in the transport sector through a mixture of corporatisation and increased private sector involvement. In the railway industry, for example, the Bank is supporting corporatisation of the core functions of network management and freight and passenger transport, together with greater involvement of the private sector in ancillary industries such as heavy maintenance, terminal operations, train catering etc. In due course, the Bank expects to assist in the privatisation of some of the core operating activities.

Corporatisation and privatisation force public authorities to make explicit their non-commercial requirements of an industry (public service obligations). Such arrangements require public authorities to compensate enterprises for the cost of those obligations, preferably by multi-annual contracts containing efficiency incentives. In so doing, the commercial incentives of enterprise managers are preserved. Privatisation also provides a more robust framework to tackle long-standing issues of overmanning and inefficient working practices. This is always a challenging process that generally progresses in stages, but nevertheless is necessary for transport companies to compete effectively and serve customers' needs.

With some exceptions, a prerequisite for Bank participation is that the borrower should be a corporate entity. All the assets required for the day-to-day business of that entity should be under the control of the management. Managers should have freedom to take decisions regarding the long-term sustainability of the business.

Airports fulfil an important regional role in large countries. The Bank favours the transfer of ownership and control from central government to a company at the regional level, owned by private interests and/or regional government. Where vertically integrated entities exist, the complete legal and managerial separation of main activities is generally a condition precedent to Bank financing. This is to avoid conflicts of interest, create transparency and promote a competitive downstream market (for example, with regard to landing slots and gate allocation).

Ports constitute important gateways for manufacturing entities to the international marketplace. Efficiency of port operations may mean substantial reductions in transport costs and delivery times. The Bank generally favours the involvement of private port terminal operators in superstructure investments as a means of increasing cost-effectiveness and accountability in third party claims for damages or delays. This approach is in line with world trends in port management.

The Bank fosters the transition of public railway enterprises by investing in asset modernisation, linked to conditionality with respect to the development and implementation of restructuring strategies. The Bank does not advocate a single restructuring model, but it must involve the commercial management of railway enterprises, whether these are train operating entities, network authorities or railway supply industries; and whether they are privately or publicly owned. The Bank supports the creation and functioning of competitive railway supply industries. It also advocates competitive transport markets, without special protection of railway markets, since it is through free and fair markets that users' needs and preferences are expressed. Consequently, Bank lending to publicly owned railways is subject to two conditions:

- the commitment of senior railway managers to a commercialisation process and to responding effectively to competitive transport markets; and
- the commitment of government owners to support that transition with an appropriate legislative framework and transparent financial arrangements to support non-commercial activities imposed by government.

In the roads sector, the Bank encourages the separation of strategic planning and regulatory functions (the role of government) from construction, operation and maintenance. The latter should be divested by the public sector and carried out by private, corporate entities.

### 3.1.3 Transition Impacts

Transport projects may achieve transition both within the sector and in the wider economy, since transport is an intermediate good with extensive upstream and downstream linkages. By reducing economic distance, transport plays a key role in broadening and deepening competitive markets. The transition impacts of projects financed by the Bank in the following areas are set out in more detail in Annex B:

- reforming the state's role of supervising a market economy;
- legal framework;
- decentralisation of state assets and responsibilities;
- scope of public services;
- divestiture of public sector operational activities;
- sector financing (including full cost recovery);
- corporate governance;
- development of market-related skills;
- technology transfer;
- competitive tendering for goods, works and services;
- enabling trade and exports;
- mobilisation of local finance; and
- demonstration effect and replicability.



### 3.2 ENVIRONMENT

In line with the Bank's Environmental Procedures,<sup>5</sup> all transport operations undergo environmental appraisal. The purpose is twofold. First, to help the Bank decide if an activity should be financed. In this regard, an operation can be rejected on environmental grounds when there are major environmental problems or where an operation fails to handle environmental issues in a satisfactory way. Where an operation can, in principle, be financed, the appraisal identifies the way in which environmental issues should be incorporated in financing, planning and implementation. The overall objective of environmental appraisal is to improve decision-making. It is important, therefore, that it is initiated at an early stage. Early identification and resolution of environmental issues can avoid costs and delays in implementation. Secondly, environmental appraisal is carried out to identify ways in which operations can be designed, financed and implemented to provide environmental benefits and improve environmental quality.

As with economic, financial and technical matters, environmental appraisal is essentially the responsibility of the project sponsor. The Bank's role is to determine the type of appraisal needed, provide guidance on how it should be conducted, review the results, and ensure that findings are properly reflected in operation financing and implementation.

The types of environmental appraisal most often undertaken in the transport sector are an Environmental Impact Assessment (EIA) or an Environmental Analysis. An EIA is carried out to identify, predict and assess the likely future environmental impacts associated with a particular operation, where the impacts are potentially significant and cannot be readily identified, assessed or mitigated. The scope and detail of an EIA depend upon the likely types and extent of an operation's environmental effects and the sensitivity of the locations affected. These are usually determined through "scoping", which is a consultation process to identify the important issues and alternatives that should be examined in an EIA.

Certain types of transport operation will be subject to an EIA, regardless of their location. These include the construction of motorways, major highways, railway lines, airports with a runway length of 2,100 metres or more, sea ports, and inland waterways and ports that permit the passage of vessels of over 1,350 tonnes. Operations that affect environmentally protected or sensitive areas (such as national parks or nature reserves) may also be subject to an EIA.

An Environmental Analysis is carried out on transport operations where any future impacts are potentially significant but where, because of their nature, size and location, they can easily be identified, assessed and mitigated. The content of an Environmental Analysis is usually more limited than that of an EIA.

An Environmental Action Plan (EAP) is prepared as the result of the environmental investigations and is developed by the project sponsor. The purpose is to obtain an agreement concerning key environmental, health and safety performance criteria, corrective actions and improvement programmes, and to define monitoring and reporting requirements.

EBRD operations support and advance appropriate environmental and health and safety standards throughout the region. The Bank operates in countries that have enacted environmental and health and safety legislation consistent with good international practice. Most of them have signed Association or Partnership and Cooperation Agreements with the EU. These provide for approximation of their national legislation toward full EU environmental standards and, in the case of associated countries, for a progressive full compliance with EU standards in view of their future accession.

<sup>5</sup> *Environmental Procedures*, EBRD; September 1996.

EBRD operations are structured to meet national and existing EU environmental standards or, where EU standards do not exist, national and World Bank standards. If these standards cannot be met at the time of Board approval, operations will include a programme for achieving compliance with national and EU or national and World Bank standards. In addition, the Bank will make recommendations and encourage project sponsors to bring their existing operations at the project site into compliance with good international practice and standards within a reasonable timeframe.

### 3.3 SUSTAINABILITY

The private car offers immense personal freedom and convenience. Buses provide one of the most economical and flexible forms of urban and rural collective transport. Road trucks provide the most responsive, reliable and rapid freight transport for the emerging, market-orientated small and medium-sized enterprise (SME) sector. However, as income levels and mobility have increased in the industrialised countries, so have concerns about traffic congestion, transport-related pollution and the consumption of non-renewable resources. Over the past decade, these concerns have come to be expressed in terms of the "sustainability" (or otherwise) of highly motorised transport systems.<sup>6</sup>

Transport systems evolve continuously in response to changes in demand, available technology and other factors, and prices adjust to reflect costs. It is ultimately the responsibility of governments to adopt policies that ensure that transport systems are environmentally, economically, financially and socially sustainable. EBRD fosters sustainability through its transition and environmental mandates. The Bank believes that financial and environmental sustainability are inextricably linked. Unless public transport enterprises operating trains, metros, trams and buses are placed on sound financial foundations such that they can survive, appropriate services will not be available to compete with road transport and other modes over the long term. And to be financially viable on a continuing basis, they must also be environmentally sustainable.

*Pricing* is a key policy instrument that promotes sustainability at three levels: first, by influencing overall transport demands, secondly by encouraging the use of environmentally friendly modes of travel, and thirdly by ensuring that each mode is as clean as possible, within practical constraints. For example, passenger air fares in the former Soviet Union were very low and generated high (and often unsatisfied) demands. As fares gradually aligned with costs, demand plummeted – by up to 70-75 per cent over five years in Russia. This phenomenon was associated with a gradual shift to more economic and environmentally benign travel (in this case long-distance rail services) and the suppression of non-economic demand. At the same time, airlines were under pressure to modernise their fleets by eliminating old, kerosene-guzzling aircraft and introducing more fuel-efficient planes.

Prices directly influence revenues and thus the financial performance of transport operators. The Bank advocates pricing at economic levels in order to ensure long-term financial sustainability. Prices should be market-based for individual user classes, subject to price floors that reflect incremental costs, while collectively recovering the full cost of providing services

<sup>6</sup> In its report entitled "Our Common Future" (The Brundtland Report), the World Commission on Environment and Development defined a sustainable society as one "that meets the needs of the present without compromising the ability of future generations to meet their own needs". It has been suggested that a sustainable transport system should meet users' needs while fulfilling four basic conditions: (a) it should not endanger public health; (b) emissions should not exceed the absorptive capacity of the environment, (c) rates of use of renewable resources should not exceed their rate of regeneration; and (d) rates of use of non-renewable resources should not exceed the rate at which sustainable renewable resources are developed.

(including debt service and a return on equity). Fuel pricing can be used to influence overall consumption, favour preferred behaviour (for example the use of unleaded gasoline) and influence modal choice. Box 1 shows the variation in road transport fuel prices over the Bank's countries of operations. Considerable adjustments will be required in those countries that aspire to accede to the EU:

**Box 1: Road Transport Fuel Pricing (US cents per litre)**

Fuel pricing is central to managing road transport demand and limiting vehicle emissions. Fuel prices vary considerably within eastern Europe and the FSU:

Country	Gasoline	Diesel
Albania	90	40
Armenia	34	28
Azerbaijan	37	21
Belarus	35	18
Bulgaria	50	32
Croatia	77	64
Czech Republic (1997)	76	67
Estonia	45	39
Hungary	85	69
Kazakstan	29	15
Kyrgyzstan	45	20
Latvia	56	35
Lithuania	49	38
FYR Macedonia (1997)	86	49
Poland	57	44
Romania (1997)	45	32
Russia	34	22
Slovakia (1997)	67	62
Slovenia (1997)	53	50
Tajikistan	41	38
Turkmenistan	10	7
Ukraine	48	24
Uzbekistan	63	33
France	118	82
Germany	120	82
United Kingdom	97	91
United States	38	37

Sources: World Bank, GTZ, Energy Detente and EBRD

Note: prices refer to 1996 unless otherwise stated; premium unleaded gasoline, where available

Debate has raged for many years about how to create a "level playing field", to enable "fair" competition between the various modes. Transport economists have identified, and in some cases quantified, the "externalities" of transport systems, namely those costs imposed by use of a given transport system that are not "internalised" and borne by the system user. The European Commission (EC) recently stimulated this debate through publication of a Green Paper on the subject.<sup>7</sup> The Bank supports this initiative since it has a preference for economic rather than regulatory instruments to influence demand (where feasible), and encourages its

<sup>7</sup> "Towards Fair and Efficient Pricing in Transport. Policy options for internalising the external costs of transport in the European Union." European Commission COM(95) 691 final.

clients through project conditionality and technical cooperation to develop and adopt appropriate pricing and regulatory regimes.

The Bank is willing to work with national authorities, and with other international institutions, to develop appropriate policy frameworks. However, other institutions are better equipped to take the lead in policy development assistance and engage in policy-based lending. EBRD's role is to contribute its expertise to joint policy initiatives (for example, a Strategic Environmental Assessment), while focusing on project lending.

### 3.4 MOTORISATION AND URBAN TRANSPORT

Rapidly increasing motorisation is one of the biggest environmental challenges facing the region. Poor performance by public transport encourages private car ownership and use, which leads to increased road traffic congestion that delays public transport vehicles, and so reinforces the well-known downward spiral. This phenomenon aggravates urban air pollution problems, which have been identified by Ministries of Environment as one of the main environmental issues in Europe.

Urban transport influences where people live, the locations of firms, the efficiency of labour markets, and the scale and form of urban development. Formerly good public transport systems in many cities are decaying, due to lack of financial resources, yet the Bank portfolio contains only one purely urban transport operation: the Budapest Public Transport Project, signed in August 1993, and co-financed with the World Bank and the Municipality of Budapest. Project components include: rehabilitation of the Millennium metro line, provision of new buses, introduction of parking controls in the central area, and implementation of a park-and-ride scheme. In addition, the Via Baltica Project has an urban component comprising bicycle lanes in Kaunas.

Despite the region's heritage of well-developed (but deteriorating) public transport systems and the economic importance of urban transport, it has not proved possible to bring forward other urban transport projects consistent with sound banking principles. The main obstacle is the low cost recovery in the sector and the consequent lack of creditworthiness of potential borrowers. Urban public transport was considered a public service under the former regimes and so fares were low and many groups were exempt from paying at all. Farebox revenues typically cover 20-30 per cent of operating costs (necessitating large subsidies) and, in many cities, there is a desperate shortage of funds to pay staff wages and purchase spare parts, let alone invest in new equipment.

