

## **HUNGARIAN TRANSPORT POLICY**

**2003 - 2015**

# FOREWORD



Rising living standards trigger greater mobility and increase demand for the shipment of goods. Transport is a fundamental condition for economic growth, and a token of freedom and a better life for people. At the same time, transport damages the environment and presents risks to life and health. Transport policy is meant to resolve this contradiction and balance the two sides by finding ways to satisfy demands for increased mobility while minimizing damage. In other words, it is the tool of sustainable mobility.

Social and economic changes, recent experiences, and the European Union's transport policy, issued in 2001 for the period ending in 2010, make it necessary to overhaul Hungary's transport policy that has been in effect since 1996.

In these early days of the 21<sup>st</sup> century, the standards of Hungary's transport system—like the general level of the country's economic development—fall short of the European average. Hungary's success in the market economy over the past decade has highlighted the fact that freeways, a high-performance railroad, sophisticated air transport, and inexpensive freight shipping of agricultural products on inland waterways constitute essential criteria for industrial and commercial enterprise in making investment decisions and choosing locations for facilities. In this way, transport has become a key factor of Hungary's economic growth and ability to compete in international markets.

On average, Hungarian households spend nearly one fifth of their total income on transportation and related expenses. Transport, while enabling the free movement of people and goods, exerts a stressful influence on the environment by means of accidents, energy consumption, air pollution, and noise, and its sheer demand for space. The Hungarian transport development of the future will bring more awareness to improving living standards and implementing a sustainable growth pattern in harmony with the environment.

Obviously, the construction of the freeway system, the modernization of the railroad to meet 21<sup>st</sup>-century requirements, the revitalization of Hungarian navigation traditions on the Danube-Rhine-Main waterway, the acquisition of solid positions in the dynamic air transport market, and the integrated development of urban and metropolitan transport networks outstrip the powers of the Ministry of Transport alone. These goals of transport policy will take nothing less than a well-orchestrated collaboration between the national and local governments, domestic and foreign investors, private capital, and private enterprise.

Budapest, May 2004

**Dr. István Csillag**  
Minister of Economic Affairs and Transport

# CONTENTS

page

<b>I.1. MAJOR FORCES SHAPING TRANSPORT POLICY</b>	<b>2</b>
I.1.1. Factors influencing transport demand	2
I.1.2. The macroeconomic context	2
I.1.3. Competition in the transport market	3
I.1.4. Public services	4
<b>I.2. OBJECTIVES AND STRATEGIC GOALS</b>	<b>6</b>
I.2.1. Top priority objectives	6
I.2.2. strategic goals	9
<b>I.3. INSTITUTIONS AND REGULATION</b>	<b>11</b>
 <b>II.1. MODERN TRANSPORT AND IMPROVED SERVICES</b>	 <b>14</b>
II.1.1. sustainable growth	14
II.1.2. Transport safety	18
II.1.3. National defense capability	19
II.1.4. Reliable, safe, and accurate service based on up-to-date technology	19
II.1.5. Improving existing transport systems and their exploitation	20
II.1.6. Rapid construction of lacking infrastructure	20
II.1.7. Financing	22
II.1.8. Competitiveness and efficiency	23
II.1.9. Professional training	23
<b>II.2. DEVELOPMENT BY TRANSPORT MODE</b>	<b>24</b>
II.2.1. Infrastructure networks and hubs	25
II.2.2. Ownership, regulation, and operation	34
<b>II.3. ROLLING PLAN FOR MID-TERM INFRASTRUCTURE DEVELOPMENT</b>	<b>40</b>
 <b>LIST OF RELEVANT LAWS AND REGULATIONS</b>	 <b>41</b>
<b>OTHER DOCUMENTS AND PLANS</b>	<b>42</b>



# I. TRANSPORT POLICY

**The significance of transport** in economy and society clearly justifies the need for comprehensive strategies and policies of transport development, devised to harmonize with the general trends of domestic and international growth.

Transport policy regards transport as an organic whole in which the various networks of infrastructure form and operate in a hierarchy. It unifies and coordinates mid- and long-term development plans, strategies, regulatory concepts, the institutional background, and financing. Taking into account the need to minimize environmental damage, it outlines the role of transport in social and economic development, relations in neighboring countries, and Hungary's own accession and adaptation to the EU. The transport policy is in harmony with the Cohesion Fund Master Strategy designed to receive support from the EU Cohesion Fund, the National Development Plan for the use of EU Structural Funds, and the law on the National Plan for Regional Development.

The main **priorities** discussed in this document by sector are as follow:

- **Construction of lacking infrastructure** in accord with Trans-European Transport Networks (TENT) guidelines. Implementation is aided by the transport allocations of the Europe Plan, the National

Development Plan, and the Cohesion Fund Master Strategy.

- **Following EU transport regulations** with a view to the distinctive features and possibilities inherent in the Hungarian situation, particularly domestic railway reform, public passenger transport service, and regulated competition.
- **Developing an environmentally friendly transportation** system through environmental measures and preferences for environmentally sensitive approaches.

**The resulting transportation system will be assigned the following priorities in operation and traffic management:**

- Preference for mass transportation over individual means; encouragement of bicycle use; improvement of pedestrian safety and comfort.
- In goods traffic, incentives for rail and water transport as well as combined/multimodal shipping methods.

The transport policy elaborates the details of the transport system goals to be achieved by 2015. The implementation of specific network elements will require the construction of the socio-economic and technical background. The transport policy addresses issues of urban transport in its major aspects only. Owing to the special significance of this field, a separate concept for urban transport policy will be developed.

## I.1. MAJOR FORCES SHAPING TRANSPORT POLICY

### I.1.1. FACTORS INFLUENCING TRANSPORT DEMAND

The most important factors expected to shape transport demand in Hungary are the following:

- In 2004, Hungary became a member of the European Union;
- Hungarian GDP is expected to grow steadily, at a rate regularly above the EU average;
- With the ongoing restructuring of the economy, conventional, transport-intensive sectors will probably continue to shrink;
- The economy will remain essentially export-driven;
- The most dynamic growth sectors are those with considerable foreign investment that will continue to attract capital;
- Hungary will absorb labor from neighboring countries;
- Demographic changes will restructure the population in terms of age groups, employment rates and labor distribution by sector;
- Differences between the country's regions will decrease;
- Suburbanization—the trend of moving out of larger cities—will continue;
- As wages begin to approach the EU average, the resulting lifestyle changes will have implications for mobility;
- The growth of the tourism industry will become a major factor.

These factors provide the basic vantage points for the strategic planning of each transport sector and are decisive in identifying transport policy priorities.

### I.1.2. THE MACROECONOMIC CONTEXT

**The global recession** that set in after the turn of the millennium has reined in Hungary's export options and discouraged investment. It is the intention of the Government to establish the right conditions for sustainable growth, economic equilibrium, and improved competitiveness by means of a firmer and more stringent fiscal policy in utter harmony with the EU's fundamental principles of liberalized markets, transparency, and fair competition. The Government's program outlines a macroeconomic framework in which the rate of GDP growth will rise steadily starting in 2003.

**The task of transport policy** is to aid long-term economic growth and improve the quality of life by ensuring environmentally sustainable mobility. The European transport corridors are the main arteries of the continent's integrating economy which, passing through Hungary, enable the active connection of the country and its businesses to the international circulatory system.

**Any change in the economic environment** entails consequences for transport. This interdependence demarcates the possibilities of an integrated economic and transport policy. Economic forecasts and anticipated social changes help us identify required development goals, restructuring, and other measures in the transport sector.

Investing in Infrastructure development is the best way to stimulate the economy. The allocation of these funds is all-important for progress in any given region, particularly in agriculture, where success is highly dependent on transport infrastructure. It is equally vital for the tourism industry, whose needs must therefore be taken into account in transport planning.

In modern societies, transport-related expenses make up 13-18% of household incomes, and they figure highly in national budgets. After World War II, economically advanced countries spent 2-2.5% (some as much as 3-3.5%) of the GDP investing in transport and telecommunications. During the construction of the basic infrastructure, transport investments have swallowed (and continue to swallow) 1.3-2% to 2.5-3% of the GDP. Examining the investment volumes from 1985 to 1994 and their ratio to 1994 GDP figures in 14 member states of the EU—with

the single exception of Greece—we find that, during that decade, transport investments in 12 member states increased by 45%. In the 14 countries, the ratio of investments in railways and roads to the GDP was 1.1% in 1994; in 1996, the 15-nation average of transport investments accounted for 1.1% of the GDP.

**In the early 1990's, Hungary** spent an annual average of **0.5-0.6% of its GDP** investing in transport. This ratio began to climb between 1998 and 2001.

	1998	1999	2000	2001
Total investment as a percentage of the GDP	14,1	16,3	18,8	20,7
Transport investment as a percentage of total investments	8,2	6,3	6,1	6,1
Transport investment as a percentage of the GDP	1,15	1,03	1,14	1,26

Source: GKM Transport, post and water management statistics, 2001.

To implement transport policy, it is necessary to create a predictable and pro-investment financing system for the operation, maintenance, and development of transport branches.

Before and since Hungary's accession to the EU, the ISPA and, respectively, the EU Cohesion Fund and Structural Fund have assisted Hungarian transport modernization by non-repayable support, on condition of matching domestic allocations.

### I.1.3. COMPETITION IN THE TRANSPORT MARKET

In the course of the socio-economic transformation since 1990, Hungary's transport system has undergone major changes.

Carriage of goods by road is now fully privatized, with small and micro businesses dominating the sector. The vehicle fleet and professional expertise of international carriers operating out of Hungary are on a par with those of the EU counterparts.

Regular passenger transport by road meets international standards in terms of network density and service frequency, but revenues fall far behind those western competition.

Local regulations and the adoption of Community laws define the framework in which the specific attributes of individual transport categories, pricing policies, subsidies, benefits, operation requirements and other measures contribute to EU-conform market conditions. In the area of transport, particularly passenger services, the EU clearly favors **regulated competition**.

<sup>1</sup> *Közlekedéspolitika a 21. Század elején* [Transport policy in the early 21<sup>st</sup> century], KTI – 2001.

<sup>2</sup> EU Energy and Transport in Figures. Statistical Pocketbook, 2001.



The satisfactory saturation and repair of the infrastructure, along with the quality of transport services, improves the competitive edge of the production sector, especially agriculture, and the tourism industry.

#### I.1.4. PUBLIC SERVICES

**The national and local governments** are responsible for ensuring the smooth operation of public passenger transport services.

Public passenger transport relies on scheduled services of the appropriate frequency to meet the population's travel needs, accommodating the demands of various lifestyles.

These daily needs include travel

- to and from school and work;
- from the peripheries to economic, administrative and service centers;
- to access health and social services;
- to take care of official matters.

Access by travel is especially important

- between larger settlements and the capital;
- for connecting settlements without railway to the nearest station by scheduled transfer.

Travel safety for the handicapped must be ensured by eliminating obstacles from the infrastructure and/or by special door-to-door services.

The quality and quantity standards of public passenger service (timetables, routes, and hours of operation) are set by the assigned unit of public administration based on the deliberation of the residents' demands and financial means. (Under the present distribution of duties, intercity travel is the responsibility of the national government, while the local governments manage local passenger services.)

In the area of the transport infrastructure, we must enable each community to reach the

regional center without unreasonable detours, and ensure public sidewalks and paved roads to access all licensed properties in residential or resort belts by foot or passenger car. Regional centers are connected by a freeway/expressway network (catchment areas are shown in the access illustrations below). Access to smaller regional centers is provided by lower tiers of the road network, such as main roads and regional secondary roads.



In our established policy, the government allocates funds from the annual budget via several channels to support local and intercity communal transport. The government also provides annual production support for MÁV, the Hungarian State Railways, periodically restructures the company's losses, and finances its investments of national significance. In the area of road transport, the Volán bus companies have received support from the state in revitalizing their fleets. Passenger support includes subsidies for discount passes for students and senior citizens and discount tickets for a variety of preferred groups, in both local and intercity rela-

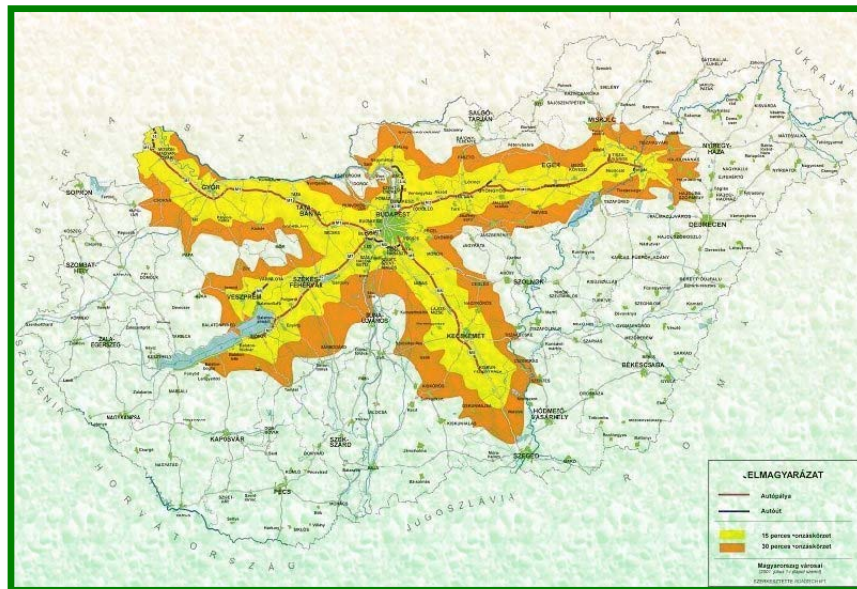


tions. This system of consumer price subsidy needs to be streamlined.