The Bank recognises that fares cannot be increased to full cost recovery levels overnight, given that many low-income groups depend on public transport, and recognises the common international practice of granting travel fare concessions to pensioners, students and other social groups as a matter of public policy. As in the case of railways, the Bank advocates that the authority granting travel privileges should pay the associated costs, through proper contractual arrangements. Such compensation payments form an important revenue source for public transport operators and payments are necessary to enable service providers to become financially viable and attract investment. In Ukraine, for example, where compensation is not currently paid, the government has estimated that such urban travel privileges cost operators around US\$ 500 million per year, resulting in an inevitable decline in service levels and lack of investment. Dealing with this issue through the abolition of some travel privileges, payment for public service obligations and/or operating premium services (higher quality services at cost-recovery fares) in addition to basic services, will be essential to facilitate development of sustainable public transport systems.

Where road traffic volumes are relatively modest and little congestion exists, there is no intrinsic reason why appropriate urban public transport should not cover its full costs, given suitable organisational, management and pricing arrangements. As motorisation increases and traffic congestion develops, the situation becomes more complex. Market distortions arise because it is not currently possible to charge road users the full costs of their travel, including the congestion costs imposed by the traveller on other road users and the pollution costs imposed on society at large. In such circumstances, demand management becomes necessary to balance modal competition. Demand management may be exercised in urban areas through traffic management measures such as parking controls; public transport services may be protected from road traffic congestion by means of segregated rights-of-way and junction priorities; and operating subsidies may be justified where public services are economically viable and generate environmental benefits, and yet cannot cover their full costs from the farebox. In such cases, the Bank will explore with potential donors the possibility of blending Bank resources for capital investment with donor grants towards investment and/or operations.

As industry-related pollution is reduced in the region, motor vehicle emissions and the associated health effects (especially in urban areas) are likely to attract increasing attention. Vehicle emissions policy needs to be addressed at the international and national levels, although implementation of specific measures can be facilitated through individual Bank operations. Motor vehicle emission problems arise from a complex web of factors, including: fuel formulation, fuel pricing, vehicle emission standards, vehicle technologies, the timing and cost-effectiveness of upgrading national vehicle fleets, and the cost-effectiveness of introducing and/or strengthening periodic vehicle safety and emission testing. Responsibilities are typically spread over numerous public authorities. The Bank proposes to investigate this web of factors through technical cooperation in order to provide policy guidance and to identify specific investment opportunities (preferably with the private sector), most likely related to the production and distribution of "clean" fuels and vehicle emissions testing (starting with high-use vehicles).

### 3.5 LONG-DISTANCE TRANSPORT

The balance of demand between competing modes depends upon many factors (for example: costs, reliability, security) and has important economic and environmental implications. Particularly sensitive areas are competition between road, rail and water for freight movements, and between air, rail, inter-urban coach and car for passenger movements.

#### 3.5.1 Aviation

Since the birth of commercial air transport, flag carriers have been viewed by governments as national status symbols. Flag carriers are often used as a foreign policy instrument, when commercially non-viable services are operated to "brother countries" and/or former colonies. These attitudes, which still prevail in the Bank's countries of operations, are increasingly at odds with the worldwide trend towards deregulation and the completion in April 1997 of a single free domestic air transport market throughout the EU. In many parts of eastern Europe, the Baltics and the Commonwealth of Independent States (CIS), ailing, overstaffed and inefficient carriers operate on protected routes and benefit from state financial support. Elsewhere – for example in Russia and Kazakhstan – fierce competition exists among carriers, which operate in a loosely regulated domestic market. State support in these countries is not available.

Despite this striking difference, east European, Baltic and CIS airlines are generally not yet financially sustainable. This is evidenced in some countries by the levels of state support (ranging from direct financial support through to competitive restrictions on access to airport

and other services) and in other countries by the fact that air fares are still too low to enable airlines to afford adequate maintenance and fleet renewal.

It has been difficult for the Bank to enter this market as governments in the countries of operations fiercely protect their flag carriers, a policy that is inconsistent with the Bank's transition objectives and the application of sound banking principles. It is expected, however, that the cost to governments of supporting ailing carriers will, in due course, force them to relax protectionism and to restructure or privatise their flag carriers. In certain countries, local airlines have formed strategic alliances or engaged in equity swaps with western partners.

In Russia and Kazakhstan, the market will gradually ensure rationalisation of the airline industry, as already demonstrated in Russia, where the largest carriers are recovering and are implementing fleet refurbishment and marketing efforts, consistent with free market principles. These processes are likely to result in further increases in air fares to levels consistent with the long-term sustainability of the industry, cause the transfer of the lower end of the market to less energy-consuming modes (such as railways), and force airlines to replace their fuel-inefficient fleets.

With regard to infrastructure (airports, air traffic control, etc.), the challenge to long-term sustainability is much less acute than in the airline industry. Long-term sustainability will be fostered by: (a) the implementation of development plans dimensioned to meet the short and medium-term needs of the industry, phased in line with market demands, and (b) the pricing of services at levels that enable full cost recovery and encourage the most efficient use of resources.

#### 3.5.2 Railways

Railway organisations across the region are being forced to restructure as a consequence of the well-known political and economic upheavals of the past five years or so. Railway traffic has dropped by more than half in many countries, with reductions of up to 70-80 per cent in some. Volumes are bottoming-out or increasing in some countries, but still falling in others (for example Ukraine).

The Bank seeks to assist railway organisations to restructure in order to develop businesses in markets where railways have a comparative advantage. For present purposes, railway restructuring can be defined as: *"the adaptation of railway industry structures, institutions and business processes in response to changing market demands and technological possibilities"* - see Box 2.

Railway restructuring is not unique to the Bank's countries of operations. The railway industry is experiencing profound structural change in many parts of the world and different approaches are emerging, which may have specific applications in the region. However, eastern European, Baltic and CIS railways additionally face the special challenge of adapting from a framework in which their role and traffic task were centrally planned to one in which they are determined by market forces. The success of railways in adapting to the new environment is essential to the economic and social life in the region. The railways' market share is generally high by world standards and other transport modes tend to be less well developed. Moreover, failure to make the transition may create unacceptable burdens on State budgets. To respond fully to market forces, most railways will also need to modernise key areas of technology and business processes.

## Box 2: The Nature of Railway Restructuring

The Bank expects railway restructuring policies and plans to include:

- laws that foster fair competition between transport modes;
- laws that support the commercialisation of railway institutions;
- arm's-length contracts between railway entities and government, which clearly distinguish the objectives and obligations of each, including compensation arrangements for government-imposed public service obligations;
- management structures within railway entities to create commercial and market focus;
- business plans that demonstrate commitment to altering business processes to improve commercial performance (including rationalisation of operating practices and changes in pricing policy); and
- policies and practices that encourage participation of the private sector.

Where managers have a genuine wish to restructure railway organisations, but where the above features are currently absent or weak, the Bank mobilises technical cooperation to help create the restructuring policies and plans that can form the basis for a Bank lending operation. The transition impact of such technical cooperation, linked to subsequent investment, can be very high.

Railways have a high proportion of costs that are fixed in the short run and, following recent precipitous traffic losses, it will take time to bring costs and revenues into balance, while continuing to renew essential infrastructure. In the interim, the financial deficits must be covered by the state, as must the cost of any uneconomic passenger services and fare privileges provided for social reasons. One of the biggest challenges to railway commercialisation is the existence of extensive passenger train operations that do not cover their costs, a problem that also exists in western Europe and elsewhere. The problem is exacerbated by government policies to keep politically sensitive passenger fares at low levels and to try to maintain maximum network coverage. The Bank does not require that all passenger services be financially self-supporting from passenger income alone, but does require to see a sound contractual basis for financial support, agreed targets and a transparent and stable regime for compensation. Such arrangements treat government as a customer for passenger services and allow railway managers to manage services in accordance with commercial principles. A corollary is that rail freight should be treated as a separate business (or businesses) and should aim to operate profitably, without subsidy, and not be required to cross-subsidise passenger operations.

Although circumstances vary from country to country, governments and railway managers are facing a very difficult set of issues: how to downsize assets, labour forces and operations in a politically and socially acceptable manner (manning; network length; services) and increase tariffs to better reflect costs and finance government-imposed public service obligations and invest in modernisation? These issues must be tackled within comprehensive restructuring plans.

Nearly all eastern European, Baltic and CIS governments have recognised the need to adapt their railways to the market economy – some are in the planning stages, while others have commenced implementation. The latter include the Bank's clients in the Baltics, Bulgaria, the Czech Republic, Poland, Romania, Russia and Slovenia. Most railway restructuring plans cover an initial 3-5 year period. In the countries themselves, the changes are perceived as highly radical – rightly so given their starting point. By comparison with past railway reforms in western Europe, and internationally, this represents a very fast programme of change.

However, international experience suggests that railway restructuring is a long-term process. Measures which seem radical at the outset, may turn out to be insufficient as the market and

technology evolve. The remorseless impact of competition from other modes will place continual pressure on market share and revenue yields, and cause the world's railways to appraise continuously their productivity levels, equipment utilisation and unit costs. The structural and cultural changes required in the railways will benefit from the involvement of external change agents, such as the Bank, for many years to come. The Bank aims to retain a key role in this long-term process through repeater projects, until commercial structures are in place that can drive continuing adaptation. In parallel, the Bank will seek to support private sector operations as markets develop (for example, the Bank is financing private rail tank wagons in Russia).

### 3.5.3 Intermodal Transport

Intermodal transport is a generic term loosely referring to traffic that is transferred between sea and rail, or road and rail, or sea, rail and road for different parts of its journey. It includes containers, swap-bodies (which readily fit a truck or rail wagon), loaded trucks carried on trains (piggyback or Ro-La<sup>8</sup>) and several other specialised forms of transport. Intermodal transport, which combines the line-haul advantages of rail with the distributional flexibility of road, has been one of the fastest growing components of North American and west European railway freight in recent years. In western Europe, intermodal represents about 8 per cent of the rail freight task.

Several new regular intermodal train services have been introduced in the last three years between western and eastern European cities: for example, Hamburg to Prague, Trieste to Budapest and Berlin to Moscow. Nevertheless, intermodal transport is very underdeveloped and investment in this sector will be essential to maximise trade opportunities with western Europe.

The EU places considerable emphasis on intermodal transport in the context of its sustainable mobility policy. Emerging EU policy is to support improvement of intermodal freight terminals, develop the intermodal freight systems through Trans-European priority freight routes and launch pilot projects for intermodal services. The EC is also proposing a new Directive to increase road user charges for heavy goods vehicles. This orientation is driven by the internal needs of the EU, but eastern European and the Baltic States will need to conform in order to participate in the growing transport services to and from the EU and to provide access for its producers to EU markets. Growth in intermodal traffic between western and eastern Europe is expected to be rapid.

Realisation of the potential for intermodal and other rail freight will depend on increasing network access to enable private international train operators to use the European rail system to offer efficient, integrated door-to-door services. The Bank supports the EU Directives that facilitate this access<sup>9</sup> and encourages adoption of the same principles elsewhere. The private sector has important skills and expertise to deploy in the management of intermodal terminals and ancillary logistics activities.

<sup>8</sup> Rollende Landstrasse

<sup>9</sup> "A Strategy for Revitalising the Community's Railways". White Paper. Commission of the European Communities, 30 July 1996.



### 3.5.4 Road Transport

Road transport passenger volumes are likely to increase steadily over the coming years, in line with motorisation, while freight movements are expected to grow as economies restructure and develop. In many countries, vehicle operating costs correspond to about 7-8 per cent of GDP and it is therefore important to manage road systems efficiently, in line with economic criteria.

During its initial years of operations, the Bank signed sovereign loans to improve basic road infrastructure in various eastern European, Baltic and CIS countries (Annex A). However, the European Investment Bank (EIB) has a mandate to finance Trans-European Networks (TENs), including highways and motorways, and the World Bank is also active in this subsector in some countries.

Since the EBRD's focus is on *transition* (rather than corridor infrastructure improvements), the Bank's additionality in this areas has been increasingly questioned.

EBRD intends to use its comparative advantage in this subsector to: (a) mobilise private capital and management expertise for toll motorways (whether through concessions or public-private partnerships); and (b) foster sector reforms through sovereign operations in Early Stage and selected Intermediate Stage transition countries. In the former countries, private investment in roads is unlikely, even in the medium term, in view of the "lumpy" nature of road investment, the impracticality of charging at the point of use and the long gestation period required for traffic volumes to reach levels that generate adequate returns. However, Bank operations often support reform of sector finances through: (a) adjustments to road user charges to ensure that users pay the full costs associated with their travel, and (b) the establishment of a Road Fund that can provide multi-year financing that permits rational programming and budgeting over the long timescale associated with infrastructure development. Such reforms play an important role in creating and financing the demand for local construction industries, in which private investment can be mobilised. In some cases (for example Romania), Bank-supported projects have had a major impact on the development of the local construction industry through the introduction of international competitive tendering, and the fostering of joint ventures between local and international contractors. Such projects help to create an active market, and transfer skills and disciplines that in turn can support other activities, such as corporatisation and the divestiture of periodic maintenance to the private sector.

The Bank is financing several automotive industry investments. Such investments are considered as private, commercial operations and are appraised on their merits, applying standard Bank criteria. The Bank has also been approached by several road freight companies but, to date, is not financing any operations directly. Proposed projects tend to be relatively small and are often best dealt with through the Bank's network of local financial intermediaries.