Public transport development and fare policy must be designed with a view to the social

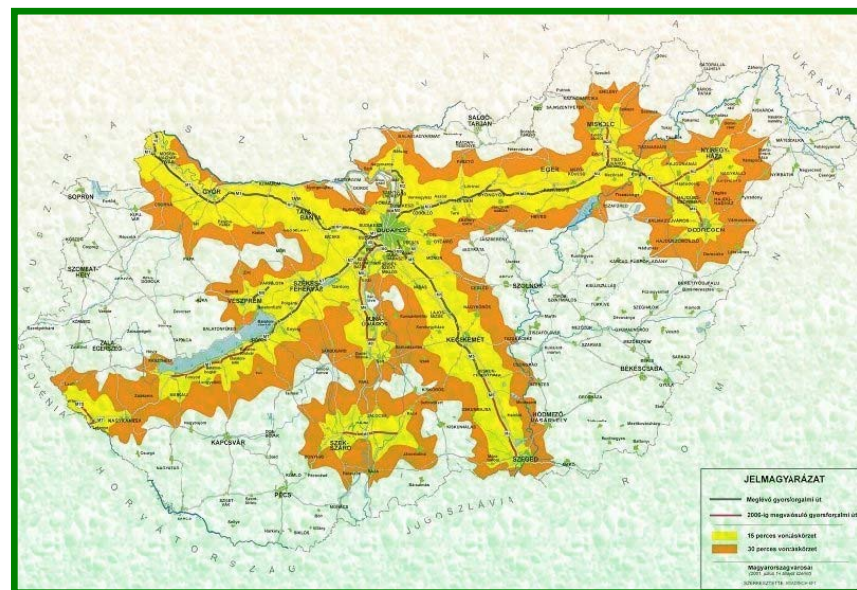
function of public service and its significance in everyday life, the preservation of local communities, the advancement of regions, and the assurance of equal opportunity.

### 15 and 30 minute catchment areas of the freeway system in 2002



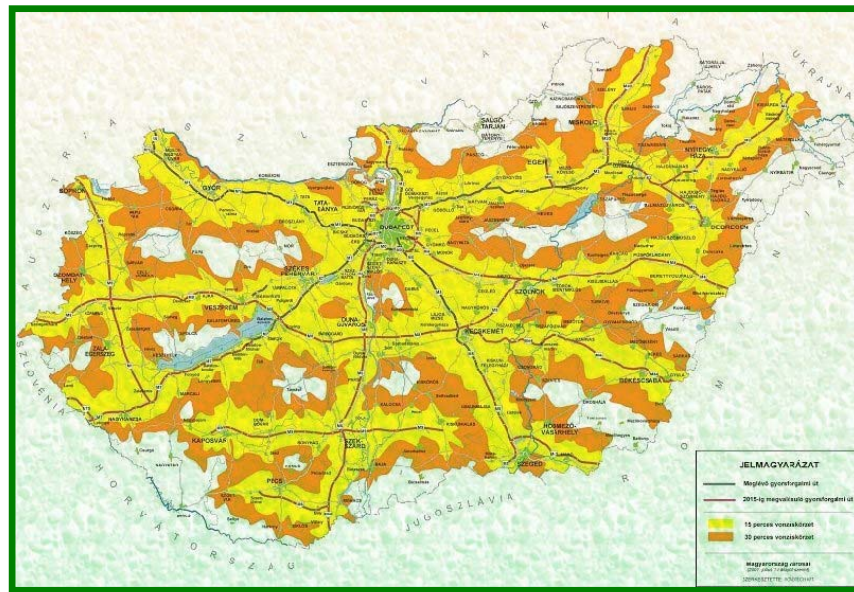
LEGEND  
Freeway  
Expressway  
15 – minute  
catchment area  
20 – minute  
catchment area  
Cities of Hungary

### 15 and 30 minute catchment areas of the freeway system in 2006



LEGEND  
Existing free-  
way/expressway  
Freeway/expressway  
to be constructed by 2006  
15 – minute catchment  
area  
20 – minute catchment  
area  
Cities of Hungary

### 15 and 30 minute catchment areas of the freeway system in 2015



## I.2. OBJECTIVES AND STRATEGIC GOALS

### I.2.1. TOP PRIORITY OBJECTIVES

The **European Union's new transport policy, issued in 2001**<sup>3</sup> aims at creating a balanced transport system that is sustainable socially, economically, and environmentally. Additional objectives include the integration of candidate countries and better access to the peripheral regions of the continent via the Pan-European Transport Network.

As the main priorities of its transport policy, the European Union seeks to

- correct regional disparities;
- clear bottlenecks;
- reduce congestion;
- shift the balance between transport modes;

- give a new place to users, at the heart of transport policy;
- manage the effects of transport globalization.

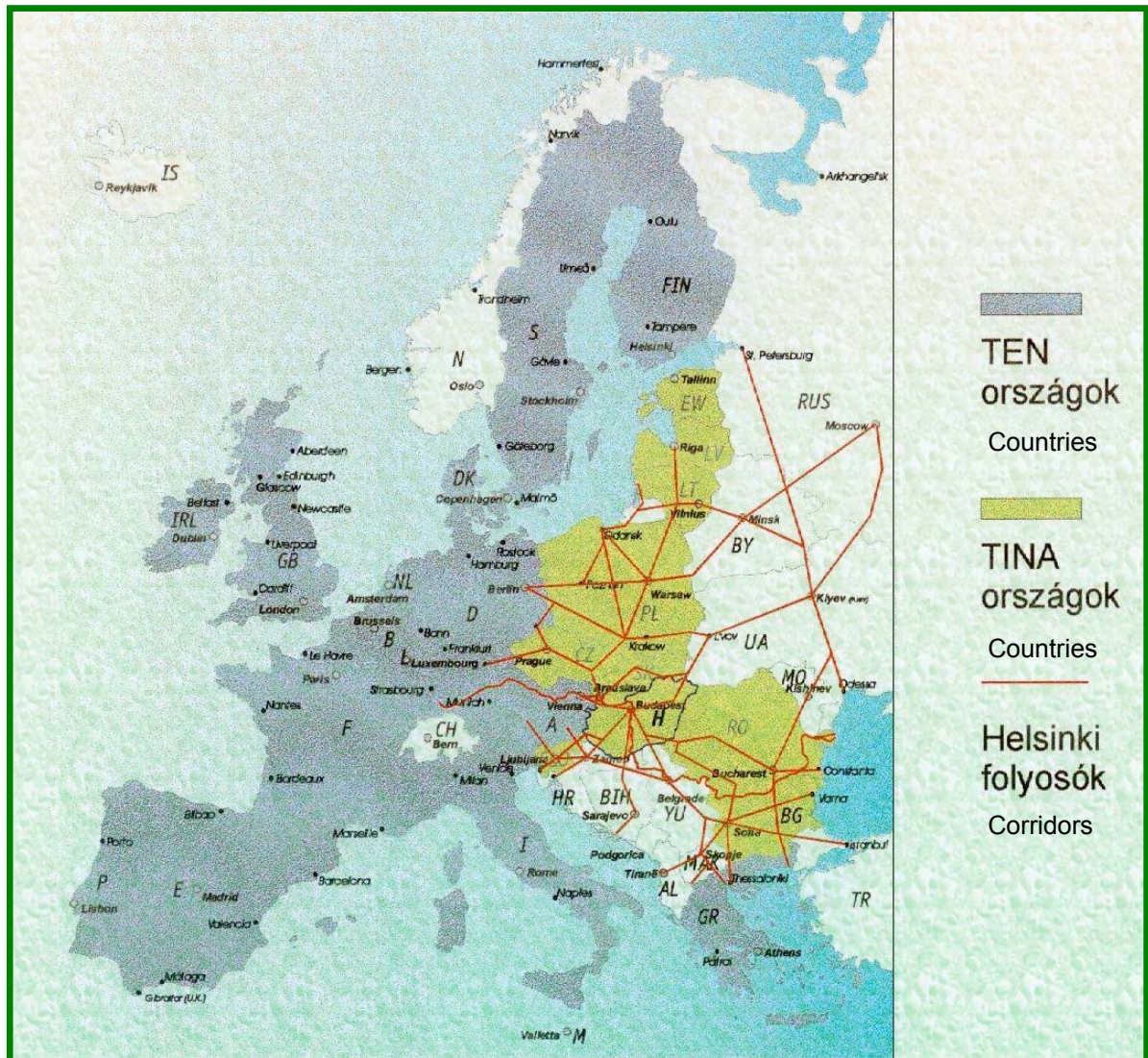
In Hungary, transport services and the state of the infrastructure often diverge from the European norm, but the nature of the challenge is similar, especially in the long term. This situation both enables and forces Hungary to adapt to the EU's transport policy.

**Hungarian transport policy** has identified the objective of creating a transport system that is economically efficient, modern, safe, and easy on the environment.

<sup>3</sup> White Book European transport policy for 2010: time to decide



### The countries of the Pan-European Transport Network



The implementation of the transport policy, including the improvement of system efficiency and international interface, is an essential condition for the country's **long-term economic growth**. The quality and level of development of the transport system influences the country's ability to function properly and defend itself. As a tool of economic policy, the transport policy serves sectoral policies, particularly those of tourism and regional development, by aiming to provide the required infrastructure and services. The transport infrastructure plays a central role in accessing markets for the commodities produced. As a result, its state of evolution and the quality and quantity of services conducted

through it greatly influences the competitiveness of the production sector. The territorial distribution of production, the equalization of regions, cross-border cooperation, and integration in the European Union all benefit from a high-performance infrastructure of the appropriate density and condition, and modern vehicle fleets.

Transport also has a direct impact on **living standards** by linking various aspects of life (including residence, work, education, services, recreation, and tourism) in space and time, thereby fulfilling a vital socio-political role. The incorporation of the interests of tourism also serves to improve the quality of life.

The social, economic and ecological effects of transport cannot be separated from one another. All three aspects must be given equal consideration in designing transport policy, development, and regulation. The principles of **sustainable mobility** demand an optimal balance between economic, social and ecological efforts, particularly through the enforcement of environmental interests by maintaining the portion of environmentally friendly modes, safeguarding public health, and minimizing the area claims of new investment.

The **progressive implementation of the transport policy** will bring about, **by 2015**, the transport system Hungary needs to exploit its geopolitical position and preserve its competitiveness. The most significant elements of this policy are the following:

**1. General elements of the transport policy**, which take precedence and are compatible with the EU's transport policy priorities:

- Expand the Pan-European Network in Hungary by developing the domestic freeway system from border to border to meet the increasing demands of transit traffic and relieve stress on the capital, at once enabling greater use of EU funds;
- coordinate transport modes (rail, road, water, and air) with a view to sustainable development;
- **improve transport safety**;
- **minimize environmental damage** (caused by emissions contributing to the greenhouse effect, solids, as well as noise and vibration) and protect natural and landscape assets while developing and maintaining transport infrastructure;
- introduce a standardized **EU-conform** system for transport **tariffs, fees**, benefits and revenue subsidies, along with up-to-date telematic solutions for fee collection and integrated ticketing;

- increase incomes of transport sector **employees**, improve work conditions, and offer training in modern skills.

**2. Top-priority development projects until 2006**

- As part of the Pan-European Network, gradually construct **freeway system** reaching from border to border North to South and East to West, so as to relieve stress on the capital and enable optimum access from neighboring regions;
- The freeway construction should go hand in hand with the development of a high-capacity data transmission network that will enable operative, telecommunication, in the future electronic toll collection, network management and monitoring functions on state-owned freeways, as well as the provision of other services for a fee;
- Progressively construct freeway ring around the capital, with **a bridge over the Danube north of the city and another at Dunaújváros**, to relieve stress on Budapest and improve regional connections;
- **Develop railway backbone network** with domestic and international trunk routes as part of the standardized European railway system, in order to reclaim Hungary's traditional role as a transit corridor, and to enable high-speed rail connection to other member states;
- Develop suburban railway transport, starting with the replacement of current vehicle fleet, as a means of significantly reducing car traffic in inner city areas, thus cutting down on harmful emissions;
- Ensure modern passenger transport of high standards locally and in intercity relations, as the first step introducing a new pass system enabling passengers to switch between operators in the capital and its vicinity (Budapest Transport Alliance).

**3. Additional development projects of priority until 2015**

- Construct North-South corridor traversing West Transdanubia, particularly the M9 freeway and the M86 expressway, and the Vienna-Graz railroad via the Hungarian towns of Sopron and Szombathely.



- Develop **logistics service centers and intermodal shipping terminals** to enable greater reliance on environment-friendly goods transport.
- In international collaboration, develop the appropriate **waterway** on the Hungarian section of the Danube, along with the basic infrastructure of **national public ports**.
- Develop **international airports of regional significance**.
- Continue developing air traffic services, improve **airspace security**, and harmonize **air traffic control** systems and procedures with EU norms.
- Set up **modern vehicle fleet** meeting the latest requirements, including handicapped access.
- Introduce **intelligent transport systems** enabling the more efficient use of transport routes and services.
- Expand the capacity and services available at the **Budapest Ferihegy International Airport** (BFNR) and construct high-speed railway linking it to the city.