## 4 TESTING THE LIMITS OF COMMERCIAL INFRASTRUCTURE

### 4.1 INVESTMENT NEEDS

Anticipated demands for transport infrastructure financing in the Bank's countries of operation are large, as illustrated by a recent EC-financed analysis of needs in ten countries that have signed Association Agreements with the EU (Box 3). The EC estimates that external financing in the order of ECU 20-30 billion will be required over the period 1996-2005 in these ten countries. Since 1990, the International Financial Institutions (IFIs) have committed ECU 2.6 billion to the sector in the ten countries, averaging ECU 400-500 million per year. The study concluded that the flow of IFI funds needs to exceed ECU 1 billion per year from 2000 and to increase thereafter, in addition to a flow of at least ECU 1 billion per year from the EU and ECU 500 million from the financial markets. The demand forecasts are subject to uncertainty and the Bank promotes economic priorities rather than a needs-based approach, as used in the study, but nevertheless, it is clear that there is likely to be a very substantial shortfall of transport infrastructure finance relative to emerging transport demands in the Bank's countries of operation.

#### Box 3: Transport Infrastructure Needs Assessment

As transport links will play a vital role in the integration of new members into the European Union Single Market, the European Commission financed an independent assessment of sector investment needs and the availability of financing. While the Bank has important reservations concerning a needs-based approach relating to technical standards rather than economic criteria, the assessment is the most comprehensive to date and sets out the challenges facing transport infrastructure providers.

The study examined the years 1996-2005, being the possible accession period for those nations that have already signed, or are about to sign, an Association Agreement with the EU, namely: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

Investment needs in these countries were estimated assuming that, for the Trans-European Networks (TENs), motorways would be developed to four-lane, grade-separated standards (with sufficient service areas), and railways would be double-tracked, electrified, provided with modern signalling systems and have a design speed of 160 km/hour (120 km/hr on mountainous sections). Total transport infrastructure investment needs were estimated to be in the range ECU 65-95 billion, including an estimated ECU 31 billion (ECU 20 billion for motorways and ECU 11 billion for railways) to complete the TEN "Crete Corridors".

Source: Transport Infrastructure Financing in Central and Eastern Europe. Current Developments and Outlook, Presses de l'école nationale des ponts et chaussées, Paris, 1996.

### 4.2 REGIONAL ASPIRATIONS

With sharp cut-backs in government investment, as well as compression of current expenditures, most countries in the region have made some, if not significant, progress towards fiscal stabilisation. Fiscal deficits in countries at advanced stages of transition have fallen to levels below those prevailing in many industrialised countries, and the levels in countries at intermediate and early stages of transition are only modestly higher. However, expenditure pressures associated with transition, in particular health care and pensions, and the need to maintain educational standards, will continue to pose challenges for fiscal stabilisation over the medium term. The scope for significant increases in capital expenditures by governments for transport infrastructure would appear to be limited, without recourse to tax increases (which would deter other types of investment) or to larger fiscal deficits (which would weaken confidence in macroeconomic stabilisation).

The apparent success of privately financed transport infrastructure world-wide has generated high aspirations within eastern Europe. Nevertheless, there are diverging views within the region concerning the desirability (or otherwise) of privately financed transport infrastructure. At one end of the spectrum, some decision-makers have high expectations (often fuelled by contractors) that the private sector will bring money, construct infrastructure and bring operating efficiencies, at no cost or risk to the government. At the other extreme, some decision-makers point to the high returns on equity demanded by investors, the high interest rates charged in the financial markets (compared to sovereign borrowing), administrative complications, social impacts and high transaction costs, and question whether it is all worthwhile. Determining policy is further complicated by the fact that private concessions involve redefinition of the public sector's role, which poses threats to existing power structures. Irrespective of the divergent views, the continuing fiscal squeeze in many countries will force governments to seek private investment to finance the transport and other infrastructure needed to support economic development.

#### Box 4: Global Perspective on Privately-financed Transport Infrastructure

Between 1984 and September 1995, an estimated 230 private infrastructure projects were financed using a BOT (Build-Operate-Transfer) approach, or similar arrangements. There were about 140 transport projects, including some 50 Mexican toll roads. Three transport projects figure in the list of the largest 20 new investments: the Channel Tunnel between England and France, the Taipei Mass Rapid Transit System and Kansai International Airport.<sup>10</sup>

Privately financed infrastructure projects are forecast to grow rapidly, mainly due to governments' budgetary constraints and their recognition of private sector capabilities with respect to project implementation and management. The World Bank has identified nearly 2,000 proposed BOT projects world-wide, that would cost over US\$ 1,300 billion, excluding privatisation projects. In the transport sector, there are around 400 proposed projects. By June 1995, the International Finance Corporation (IFC) had approved US\$ 2.5 billion to finance 116 projects, including 23 transport projects (IFC total commitment US\$ 224 million).<sup>11</sup>

In 1995, international banks mobilised some US\$ 15.8 billion for private infrastructure projects world-wide, of which about US\$ 1.8 billion was invested in the Bank's countries of operations.

### 4.3 LESSONS OF EXPERIENCE

Experience with privately financed transport projects has been mixed. The Mexican toll motorway programme ran into difficulties because of inadequate traffic and revenue forecasts, underestimation of costs, and debt maturities that were ill adapted to projects' needs. Dulles Greenway in the United States and Orly VAL in France face problems because of lower than expected revenues. Poor initial project evaluation, resulting in cost overruns, delays and lower than expected revenues necessitated financial restructuring of the Channel Tunnel project. And the Second Stage Expressway in Bangkok faced difficulties due to government intervention and late access to land.

<sup>10</sup> "The Emerging Infrastructure Industry"; Second Edition; International Bank for Reconstruction and Development, November 1995.

<sup>11</sup> "Financing Private Infrastructure Projects, 1967-95, IFC's Lessons of Experience"; 1996; International Finance Corporation. It is noteworthy that of the 116 IFC projects, 44 were in the power sector, 34 in telecommunications, 23 in transport, six in pipelines, four in water and five miscellaneous. Of the transport projects, 16 were ports, three railroads, two roads, one mass transit system and one airport.

In spite of high hopes of attracting private finance for transport infrastructure in the Bank's countries of operations, up to the end of 1996 only four privately financed, Bank-supported transport infrastructure projects had reached financial closing: the M1-M15 and M5 Toll Motorways in Hungary, the Yuzhny Fertiliser Terminal in Ukraine and the Giurgiulesti Oil Terminal in Moldova, with total investment of ECU 754 million equivalent<sup>12</sup>.

The 42 km M1 section of the M1-M15 Toll Motorway Project opened for commercial operations in January 1996, on schedule and within budget. However, traffic volumes are about 40 per cent lower than forecast. Outturn corridor demand is substantially less than forecast due to various factors, including: (a) lack of market growth – there was virtually no growth between 1993 and 1996, (b) continuing border delays between Austria and Hungary at peak periods, despite construction of a new motorway border crossing point, (c) lower than forecast diversion from elsewhere within the region, and (d) forecasting errors. The M1's market shares (considering M1 and the competing Route 10) are broadly in line with forecasts, with the exception of western trucks and coaches, which are well below forecast levels. This shortfall appears to be due mainly to suboptimal toll levels and inadequate marketing. The initial section of the M5 Toll Motorway Project opened to traffic in December 1996, and traffic and revenues are being monitored closely.

A list of private transport infrastructure projects which the Bank has considered or financed is given in Annex C. Several projects in the region have stalled (for example, the Szekszard Bridge in Hungary); or concession tenders cancelled (D5 Motorway, Czech Republic; M3 Motorway, Hungary); or market-priced limited-recourse financing rejected in favour of other options for various financial and legal reasons (Ruzyne Airport, Prague, Czech Republic; Ferihegy Airport, Budapest, Hungary). The reasons vary from project to project, but the most important factors seem to be (see also Annex D):

- poor financial viability (particularly for motorway projects);
- public affordability and political acceptability;
- level and equitable allocation of risks;
- lack of equity;
- lack of local funding;
- regulatory and legal constraints; and
- lack of convincing examples in western Europe.

Despite many successful syndications of infrastructure projects world-wide, lenders remain wary of the risks involved, especially for road and bridge projects. Investors and lenders are asked to take a variety of risks, including: market risks (traffic and revenue), construction cost, programme slippage, environmental liabilities, interest rates, exchange rates and political risks. Forecasting traffic demand and revenue is notoriously difficult, especially where there is little history of market response to prices and services. Lenders tend to prefer power projects, where the future financial position can be forecast more easily on the basis of pre-agreed supply and power-purchase contracts.

Even if experience to date with privately financed transport projects is mixed, the rationale for private participation in infrastructure projects remains strong. Privately financed projects aim to achieve commercial discipline, harness private management skills, shelter infrastructure from

<sup>12</sup> The Bank is also co-financing a private logistics centre in Poland.

excessive political intervention, and relieve government budgets and sovereign borrowing by attracting additional capital. By emphasising financial criteria and service quality rather than engineering, private financing focuses attention on cost-effectiveness and the importance of good management. Sheltering infrastructure from political influence helps to create a constituency for more cost-reflective pricing (subject to public acceptability), improve the selection of service providers and strengthen incentives within infrastructure enterprises. The challenge remains to allocate project risks adequately to those parties best able to manage them and allow the public sector to play a role as financial supporter of those projects which are economically but not financially viable through Public-Private Partnerships (PPPs).

#### 4.4 PROSPECTS FOR COMMERCIAL TRANSPORT INFRASTRUCTURE

The Bank expects to be able to structure privately financed operations where activities can be "ring-fenced" in a project company and foreign currency revenues are available to service debt. Such projects will be subject to the usual Bank tests of transition impact, additionality and sound banking principles. The Bank will actively seek to add sound projects of this nature to its portfolio, especially in the aviation and port subsectors (see Section 5).

BOT-type projects tend to be complex owing to the need to separate the project company from other activities. In the case of an airport, for example, the project company must enter into a large number of agreements with airlines, suppliers, operators and other parties. The set-up costs associated with a BOT-type structure are therefore considerable and are relatively independent of project size. Consequently, only larger projects are usually eligible for this kind of financing (typical investment of at least ECU 100 million).

Several governments have adopted ambitious motorway development plans, which they hope can be financed largely by private capital (for example, Croatia, Poland and Romania). However, since motorway capital and operating costs in the Bank's countries of operations are broadly in line with those in the EU, and traffic volumes tend to be lower, either tolls have to be higher than in the EU or public sector financial support will be required to keep tolls at levels affordable by local people *and* enable a project to be "bankable". Since high tolls tend to be unacceptable to local populations (especially for motorway sections that were formerly toll-free), there are likely to be few (if any) financially viable motorway concessions in the region in the next five years or so, without substantial public sector financial support. Furthermore, governments usually insist on there being a toll-free alternative road (a free alternative would be unthinkable for a telecommunications or a power project). Where a proposed toll motorway project cannot attract sufficient public sector financial support, the project should be downsized or postponed. Where support is available, the Bank will seek to structure PPPs for economically viable projects by blending private risk capital and management skills with public sector financial and political support.

#### 4.5 PUBLIC-PRIVATE PARTNERSHIPS

##### Box 5: Public-Private Partnerships

The term "public-private partnership" (PPP) is used here to denote a commercial company in which both the private and public sectors hold stakes, with managerial control resting with the private sector.

The key distinguishing features of a PPP compared to a classic BOT are that: (a) equity in a PPP will usually be held by both private and public interests, and (b) a PPP is more flexible with regard to phased project implementation. A PPP requires a recognition of market realities and an ability to blend sovereign and risk capital with an equitable risk allocation.

A PPP may be appropriate in various instances: (a) where the public sector wishes to maintain a degree of control over a strategic asset (for example a capital city airport); (b) where the public sector must make a substantial financial contribution to a project to render it "bankable"; (c) where only the initial stage of a project can be implemented and the timing of future stages is uncertain; or (d) where a publicly owned, commercially oriented entity (such as a railway company) wishes to participate for commercial reasons (for example in an intermodal terminal).

The Bank-supported Hungarian M5 Toll Motorway Project exhibits some essential PPP characteristics. Tendered as a classic BOT concession, lengthy negotiations were necessary in order to arrive at a politically acceptable deal between the government and the project sponsors, to reach financial closing in December 1995. The government is contributing existing motorway assets, a new link road, land for new construction and a cash-flow deficiency guarantee in the form of a stand-by facility. In return the government is participating in a profit-sharing arrangement with the concession company. This project blends sovereign support with risk capital in a way that is acceptable to the government, equity investors and lenders.

The Bank undertook technical cooperation with the Hungarian Government, the State railway (MAV) and the private sector to develop an intermodal logistics terminal at Soroksar, Budapest.<sup>13</sup> The Bank is working with MAV and its advisers to structure the project such that private sector sponsors would be the majority shareholders and manage the facility, while MAV would hold a minority interest. This PPP structure aims to harness private sector expertise, and blend commercial and grant financing, while enabling MAV to have a financial interest in infrastructure of strategic importance to its growing intermodal business.

In Estonia, the government is considering options to increase private participation in the railway sector. The Bank is preparing an infrastructure loan which would assist in this process by helping the public sector to overcome past physical deficiencies while encouraging the private sector to invest in future development.