### 1.2.2. STRATEGIC GOALS

**The current strategic goals are essentially the same as those of the transport policy adopted in 1996**, namely to

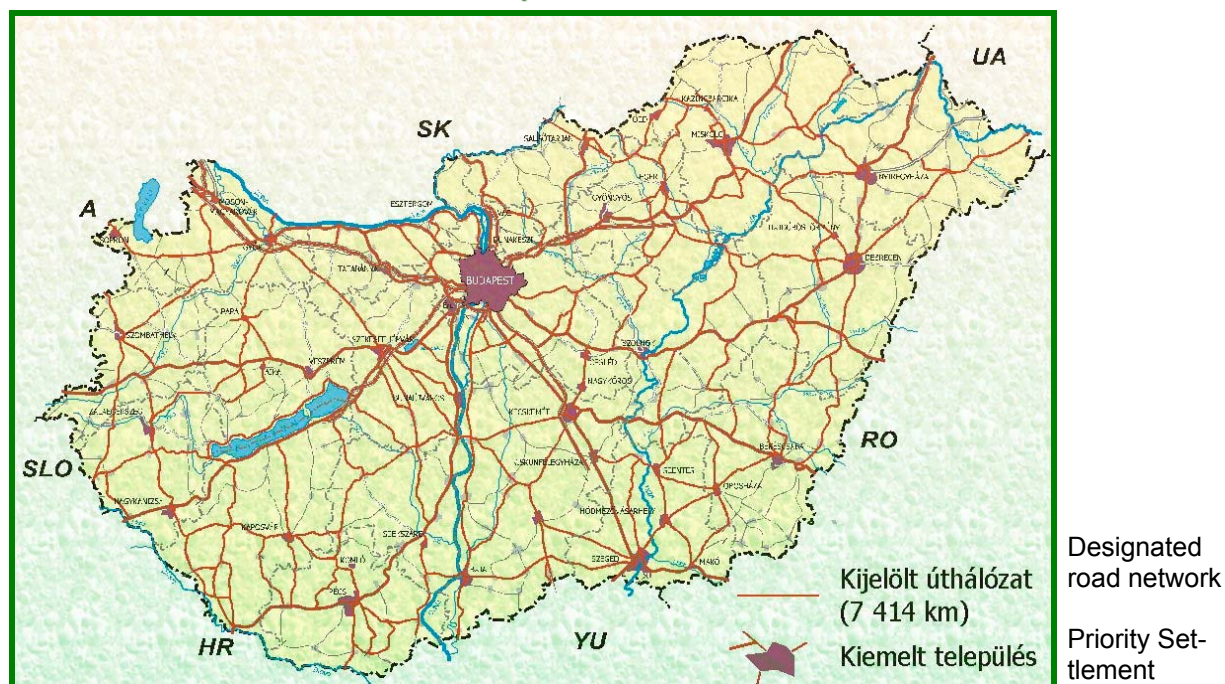
- improve the quality of life, preserve health, reduce regional differences, increase transport safety, and protect the natural and man-made environment;
- promote successful integration within the European Union;
- improve and broaden relations with neighboring countries;
- assist with regional development;
- enable efficient operation and maintenance through regulated competition.

**The strategic goals of** improving the quality of life, preserving health, reducing regional differences, increasing transport safety, and protecting the environment presuppose the

following tasks: foregrounding security considerations in capacity enlargement; construction of bypass roads around settlements for safety and mobility; reconstruction of dangerous sections and intersections; monitoring the safety performance of new road already in the planning phase; developing residential and service roads; the safety-conscious expansion of bicycle roads. We need to encourage modern and environment-friendly vehicles, technologies, and towing methods (multimodal goods transport, public passenger transport, transport alliances) and to stop, or at least slow down, the deterioration of rail and water transport performance. We must make public transport a more attractive option by improving quality, modernize signaling and safety equipment, and promote the application of intelligent systems and information technology. We must aid the handicapped by removing obstacles from the transport infrastructure.

**As part of our successful integration in the European Union**, we must modernize freeways, trunk railway lines, national public ports, central and regional airports, and multimodal logistics centers in the Hungarian territory of Pan-European corridors. We must increase the load-bearing capacity of trunk roads and bridges exposed to the greatest stress by goods transport, to support 115 kN/axle, the maximum load allowed in the European Union. To boost the profitability of goods transport by rail, we must gradually increase the load capacity of trunk lines from 200 to 225 kN/axle. We must achieve level VI construction on the Danube (international corridor VI) which implies guaranteeing a draught (navigable depth) of 2.5 m 300 days a year.

### Road network to be developed for 11.5 ton /axle load



**In the context of improved cooperation with neighboring countries**, we will construct external border crossing points meeting Schengen criteria, modernize transport routes leading to those crossing points, increase the frequency of cross-border transfer connections, build regional airports, and build free-ways north to south and east to west.

**The goals of regional development** will require the modernization of the national road network, regional and community roads, and certain peripheral community roads managed by local governments. We need to build the missing road sections linking up cul-de-sac villages, ensure access to minor regional centers, and construct more bridges. We must improve the standards of public passenger transport, national and local, and pave the way toward a sustainable urban mobility.

**For efficient operation and maintenance**, we must create and enable the legal, institutional, monitoring and loss-financing background of EU-compatible market regulation. We need to streamline fare and toll mecha-

nisms and the system of travel discounts, benefits, and revenue support.

Infrastructure development programs must be coordinated with other programs of regional development, other sectors of the national economy, and all applicable statutory requirements, with special regard for strategic and mid-term tasks identified by the Hungarian Information Society Strategy as well as short-term action plans. This will include planning for the required budget resources.

As a cornerstone of the transport policy, we must accomplish the transport goals set by the National Development Plan (NTF), which delineates the conditions for receiving support under the Cohesion Fund Master Strategy and the Structural Funds. As part of the NTF, projects running under the Environmental and Infrastructure Operative Program (KIOP) and the Regional Operative Program (ROP) between 2004 and 2006 will supplement investments supported by the Cohesion Fund.

### I.3. INSTITUTIONS AND REGULATION

The principles of privatization and subsidiarity transform the ownership role of the state in transport as in other sectors, to the effect of rendering its responsibilities clear and unambiguous. State-owned business organizations will be required to divorce ownership/management functions from regulatory ones (unbundling).

The state will hold on to its leading role in:

- the development, maintenance, and operation of the national transport grid;
- coordinating transport infrastructure development with regional development;
- harmonizing development policies for individual transport modes and regulating competition;
- the regulation, professional management, supervision, operation and loss-financing of public passenger transport;
- the regulation and supervision of environmental protection, transport safety, public road transport services, and the transportation of hazardous materials;
- ensuring the defense-readiness of the transport grid;
- overseeing transport research and development;
- regulating fare and fee policies in a market environment characterized by competition;
- in legislation, including the adoption of Community laws;
- reorganizing and modernizing the institutional system and corporations fulfilling government functions;
- the implementation and regulation of telematic solutions for organizational, technical and subsidy-accounting

needs arising from compatibility requirements under the Hungarian Information Society Strategy.

Public roads, railways, national or trunk networks and their intersection elements will remain the permanent property of the state. Certain elements of the infrastructure may and must be relinquished for operation to the private sector if privatization does not jeopardize public service and access free of discrimination.

The comprehensive revitalization of transport, necessitated by its social, economic and ecological role, will rely heavily on the state's efforts to organize capital. As part of this function, the state examines ways to involve private capital in transport development and operation, for instance through bond issue, co-financing, and Public-Private Partnership.

The state has an increasing role in the field of regulation.

- It is vital to determine and enforce **standardized criteria** for the technical configuration, maintenance, and operation of public transport infrastructure owned by the state and local governments, in order to project to users the image of a uniform network.
- The creation, enforcement, and sanction of the rules governing controlled, regulated competition is the function of the state. Left to its own resources, a liberalized market cannot respond to every instance of imbalance or disturbance. In the area of transport—particularly in public transport, where most providers fulfill the service obligations of the public sector—it is necessary that the state regulate and monitor **the terms of competition, access to professional**



**training, and market acquisition**  
(through public service contracts and loss financing).

The administrative tasks of legal application must be shouldered by central and regional government agencies—notably the transport inspectorates—taking into consideration the official duties in the field of air transport.

Beside applying the law as an agency of the government, the transport authority also fulfills a vital function **by enforcing and monitoring compliance**. Especially in this area of supervision, the importance of the authority will continue to grow in the fold of the European Union, requiring us to adjust its technical background, organization, and financing to fit this new role.

Among other measures aimed at improving the safety of transport on public roads, of special importance is the promotion of voluntary compliance with traffic regulations and the proper operation of tools serving this purpose, including training, prevention, and monitoring. This complex task requires efficient collaboration between the police and the transport authority. The traffic department of the police must be given special emphasis to be able to contribute to an improved quality of life, and monitoring agencies must be prepared for the extra workload presented by infrastructure development.

In order to **enable scrimation-free competition** and meet EU requirements, capacity and slot allocations for railway and air transport will be administered by an independent track management organization and, respectively, by HungaroControl, the Hungarian Air Navigation Service split off of LRI, the Air Traffic and Airport Administration.

The institutions of the transport authority and the branch operators must be prepared to deal with potential reorganization of tasks and responsibilities in central, mid-level, and local administration with respect to transport politi-

cal, ownership and official licenses and service liabilities.

Following the completion of the administrative and legislative process whereby **Hungary's regions are strengthened**, the ownership and/or management, development, maintenance, and operation of some of the transport infrastructure, such as regional roads and railway lines, along with the bulk of public service responsibilities, will be assigned to regional and local administration. This means that the discretion over some of the central transport allocations will be **delegated to the regional and local level**, particularly in respect of the development of local railway lines, roads, and bicycle roads, the modes, frequency and quality of public passenger transport, and the rate of fare subsidies and revenue support. As a main priority, we will have to prevent a temporary crash that could occur if the private or regional system is not yet up and running reliably by the time the state has withdrawn.

The rising solvency of the traveling public and shipping companies will enable the progressive introduction of the **“user pay” principle**, whereby fares and fees will gradually approach actual transport costs. However, the effect of this change will only be felt in the longer term.

Under a new draft replacing Council Regulation 1191/69, the public service obligation will be replaced by a system of public service liabilities, while the imposition of the obligation will be superseded by a public service contract. The contract awarded by the authority to the provider with the winning bid will guarantee public service and the provider's exclusive rights for certain functions for a specific period of time. The national or local government is liable to compensate the provider for obligatory expenses not covered by revenues. This method of regulating competition guarantees rising quality standards, better efficiency, and discrimination-free access to markets. In the field of domestic **public passenger service** (scheduled public services within the territory of Hungary) the state and the local governments will remain actively involved as providers. As a rule of thumb, it is unfeasible

to make the traveling public pay for the full actual costs of public transport. In fact, countries with much higher living standards than Hungary have refrained from enforcing these actual costs in their transport fares. **It is imperative to make the financing of public transport transparent and fully controllable, regulating tariffs so that the actual price is fully covered by the combination of fares paid by the traveling public and the revenue compensation disbursed by the state or local government.** In turn, the actual price must cover the documented costs of a prudently managed company plus reasonable profits allowing for continued development. **Under the terms of regulated competition, the public passenger service market will open up to new entities, including providers from other member states.**

In public service, **the state is also liable to compensate providers for losses incurred through social-type benefits extended to certain passenger groups.** However, market principles demand that all such subsidies and trips made using such support be kept on record by an **intelligent ticketing system**, soon to be developed. The officially regulated prices and travel benefits must be standardized for all emerging transport alliances.

**The fees collected for the use of roads and tracks will gradually meet the actual costs of maintenance, operation, and renovation.**

The use of ports and airports will be subject to fees as dictated by market forces and similar charges in neighboring countries. Users of the Hungarian airspace and air services will pay a cost-based fee tracking changes in the international accounting protocol.

The content and affordability of public road tolls will be applied equally to the current decal system and the electronic, performance-based toll system to be introduced in the long term.



## II. THE TRANSPORT DEVELOPMENT PROGRAM

### II.1. MODERN TRANSPORT AND IMPROVED SERVICES

Transport has a very direct influence on people's lives, shaping interpersonal relations, the economy, security, the environment, as well as educational and cultural opportunities. When transport does not function properly, it disrupts people's lives and damages the economy. By the same token, a transport system that is safe, efficient, and environment-friendly contributes to human freedom, well-being, and the protection of the environment.

Reconceived to better meet social and economic demand, **Hungary's transport system will have to ensure**

- **sustainable development** and the protection of the land, including both the natural and the man-made environment;
- enhanced **transport safety**,
- strengthened **defense capability** and response to natural disasters;
- **high service standards**, including reliability, safety, and accuracy;
- **efficient exploitation of existing** roads, intersections and other network elements;
- the **construction of lacking infrastructure** and the elimination of bottlenecks;
- a **financing system** satisfying the requirements of transport operation, maintenance, and development;
- **competitiveness** and efficiency on the national and international level;
- the application of **professional expertise** and highly evolved technology.

#### II.1.1. SUSTAINABLE GROWTH

Mobility is an indispensable condition for a properly functioning economy and society that has a direct impact on the quality of life. Even as it allows people to generate and access goods and services, its operation often entails negative consequences for the environment. A key tool in the hands of any government in power, **transport policy serves to forge a balance** between the demand for mobility and the needs of the environment, without impairing either of these fundamental values.

Transport systems practically affect every element of the environment, and play a lesser or greater role in any harmful environmental influence. Nevertheless, pollution rates and the contribution of transport vary significantly region by region, but air and noise pollution by transport tend to be decisive. By contrast, transport generates barely 2% of the total waste in Hungary, and not more than 5% of the total production of hazardous waste. The pollution of waters due to transport is of a similar magnitude, while infrastructure construction and operation cause greater environmental damage. Beyond their sheer territorial encroachment, high-traffic arteries disrupt and fragment wildlife habitats, potentially posing serious threats to biodiversity.

More indirect negative influences can result from the rapid building up of tracts along free-ways and expressways, a tendency already noted and certainly expected to continue as new infrastructure construction is completed.

In the area of **air pollution** the vehicle development that started in the 1990's and has ad-

vanced at great strides has eliminated or minimized carbon-monoxide, hydrocarbon and lead emissions, leading to a situation in which we “only” have three challenges to meet over the next 10-15 years:

- The global problem presented by the emission of greenhouse-effect gases, particularly carbon-dioxide, of which transport in EU countries accounts for some 25-30% (15% in Hungary) and its contribution continues to grow.
- The regional and, in part, local problem of nitrogen emissions, which also displays a mildly rising tendency.
- The local, especially urban, health hazard caused by emissions of NO<sub>x</sub> (with transport accounting for about 55 % of the total emission), ultra-fine particles (PM<sub>2,5</sub> – solid particles smaller than 2,5 µm), and a few other substances (PAH's, aldehydes, N<sub>2</sub>O, dioxins etc.) that are not regulated by limit values at present.

In developed countries, accomplishments in the fight against air pollution have directed attention to hazards posed by transport noise. Currently, the state of **noise pollution** in Hungary can be characterized as follows.

- Within the city limits of Budapest, there are 51 main roads considered to have especially high noise levels under EU classifications, with daytime and nighttime pressure levels of 71-77 dB and 66-72 dB, respectively.
- Tests along primary and secondary highways and freeways have identified 48 intersections and zones where noise levels exceed the acceptable maximum of 65/55 dB (day/night) by 5/10 dB. To make things worse, these happen to be densely populated areas.
- The situation is more favorable with railways, where trunk lines conducting heavy goods traffic measure 57-66 dB in populated areas, but people will sense this level as subjectively lower due to the spectral characteristics of the specific noise type emitted. Judging from residential complaints, railway transport is apparently re-

sponsible for one tenth of the total noise pollution.

- Special sources of noise include air traffic and recreational water vehicles. Despite the fact that aircraft with quieter engines have been gaining ground, the vicinities of major airports continue to suffer from greater noise stress due to increased traffic volumes.

**The construction of lacking infrastructure** is a top priority of the transport policy.

Expanding transport networks enable the free movement of people, goods, and services, and link people, cities, and countries, but they also carve up natural habitats. As a sign of the new appreciation for the environment, nature acreage under protection in Hungary will continue to grow (from 9% of the country's territory today to 11% projected by 2008 under the National Environmental Plan) and there are plans to develop the National Ecological Network to help preserve biodiversity. Through careful planning, minimizing the area needed for the implementation and maintenance of new installations, and the application of a wide range of conservation tools, it is possible and imperative to simultaneously uphold the interests of society, the economy, and the environment.

Transport policy provides a context for minimizing environmental damage, integrates environmental considerations, and sponsors special environmental programs toward establishing a sustainable transport system.<sup>4</sup>

The transport policy proposes to use the following **tools for sustainable growth**:

- The past decades have been characterized by the steady climb of passenger and goods transport volumes in tandem with GDP growth (in fact, passenger traffic has grown at a rate somewhat over that of the GDP, while goods transport a little below it). It is now our overarching economic goal

<sup>4</sup> The document entitled “A long-term strategy and action plan for **environment-friendly transport and infrastructure development**” defines specific environmental measures as a token for sustainable growth.

to **separate the GDP from transport volumes**, by the efficient management of real transport needs. Obviously, the purpose is not to rein in mobility but to eliminate “irrational” travel and goods shipping by various means, including those of influencing settlement and regional development, trends in tourism, and the application of information technology, telematic solutions, logistics, industry and trade policy, and economic measures.

- In its transport policy, the EU has set the goal of attaining a beneficial balance between transport modes as the cornerstone of sustainable development. As part of this effort, the EU seeks to halt and eventually reverse the spontaneous increase of the reliance on road transport, through a series of long-term measures, most notably the introduction of a new financing system and fare/toll policy. The division of labor between transport modes in Hungary diverges from that in EU countries. In Hungary, a smaller portion of the total transport, both passenger and freight, is conducted by road, but this tendency is changing in a way that has negative implications for the environment. We must intervene to make sure that the ratio of multimodal transport does not drop too sharply even with the implementation of major road development plans (see Tables 1 and 2). Realistically, the increase in the number of

cars projected until 2015 limits our plans to merely **slowing down the pace of growth of transport by road**.

- Preference for environment-friendly modes by developing **combined shipping capabilities**. By creating service centers at combined freight terminals, Hungary intends to become part of the European logistics network, also as a means to improve the positions of domestic industry, commerce, and agriculture. These centers will be instrumental in diverting traffic from the roads to the rails and waterways, assisting us in reducing environmental damage and buffer unfavorable trends in intra-sector distribution.
- Maintain the current **share of public transport**, modernizing assets, equipment, and infrastructure, and raising service standards in order to improve the chances of non-motorized transport.
- Introduce technical and economic measures directly targeting **the reduction of pollutant emissions**; modernize vehicle fleets to meet progressively adopted EU emission norms; improve fuel quality by encouraging alternative energy carriers and programs supporting the replacement of an aging vehicle fleet.



Table 1

**Changes in transport performance and modal split in the European Union**

	Share of modes %					Percentage growth		
	1990-1998-2010					1998-2010		
	1990	1998	2010 T1	2010 T2	2010 T3	2010 T1	2010 T2	2010 T3
<b>Passenger transport</b>								
car	78	79	78	71	77	23	12	21
bus, car, tram, metro	11	10	8	14	9	6	80	21
rail	7	6	6	9	7	13	74	38
air	4	5	8	6	7	90	55	69
total	100	100	100	100	100	24	24	24
<b>Goods transport</b>								
road	68	75	78	66	75	50	18	38
rail	19	13	12	18	13	13	60	38
inland water	8	7	5	11	7	14	101	38
pipeline	5	5	5	5	5	15	13	15
total	100	100	100	100	100	38	38	38

Scenarios:

T1 = liberal transport policy; T2 = stringent, pro-environment transport policy; T3 = realistic transport policy

(Source: EU White Book 2001)

Table 2

**Changes in transport performance and modal split in Hungary**

(performance figures calculated in passenger kilometers and goods-ton kilometers)

	Distribution ratios %					Percentage growth		
	1990-2000-2015					1990-2015		
	1990	2000	2015 I	2015 II	2015 III	2015 I	2015 II	2015 III
<b>Passenger transport</b>								
car	58	60	70	61	64	50	43	45
bus	27	26	16	20	19	24	30	28
rail	13	11	8	12	9	25	38	28
air	2	3	6	7	8	120	140	150
total	100	100	100	100	100	31	31	31
<b>Goods transport</b>								
road	39	57	65	58	60	60	54	57
rail	43	24	20	23	22	16	19	18
inland water	5	4	4	7	6	27	48	39
pipeline	13	15	11	12	12	29	32	33
total	100	100	100	100	100	28	28	28

Scenario I: Extrapolated from the tendency of the past 15 years, assuming a GDP growth of 4.5%.

Scenario II: The radical version, building on the assumption that the share in the total of environment-friendly transport modes will increase dramatically for the same rate of GDP and mobility growth.

Scenario III: The realistic version, aiming to stabilize the modal split near 2000 ratios while slowing the pace of growth that has characterized transport by road.

(Source: KTI Rt. – Institution for Transport Sciences)

- **Increasing the existing infrastructure capacity and rate of exploitation** using the tools of electronics, information technology, logistics, intelligent transport systems, trans-border passenger information, infocommunications, and organization of goods transport.
- **Environment-friendly infrastructure development** mindful of natural assets and landscapes, as well as quality requirements and integration with EU networks. (Development of freeways and expressways, bypass and other public roads, railways, ports, waterways, and airports.)
- Publicly posting regular **information** on the effects of transport on the environment, the costs of damage control, and the results of implemented measures, in such a way as to call attention to individual responsibility and rally support for environmental considerations and measures to be incorporated in daily practice.

Some of the measures listed above demand an independent program. We need to marshal sufficient financing by the progressive broadening of the "**polluter pay**" and "**user pay**" **principles**, giving due expression to the value of natural resources used by transport, and relieving society of the burden to pay for external costs.

### II.1.2. TRANSPORT SAFETY

As a result of government efforts and social solidarity embodied in the National Program for Transport Safety, the 1990's in Hungary saw a significant drop in the number of traffic injuries and fatalities. This tendency halted in 2001. Now the number of road accidents is on the rise once again, demanding urgent intervention. Traffic accidents claim more than 1400 lives and cause 100-120 billion forints in losses in medical bills, missed income, and other damage.<sup>5</sup>

It is essential to reduce the number and severity of traffic accidents despite the growth of the car park and shipping performance. Road transport can only be really safe if roads, humans and vehicles form an organic whole developing in harmony with one another, commensurately with user expectations and the capacities of the national economy. The chief elements of the system are the following:

- network development;
- more up-to-date traffic solutions;
- safer vehicles;
- education and training,
- propaganda promoting safe, responsible and legitimate behavior;
- participants enlightened to the importance of transport safety;
- fine-tuning regulations and efficient monitoring of compliance;
- implementation and maintenance of efficient traffic control.

Purposeful development of these areas has targeted **the reduction of personal injuries and fatalities by at least 30% from 2001 to 2010, and by 50% until 2015—the rate prescribed in the EU White Book.**

If it is to be successful, the complex mission of improving transport safety requires not only the commitment of each sector but broad-based social support as well.

<sup>5</sup> KTI figures, calculated by the Human Capital method.



### II.1.3. NATIONAL DEFENSE CAPABILITY

An infrastructure network of the right quality and density, along with the preparedness of its control mechanisms, constitute vital elements of national defense and disaster control. Defense prowess is intimately related to the ability of forces to move and relocate quickly and efficiently.

Collaborating with other authorities, transport agencies participate in the fight against terrorism and drug trade. The relevant security systems and technical equipment must be constructed and coordinated so that they meet the criteria stipulated for internal and external borders in the Schengen Treaty, thereby contributing to the security of travelers and the nation.

It is an important task, and an international obligation, to build up defenses against terrorist acts and illegitimate disruptions of the working order of the transport system.

We also have an ongoing obligation to avert natural catastrophes, assist with damage control, and respond quickly to inevitable emergencies.

### II.1.4. RELIABLE, SAFE, AND ACCURATE SERVICE BASED ON UP-TO-DATE TECHNOLOGY

The ongoing rejuvenation of Hungary's vehicle park, domestic and international research and development in the vehicle manufacturing industry, and the gaining ground of intelligent information systems all contribute to improving transport performance, safety and the quality of life.

- Information technology and telematic applications claim an increasingly central role in the transport sector. The recent currency of telematic solutions in transport organization and traffic control allows fewer traffic jams

and shorter journey times. The equipment of utility vehicles with on-board computers and the application of satellite locator devices assist the exploitation of vehicle capacity, enable precise vehicle tracking, and increase safety. Advanced computer technology affords sophisticated passenger information. The new computerized management of transport and business tasks boosts the competitiveness of Hungarian railway companies. In navigation and air transport, the challenges of competition and international expectations will soon result in the across-the-board application of electronic solutions in client information and identification, data processing, and a large-scale reliance on electronic air freight records and satellite navigation devices.

- The construction and maintenance of track installations demand modern technologies and a high level of automation. In road construction, preference is given to durable, noise-absorbing surfacing materials. The recycling of asphalt enabled by these new technologies is becoming a wide-spread practice of waste management.
- In public road transport, the government must assume a proactive role in supporting the replacement of obsolete, environmentally stressful vehicles by means of benefits and tax incentives.
- The modernization of locomotives, the acquisition and introduction of efficient and environment-friendly railway vehicles, modern passenger train coaches, and special combination cars for goods transport are ongoing priorities.
- The electrification of railway lines must be carried on in the context of the mid-term electrification program and proposal.

Technical progress relieves some of the stress on the environment in a number of ways:

- Modern engines with lower fuel consumption cut down on energy use.
- Vehicles using alternative fuel, such as LPG, are easier on the environment than those powered by conventional fuels.
- Multimodal solutions include the environment-friendly movement of trucks by rail.

Alternative, zero-emission vehicles will assume a role in urban transport. In the railway sector, the vehicle reconstruction program is now drawing to a close. In goods transport by rail, special and multi-function cars will soon become predominant.

It is our hope that, within the interval of the transport policy, we will see the first high-speed railway in Hungary constructed and linked to the European network.

Enabled by research and development in the sector, the progress of transport technology offers fresh opportunities and markets for international and Hungarian industries.

### II.1.5. IMPROVING EXISTING TRANSPORT SYSTEMS AND THEIR EXPLOITATION

Hungarian road and railway networks, waterways, inland ports, and airports represent a large part of the country's assets. The preservation of these assets, their maintenance in good repair, and their more rational use are the fundamental interest and responsibility of the state and every citizen.

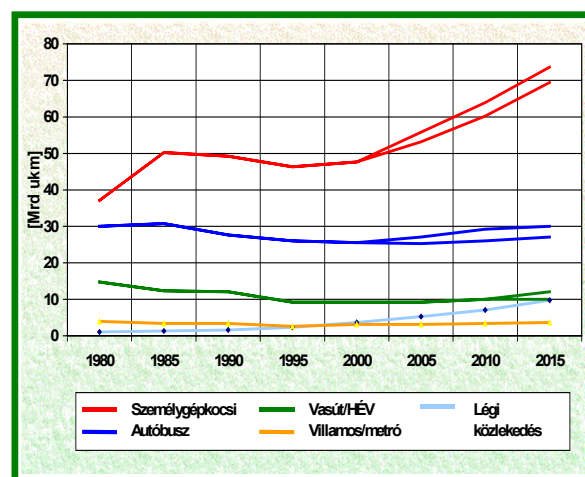
Before constructing new capacities, we must strive to increase the efficiency of the existing system, coordinating goods transport by rail and water using combined and multimodal methods, maintaining a healthy balance between personal and public passenger transport, as well as promoting P+R ("Park and

Ride") and integrated traffic management systems.