The Bank will continue to use its influence to encourage states to mobilise private sector finance wherever feasible and economically justified. The Bank can only be successful when a government has realistic expectations of what the private sector can contribute, and when the government genuinely wants to mobilise private capital in preference to increasing its own sovereign exposure, and recognises market realities with respect to interest margins and project risks. Sometimes overemphasis by governments on interest margins, without due consideration of risks, has distorted the prospects for privately financed infrastructure. The risks of a state contributing substantial sums to a PPP are sometimes perceived as unacceptably high and induce decision-makers to postpone investment until such time as the project can be funded on a public basis. Coordination between IFIs is important in this area because if

<sup>13</sup> Financed by the Bank's Swiss and German Trust Funds.



financiers lend at lower than market rates for state-sponsored revenue-generating projects, transition to a market economy will be inhibited.

Guidelines for Bank financing of transport infrastructure concession projects are given in Annex E.

## 5 POLICY FOR THE NEXT FIVE YEARS

### 5.1 STRATEGY

The Bank's mission in the transport sector is to foster transition by assisting borrowers and beneficiaries to exploit modern technologies in a competitive market-place governed by sound economic policies.

#### 5.1.1 EBRD Comparative Advantages

The Bank will seek to finance economically viable transport infrastructure and services, and transport industry projects, where and when it has a comparative advantage deriving from:

- its in-depth regional knowledge and expertise, and local presence through its network of regional offices;
- its professional expertise in particular technical areas (for example, railways);
- its capability in enterprise restructuring and privatisation;
- its skill in financial engineering; and
- its ability to operate in the private sector, the public sector and, increasingly, in the difficult middle ground of public-private partnerships.<sup>14</sup>

The Bank exerts influence on the creation and supervision of competitive markets through technical cooperation and sovereign lending that incorporates transition-linked conditionality. It is essential that the Bank be present from the outset, so that it can act as a reliable partner through the various transition stages. Due to its unique mandate, the Bank can bear certain risks and thus operate at the frontier of commercial possibilities, using its wide range of instruments (Annex F).

#### 5.1.2 Guiding Principles

As with all Bank operations, transport projects are scrutinised with respect to a trilogy of principal criteria: *transition impact, additionality and sound banking principles*. Each proposed project must also satisfy criteria relating to procurement, economic viability, legal and other aspects, and all Bank operations undergo environmental appraisal to help the Bank decide if an activity should be financed and, if so, the way in which environmental issues should be incorporated in financing, planning and implementation. Further, the Bank pays careful attention to portfolio balance, credit quality, cost/productivity issues and profitability, and ensures that each proposed transport project is consistent with the relevant Country Strategy.

The Bank responds to market demands and does not allocate lending slots by country or by sector. However, application of the Bank's country exposure and portfolio ratio limits are necessitating some form of programming for public sector operations. Since transport infrastructure projects tend to have long lead times (typically 2-3 years), the Bank has to commit resources to project preparation well in advance of knowing the political and economic circumstances in the host country, and the Bank's actual exposure and country portfolio ratio at the time a final decision has to be taken.

<sup>14</sup> The commercialisation of infrastructure is one of the main thrusts of the Bank's activities. See Part II of the EBRD *Transition Report* 1996 for a discussion of: (a) inherited supply, market demands and the environment; (b) commercial infrastructure: pressures and potential; and (c) regulation and competition in infrastructure.

A priority will be to mobilise private finance for transport infrastructure, through concessions and PPPs. However, for the reasons set out in Section 4, the number of opportunities is likely to be limited in the near future. The Bank expects to turn its attention increasingly to co-financing *operating assets and transport services* with the private sector (for example rolling stock and rail freight services), leaving traditional infrastructure financing to institutions such as the EIB and the World Bank, which have a mandate for sovereign lending in those areas. EBRD will, however, pursue sovereign operations where: (a) its financing is truly additional, (b) substantial transition impacts can be achieved, and (c) strong environmental and/or energy efficiency arguments can be made to justify using limited sovereign exposure (for example, in the case of urban transport). The Bank will engage in lending for TENs infrastructure where additional private capital can be mobilised (for example, for toll motorways) or where significant transition impacts are anticipated (for example, linked to railway restructuring).

Where sound projects do not fall within the Bank's mandate, the Bank will encourage other financiers. As the Bank is project-driven, it engages in sector work only to the extent necessary to identify viable investments. Although Bank projects frequently include institutional development, the important area of human resource development is mainly left to programmes such as Phare and Tacis.

### 5.1.3 Cooperation with other Financial Institutions

By the end of 1996, EBRD, EIB and the World Bank had invested approximately ECU 4.7 billion in transport infrastructure in the Bank's countries of operations.<sup>15</sup> Additional funds were mobilised by other financiers such as the Asian Development Bank (ADB), Kreditanstalt für Wiederaufbau (KfW), the Overseas Economic Co-operation Fund (OECF) and commercial banks. In addition, Phare granted approximately ECU 280 million to transport infrastructure co-financing in 1992-94 and it is understood that funds of the order of ECU 600 million were available for transport in 1995-96 under the countries' multi-annual programmes.

EBRD is co-financing five transport projects with the EIB (in Bulgaria, Lithuania, Romania, Slovakia and Slovenia) and, additionally, the two institutions are parallel financing parts of programmes in the Czech Republic, Poland and Slovenia. EBRD is co-financing seven transport projects with the World Bank (in Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Lithuania and Romania) and two with Phare (in Bulgaria and Romania).

EBRD will continue to coordinate closely with other IFIs through established channels in order to reach agreements to collaborate where a project requires financial commitments in excess of the capacity of a single institution or where the presence of more than one IFI can encourage a government to take difficult decisions with respect to transition (notably for railway restructuring). In other cases, EBRD will seek an efficient division of labour. For example, there is agreement that in Russia, the World Bank will concentrate on highways, bridges and urban transport, while EBRD will focus on aviation and railways.

Recognising that the EIB has a specific mandate to finance TENs infrastructure, whereas EBRD's mandate focuses primarily on transition, the two institutions are developing closer cooperation, particularly in the railway subsector. EBRD also expects to cooperate with EIB and the European Investment Fund (EIF) in co-financing PPPs for toll motorways in the pre-

accession countries. The Bank also looks forward to continuing close cooperation with Phare and Tacis, and very much welcomes grant co-financing.

The Bank will continue to work with other IFIs (including KfW, OECF and others) to establish a coherent policy framework and an efficient division of labour in each country. In this context, the Bank will use its influence to try to persuade other lenders of the rationale and merits of enterprise restructuring and private sector involvement, in the interest of transition and long-term sustainability.

## 5.2 LINES OF BUSINESS

The Bank intends to pursue six main lines of business, in which it has a comparative advantage (Box 6), and to explore several business development initiatives (Section 5.4):

### Box 6: Lines of Business

#### Aviation

The Bank is already financing ten operations and is one of the few IFIs active in this subsector. There is considerable scope for private and PPP operations, especially in large countries such as Russia.

#### Ports

Unexploited market potential exists for private sector operations in this subsector, especially where hard currency revenues are available. The Bank has relevant in-house expertise in the Transport Team and some Country Teams.

#### Railways and Intermodal Transport

The Bank has established its leadership in railway restructuring in the region through its technical expertise and its willingness to apply realistic project conditionality, alone or in conjunction with other IFIs. Considerable scope exists for both sovereign and, increasingly, private sector operations related to infrastructure and services.

#### Road Transport

The Bank has substantial expertise in this subsector and has clearly demonstrated its *institutional additionality* by defining and implementing far-reaching transition-related reforms, particularly related to sector finances.

#### Shipping

The Bank has a comparative advantage in the shipping and ship-building industries, having already financed seven operations, notably in Russia and the Baltics.

#### Urban Transport

The Bank intends to apply its restructuring and municipal finance skills to develop a portfolio of "bankable" projects in this area.

<sup>15</sup> By the end of 1996, the World Bank had committed US\$ 2108 million (ECU 1743 million equivalent) to 22 transport projects in 14 countries in eastern Europe, the Baltics and the FSU; the EIB had invested ECU 1685 million in 35 transport infrastructure projects in 12 Eastern European countries; and the EBRD had invested ECU 1291 million in 38 transport infrastructure projects in its countries of operations.

The individual business sectors are described on the following six pages:

### Box 7: Aviation

The Bank will consider investments in civil aviation infrastructure, which constitutes the essential infrastructure for a competitive aviation environment and usually generates hard currency revenues.

Airport investments may include:

- runway, taxiway and apron improvements;
- lighting and navigation systems;
- passenger and cargo terminal buildings;
- ground handling equipment;
- office buildings for the airport enterprise or catering centres;
- ancillary equipment (such as power supply and heating); and
- environmental infrastructure (such as waste management and noise protection).

The Bank will continue its efforts to modernise air reservation systems that constitute a market-place for passenger and cargo air transport services, and are a vital tool to improve airline efficiency and market orientation. The Bank can consider financing the hardware, software, equipment implementation and user training.

In the air navigation sector, the Bank will continue to assist national authorities to improve safety and increase capacity where necessary. Implementation of such projects will normally include clear and transparent cost recovery from users (through en-route charges), paving the way for private projects or public-private partnerships.

The Bank is unlikely to finance Western aircraft, due to lack of additionality, but may consider financing aircraft and equipment manufactured in the region, and participation in airline restructuring or privatisation, or investment in fixed equipment. The Bank will support the projects of subsidised flag carriers only if such projects are associated with restructuring and the removal of direct and indirect subsidies. In countries where free market principles already prevail, the Bank will encourage the development of airlines with financial performance consistent with sound banking principles.

The Bank is working with the Russian authorities on possible mechanisms to finance a Russian Regional Airports Development Programme. Aeroflot has broken up into numerous locally based, vertically integrated aviation enterprises, combining air transport services, the home airport and air traffic services. Russian airports are highly diverse in their characteristics: most cater predominantly for domestic traffic, a few for relatively large volumes of passengers on international scheduled services, and others cater for the volatile shopping-tourism, charter traffic market. There are 857 functioning airports in Russia alone (down from 1302 in 1993), the majority of which require reconstruction and refurbishment. According to the Russian aviation authorities, investment of the order of US\$ 660 million per year will be required in regional airports over the coming years. A full sovereign guarantee is unlikely to be available to finance improvements on this scale and therefore other forms of guarantee are being pursued. In addition, many individual investments would be too risky and too small to warrant the complexity and transaction costs of a BOT-type structure.

The Bank can mobilise technical cooperation in support of investments, including: management training related to airport-specific matters or general business methods; language tuition; and establishment of modern accounting and cost control systems.

Following the modernisation of basic civil aviation infrastructure, the Bank anticipates increasing private sector investment opportunities, including: ground-handling, in-flight catering, warehousing, freight forwarding etc.

### Box 8: Ports

Port projects can have important transition impacts within the sector by developing modern facilities and improving management, and externally by facilitating trade and achieving environmental gains.

Many ports are capable of substantially larger throughput, without major investment. Both productivity and throughput could be increased by better coordination with inland transport (especially the availability of rail wagons for direct loading/unloading), modest investment in storage facilities and improved management.

In considering potential port investments, the Bank distinguishes between basic infrastructure (such as breakwaters and berths) and superstructure (such as buildings and cranes). The Bank can finance basic infrastructure on a sovereign basis, where it believes that the transition impact will be high, Bank financing is genuinely additional and will facilitate private sector investment, probably in specialised terminals. Thus, the Bank is investing ECU 43.2 million in Aktau Port, Kazakhstan. The investment will help maintain port operations by raising the level of the general cargo berths to protect them from the rise of the Caspian Sea, undertake rehabilitation works to install modern cargo berths, increase productivity and support the corporatisation of the port's activities.

The Bank is primarily interested in supporting private sector investments, for example specialised terminals for containers, grain or oil products. Loans have already been signed for the Yuzhny Fertiliser Terminal in Ukraine and the Giurgiulesti Oil Terminal in Moldova. Container traffic is the fastest-growing market sector, and there is underprovision of facilities in many ports, even at current income levels. With the exception of oil products, for which pipelines may be more cost-effective, sea and waterway transport has a cost advantage over land for dry and liquid bulk cargoes.

Privatisation may start with the use of private services (for example, forwarding, stevedoring, bunkering and lighterage) leading on to private terminals and, in some cases, privatisation of the port authority itself. Potential projects must be financially viable and be underpinned by robust traffic forecasts. High quality management, capable of change, is also essential. In some cases, this may be achieved through the short-term involvement or equity participation of a Western operator.

The increased use of sea and waterway transport, where cost-effective, can have environmental benefits (limited noise and air pollution impacts; distance from densely populated areas), although marine pollution from deliberate and accidental sources needs continuing attention.

### Box 9: Railways

The Bank supports a wide range of investment components, provided they are associated with necessary commercialisation and restructuring:

#### Network operations

- upgrading of line speed and capacity, if justified by traffic volumes and economics;
- infrastructure maintenance and equipment renewal;
- railway telecommunications/data communications networks;

#### Rail transport operations

- rolling-stock rehabilitation;
- new rolling stock;
- improvements to terminals and terminal equipment, especially for freight and intermodal traffic;
- depot modernisation and maintenance equipment; and
- traffic/rolling stock management systems to improve efficiency and service.