### II.1.6. RAPID CONSTRUCTION OF LACKING INFRASTRUCTURE

Between 2000 and 2015, passenger and goods transport performances (in passenger and ton kilometers) is expected to grow by 30-35% and 25-30%, respectively.<sup>6</sup>

#### Changes in Hungarian passenger transport performance by mode



Car Bus Railway/suburban Tream/metro Air transport  
Fig. 1

#### Changes in Hungarian goods transport performance by mode

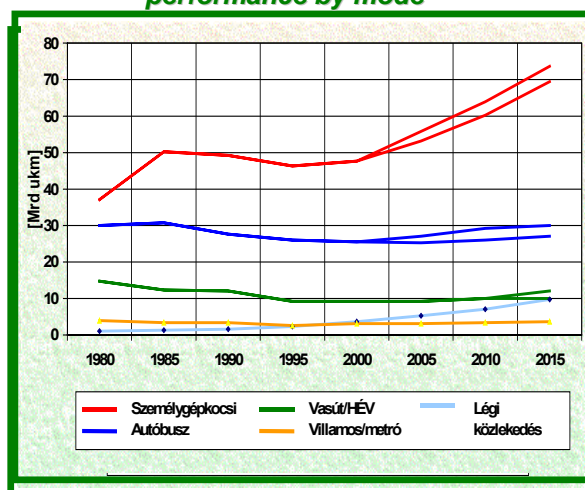


Fig. 2

<sup>6</sup> A 2001 KTI estimate, based on Gazdaságkutató Rt.'s calculations for the transport elasticity of the Hungarian economy over the next 10-15 years.

## HUNGARIAN TRANSPORT POLICY

In light of specific indicators (density per 1000 km<sup>2</sup> and 10,000 inhabitants), the freeway/expressway saturation in Hungary is

the Hungarian section of the Danube is less than one third of that west of the border. The country has just one international airport.

### *Pan-European Corridors and TINA supplements in Hungary*



barely one third of the EU15 average. Certain structural elements of existing public roads are also lacking, and we need more river bridges. Only 85 km of the 3500-km railway network in Hungary is suitable for a travel speed of 160 km/h. The density of ports on

**It is of vital necessity to construct missing infrastructure elements linking to the European networks by 2015.**

A crucial aspect of transport development is the enhancement of **links between the various modes**. When properly designed and implemented, the **intersection and transfer points** connecting individual modes (pedestrians, bicycles, cars) to mass transport (bus, railway, urban transport vehicles) offer more safety, relieve stress on the environment, and provide more and better options for individual passengers, families, and business travel. In goods transport, special economic and environmental significance is accorded to **logistics centers**, particularly multimodal hubs that link transport by road, rail, and inland water.

We must adopt laws guaranteeing the terms of resolving social conflicts between infrastructure development and the interests of environmental protection. **By enacting the Public Benefit Act**, we ensure the ability to realize plans that are important for society as a whole in the area of environmental protection, security, technology, and economy. We cannot allow a few individual interests to foil or delay development that serves the interests of the local or regional community, or the entire nation. It is crucial to precisely define the available means of enforcing interests, and to render the relevant rights and procedures both more consistent and more predictable.

### II.1.7. FINANCING

In any country, transport networks are the property of the nation, the value of which increases with investment and decreases if left unattended. Therefore, the construction, operation, and maintenance of traffic installations are government functions regulated by law, and overwhelmingly financed from central and local budgets.

The implementation of the transport policy requires far greater resources than the Hungarian government has traditionally allocated for similar purposes on the “leftover principle.” This means that **the government must assume a new role intensely promoting economic development by encouraging and prioritizing investment in infrastructure as a pillar of the market economy.**

#### Development financing

The resources for financing infrastructure development will be available from the national budget, European Union funds on a co-financing basis, loans by European banks, and private capital. We must constantly look for PPP financing of infrastructure projects. We plan to use Cohesion Funds primarily to finance such large-scale investments as Pan-European corridor sections and TEN-T elements, with additional transport targets under the National Development Plan using Structural Funds.

In a number of EU member states, the vehicle fuel tax contributes resources. By analogy, the tax component of fuel prices in Hungary could be used to finance transport development projects. It would make sense to set up a dedicated fund for this purpose.

In 2000-2001, Hungary spent 1.1-1.3% of the GDP on transport investments collectively in all modes. The construction of the required infrastructure will claim a far larger portion of national resources to supplement the funds available from the EU.

The European Union’s transport policy advocates performance-rated fees for the use of infrastructure. In this sense, it encourages the involvement of users and private capital in the financing of government tasks in network development and management. In the future, it will be inevitable to increase the participation of local, and later also regional, governments in financing development projects in their purview. This means we will have to guarantee the access of regions and local communities to the required resources.

Infrastructure development financed jointly by the government and private ventures (PPP) provides a useful way to replenish resources, although this scheme may raise a number of difficulties when it comes to co-financing projects with EU funds.

#### Operation financing

In line with the EU’s transport policy, we must transform the regulatory and financing systems to render identifiable factors of environmental pollution, mental hazard, and other material damage, gradually shifting financial responsibility for these factors from society to those who cause them.

We must advocate recognition of the fact that the demand for improved transport services implies higher taxes. Pursuant to EU regulations, the national or local government is liable to compensate providers for obligatory expenses not matched by revenues, in a scheme of loss financing.

In order to promote the quality operation of local public transport, the government introduces a standardized, normative support system independent of forms of business organization and ownership.

The system of financing must strike a balance between maintenance/operation and development, with maintenance expenditures growing side by side with investment. As users gain in



taxable income, they will have to contribute increasingly to the maintenance, operation, and development of the transport infrastructure.

### II.1.8. COMPETITIVENESS AND EFFICIENCY

Transport plays a major role in improving any country's economic growth, competitiveness, and employment rates. In order for it to properly fulfill this role, transport must operate efficiently and in a market-oriented manner. This in turn presupposes free competition without discrimination. However, smooth operation is always a principal criterion for transport which dictates intervention by the government, as is the case in the European Union, to the extent of regulating competition.

It will take a few **measures of modernization in the area of organization, telematics, and regulation** to ensure the competitiveness of Hungarian goods carriers in line with the objectives of the transport policy. As a case in point, micro, small and medium-sized road transport businesses in Hungary will continue to need some government support.

The few provisional derogations Hungary has won in its transport negotiations give us enough slack to prepare for the liberalized market, and will help us close the gap that separates us from the competition. The national and local governments will have to assume a major role in ensuring the country's ability to compete in the transport sector. It is especially vital therefore to **design a supportive financial policy that will meet the approval of the EU.**

The refurbished vehicle park, the planned infrastructure developments, the application of new logistics methods, and an EU-compatible regulatory environment will collectively strengthen the competitiveness of Hungarian business both at home and abroad.

To compete successfully in the integrated market of the EU and in global markets, Hungarian transport will rely on the coordinated and ceaselessly evolving work of well-trained and highly skilled drivers, mechanics, engineers, information technicians, economists, and lawyers.

### II.1.9. PROFESSIONAL TRAINING

A fully functional transport system presupposes not only the requisite infrastructure and vehicle park, but properly trained professionals as well.

The application of modern IT solutions, traffic planning and organization, and the trends of integration within the sector all demand an intense development of proficiency. The growing prevalence of multi-level, life-long training, knowledge of languages, and the advanced mastering and application of technical, economic, and computer skills collectively bring along a fundamental change in the way we think of and employ human resources.

In conjunction with quality transport services for the long haul, professional training in the sector offers a career opportunity for life, especially for the younger generation. The government will ensure that a renewed transport system make an affordable contribution to the security and well-being of Hungarian society by developing professional training at colleges, universities, and beyond, coordinating domestic training with international education, and supporting research and development as a top priority.

In the future, we will continue to stress the importance of professional training in the school system as well as ongoing additional training of those already in employment.

As a key factor in the standards and safety of transport services, the training curricula must reflect real needs and expected tendencies in each area of specialization. In secondary education, this requires the periodic review of the scope of skills recognized in the National Training Register, and the introduction of new specializations based on actual industry demand.

Training will rely heavily on central programs along with professional standards and examination requirements developed on the basis of these programs in each specialization. We must constantly and flexibly update these documents so that they reflect the prevailing status of knowledge and recent changes in each special field within the sector.

Another crucial element is the expertise of educators, who will have to participate in regular training seminars to keep their knowledge up to date.

In developing training, we must ensure a keener focus on practical issues and that the training actually result in quality changes in the sector.

The purpose is to gradually erect a professional structure that will meet the expectations of the economy, reflect the specifics of the

field, and in which each specialization will be aligned with EU norms in terms of curricular content and the time required for graduation.

It is imperative to forge a cohesive training alliance between public, undergraduate, graduate, and adult forms of education and on-the-job courses to raise a dynamic workforce able to respond to a quickly changing labor market.

Industry support and good communications are indispensable for the smooth transformation of the currently dual higher education system into a two-stage linear training format that will award BSC and MSC degrees that are principally practice-oriented but enable the subsequent concentration of theoretical knowledge. In the transport sector as in other fields, it is necessary to forge a unified system from the elements of the BSC and MSC degrees, further graduate programs including the doctoral, and on-the-job training courses and special seminars.

## II.2. DEVELOPMENT BY TRANSPORT MODE

**Some of the objectives of Hungary's former transport policy have been achieved, and others adjusted. There have been changes in specific development projects as follow.**

- In **road transport** we now seek to implement a purpose-oriented toll policy and measures to divert long-distance and transit traffic, especially **heavy trucks, to the freeways and expressways**. This will enhance transport safety, reduce environmental impact, and significantly alleviate transit traffic stress on populated areas without requiring new bypass roads.
- In **passenger transport by road**, the opening up of the market will be realized through the adoption of **new EU laws now being drafted**. These regulations will necessitate, among other things, the removal of public passenger transport from the effect of the Concession Act.

- The Pan-European Transport Conference in Helsinki has modified development targets and some of the Pan-European corridors. It is necessary to maximize the involvement of Cohesion Fund and TEN-T resources in financing top priority projects in the TINA (Transport Infrastructure Needs Assessment) and TEN-T (Trans-European Network for Transport).
- In addition to the **urgent construction of transit freeways all the way to the border**, we will need to build the Hungarian freeway sections of the **TINA network** by 2015.
- Local public roads in built-up areas must be **fully completed with solid pavement surface** by 2015.
- Instead of keeping MÁV Rt. as a whole fully in possession of the Hungarian state, the goal now is to **retain state ownership only of railway tracks**, but not necessarily of railway passenger and goods transport interests as well.

- Environmental considerations have removed from the agenda the coordinated development of the airports at Ferihegy and Kiskunlacháza. At the same time, **the Debrecen and Sármellék airports have advanced to regional significance<sup>7</sup>**, with the government taking a role in their development..
- We will follow in the tracks of former transport policies in earmarking government support for MALÉV to improve its positions in the air transport market. As a result of global changes, **the course of progress for MALÉV will now lead through privatization and integration in a carrier alliance.**
- In the inland navigation sector, **all obstacles from privatizing MAHART have now been removed.** Ideally, the privatization of MAHART should not affect the permanent state ownership of the Csepel Public Port on the Danube.
- The Schengen Treaty has differentiated **Hungary's obligations with regard to border crossing points.** Our task now is to develop control points on external borders, and to wind up points along internal borders.
- Enhancing the safety of **pedestrian and bicycle traffic** has equal benefits for the economy, national health, environmental protection, and tourism. We will continue to respect this conclusion of the 1996 transport policy, and carry on the construction of the national network of bicycle roads.

### II.2.1. INFRASTRUCTURE NETWORKS AND HUBS

The desired performance and concerted operation of various transport modes (road, air, water, rail, urban) presupposes networks of an adequate density and quality, as well as strategically chosen and fit-for-purpose nodes

and hub locations, such as railway stations, ports, airports, and logistics centers. Properly sized networks and trans-shipment points have a positive effect on accessibility, safety, the environment, and the desirable intermodal balance.

Recognizing the improvement of existing networks and the construction of lacking infrastructure as its main goals, the transport policy emphasizes the need for more substantial resources than have been previously available for such purposes.

#### Road network

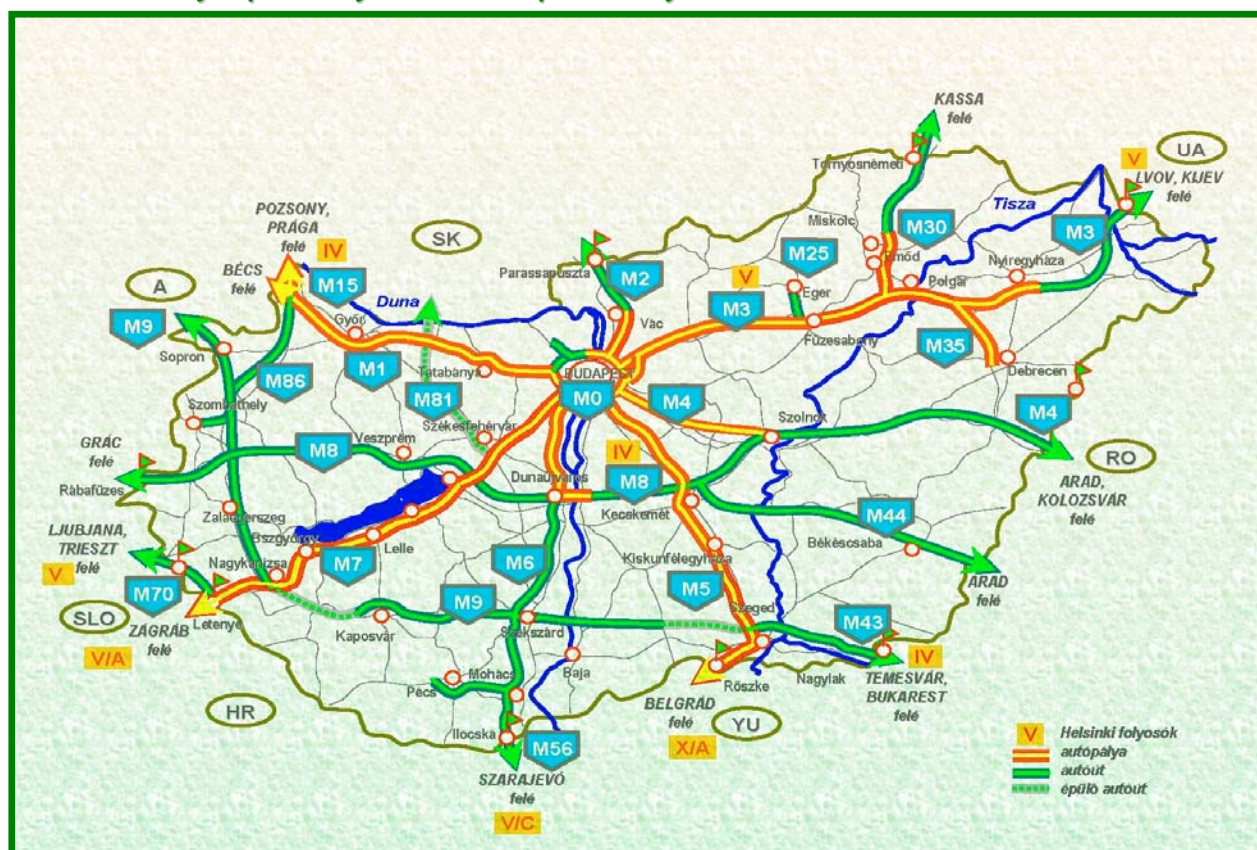
As the number of vehicles on public roads grows in tandem with the evolution of economic and international relations, we encounter a number of infrastructure development needs, in the **following order of priority:**

- Construct the freeway/expressway system according to the timetable set by Act CXXVIII of 2003, as part of Hungary's Europe Plan and in harmony with the National Plan for Regional Development.

<sup>7</sup> Pursuant to Government Decree 2078/2000, in harmony with the National Aviation Strategy.



## The freeway/expressway network as planned by 2015



Helsinki corridors  
Freeway  
Expressway  
Expressway under construction

- Complete freeway ring bypassing the capital, with a bridge over the Danube north of the city, and another at Dunaujváros, to relieve stress on Budapest and improve regional connections. Build bridges on the Tisza River as required by the National Plan for Regional Development.
- By 2008, increase the length of roads—in addition to the freeway/expressway network—with a load capacity of 115 kN/axle, the EU norm, to 7000 kilometers by reinforcing trunk and regional roads.
- Develop river ferry services to compensate for the inadequate number of bridges and improve access.
- Assist transport safety, environment-friendly local transport, and tourism by developing the bicycle road network adopted in the National Plan for Regional Development, and supporting similar local initiatives.
- Complete and surface all public local roads in built-up areas—one third of which are still unpaved at present—by 2012 in Budapest and major cities around the country, and by 2015 in all other settlements.

## The new road policy

- from the perspective of the user, pre-supposes a uniform road network from starting point to destination, and aligns the procedure of its management by the national and local government with accepted EU practice, opening the horizon for the empowerment of regions in the long term;
- establishes a mechanism of road development, maintenance and operation that reflects the importance of each network element in conducting traffic, subordinating to this principle the improvement and preservation of service standards that can be reasonably ex-

- pected considering the country's prevailing level of economic development;
- stresses the improvement of technical and environmental parameters and the preservation of assets, with a view to equalized and proportionate balanced regional development, sustainable growth, interface with the TEN, and the urgent accommodation of the maximum axle load permitted on European Union roads;
- coordinates the development, operation, and maintenance of national and local road networks, particularly in the capital city and regional centers;
- seeks ways to enable two-way access to cul-de-sac communities.

### Constructing a uniform road network

The rapidly integrating European markets, the strengthening of regions, the rising demand for road use, particularly for goods transport and logistics chains, and the general processes of globalization all necessitate a fresh approach to policy-making that regards the transport infrastructure as an organic whole. Heeding this call, we seek to construct an advanced, **standardized road network** step by step. To users, this uniformity will primarily appear in the form and quality of operation, regardless of the ownership structure of the network.

The elements of the newly conceived road network are the following:

- Trunk roads**, consisting of freeways, expressways, their lead branches at intersections and rest areas, category I and II main roads, their lead branches at intersections and rest areas, as well as secondary roads promoted to main road status due to their significance for the network. In 2000, this portion of the Hungarian road network totaled 9,800 km; by 2015, it is projected to attain 11,800 km in length. Owned and managed by the state.
- Over the long term: **regional roads**, consisting of the secondary roads of

the national network, without the lead branches at intersections and rest areas associated with category I and II roads, freeways, and expressways. In 2000, this portion of the Hungarian road network totaled 20,500 km; by 2015, it is projected to attain 20,900 km in length. To be owned and managed by the regional administration.

- Local roads**, owned and managed by the local governments. Initially, these consist of roads within city limits in built-up areas. In 2000, this portion of the Hungarian road network totaled 53,565 km, with two-thirds of this length consisting of paved roads. As a goal of the transport policy, by 2015 the entirety of this portion of the network is expected to be paved.

As an additional element of the local road network, we reckon with some 70,000 km of unpaved peripheral roads, typically used by the farming sector. Although it would be unnecessary for the transport policy to provide for the development, maintenance and operation of these, the issue of their ownership and management will have to be inevitably settled as part of modernizing public administration. We also need to look into the possibility of user participation in financing. The safety of operation and efficient management of local roads must be realized by means of technical stipulations and guidelines for quality, construction, maintenance, organization, and methodology.

Summing up, the public road network in 2000 consists of 30,346 km of national roads owned by the state and 129,500 km of local roads owned by the local governments, or 159,846 km of public roads in total.

The organization managing this newly divided network as an organic whole will have to create and preserve reliable quality service in proportion to traffic needs. To further this end, public road management will be gradually divorced from ownership and controlling functions, as is

the custom in the developed member states of the EU.

Launched in 1997, the Hungarian Bicycle Transport Program has identified the goals of

- improving transport safety;
- increasing the share of bicycle transport in the total;
- developing domestic and international tourism;
- encouraging healthy lifestyles.

The Program seeks to achieve these goals by

### **Railway network**

The density of the Hungarian railway network exceeds the EU average, but it falls behind in terms of quality parameters. Railways claim a higher share in both passenger and goods transport than the EU average, and we will spare no effort to maintain this favorable ratio.

**This priority of maintaining the market share of railway transport** has been assisted by the track reconstruction program of recent years, the installation of modern safety devices, the modernization of traffic control, the electrification of the trunk network, the introduction of modern passenger coach cars in intercity service, and the removal of obstacles from all elements of the infrastructure to facilitate handicapped access.

### **Priority areas of railway infrastructure development**

- Pan-European railway corridors;
- international railway corridors;
- intercity railway corridors;
- suburban sections;
- regional lines;
- other infrastructure elements, such as logistics centers.

In the near future, Hungary's railway policy will implement the comprehensive reform of MÁV, in order to help design a railway transport system that is both EU-conform and mindful of national interests.

- promoting a bicycle-friendly climate;
- designing local bicycle transport networks;
- designing a national network of bicycle roads;
- creating the background for multimodal transport options;
- developing the information and traffic sign system.

The network of main bicycle roads is planned to total 3400 km.

As part of the new railway policy, we will

- unbundle divisions with their own accounts within the railway company;
- organize the relations between the state and the railway companies according to EU norms, financing government support for the track grid and contracting out public passenger services;
- develop the vehicle park to maintain competitiveness;
- free up the tracks for access by alien railway companies for a fee;
- develop the trunk network with EU funds.

The transport policy considers it of the essence to preserve the existing railway network and to develop high-traffic sections. The limited opening of the Hungarian railway network to foreign providers in the integrated EU market is scheduled for 2004, with unlimited access for a fee enabled in 2007 at the very latest.

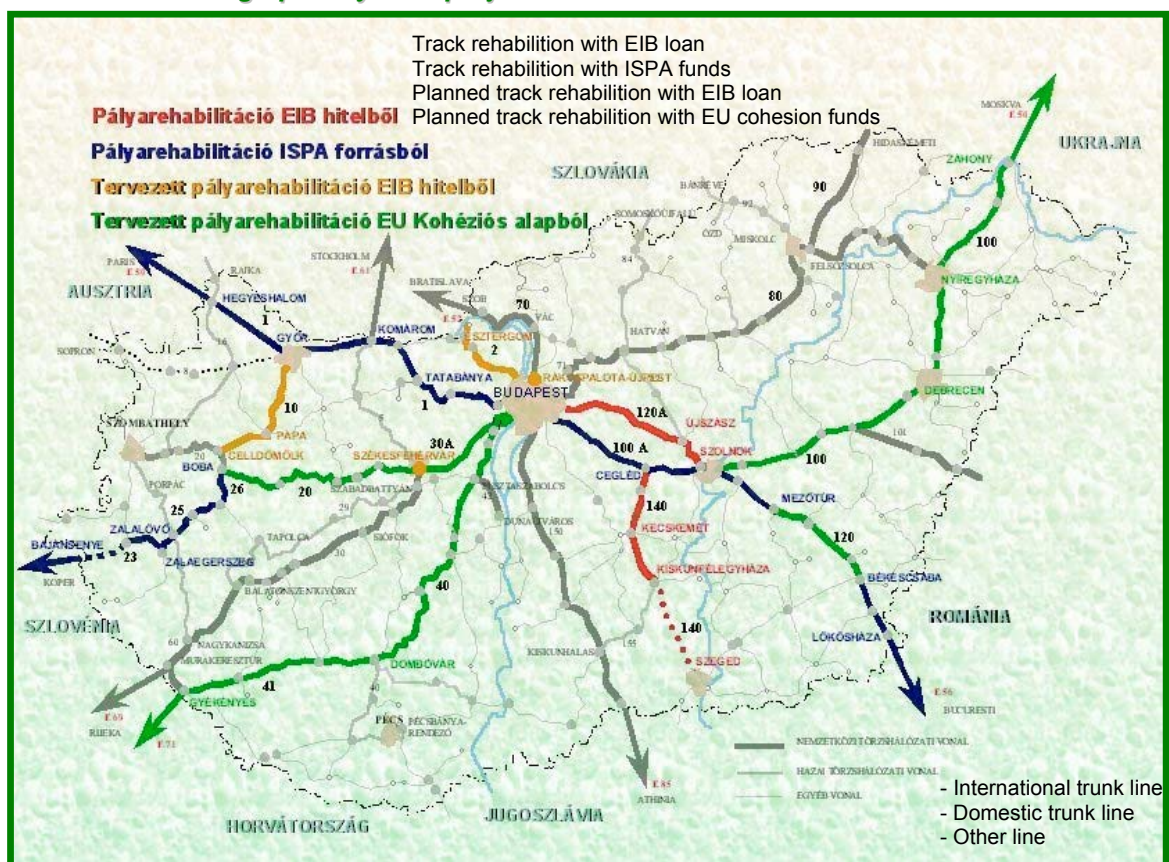
Hungarian railways have a considerable business potential owing to their attractive prices and services for international passenger and transit goods trains. We can rely on a highly developed railway network and efficient transport by rail to impede the flux of passengers and goods over to the roads.

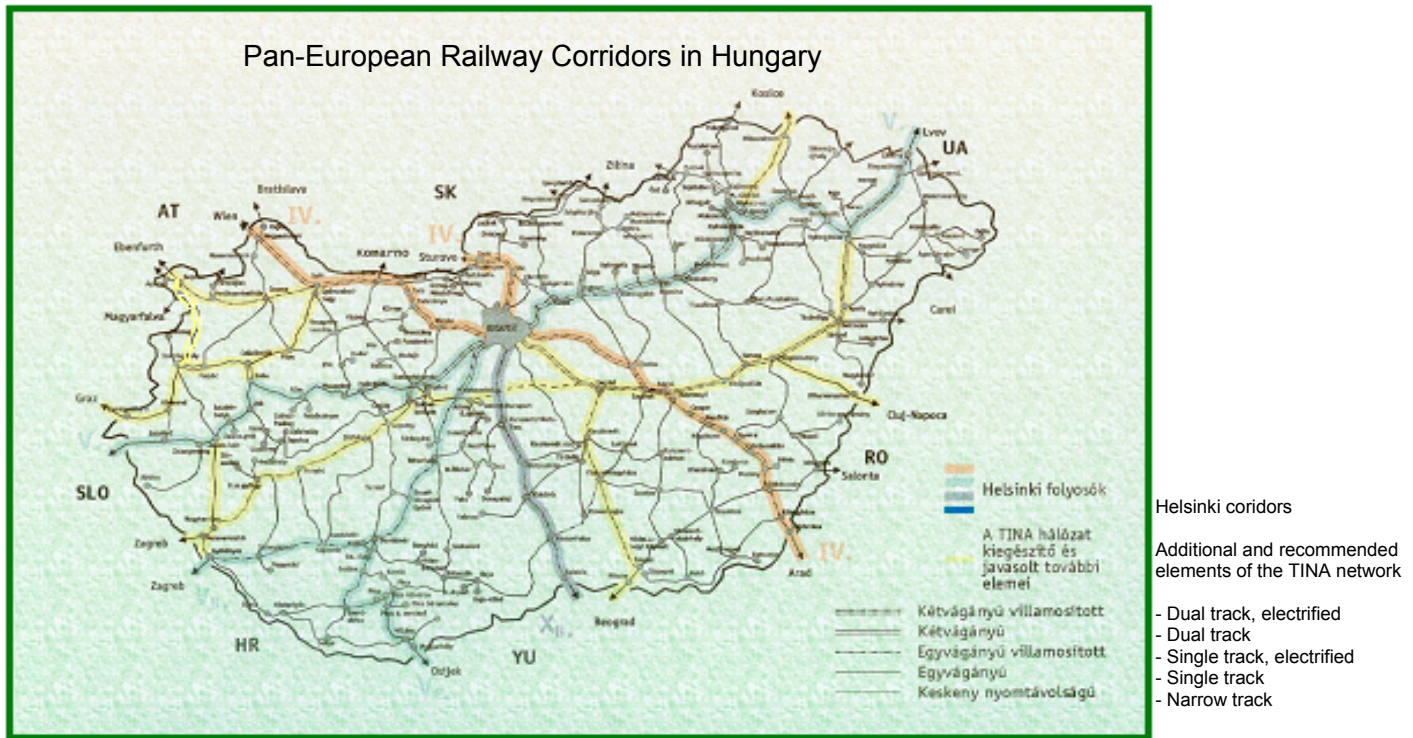


In order to safeguard competitive edge for the long term and satisfy the demands of passengers, freighters, and commercial railway companies, we need to concentrate our hitherto limited financial means on developing strategically important track sections.