In assessing individual investment components, the Bank encourages railway owners to divest non-core activities rather than reinvest, and to procure railway support services from external markets, where feasible. Private participation in the railway industries can contribute greatly to transition through various forms:

- privatisation or joint venturing of manufacturing or heavy repair enterprises owned by or allied to public railway enterprises;
- outsourcing of network operations support activities, for example infrastructure maintenance and renewal, telecommunications systems, property services, facilities management;
- outsourcing of the transport operations support activities, for example rolling stock maintenance, train and station catering, terminal management, cleaning services, security, travel agency activities and advertising;
- procurement of equipment from leasing and rental companies, for example rolling stock, terminal equipment; and
- concessions for specific rail operations, such as intermodal services.

Legislative and financial frameworks can be introduced which allow access to rail networks by private operators, either through track access rights or concession/franchise arrangements. In the freight sector in particular, the Bank sees the need for the emergence of private freight companies operating long-distance international freight and intermodal services over the European network. Such operators would offer a "seamless" service to overcome the historic fragmentation of responsibility between individual national rail systems.

The Bank will continue to pursue sovereign operations in support of railway restructuring and modernisation in all its countries of operations, including repeater operations, where there are continuing transition impacts and additionality. In view of its emphasis on transition, the Bank will not invest in rail infrastructure upgrading, without adequate restructuring of rail transport operations to support long-term financial sustainability and will seek the cooperation of other IFIs and lenders in this effort. The Bank will actively seek out and support viable non-sovereign, private sector operations, where their feasibility is underpinned by sound business plans and an adequate policy framework.

The Bank is willing to support projects in the intermodal rail freight sector, including infrastructure, terminals, specialised equipment, management information systems and logistics support services. Successful growth will require the involvement of both the public and private sectors, but the Bank will look favourably on projects which bring to bear private skills and capital to this important sector.

### Box 10: Road Transport

Modern economies depend upon an efficient road transport industry. Studies suggest that the provision of road transport infrastructure is associated with an increase in the productivity of private enterprises.<sup>17</sup>

Roads are only the "track" that sustains a large and complex industry. Although generally planned, procured and owned by the public sector, roads are usually built (and are sometimes maintained) by private companies. The public provision of roads is the norm in western Europe and elsewhere, due to the complexities of land acquisition, the importance of network integrity (which militates against fragmented ownership), and the difficulty of charging at the point of use. Where direct charging is feasible – for example, tolled motorways, tunnels and river crossings – private sector concessions may be possible.

Other industry elements include: the vehicles (the "rolling stock"), which are mainly produced by private companies, and are generally owned and operated by private firms and individuals; vehicle and driver registration and testing systems; emergency services (including insurance); and motorists' services, including fuel production and distribution.

There are many opportunities for private, entrepreneurial initiative within the road transport industry: trucking provides ample opportunities and produces the flexible services required by SMEs; freight forwarders facilitate efficient line-haul operations; inter-urban buses can often run profitably; taxi services are required in urban areas; vehicle maintenance and repair shops, and motorists services are increasingly required by the expanding vehicle fleet. Free markets work well in road transport and this is one of the first areas to attract private capital. Regulation should be kept to a minimum, covering principally vehicle and driver safety, emissions, axle loads, dangerous goods and respect for commercial laws.

The Bank will give priority to financing sound private sector or PPP revenue-generating infrastructure projects, and to private sector transport services. The Bank expects to be active with respect to toll motorways, where it can play a catalytic role. All projects will be required to meet economic as well as financial criteria.

EBRD will continue to work on sovereign operations to restructure the sector in Early Stage and selected Intermediate transition countries, where the Bank has strong institutional additionality with respect to reforming sector finances and the divestiture, commercialisation and privatisation of road maintenance and other operational activities. The Bank generally works with the relevant authorities to ensure that road users cover the full costs of their travel and that the roads subsector is self-financing. Sovereign road rehabilitation projects are under preparation in Albania, Armenia, Azerbaijan, Turkmenistan and Ukraine. Others may be considered in the future, subject to meeting the Bank's criteria, including: transition impact, additionality, sound banking principles and country portfolio ratio.

Through the flow of funds and the application of rigorous tendering procedures, the Bank is instrumental in developing and internationalising construction markets. The Bank-supported European Road Rehabilitation Project in Romania, for example, is pumping ECU 300 million into the local construction market and has fostered the upgrading of local contractors and consultants through joint ventures and subcontracts with international firms. The Bank seeks private sector investment opportunities related to the supply of construction materials, intelligent highway and vehicle systems, and other activities.

The Bank will foster transition through its technical cooperation and loan conditionality associated with high-priority sovereign projects.

<sup>17</sup> See, for example, the studies quoted in "Investment in Transport Infrastructure: The recovery of Europe"; European Centre for Infrastructure Studies; November 1994.

### Box 11: Shipping

The Bank has successfully financed seven shipping and ship-building operations, with total Bank commitments of ECU 156 million towards total investment of ECU 709 million.

It is likely that the seaborne trade of the Bank's countries of operations will grow faster than world trade as a whole as a consequence of trade diversion, thus increasing regional demand for shipping and ship-building. Trade creation and diversion are already playing, and will continue to play, a crucial role in transition. In many countries, exporters see the major obstacles to expanding their activities lying in both physical and financial infrastructure. Investments in the industry play a part in lowering the obstacles, thereby opening the economy and advancing transition.

In the Bank's countries of operations, fleets are older than the world average, an inheritance of the priorities of the old regime. This will generate demand for proportionately speedier fleet replacement. The size of the total world fleet has stagnated since the mid-1980s, with less than 1 per cent growth since 1987. However, the number of container vessels, non-oil tankers and single deck ships has grown significantly. There has also been a trend towards bigger ships.

The market consensus is that aggregate replacement demand will grow substantially towards the end of the decade, particularly for tankers and dry bulk carriers. The trend towards bigger ships is expected to continue. In addition, increased trade is expected to result in sufficient demand to require a significant increase in the total fleet size. Overall, up to the end of the century, replacement demand is expected to account for the vast majority of total new building: consensus forecasts are for total new building demand of around 18,000 ships, of which about 15,000 will be to replace existing ships.

A major change in the country market share of world ship-building output took place in the 1980s. At the beginning of the decade, Asia produced about half of world output; that region now produces more than 75 per cent, with the biggest single increase by far having taken place in South Korea. The Bank's countries of operations experienced a sharp decline in ship-building output and the trends appear to have continued into the 1990s.

The Bank is willing to consider financing a variety of vessel types, including: tankers, dry bulk, container and Ro-Ro. The scale of the Bank's operations is small in relation to total demand, accounting for well under 1 per cent of the world market.

The countries of operations no longer have the type of discriminatory practices that they exercised under centralised economic policies and their practices are approaching, and in many cases mirror, those of other nations with maritime interests. Bank-supported operations must comply with international statutory requirements, including those of the International Maritime Organisation, such as those specified in the Maritime Pollution Convention (MARPOL) and the International Convention for the Safety of Life at Sea (SOLAS), and with all appropriate regional conventions.

See also: Guidelines for the Bank's Operations in Shipping and Shipbuilding, BDS94-161 (Final), 5 December 1994.

### Box 12: Urban Transport

Having regard to the inevitable increase in motorisation, and the importance of urban transport for sound and sustainable development, EBRD intends to develop its portfolio of operations in this subsector. Where possible, the Bank will work with private and municipal project sponsors to develop free-standing operations. However, where progress is inhibited by national-level issues (such as mandatory but unfunded fare privileges), the Bank will also work with central governments to reform the regulatory and financial framework to facilitate sound development.

To be eligible for Bank financing, urban public transport services should be provided on a commercial basis by corporate transport operators (whether privately or municipally owned). Operators' costs should in future be fully covered by revenues derived from: (a) the farebox, (b) compensation for travel privileges/exemptions awarded by public authorities as a matter of social policy (for example, students and pensioners), (c) payments for predetermined services or activities purchased from operators by public authorities (public service obligations), and (d) other earned revenue. Public authorities are free to pursue the social policies of their choice, but each granting authority should pay to operators the full costs of all travel privileges awarded by the authority to beneficiaries. The regulatory framework should ensure that operators are not be required to carry passengers without corresponding payment. Where necessary, the Bank will work with central government and municipal authorities to address institutional constraints.

The Bank's priority will be to develop non-sovereign operations through lending to private companies, or to municipalities or municipal entities, where creditworthiness can be established or satisfactory guarantees provided. Where this is not feasible, especially in Early Stage and Intermediate transition countries, the Bank will work with central governments to develop and implement a reform programme, and consider financing priority investments on a sovereign basis.

Circumstances vary from country to country and city to city, but projects may include some or all of the following: (a) the "unbundling" of bus and truck operations into separate legal entities, where currently together; (b) where urban public transport assets are currently owned by the state, the assets would be "decentralised" to the relevant municipalities or privatised; (c) responsibility for all aspects of urban public transport planning and regulation (including tariffs) would be vested in municipalities; (d) electric transport operating entities may be corporatised, under municipal or mixed private/municipal ownership, or operations franchised or privatised; (e) bus entities and assets would be privatised, and services tendered and franchised by municipalities, as soon as practicable. The Bank encourages the establishment of multi-year performance contracts between municipalities and transport operators for services on a core network. The Bank can consider financing infrastructure provided by a public authority or a private company, and/or operating assets such as rolling stock.

Demand management (including traffic management) is likely to become increasingly important in urban areas in order to manage scarce road capacity, limit the intrusion of motor vehicles and protect public transport services from road congestion caused mainly by private vehicles. The Bank may consider financing public transport priorities and parking management systems.

Technical cooperation may be available to help municipalities develop their institutional capability to: define a core network, establish and manage performance contracts, franchise services, design and implement public infrastructure transport priorities and parking schemes, and develop their creditworthiness to support debt servicing. Assistance may also be available to participating companies with respect to management information systems (including cost accounting) and operating methods. Strategic partnerships between local and western private companies are encouraged.

## 5.3 BANK OPERATIONS

### 5.3.1 Early Stage Transition Countries

#### Azerbaijan; Belarus; Tajikistan; Turkmenistan.

The priority in countries at early stages of transition will be investments to rehabilitate and expand basic transport infrastructure. Almost all projects of this type will necessarily be sovereign operations in the short to medium term. The extent of Bank operations may be

constrained by: (a) the willingness of borrowers to undertake reforms, (b) the availability of sovereign funds on more attractive conditions from other financiers, and (c) the willingness of the Bank to extend sovereign loans, having regard to country portfolio ratios (all of which will take some years to achieve the 60:40 target). The expected areas of operations are summarised in Table 5.1:

**Table 5.1: Anticipated Bank Activities in Early Stage Transition Countries**

Country	Aviation	Ports	Railways	Road Transport	Shipping	Urban Transport
Azerbaijan	m/S	S		S		
Belarus				m		
Tajikistan	m/S					
Turkmenistan		S	S	S		

m = monitoring on-going operation; S= sovereign.

### 5.3.2 Intermediate Transition Countries

**Albania; Armenia; Bosnia and Herzegovina; Bulgaria; FYR Macedonia; Georgia; Kazakstan; Kyrgyzstan; Moldova; Romania; Russia; Uzbekistan.**

Development of the transport portfolio will be particularly challenging in the countries at intermediate stages of transition, since private sector activities are still emerging and further sovereign lending will be constrained in many cases by country portfolio ratio and market factors. The Bank is already implementing a large portfolio of transport projects in some countries and major transition impacts will be required to justify sovereign lending. Anticipated areas of activity are summarised in Table 5.2:

Transport-related commitments in Russia are expected to grow in line with the Bank's overall portfolio. The Bank expects to focus on: (a) private sector operations in shipping, and the railway and distribution industries; (b) limited-recourse and PPP lending to the aviation sector; and (c) further sovereign lending for railways. The Bank does not expect to participate in the highways subsector, other than to complete ongoing technical cooperation relating to the Moscow-St. Petersburg-Finnish border corridor. In view of the high country portfolio ratio, there would not be an impediment in principle to sovereign lending, should the government so desire.

**Table 5.2: Anticipated Bank Activities in Intermediate Transition Countries**

Country	Aviation	Ports	Railways	Road Transport	Shipping	Urban Transport
Albania	S			S		
Armenia	m			S		
Bosnia and Herzegovina	m			m		
Bulgaria	Pr	Pr	m	m		
FYR Macedonia	m					
Georgia		Pr				
Kazakstan			Pr/S			
Kyrgyzstan						
Moldova	S	m		m		
Romania		Pr	m	m/PPP		
Russia	Pr/PPP/S	Pr	m/S		m/Pr	
Ukraine	S	Pr	Pr/S	S	Pr	S
Uzbekistan	S		S			

m = monitoring on-going operation; Pr = private; PPP = public-private partnership and public non-sovereign; S= sovereign.

### 5.3.3 Advanced Transition Countries

**Croatia; Czech Republic; Estonia; Hungary; Latvia; Lithuania; Poland; Slovakia; Slovenia.**

Potential non-sovereign transactions include private port terminals in the Baltics, a motorway concession/PPP and urban transport in Poland, an intermodal logistics terminal in Hungary and a railway operating concession in Estonia. Sovereign lending will focus on railway restructuring, where the Bank has a comparative advantage, in those countries where country portfolio ratio and Bank exposure permit.



Table 5.3: Anticipated Bank Activities in Advanced Transition Countries

Country	Aviation	Ports	Railways	Road Transport	Shipping	Urban Transport
Croatia	m/S		S	m/PPP		
Czech Republic			m			
Estonia			Pr/S			
Hungary			Pr/S	m/Pr		m
Latvia	m	Pr	S	m	Pr	
Lithuania			m/S	m		
Poland		Pr	m/S	m/PPP		Pr/PPP
Slovakia			S	m		
Slovenia			m	m		

m = monitoring on-going operation; Pr = private; PPP = public-private partnership and public non-sovereign; S= sovereign.

## 5.4 BUSINESS DEVELOPMENT INITIATIVES

### 5.4.1 Public-Private Partnerships

Future PPPs will be complex since they will need to blend equity, limited-recourse finance, sovereign resources, grant funding and guarantees with equitable risk allocation, while accommodating the policies and regulations of several IFIs. As PPP opportunities arise (for example, in Poland, Romania and possibly Croatia in the short to medium term), the Bank will investigate and develop project structures and, in parallel, assess whether a structured PPP Infrastructure Fund may be appropriate. Should this be the case, the Bank will progress proposals with potential co-financiers, including Phare, EIB, the EIF, World Bank and commercial financiers.

### 5.4.2 Financing Small Projects

For productivity reasons, the normal minimum Bank participation in any project is ECU 5-10 million. While most transport *infrastructure* projects are large, an increasing number of airport, port and intermodal terminal projects is anticipated for which financing of less than ECU 10 million is sought. Additionally, many relatively small investment opportunities in *transport services* could arise, for example: rail freight services; railway workshops; rail catering and cleaning; trucking, taxis, container manufacturing and repair, freight forwarding, motorists' services, parking facilities, vehicle testing, inter-urban and urban bus services, telematics (for example, vehicle tracking systems) and so on. The Bank increasingly relies on intermediaries to finance the smaller operations using Bank-supported credit lines and investment funds. Existing credit lines and investment funds will be mobilised where possible to meet clients' needs and additional facilities may be considered should market demands be identified consistent with the Bank's mandate.

## ANNEX A

### EBRD TRANSPORT SECTOR COMMITMENTS

(as at 31 December 1996)

The following tables include transport infrastructure and services, but exclude manufacturing industry (for example, the automotive and ship-building industries).

Sector	Country	Project	Total operation cost (ECU m)	EBRD finance (ECU m)
<b>1992</b>				
Aviation	Czech Republic	CSA	24.5	23.9
Road Transport	Hungary	Budapest Orbital Motorway, M0	108.8	21.0
<b>Signed operations, 1992</b>			<b>133.3</b>	<b>44.9</b>
<b>1993</b>				
Aviation	Latvia	Riga International Airport	9.0	8.4
	Ukraine	Borispol Airport, Kiev	12.0	4.0
Railways	Slovenia	Railways	87.3	43.4
Road Transport	Bulgaria	Transit Roads	85.1	34.6
	Hungary	M1-M15 Toll Motorway	329.6	101.0
	Poland	Motorway Development	83.6	45.0
	Romania	European Road Rehab.	322.2	64.4
	Slovakia	International Road Corridor	41.6	15.0
Shipping	Estonia	Estline Marine Co Ltd.	47.1	21.0
Urban Transport	Hungary	Budapest Public Transport Rehabilitation	163.9	51.5
<b>Signed operations, 1993</b>			<b>1181.4</b>	<b>388.3</b>
<b>Cumulative commitments, end-1993</b>			<b>1314.7</b>	<b>433.2</b>



Sector	Country	Project	Total operation cost (ECU m)	EBRD finance (ECU m)
1994				
Aviation	Armenia	Yerevan Air Cargo Terminal	23.8	18.3
	Croatia	Air Navigation	21.6	19.4
	Estonia	Tallinn Airport Rehabilitation	11.7	9.2
	FYR Macedonia	Air Navigation Upgrading	18.8	11.3
Railways	Lithuania	Transport Project <sup>1</sup>	37.4	15.2
Road Transport	Belarus	Brest-Minsk-Russian Border Highway Improvement	69.2	43.0
	Latvia	Road Project	21.5	8.3
	Slovenia	DARS	51.5	25.8
		National Road Administration	72.6	24.1
Shipping	Russia	PRISCO	190.4	36.2
		FESCO	43.8	13.1
Signed operations, 1994			562.3	223.9
Cumulative commitments, end-1994			1877.0	657.1

<sup>1</sup> Includes a road component.

Sector	Country	Project	Total operation cost (ECU m)	EBRD finance (ECU m)
<b>1995</b>				
Aviation	Georgia	Tbilisi Airport Refurbishment	10.4	8.8
	FYR Macedonia	Skopje Airport Rehabilitation	12.3	9.2
Ports and Waterways	Ukraine	Yuzhny Fertilizer Terminal	24.9	4.0
Railways	Bulgaria	Railway Restructuring	237.4	36.2
	Czech Republic	Railway Corridor	695.5	43.1
Road Transport	Croatia	Highway Reconstruction	193.8	36.7
	Hungary	M5 Toll Motorway	369.1	112.0
	Moldova	Road Rehabilitation	56.6	23.0
Shipping	Russia	Northwestern Shipping Co.	56.5	15.0
		Novorossiysk Shipping Co.	294.5	48.3
	Ukraine	Ukrrihflot	25.9	6.6
<b>Signed commitments, 1995</b>			<b>1976.9</b>	<b>342.9</b>
<b>Cumulative commitments, end-1995</b>			<b>3853.9</b>	<b>1000.0</b>

Sector	Country	Project	Total operation cost (ECU m)	EBRD finance (ECU m)
<b>1996</b>				
Aviation	Azerbaijan	Air Navigation	12.6	11.0
	Bosnia and Herzegovina	Emergency Transport Reconstruction <sup>2</sup>	75.9	26.3
Ports and Waterways	Kazakhstan	Aktau	59.6	43.1
	Moldova	Giurgiulesti Oil Terminal	30.6	15.3
Railways	Poland	Railway Modernisation	487.0	50.0
	Romania	Railway Rehabilitation	338.2	58.4
	Russia	Railway Modernisation	153.6	96.7
Road Transport		SFAT	57.0	25.8
	Lithuania	Via Baltica and Lithuania Road Project	94.3	18.6
	Romania	Bucharest-Pitesti Motorway Upgrading and Tolling	83.2	42.7
		NAR Restructuring and Road Rehabilitation Project	483.2	69.1
Shipping	Russia	Sakhalin Shipping Co.	65.2	18.0
<b>Signed commitments, 1996</b>			<b>1940.4</b>	<b>475.0</b>
<b>Cumulative commitments to end-1996</b>			<b>5794.3</b>	<b>1475.0</b>

<sup>2</sup> Includes a road component.

## ANNEX B

### TRANSITION IMPACTS

<b>Market Expansion and Competition</b>		
<b>Reforming the state's role of supervising a market economy</b>	<b>Does the project improve the competitive environment and/or reduce market distortions in the sector?</b>	For example: through the separation of public sector regulatory and operational functions (e.g. divestiture of periodic road maintenance).
<b>Legal framework</b>	<b>Does the project assist in the creation of a legal framework to support a market economy?</b>	For example: (1) passage of a Railway Law in Bulgaria; (2) Bank technical cooperation to help draft transport concession laws in Poland and Romania.
<b>Decentralisation of state assets and responsibilities</b>	<b>Does the project decentralise assets and responsibilities from central government to local level?</b>	For example: the transfer of aviation or urban public transport assets from central to local or regional authorities.
<b>Scope of public services</b>	<b>Does the project place transport services on a commercial basis?</b>	Transport services were used as an instrument of social policy under former regimes and travel privileges were granted to numerous user categories, particularly for rail and urban travel. Operators were generally not compensated for the corresponding revenue loss. Bank projects seek to place services on a contractual, commercial basis, in which public authorities may be customers, and purchase services through public service obligations.
<b>Divestiture of public sector operational activities</b>	<b>Does the project progress divestiture of operational activities and assets, and their corporatisation and privatisation?</b>	For example: (a) separation of airport and airline activities and their respective corporatisation, (b) divestiture of construction and maintenance units from the state so that they have stronger incentives to perform efficiently, and ministries have an incentive to strengthen quality controls.
<b>Transport sector financing</b>	<b>Does the project contribute to rendering sector finances sustainable through appropriate pricing and other means?</b>	Many Bank projects involve tariff adjustments or reforms to road user charges and the establishment of a Road Fund to ensure a reliable, multi-year source of funding for the sector. Other examples include: targeting subsidies; and making public service obligations explicit through the purchase of services from operators.
<b>Private sector development</b>	<b>Does the project contribute directly to the private sector provision of facilities or services?</b>	Airport, port, intermodal terminals and motorways may be provided by the private sector.

<b>Corporate governance</b>	<b><i>Does the project help to improve corporate governance of enterprises in ways that increase market orientation?</i></b>	For example: through the establishment of "contract plans" that make public service obligations explicit, and set out the obligations and responsibilities of a client government and a railway enterprise. Also, financial discipline is fostered through the application by enterprises of International Accounting Standards and Bank requirements for audits to international standards.
<b>Market-related skills</b>	<b><i>Does the project create or transfer skills relevant to a market economy (e.g. management; marketing; accounting and auditing; tendering)?</i></b>	All Bank sovereign lending requires competitive tendering for goods, works and services. This encourages the development of local markets and disciplined tendering.
<b>Technology transfer</b>	<b><i>Does the project transfer technology and technical skills?</i></b>	For example: railway track maintenance technology in Russia.
<b>Competitive tendering for goods, works and services</b>	<b><i>Do procurement procedures ensure value for money?</i></b>	The Bank's Procurement Policies and Rules help create functioning markets by fostering competition and by requiring transparent and fair tendering for publicly financed goods, works and services.
<b>Enabling trade and exports</b>	<b><i>Does the project enable trade or export-oriented activity?</i></b>	Transport projects facilitate trade by reducing costs and assist the integration of markets.
<b>Mobilisation of local finance</b>	<b><i>Does the project contribute to financial intermediation and new local financial instruments?</i></b>	The availability of local financing can be important, especially where project revenues are in local currency.
<b>Demonstration effect and replicability</b>	<b><i>Does the project create a new, replicable activity?</i></b>	Several Bank projects have fostered interest in well-designed, efficient projects (for example, airport terminals and railway operations in the FSU).
<b>Backward linkages</b>	<b><i>Does the project utilise local suppliers/domestic inputs?</i></b>	Construction of transport infrastructure usually involves local contractors (whether as main contractor, subcontractor or in joint venture). Bank projects contribute to a flow of contracts that sustain local employment and technical capabilities. Local materials are used generally used when financially attractive to do so.
<b>Forward linkages</b>	<b><i>To what extent does the project induce downstream activities?</i></b>	As an intermediate good, transport typically has extensive downstream linkages. Freight movements might ensure raw material inputs to manufacturing, form part of a multi-location production process, or distribution of finished goods to end-users.
<b>SME development and employment</b>	<b><i>To what extent does the project contribute to the formation and expansion of SMEs?</i></b>	Provision of a modern road network provides essential infrastructure for SME activity related to trucking, vehicle maintenance and repair, motorists' services, freight forwarding etc.

## ANNEX C

### PRIVATE TRANSPORT INFRASTRUCTURE PROJECTS

The following projects have been submitted to the Bank for consideration:

Country	Project	Comment
Bulgaria	Sofia Airport	preferred concessionaire did not achieve financial closing; discussions under way for new tender
Croatia	M12 Zagreb-Gorican	discussions under way with government's preferred tenderer
	Zagreb-Karlovac-Rijeka	subject to review
Czech Republic	D5 Motorway	concession tender cancelled and project completed by the State
	Prague Airport	proposed concession cancelled
Hungary	M1-M15 Toll Motorway	<b>private financing using BOT structure; M1 opened to traffic in January 1996; outturn traffic about 40 per cent lower than forecast</b>
	Szekszard Bridge	concession awarded, but project never reached financial closing, due to poor financial viability
	M5 Toll Motorway	<b>private financing using BOT structure; first section opened to traffic in December 1996</b>
	M3 Toll Motorway	having tendered the project as a BOT concession, the government decided in September 1995 to cancel the tender and build the motorway as a state sector project
	M7 Toll Motorway	concession tenders submitted; government reviewing options
	Ferihegy Airport Terminal	government effectively nationalised the project in 1996
	Intermodal Logistics Terminal	to be tendered, with MAV as minority shareholder
Latvia	Kalija Parks	
Moldova	Giurgiulesti Oil Terminal	<b>EBRD loan signed December 1996</b>
Poland	A-2 Motorway Concession	two concession tenders submitted
	A-4 Motorway Operating Concession	preferred tenderer selected by government
	Grain terminal, Gdansk	discussions under way
	Iron ore terminal, Gdansk	discussions under way
Romania	Initial motorway concession	concession advertised July 1996

Russia	Pulkovo Airport Terminal, St. Petersburg	negotiations well advanced; financial closing targeted for 1997
	Tamanski Oil Terminal	preliminary stage
	Novorossysk grain terminal	under preparation
	Batareinaya Bay refined oil products	
Turkmenistan	Turkmenbashi port dry cargo	under review
Ukraine	Yuzhny fertiliser terminal	<b>EBRD equity participation signed December 1995</b>
	Oil terminal	discussions under way

## ANNEX D

### MAJOR IMPEDIMENTS TO MOBILISING PRIVATE FINANCE FOR TRANSPORT INFRASTRUCTURE

#### Poor financial viability

A project may be economically attractive, but not be financially viable without a contribution from the public authorities. For example, some economic benefits may accrue to users of competing facilities, where congestion is reduced as a result of the new project, but such benefits are not capturable through the tariffs charged by the project company. A "mismatch" between economic and financial performance may also be due to price distortions, differences between the useful life of the asset and the loan tenors, or the lenders' requirement that expected revenues cover debt service plus a cushion, so that the project can withstand adverse events without default. In such cases, the public authorities may wish to contribute financially in order to enhance returns on equity and debt service cover ratios to market-acceptable levels, thereby "enabling" the project to proceed. The support may take the form of contributions-in-kind (for example, provision of existing assets), guarantees, grants, subordinated loans or standby facilities.