The Hungarian trunk railway network totals 4074 km, including 2286 km under the EU-approved TINA network where 75-80% of the total traffic by rail is conducted.

## High-priority MÁV projects





As a result of trunk network maintenance and rehabilitation, we must achieve the mid-term objectives of achieving the initial construction speed and increasing the tracks' load bearing capacity from 20 t/axle to 22.5 t/axle. If we can exploit to the full the opportunities afforded by EU funds, by 2012 we should be able speeds of 140 to 160 km/h on sections integrated with the TINA network.

We need to carry on the electrification program. At present, only 34% of the lines have been electrified compared to the EU average of 41%. After the lines along Pan-European Corridor V, the next level of priority is to electrify the lines in the Transdanubian region. We also need to complete the modernization of border crossing points as required by Hungary's accession and the Schengen Treaty, hopefully by 2006.

Considering the European Union's plans, existing in several drafts, for a high-speed railway line to Athens as part of the Trans-European Network (TEN), the first opportunity for Hungary to join this high-speed line along Corridor IV will not materialize before 2015.

The trunk railway network will remain **state property**.

We plan to separate **trunk lines** from **regional (local) lines**. The **regional network** will incorporate secondary lines without national or international significance and fall outside the main arteries of passenger and goods flow. A total of 2000-3000 km of these lines will be relinquished to the regions and **become private or local government property**, along with the responsibilities for operation and financing. These lines will serve local passenger and goods transport as well as tourism in a simplified yet safe operation scheme. Operation and ownership will thus converge at the level of the given region, local government, business organization or possibly a public-private partnership, thereby upholding the European principle of subsidiarity.

### **Ports and waterways**

With a fraction of the usual air pollution and negligible noise emission, transport by water clearly offers an environment-friendly alternative to other modes whose advantages will be readily apparent if given a rational place in the division of transport labor. The external cost of navigation per unit of shipping performance is estimated to amount to one third and one tenth of the respective burden that transport by rail and road impose on society. Transport by water, particularly of good suited for river shipping, has certified benefits for the national economy.



We need to eliminate the factors impeding the realization of these inherent advantages, by clearing waterways, developing the network of ports, and modernizing the vessel fleet.

### Waterways

- The number one development priority is of course the Danube, particularly the sections on the Hungarian-Slovakian border and south of Budapest, to enable **vessels with a draught of 2.5 m to navigate without restrictions 300 days a year**. We propose to negotiate a Danube development project with Bavarian, Austrian and Slovakian partners, seeking support from EU funds.
- To exploit natural inland waterways, we must render the length of the Tisza, Bodrog, and Körös rivers navigable by vessels with a 400-600 ton freight capacity.
- In an effort to enable international river shipping, we must invite the af-

ected Slovakian, Romanian, Ukrainian, and Serbian parties to negotiate the international legal status of the contiguous Tisza, Bodrog, and Körös rivers, according to the following strategy:

- As the bare minimum, we must amend the Hungarian-Yugoslavian treaty on River Tisza navigation to allow transit vessels under a third nation's flag.
- We must find the most effective way to extend to the Tisza River the international navigation protocol recognized on the Danube. The old legal precedent, still thought by the French to be in force today, is the 1920 Danube Convention, signed in Paris, which included the Tisza in its purview.
- As an interim solution, we propose to sponsor a regional agreement to be signed between Hungary, the Ukraine, Romania, Slovakia, and Serbia.

*Hungary's waterways and planned ports*



## Ports

In the course of developing **national public ports** government investments must be coordinated with business terminal developments implemented within the port limits. This applies to the following top-priority development targets:

- For the Győr-Gönyű port, the Csepel National and Freeport, and the ports of Dunaújváros and Baja, we need to construct the basic infrastructure as delineated in development plans in terms of road and railway links, port installations and terminals, or reconstruct these as necessary;
- At major ports, we must construct adequate facilities for the acceptance, collection, and possibly treatment or processing of fluid and solid wastes generated on board vessels, providing for the operation mechanism of these facilities in line with EU norms.

The government will support land infrastructure development, also as a means to encourage access to local public ports without national significance.

## Logistics Support Centers (LSC) and combi terminals

The main purpose of constructing a network of logistics centers is to provide intermodal solutions for goods transport, that is, the option of environment-friendly transport modes. The sale of logistics services at these centers, such as goods handling, warehousing, dispatching, and assembly, serves to boost economic growth of the given region.

The development of LSC's and combined freight transport terminals started in the early 1990's, and is being implemented on schedule. At present, the national concept provides for 13 such centers in 11 regions, each with the obligation to construct a required/railway link, and four also with a potential port link. The main priority is to complete the Budapest Intermodal Logistics Center (BILK), followed by similar centers in Székesfehérvár, Szolnok, Szeged, and Záhony. Given the mentioned stipulation of links, these centers represent a significant investment with a slow turnover rate. As such, they typically require government support to be feasible. Logistics center development is an acknowledged market category of its own, with the role of the government limited to the construction of the actual infrastructure.

### Logistics centers of national significance



#### LEGEND

- Helsinki Corridors
- TINA network elements
- Planned TINA network elements
- Logistics center
- Logistics catchment zone



### Airports and air traffic control

One of the vital functions of transport administration is the safe operation of airports and air traffic control, along with the continuous supervision and development of flight security and the human, technical, and environmental components of aviation.

The number one priority in this field is the development of the **Budapest Ferihegy International Airport** ("Ferihegy") and its concession into a true hub port to improve profitability.<sup>8</sup> The coordinated development and operation of the **Debrecen and Sármellék airports** –both suited for international air traffic–has regional significance. The development of airports in the country must be harmonized with the National Plan for Regional Development and various local development programs.

As elements in the national network of border entry points, airports receiving international flights must be equipped with border controls satisfying Schengen criteria.

In the process of converting Ferihegy into a hub for the Central European region, we have identified the mid-term goals of improving capacity and service standards, and to construct a high-speed railway link between the airport and downtown Budapest. As part of a comprehensive environmental program, we will commission a sophisticated noise monitoring system, and design noise gates to protect residential zones.

When negotiating terms and conditions with the European Union, we must try to secure for

Ferihegy the opportunity to expand its traffic volume and range of services in the context of the international strategic cooperation between leading European airports.

The development of air traffic control must be carried out under European programs for enhancing air services and capacities. We need to help bring about the commissioning of the **Common Airspace Air Traffic Control Center** between 2007 and 2010. Realized with the cooperation of Central European states, the Center will play a prominent role in the region in implementing the Single Sky concept.



<sup>8</sup> Hub means an airport that plays a decisive role in its region, whose level of construction, technical solutions, and direct links make it a collecting/distribution center for smaller airports and other modes of passenger and goods transport.

## II.2.2. OWNERSHIP, REGULATION, AND OPERATION

The **priorities set up by the transport policy** in passenger and goods transport are the following:

- Preference of public over private passenger transport; encouraging bicycle use; increasing pedestrian comfort and safety.
- Promoting goods transport by rail and water, and multimodal solutions.

### Passenger and goods transport by road

Goods transport by road in Hungary is now fully privatized, with all functions performed by privately owned companies in an environment of free competition, and government intervention limited to indirect devices such as taxes, fees, licensing, control, etc. It is in order to employ such tools to bolster the positions of domestic carriers, in the form and to the extent allowed by EU regulations.

Competition has escalated at breakneck speed due to the growth of private enterprise and the presence of foreign business interests in the sector. It is imperative to preserve and enhance Hungary's competitiveness by rational company management, while fully upholding the principles of anti-discrimination and fair competition.

In passenger bus transport, the bulk of scheduled service is provided by the state-owned Volán group of companies, while private operators claim more than 50% of the charter bus sector,

As a basic obligation, we must ensure universal access to scheduled public bus service for

every citizen. When announcing tenders, in conformity with EU regulations, for exclusive operator rights for a definite period, the government will have to make sure there are no areas left without service, and that the awarded contracts proportionately cover service line sections of small, medium, and large traffic volume.

As the owner, the state provides the companies with support for the reconstruction of bus fleets. Public service and government compensation for unprofitable scheduled services are indispensable for maintaining positions in a fiercely competitive market. Consequently, the national and local governments must continue to take an active role in this sector.

In the privatization of scheduled bus services, we must maintain public functions and apply EU experiences, **introducing regulated competition instead of all-out liberalization.**

The condition of the vehicle fleet is of the utmost importance not only for the efficiency of operation (in terms of costs and standards) but also for safety and the environment. As road transport in Hungary continues to grow, by 2015 passenger and goods transport by road is expected to increase by 150% and, respectively, by 70%. We have already achieved results by measures targeting **the technical condition and composition of the road vehicle park** (for instance the introduction of the EURO 1, 2, 3 systems or the reconstruction of the bus fleet with government funds). Considering these results, we anticipate the following changes to affect the road vehicle park in way that are **important from the perspective of the transport policy:**

- The number of surviving obsolete, East-European-made passenger cars will dwindle, while that of modern, more environment-friendly and fuel-efficient cars will continue to grow.
- Due to changes in the road freight and scheduled bus market and the privatization of public service, only operators using vehicles of satisfying quality will remain standing.

## Railway transport

New guidelines issued by the European Union in 2001 have set for national railways the mid-term objective to unbundle activities in terms of accounting and organization, and to create new organizations, in the interest of transparency and fair competition.



The new institutions according to the EC guidelines will include

- an independent track allocation agency, in charge of allocating track capacities free of discrimination among domestic and foreign commercial railway companies, and of setting and collecting user fees;
- an agency for licensing railway companies, responsible for issuing operation licenses;
- a regulatory agency, to investigate alleged violations of competition principles;
- an independent agency for railway safety.

Using national and matching Community funds, we must develop the permanently state-owned trunk railway network to a level that will satisfy domestic demands and present an attractive transit option for international transport in terms of quality, safety, and price. The operation and development of the trunk network will be the charge of the railway track management company, be remain permanently in the ownership of the state.

- **Passenger railway services** consist of the fast and comfortable transportation of passengers between the cities and, increasingly, in suburban relations on a high-frequency schedule (both public service tasks) as well as of international passenger transport.

The government will retain long-term ownership of passenger service by rail, and will receive a revenue supplement. The system of state subsidies must be reconceived on a normative basis so that the support is both commensurable with performance (scheduled volume) and predictable. The preservation and modernization of passenger railways as state property is a fundamental social and environmental interest that deserves to be centrally supported. Over the long haul, as European railways undergo a process of globalization, it will be possible for the state passenger railway company to become part of a larger alliance.

- **Freight railways** conduct export, import, transit, and large-scale domestic deliveries of goods in market conditions. The freight railway will be free to enter an appropriate alliance and to invite private capital to boost its ability to compete in the market. The state will gradually withdraw from this sector as a proprietor.

The independent allocation agency will have to offer operators schedule times that will best utilize the available track capacity, and fees comparable to those offered by the competition and proportionate to actual costs.

Over the next few years, railway reform in Hungary will principally affect **MÁV Rt**. The only other railway company in Hungary is **GySEV Rt**. (the Győr-Sopron-Ebenfurt Line), a joint stock company registered in both Hungary and Austria, in which the Hungarian State controls a 61% interest. This railway is expected to remain unchanged in terms of ownership structure and operation protocol.

## Water transport

Since the early 1990's, numerous private enterprises have sprung up in practically every corner of the water transport sector, and the tendency continues.

### Inland freight shipping

It is vital for us to maintain vessels under the Hungarian tricolor in international navigation on the Danube. The first step in this direction is to slow down the pace at which the Hungarian fleet has been losing out on markets, stabilizing the country's share in international commercial shipping on the Danube at around 20%.

This segment is characterized by a twofold excess supply of shipping space, mainly due to the presence of foreign vessels. At the present rate of growth, demand is unable to absorb this excess, especially as it represents a level of technology not fit for new-fangled markets. In the interest of sustaining Hungarian river navigation and rendering the domestic commercial fleet more competitive, the state as owner will have to subsidize its technical refurbishment and the selective reduction of its shipping space over the short term. The privatization of MAHART is an urgent task.

On the Tisza and its tributaries, namely the Bodrog and Körös rivers, we need to promote freight and passenger shipping. In an effort to encourage international commercial presence and tourism, we will open up the Tisza to foreign vessels.

### Inland passenger transport by water

The standstill and decline of domestic scheduled service on Hungary's waterways has highlighted the need to focus on recreational and tourist transport and special, customized services.

The protection of tourist destinations, environmental assets, and local traditions requires us to handle Lake Balaton essentially as a closed market for shipping services, only leaving open the very limited segment of water sports and specialized services. We must allow the local governments to maintain their stake in Balaton Hajózási Rt. for the long term.



There has been a boom on the Danube in the traffic of international cabin passenger ships (also known as "hotel ships"), with typical ports of call in Hungary including Budapest, Esztergom, Kalocsa, and Baja. Although Hungary is currently not represented in this market, we find it important to provide incentive for further growth by constructing new passenger facilities and renovating existing ones at Budapest, Esztergom and at Szeged on the Tisza River, about to be opened for international navigation. These projects would be financed jointly by the state, local governments, and private enterprise.