However, in the case of motorways, Bank experience in Hungary, Poland and Romania suggests that upgrading to full motorway standards is likely to be economically and commercially viable for very few (if any) sections in the short to medium term, if rigorous evaluations are conducted.<sup>1</sup> Despite initial hopes and aspirations, present income and traffic levels in the region are usually too low to generate sufficient toll revenue to service the debt of a fully privately financed facility.<sup>2</sup>

#### Public affordability and political acceptability

The political environment has a very strong influence on lenders' perceptions of risk and it is clear that political factors are behind the "failure" of a number of concession projects in the region. Public acceptability plays a key role in shaping political views. First, it must be acceptable for transport infrastructure and services to be provided by a private company, usually involving foreign interests. Second, tariffs must be at levels affordable and acceptable to potential customers and, as a consequence, acceptable politically.

In some cases, a government may be reluctant to "lose control" of what it perceives to be a "strategic asset" (for example, a port facility). And decisions may be influenced sometimes by existing interest groups that would lose influence or jobs if a concession were granted to a private company. Such events are well known within the private

<sup>1</sup> It should be remembered that tolling reduces the economic benefits of a motorway since some traffic diverts away from the motorway to alternative routes, where travel speeds tend to be lower and accident rates higher. Diverted traffic also usually incurs higher vehicle operating costs.

<sup>2</sup> See "BOT Concessions and Beyond"; Philip Cornwell; Annual Meeting of the European Transport Forum, 1994.

finance markets and make it difficult to mobilise private finance for transport infrastructure projects.

#### **Level and equitable allocation of risks**

Many lenders are not prepared to take full demand risk, arguing that this is an equity risk and not one that senior lenders should assume. Therefore, lenders may ask for support from the state to partially cover demand risk, especially in the early years of operation. Client states may consider guaranteeing a base level of traffic or revenue (Spain), providing cash-flow deficiency guarantees (Hungary), and/or link the concession period to the outturn traffic volumes (Dartford Crossing and Second Severn Crossing, UK). In view of its experiences with the M1-M15 Toll Motorway, the Bank is likely to require project sponsors and/or the host state to bear some demand risk.

Demand risk in airport terminal projects is easier to assess because of the low price elasticity of demand with respect to airport charges. For port projects, base utilisation undertakings from the port's main users usually mitigate demand risk.

In view of the different attitudes and values of Western commercial players and public sector employees in the region, considerable time can be required to develop mutual trust, particularly in the case of infrastructure (which was always considered a public sector matter of strategic importance). Where substantial public sector financing is required to attract private capital for a PPP, conflicts can arise. Consequently, this phenomenon is reflected in legal arrangements and risk premiums, and project development, implementation and the initial stages of operation may be adversely affected.

#### **Lack of equity**

Several factors limit the scope for dividends to shareholders in the early years (and therefore the attraction to potential equity investors): for example long construction periods, debt service obligations and slow revenue build-up. In the case of the Hungarian M5 Toll Motorway, for instance, the first dividend payments are permitted only 10 years after financial closing. Typically, only companies that have an interest in construction or related activities are prepared to invest. Most potential motorway concession projects are therefore contractor-driven, and construction companies may be the only shareholders. Conflicts of interest are unavoidable and are difficult to mitigate contractually. Transport operators, with a long-term interest in the project, are rarely willing to become major shareholders. Regional infrastructure investment funds do not yet exist, mainly because of the small project pipeline (lack of viable projects) and the long-term horizon required. And there are many competing investment opportunities in telecommunications and other sectors, and in other regions.

#### **Lack of local funding**

For projects that generate mainly local revenues (for example, motorways), it is of crucial importance that part of the debt be denominated in local currency, in order to limit exposure to currency devaluation and inflation risks. Local financial and capital markets in the region are generally insufficiently developed for this type of funding. The Bank has successfully supported local funding instruments for the M1-M15 Toll Motorway, such that some 50 per cent of the debt is denominated in local currency.

Alternatively, the host state may choose to guarantee a fixed exchange rate (as in Spain) to enable international funding.

#### **Regulatory and legal constraints**

Ideally, countries embarking on private infrastructure projects should have a concession law in place. A concession law typically lists the types of concessions to be awarded, defines the person/body authorised to grant concessions, deals with the obligations of the state, describes the tendering procedure, and deals with termination events. Concession laws exist in Albania, Bulgaria, Hungary, Poland and Romania. Without a concession law, the approval procedure tends to be more complex. Lenders to a BOT project require certain security arrangements to be in place, such as mortgages, pledge of shares, assignment of contracts, insurances and accounts. Lack of provisions for such security arrangements will reduce lenders' willingness to participate.

#### **Lack of convincing examples in western Europe**

Most of the central European countries look to western Europe for examples of privately financed infrastructure. Unfortunately, there are relatively few examples and success has been mixed.

## ANNEX E

### GUIDELINES FOR EBRD PARTICIPATION IN PRIVATELY-FINANCED TRANSPORT INFRASTRUCTURE PROJECTS

The purpose of these Guidelines is to set out the basis under which the European Bank for Reconstruction and Development (the "Bank") may be willing to consider participation in limited-recourse project financing for transport infrastructure or a public-private partnership. The term "concession" is used in these guidelines to mean contractual arrangements between a State and a partly or entirely privately-owned concession company, whereby the State grants rights to the company for a specified period under mutually agreed conditions to finance, build, operate and maintain transport infrastructure, and to levy user charges. These guidelines apply only to limited-recourse project financing and not to sovereign lending for transport infrastructure.

In considering possible participation in limited-recourse project financing or a public-private partnership, the Bank will have regard to the following:

<b>The Sponsor</b>	The sponsor (or sponsoring consortium) may include contractors, operators, suppliers, financial investors, host government bodies and local private counterparts. The sponsor should provide a description including: (a) background and experience, (b) financial standing, (c) proposed financial contribution (appropriate to demonstrate a firm, long-term commitment), and (d) exposure to risk.
<b>The Company</b>	The company will be established by the sponsors, who will typically be shareholders. The company will be the borrower of all funds. Private sector interests should control the company.
<b>The Project</b>	The Bank will wish to review the economic and financial background to the project, its scope and rationale, together with its technical and organisational characteristics. The sponsors and/or the public authority granting the concession should set out the physical and technical options considered, and the reasons for those selected. The sponsors and/or the authority granting the concession should also demonstrate the role of the project within a coherent, sustainable national transport strategy.
<b>Legal Framework</b>	The Bank requires that: (a) there is an appropriate legislative framework for granting a concession, including rights to levy fees/tolls in a non-discriminatory manner from users of the given infrastructure, (b) the granting authority (if not the State), is the body properly authorised under applicable legislation to grant the concession, (c) any financial and other obligations undertaken by the granting authority in the concession contract and related documents are obligations of the State, or are backed by appropriate State guarantees, (d) ownership of all assets is clearly defined and duly registered prior to effectiveness of the concession contract, (e) appropriate mitigation is available against predetermined and mutually agreed Government actions materially and adversely affecting the economic situation of the concessionaire, and (f) appropriate insurance and pledging is available.
<b>Procurement</b>	The Bank classifies operations as " <b>public sector</b> " or " <b>private sector</b> " for procurement purposes (this is separate from the classification made internally by the Bank for portfolio management purposes). The classification criteria for procurement purposes are set out in the Bank's Procurement Policies and Rules (Revised March 1996):

"Para 3.2: For the purpose of these rules, *public sector operations*<sup>1</sup> are operations:

- (a) which are guaranteed by the government or a public agency or instrumentality of the country of operations; or
- (b) for public utilities<sup>2</sup> majority owned or controlled<sup>3</sup> by national or local governments, or government agencies of the country of operations; or
- (c) for national or local governments of the country of operations or agencies and enterprises majority beneficially owned<sup>4</sup> by any of them, other than such enterprises that in the Bank's judgement are operating autonomously in a competitive market environment and are subject to bankruptcy or insolvency law."

1. "Operations" refers to loans, equity investment or guarantees of the Bank.
2. Utilities and authorities or undertakings exercising one of the following activities: the provision or operation of, or supply to, fixed networks providing a service to the public in water, electricity, gas, heat, telecommunications or rail transport.
3. Control is measured by the ability to effectively determine the decisions and policies of the utility, and not merely by the ability to set tariffs.
4. "Majority beneficially owned" refers to indirect forms of ownership. For example, if Company A owns shares in Company B which, in turn, owns shares in Company C, Company A is a beneficial owner of Company C.

For a concession classified by the Bank as a *private sector operation* for procurement purposes, Section 4 of the Bank's Procurement Policies and Rules apply. For transport concession projects other than rail transport concession projects, the beneficiary of the Bank's financing will be considered to be operating in a competitive market environment for purposes of paragraph 3.2(c) of the Bank's Procurement Policies and Rules if the private sector equity partner was selected and contracted as a result of transparent, competitive tendering acceptable to the Bank. If the beneficiary of the Bank's financing also satisfies the other requirements of paragraph 3.2(c) of the Bank's Procurement Policies and Rules (i.e. it is operating autonomously and is subject to bankruptcy or insolvency law), the Bank would not require open international tendering of works, equipment and services. The Bank would, however, wish to satisfy itself that the concessionaire uses appropriate procurement methods, which ensure a sound selection of works, goods and services at fair market prices, and that capital investments are cost effective. The Bank encourages authorities managing the procurement process to assist with tendering and negotiation leading to signature of a concession contract and financial closing.

For a concession classified by the Bank as a *public sector operation* for procurement purposes, Section 3 of the Bank's Procurement Policies and Rules apply, including open tendering for civil works.

The Bank would remain strictly neutral during any tender to select a concessionaire, but would be prepared to act as a participant during the later stages of negotiations between representatives of the public authority granting the concession and the potential concessionaire(s) to ensure that the requirements of potential lenders are taken into consideration in drafting the concession contract and other agreements.

The Bank would generally require the appointment by the concessionaire of an independent engineer (to be agreed by the public authority granting the concession) with adequate powers under the contract to perform its role in the long-term interests of the concession company and investors. Lenders will generally wish to appoint a Lenders' Technical Adviser.

**Public  
Participation**

If public participation has not already taken place, a scoping meeting would need to be held in the project area as soon as possible, to which inhabitants and non-governmental organisations would be invited. The meeting would identify project alternatives and would prepare and agree the terms of reference for an environmental assessment of alternatives. If public participation has taken place, it should be fully reported, recording what meetings and exhibitions were held, feedback from the public, and how issues and concerns have been addressed in the final design and associated mitigation works.

**Environmental  
Sustainability**

The Bank requires an Environmental Impact Assessment (EIA) of all major transport infrastructure projects. An EIA should ensure that project options under consideration are environmentally sound and sustainable, and that the environmental costs and benefits of options are identified. An EIA will identify ways to improve the project by preventing, minimising, mitigating or compensating for any negative environmental impacts.

Where adverse environmental impacts are anticipated, a mitigation plan should be available and the mitigation measures should form an integral part of the proposed project. To the extent that previous studies have not covered all aspects adequately, additional environmental assessment work would have to be commissioned and carried out to the satisfaction of the relevant Ministry of Environment and the Bank.

**Traffic and  
Revenue  
Forecasts**

Prior to making any commitment, the Bank will wish to review the results of an up-to-date, state-of-the-art traffic and revenue study, carried out by international consultants with market credibility. The study should be based on recent survey data (collected over a sufficiently long period to capture seasonal variations) and take into account competition from other routes/services/modes. The Bank recommends that where possible, potential bidders and the State collaborate to organise a single traffic and revenue database study which should be designed to be acceptable to all parties, including eventual financiers. The study (which may be jointly financed by all tenderers or by the successful tenderer) should cover surveys and base year analysis/modelling and, depending upon the circumstances, may include basic macro-economic assumptions, and traffic and revenue forecasting. At its discretion, the Bank may require an independent audit of any traffic and revenue study presented by a potential concessionaire or that the concessionaire should finance a new study, to be carried out by competent, independent consultants according to terms of reference acceptable to the Bank.

**Capital  
Expenditure**

The sponsor should estimate the cost of implementing the project and set out: (a) the basis for the cost estimates, (b) allocation of the costs between land acquisition, civil works, equipment, services, permanent working capital and start-up expenses, (c) split between local currency and foreign exchange, (d) proposed procurement procedures, and (e) phasing of progress payments.

**Operating and  
Maintenance  
Costs**

The cost of operating and maintaining the project facility should be estimated, including: (a) the basis for the estimate, (b) breakdown into key cost components, and (c) split between local currency and foreign exchange.

**Economic  
Viability**

Based on the findings of the traffic and revenue studies, the proposed investment must have a satisfactory "global" economic internal rate of return (EIRR) and a satisfactory "national" EIRR under a reasonable set of "Banking Case" assumptions. When the EIRR are not satisfactory, the proposed project should be reformulated, postponed or cancelled.

**Other Project  
Costs and  
Benefits**

A description should be presented of the project's expected benefits to the local economy and the international economy. The description may include summary material on: (a) the project's role in expanding private sector participation in the sector, (b) other benefits such as job creation or environmental improvements, which may not be reflected in above calculations, (c) any economic costs not reflected in above calculations, and (d) any foreign (hard) currency generation potential.



**Financial  
Overview and  
Viability**

The sponsor should set out a financial overview of the project, including: (a) project sources and uses of funds, (b) disbursement schedules, (c) key operating assumptions (capital expenditure, operating costs, revenues, depreciation, tax calculations), (d) financial projections (Cash Flow and preferably also Profit & Loss and Balance Sheet statements) on a basis consistent with the key operating assumptions, (e) debt schedule (cash flows, current and capitalised interest, debt disbursement), (f) financial ratios such as annual and loan life debt service cover ratios, debt/equity ratios and equity returns; and (g) sensitivity calculations.

Project development costs incurred by sponsors may be taken into account, but should be identified and justified. The Bank reserves the right to have such costs audited at the appropriate time.

The project sponsors should demonstrate that, based on a reasonable "Banking Case" set of assumptions, the proposed project is "bankable" i.e. could service its debt even under a combination of adverse circumstances (for example, a traffic shortfall, cost over-runs, completion delay, extraordinary devaluation, higher than expected operating costs). The project sponsors should demonstrate that for the Banking Case, the proposed project could be expected to meet senior debt service cover ratios of at least 1.5 for each and every year of the loan life from the year of opening, and a loan life debt service cover ratio of at least 2.0 over the life of the loans (including any agreed public sector contributions). The Bank expects that aggregate adverse events would not require the company to delay the scheduled payment of any senior interest and principal (the "Downside Case").

**Financing Plan**

The sponsor should outline the proposed structure of the financing, including: (a) balance between senior debt, subordinated debt (if any) and shareholders' equity, (b) sources of supplier credits, local loans, foreign loans and equity, (c) terms and conditions required to assure adequate funding and liquidity, (d) public contributions (including in-kind contributions, construction or operating subsidies, stand-by facilities, tax or duty exemptions, and guarantees), (e) identification of gaps in the financing plan, and (f) dividend and profit sharing policy. The Bank expects to see an equity contribution of at least 20% of total project cost, with a substantial proportion from the project sponsors, in order to demonstrate long-term commitment to the investment.

**Market Appetite**

The concessionaire's financial adviser should advise on the project size in relation to the market's likely appetite for transport infrastructure financing in the given country on the proposed timescale.

**Risk Analysis**

Major project risks should be identified and a brief description given of how these may be mitigated, including: (a) risk that the project will not be completed on time and within budget (potential causes of cost overrun, including but not limited to late delivery of the site, dangerous dumpsites, archaeological discoveries, late issuance of permits and licenses by appropriate authorities; contracting mechanism i.e. fixed-price, lump sum turnkey or packaged contract; performance penalties or guarantees, sponsor or third party guarantees), (b) operating cost risk (potential for overrun or performance shortfall, contractual provisions), (c) revenue risk (demand levels, tariff/toll indexation arrangements, contractual provisions), (d) foreign exchange risk (convertibility, exchange rate depreciation), (e) interest rate risk, (f) force majeure risk, (g) contractual performance risk (financial standing of contractual counterparties, credit enhancement by third parties), and (h) proposed insurance arrangements.

**Role of the Bank**

The sponsor should present a concise description of the role the Bank is requested to play, which may include a combination of: (a) direct foreign currency loans to the concession company, (b) syndicating exposure to other lenders, (c) local currency loans, (d) guarantees, (e) underwriting, (f) facilitation of sourcing of local finance, (g) possible equity investment (although the Bank would normally look to sponsors and others), and (h) advisory services. The Bank would generally expect to limit its overall financial participation to no more than 35% of total project cost.

**Legal  
Agreements**

The proposed contractual structure for the project should be explained, including a summary of all key agreements. All legal agreements must be acceptable to the Bank (Concession Agreement, Construction Contract, Operations and Maintenance Contract, Independent Engineer's Contract etc.). All necessary approvals under national law would have to be obtained from the relevant authorities (e.g. Ministry of Environment).

## ANNEX F

### EBRD INSTRUMENTS

#### Sovereign loans

Many Bank loans are to a State or a State entity, with a sovereign guarantee. Some investments, such as road rehabilitation have a high economic return, but do not generate revenues directly. Others generate revenues which, however, cannot be attributed to a specific corporate entity. Loans have been contracted with State-owned companies, such as railways, which are still loss making, but are in the process of restructuring. All the above require sovereign backing to ensure repayment of principal and interest.

The Bank charges a uniform margin of 1 per cent over Libor. In many instances, clients also have access to finance from the European Investment Bank (EIB), the International Bank for Reconstruction and Development (IBRD), the Asian Development Bank (ADB), or bilateral institutions such as KfW, all of which offer more attractive rates and sometimes less stringent conditionality. The Bank can be additional where the financing needs for a specific project are so large that co-financing by two or more International Financial Institutions (IFIs) is required. The Bank can also be additional in countries where other IFIs are not active or where IFIs agree on a division of labour.

#### Limited-recourse project loans<sup>1</sup>

Limited-recourse finance is potentially appropriate for projects that generate enough cash flow, either in local or foreign currencies, to service the debt. This approach has been used for two toll motorways in Hungary, a port project in Moldova, and is being used to structure an airport terminal project for St Petersburg, Russia. The Bank is ideally suited to assist in such projects because of the range of instruments it can offer. Commercial banks often request Bank involvement as a condition for their participation. The Bank's additionality is strong. The main instruments are:

- **Equity/Subordinated debt.** The Bank is able to become a minority shareholder in a project company, subject to a satisfactory expected rate of return and a defined exit strategy. Alternatively, it can extend a subordinated loan, subject to satisfactory debt service cover ratios, with a mechanism to share the upside potential of the project.
- **A/B-loan.** Under an A-loan, the Bank lends to a project at its own risk. Under a B-loan, the Bank lends at the risk of commercial banks who decide to participate in the project financing. The term of the A/B-loan can be in excess of 15 years and can include a grace period as well as an annuity-type repayment profile. Commercial lenders under the B-loan benefit from the presence of the Bank and its preferred creditor status. Preferred creditor status does not mitigate against commercial risks, but against the political

<sup>1</sup> These instruments can also be applied to asset-based, corporate and municipal operations.

risk of the non-availability and non-transferability of foreign currency to service the loans.

- **Refinancing guarantee.** An A/B-loan structure may include a balloon payment at the end of the tenor of the B-loan, in order to minimise debt service during the life of the loan. Commercial lenders may want the repayment of this balloon payment to be guaranteed. The Bank can offer such a guarantee, without a counter-guarantee from the State. In the case of the Hungarian M5 Toll Motorway, the balloon amount under the B-loan at the end of year 13 was 55 per cent of the total amount. At the option of each B-loan lender, the Bank guaranteed the balloon amount for a period to be determined in the future by each B-loan lender. The World Bank offers a similar instrument called a "partial credit guarantee", but requires a counter-guarantee from the State.
- **Specific event guarantee for co-financiers.** Co-financiers may be willing to assume commercial risk, but not accept some or all of the following political risks: (a) damage due to political violence, (b) confiscation, expropriation or nationalisation, (c) revocation of approvals, (d) prohibition on import of essential equipment or entry of key personnel, and (e) "fiscal" expropriation. The Bank is willing to consider issuing "Specific Event Guarantees" to co-financiers. It would seek to mitigate these risks by obtaining suitable undertakings from the government. The level of undertaking would depend on the political sensitivity of a project and whether the country's track record with respect to the implementation of private sector projects. This is a relatively new instrument and experience will be developed on a case-by-case basis.

#### Asset-based loans

The Bank has extended several loans to shipping companies in Russia that are, in terms of credit risk, a blend of corporate risk of the relevant company and the expected resale value of the asset financed. These operations have generally been financed with commercial banks which, however, need the comfort of the Bank's presence in the transaction and its umbrella as lender of record under a B-loan. The Bank has not to date been involved in aircraft financing, due to lack of additionality - commercial banks have sufficient comfort since, in the case of payment default, lenders could take possession of the aircraft and sell it for a price that would fully recover the outstanding loan amount.

#### Corporate loans

In some sectors, such as the automotive industry, the Bank is willing to accept the corporate risk of local companies. The Bank can also consider corporate lending to an airport company, provided the enterprise has: (a) a good track record and business plan (with credible traffic and financial forecasts, and has completed a feasibility study that shows that the scale of investment is justified by foreseeable demand and users' willingness to pay); (b) the Bank can assure itself of management's capabilities; and (c) have confidence that the company will enjoy complete commercial freedom. The Bank has yet to find such a case, but may do so as the aviation industry stabilises and matures over the coming years. However, the Bank's additionality is fast decreasing, at least in central Europe, due to the strong presence of international and local

commercial banks. The Bank will therefore focus increasingly on countries at an earlier stage of transition, and on companies that require restructuring.

#### **Loans backed by municipal/regional authorities**

Several proposals for urban transport projects involve municipal finance structures. In such cases, the creditworthiness of the borrower would typically be insufficient to support stand-alone borrowing and some form of credit enhancement is required. The Bank would consider accepting the creditworthiness of a municipality or regional authority if it can be demonstrated that the authority will be capable of fulfilling its obligations, which will usually require a certain independence from government and the right to raise tax revenues and to control spending. Most other IFIs, as a matter of policy, do not accept municipal risk. Commercial banks will accept municipal risk on an exceptional basis (for example, in Poland).

#### **Development of local markets**

Since transport infrastructure projects often generate mainly local currency, it is important that a portion of the loans is in local currency. The Bank is prepared to consider issuing partial guarantees for local currency loans by a local bank to a project company. Partial guarantees make it easier for such banks to participate in long-term lending to infrastructure projects. The Bank is also willing to consider payment guarantees for private placements to institutional investors in local currency. The Bank can also issue bonds in its own name and on-lend the bond proceeds to a project company. These instruments were applied successfully for the Hungarian M1-M15 Toll Motorway.

#### **Treasury products**

Proactive currency and interest rate management is crucial to any project company exposed to currency and interest rate volatility risks. The Bank can offer various instruments such as interest rate swaps, caps, floors and hybrid instruments. Bank involvement is additional since a project company is unlikely to find counterparties for many of these instruments.

#### **Syndication**

The Bank cannot lend more than 35 per cent of total project cost and its exposure to any one project should not exceed ECU 150 million. At the same time, the Bank seeks to act as a catalyst to induce commercial banks to co-finance. The Bank maintains close contacts with the financial community and is in a position, either on its own or together with a commercial bank, to syndicate substantial amounts to commercial banks. For the financing of the Hungarian M5 Toll Motorway, the Bank and a German commercial bank successfully syndicated a B-loan in an amount of ECU 204 million.

#### **ECLAT**

ECLAT is a joint-financing programme under which contracts for specified items or packages of equipment required for Bank-supported projects are financed partly (up to a maximum of 50 per cent) by the Bank and partly by Export Credit Agencies (ECAs) or ECA-backed commercial banks. Standardised loan documentation has been developed, in consultation with a number of ECAs and banks, to facilitate the financial negotiations.

#### **Multi-Project Facility**

A Multi-project Facility (MPF) is a framework agreement/credit line with a multinational company to co-invest in regional/local companies or projects. A feature of this programme financing approach is the close involvement of an experienced investor/sponsor in the development, financing and management of each individual operation. The broad terms of the Bank's involvement are set out in a Framework Agreement. The Bank would have recourse to the sponsor in defined cases, especially those under in the sponsor's control. An MPF may be appropriate where the sponsor anticipates a series of projects with a typical Bank financing requirement in the range US\$1-10 million per project - for example, in the case of a logistics or public transport company.

#### **Technical cooperation**

The Bank can mobilise technical cooperation in support of project preparation and, sometimes, related to specific, institutional development aspects of project implementation. The technical cooperation is grant-financed thanks to the generosity of donors who maintain Technical Cooperation Funds at the Bank for this purpose. Where private sponsors are involved, the Bank will generally seek reimbursement of technical cooperation funding if and when financial closing is achieved. The Bank has executed about 80 technical cooperation projects in the transport sector, valued in total at approximately ECU 30 million.

#### **Loan conditionality**

Loan conditionality is probably the Bank's most potent instrument in fostering transition. Thus, the Bank has "encouraged" borrowers to implement a range of transition-related reforms, such as: the adoption of economically rational criteria for investment appraisal and selection; adjustment of rail tariffs to move towards financial sustainability; introduction of legislation and regulations to encourage private investment; introduction of open tendering to promote competition and ensure value-for money. Loan conditionality is negotiated on a case-by-case basis.

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*Footnote: The Bank is project-driven and therefore does not undertake structural adjustment or sector lending.*