One of the most profitable and economically stimulating branches of tourism, yachting in Hungary has undergone some spectacular development since borders opened up in the early 1990's. We should keep abreast of this trend by making the appropriate investments in yachting infrastructures on Lake Balaton and the major rivers, financed jointly by the national and local governments and private capital.



### Combined shipping and logistics

In harmony with the EU's transport policy, the Hungarian state continues to support **multi-modal shipping solutions** and environment-friendly **logistics centers**. We must extend incentives and benefits to encourage "rolling highway" and unaccompanied multimodal transport using containers, swap bodies etc. Logistics centers represent a breakthrough in railway transport, enabling better exploitation of railway capacities and diverting some of the commercial traffic onto the tracks.

Combined goods transport by road and rail is regulated the AGTC, the European Agreement on Important International Combined Transport Lines and Related Installations, to which Hungary is a signatory. Upgrading combined transport capabilities to international standards by modern terminals in Hungary is a vital national interest that serves to fully accomplish the country's transit functions and to redirect some of the east-west flow of goods onto the waters and the railway tracks. At present, some 8-9% of all transit freight flow through Hungary is conducted via rolling highway (Ro-La), a five-fold increase over the past 10 years. Unaccompanied freight transport in containers, swap bodies, semi-trailers etc. has grown by about 40% in four years. The river port development program will broaden the horizon of opportunities for Ro-Ro (combined water/road transport). The sustenance and amplification of this trend is guaranteed by the EU-harmonized Hungarian regulation and government subvention of domestic intermodal transport.

### Air transport

Air transport, along with information technology and tourism, is globally the most dynamic economic sector.

International air transport is in flux in every possible way. With markets being liberalized everywhere, the name of the game is global competition. The rivalry between individual airlines is being rapidly superseded by the competition between worldwide carrier alliances. Markets are being reshuffled, redistributed, and concentrated. Save for a few temporary lulls, the air transport market has grown steadily, both in absolute terms and in its share compared to other modes.

It is in this volatile global context that Hungary's airline industry must seek ways to ensure its survival and long-term profitable operation offering high service standards. This requires the thorough revision of the national airline's business strategy on rational economic grounds, the imposition of reasonable frugality measures, and the development of the aircraft fleet. In order to keep MALÉV alive and even to make it competitive, we need to optimize the cost structure of the fleet by reversing the current ratio between leasing and purchase with the aid of capital injection and temporary benefits.

The privatization of MALÉV will follow the strategy developed jointly by the majority owner ÁPV (the State Privatization Company) and the Department of Air Transport of the Ministry of Transport, which provides all the details of the impending ownership change. During the privatization of the airline, it will be crucial to safeguard national supervision as required by international treaties. This means that 50% + one share must remain in possession of the Hungarian state. We must also provide the capital needs for acquiring the sufficient number of aircraft, in compliance with EU guidelines and norms for government subvention.

- protect human life and the environment;
- apply prices commensurable with actual performance and costs.

## Urban and suburban transport

Nearly two thirds of the total Hungarian population lives in cities, where the quality of life depends greatly on the quality of urban transport and the ways in which it affects the environment.

A liability of the national government, intercity transport traverses city limits and blends in with local networks. It is this inseparable entanglement that makes it so vital to conceive of urban transport policy as an integral part of the national transport policy. Hungary needs cities whose transport policies mesh with those of the country to assist dynamic economic growth and integration with the European Union. In other words, **we need a strategy of urban transport development that will lean more emphatically on community transport than on individual transport modes..** In cities, we witness the concentration of the various burdens that transport imposes on society, and these burdens are proven to be heavier in case of individual transport. **The concept for urban transport policy must be developed centrally.** This concept will prioritize the construction of intermodal nodes consisting of the main transfer points linking local and intercity networks and P+R facilities, which will form an organic whole under a variety of traffic alliances. It is this integrated system whose construction, regulation, and coordination the concept recommends as one of its cardinal points.

The urban transport policy recommended in Hungary relies on EU-conform, **consistent guidelines** as follow:

- satisfy sustainable transport demand;
- support well-balanced regional development;
- ensure fair market regulation;
- support transport integration;
- improve quality and service centers;

The changes in urban transport over the past decade—the mushrooming number of passenger cars, the shifting functionality of individual areas, deteriorating public service standards—have given rise to tensions that cannot be ignored. The unfavorable influences of transport are felt more keenly within city limits, in the form of traffic jams, accidents, air and noise pollution, and the encroachment of the infrastructure on valuable acreage. To mitigate these negative factors, the government must accomplish the following tasks:

- coordinate and harmonize the national transport policy and its development targets with the urban transport policies of the cities;
- reduce pollution and accident hazards by building bypass roads and, around larger cities, freeway rings wherever warranted by the magnitude of transit traffic, allowing toll-free travel on freeway/expressway sections through suburban/metropolitan areas between the extremities of the catchment zone
- contribute to the enhanced functionality and modernization of public transport by means of subsidies and revenue compensation;
- implement traffic control measures to make public transport a more attractive option than a passenger car;
- in larger cities and their catchment zones, participate in the implementation of a city logistical system, the operation of traffic alliances, the introduction of an intelligent ticketing system and fee scheme that provides incentives for choosing mass transportation, as well as encourage the construction of facilities for the P+R (Park and Ride) network;
- coordinate individual, local public and intercity transport in cities and suburban areas through the implementation of intermodal points and telematic solutions;

- support the solid surfacing of unpaved and/or dusty roads;
- embrace the cause of bicycle transport, both in tourism and for business;
- provide incentives for removing obstacles to facilitate handicapped access.

Each local government is responsible for the operation, maintenance, and development of transport networks and installations in its possession. The Local Government Act identifies the operation of local public transport as an optional task of local governments.

In the coming decade, local governments will have to shoulder more responsibilities and take a larger part in coordination, organization, and management. We will recommend the detailed drafting of the urban transport policy based on the master concept. The mechanism of implementing fundamental regulatory changes in public passenger transport, the emergence of traffic alliances, and the coordination of these systems will be expressed in the urban policies, and will rely heavily on the local governments for their enforcement.

### Budapest and its agglomeration

It is of the essence to harmonize the transport policy with the Budapest Transport System Development Plan. The transport policy considers it a prominent task to

- complete the M0 ring around the city, with alternating freeway and expressway sections as dictated by traffic demands, to relieve transit flow;
- build new bridges across the Danube within the city limits and other transverse network elements to alleviate stress on inner city zones;
- favor public over individual modes of transport;
- bring about the Budapest Transport Alliance (BKSZ), an intelligent ticketing system, and a converted devel-

opment of various transport networks and service standards to promote reliance on public transport;

- integrate MÁV's lines within the capital with local public transport networks;
- reconstruct and develop the surface infrastructure of public transport, with special regard for fixed-rail installations;
- expand the underground network and



upgrade the intersections, rails, and vehicle parks of suburban and commuter train lines to advance an integrated, high-performance and environment-friendly transport network;

- build direct link between Ferihegy International Airport and downtown Budapest (a task for the mid-term);
- build parking garages, underground parking facilities, and P+R lots to enable pedestrian-only roads and squares—refreshing locales for a new urban way of life.

## II.3. ROLLING PLAN FOR MID-TERM INFRASTRUCTURE DEVELOPMENT

Within its purview, the government is responsible for developing the country's trunk road and railway network, national public ports, the Ferihegy International Airport, and air traffic control. Projects for the modernization, enlargement, and operation of these assets and facilities are funded from the national budget in part or in full. In additional areas where the supply of obligatory public service is only possible by producing losses, or where so required by the environmental considerations of the transport policy, the Government may subsidize operations.

Paving the way for investments in transport infrastructure is a time-consuming process that involves a Strategic Environmental Study prior to the actual planning phase, in accordance with EU guidelines. Infrastructure investments are capital-intensive and take a long time to produce returns. All these features, along with its sheer significance for the national economy, warrants the drafting of a mid-term government plan for transport infrastructure development in order to render civil works, technical design and the use of resources both more cost-efficient and more foreseeable. This mid-term plan will be drafted on the basis of modal plans and strategies, the National Development Plan, the Cohesion Fund Master Strategy, and in harmony with the National Plan for Regional Development.

The **mid-term** plan will provide for transport infrastructure development tasks for period ending in **2006**, cover the various projects proposed by modal sectors and their strategic documents for the same period, and take into account Act CXXVIII of 2003 on the Development of the High-Speed Road Network and the various infrastructure projects articulated in the Government-sponsored Europe Plan. Designed in this way, **the mid-term strategy** will lend itself to concerted implementation thanks to the rolling plan format, to be updated annually in light of the adoption of each annual budget.

We need to set up a **monitoring system** working around the clock to keep track of the targets of the transport policy as they are being accomplished. Since the EU began to take care of this task in 2002, after the publication of the White Book in 2001, we will be able to create the Hungarian monitoring system virtually side by side with that of the European Union.

The draft of the **mid-term transport infrastructure plan** must be submitted to the Government annually for approval. Also annually, the Government shall review and discuss the report on the implementation of the plan over the previous year, along with the next year's supplement, treating the two as a single rolling plan submitted for evaluation.

Budapest, March 2004



# SUPPLEMENT

## LIST OF RELEVANT LAWS AND REGULATIONS

**Resolution of the National Assembly 19/2004. (III.26.) OGY on Hungary's Transport Policy 2003-2015**

**Act CXXVIII of 2003 on the Public Interest and Development of the High-Speed Road Network of the Republic of Hungary**

- Decree 30/1988. (IV. 21.) MT of the Implementation of Act I of 1998 on Public Road Transport
- Decree 15/2000. (XI. 16.) KöViM on Licensing the Construction, Commissioning, and Elimination of Roads
- Decree 6/1998. (III. 11.) KHVM on Regulating the Management of National Public Roads
- Decree 20/1984. (XII. 21.) KM on Traffic Regulation and Road Signs
- Decree 19/1994. (V.31.) KHVM on the Management of Public Roads
- Government Decree 231/1997.(XII.12.) on the Powers and Responsibilities of the Unified Transport Authority
- Decree 14/2001.(IV.20.) KöViM on the Professional Standards and Licensing of Domestic and International Freight Transport by Road
- Decree 49/2001.(XII.22.) KöViM on the Professional Standards and Licensing of Domestic and International Passenger Transport by Bus
- Decree 5/1990.(IV.12.) KÖHÉM on the Inspection of Licensed Vehicles
- Decree 6/1990.(IV.12.) KÖHÉM on the Terms of Commissioning and Operation of Licensed Vehicles

**Act XCV of 1993 on Railways**

Railway-related regulations in force

- Decree 15/2002.(II.27.) KöViM on the Licensing of Railway Companies
- Decree 28/1994.(X. 28.) KHVM on Issuing the National Railway Code
- Government Decree 21/2002.(II. 27.) on Amending the Powers and Responsibilities of the Railway Authority
- Joint Decree 11/1996.(III. 5.) KHVM-PM in Unbundling Railway Track Management and Railway Transport Enterprise
- Joint Decree 15/1987.(XII. 27.) KM-ÉVM on the Licensing and Supervision of Railway Installations
- Decree 9/2002. (II. 6.) KöViM on the Mutual Accessibility of High-Speed Railway Networks
- Joint Decree GKM-PM on the Unbundled Accounting of Railway Activities

Railway-related regulations proposed:

- GKM Decree on the Allocation of Railway Track Capacities
- Joint Decree GKM-PM on Determining Fees for Railway Track Use
- New Railway Act

### **Act XCVII of 1995 on Air Transport**

- Government Decree on Implementing Act XCVII of 1995 on Air Transport
- Government Decree 103/1999. (VII.6.) on the Rules of Construction, Development, and Elimination of Airports
- Decree with the Force of Law No. 25 of 1971 on Promulgating the Convention of Civil Aviation Executed in Chicago on December 7, 1944, and the Minutes of Supplements and Its Signatures, dated March 26, 1998
- Government Decree 19/1993.(I.29.) announcing the EUROCONTROL Convention

### **Act XLII of 2000 on Water Transport**

- Act CXIV of 2000 Promulgating the Minutes of Supplement, dated March 26, 1998, to the Treaty of Belgrade on Navigation on the Danube, dated August 18, 1948, and Its Minutes of Signatures
- Government Decree 237/2002. (XI.8.) On the Powers, Responsibilities, and Competence of Shipping Companies
- Government Decree 151/2000. (IX. 1.) on the Promulgation of the European Agreement on Significant International Waterways
- Decree 50/2002. (XII.29. ) GKM on the Construction, Occupation, Operation, and Elimination of Ports, Ferries, and Other Shipping Facilities
- Decree 49/2002. (XII. 28.) GKM on the General Rules of Operating Ports, Ferries, and Other Shipping Facilities, and on the Implementation of these Rules
- Decree 17/2002. (III. 7.) on the Designated Waterway Status of Potentially or Actually Navigable Surface Waters, Natural or Artificial
- Decree 13/2001. (IV. 10.) KöViM on the Fitness, Inspection, and Certification of Floating Installations for Inland Waterways
- Decree 28/2000. (XII. 18.) KöViM on the Procedure of Licensing Navigation Activity

### **Act XXI of 1996 on Regional Development**

Resolution of the National Assembly 35/1998. (III.20.) OGY on the National Concept for Regional Development

Government Decree 184/1996.(XII.11.) on the Debate and Adoption of Concepts, Programs, and Plans of Regional Development

### **Act XXVI of 2003 on the National Plan for Regional Development**

### **Act LXV of 1990 on Local Governments**

### **Act LXXVII of 1997 on the Development and Protection of the Built Environment**

Government Decree 253/1997.(XII.20.) on the National Criteria of Community Development and Construction

### **Act LIII of 1995 on the General Rules of Protecting the Environment**

### **Act LIII 1996 on Environmental Protection**