Clean Air Action Group
Hungary

EU Accession, Transport and the Environment

Summary and recommendations[1]

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[1] **This is the summary of the book "*EU accession, transport and the environment*" edited by Károly Kiss and András Lukács and contributed by the experts of the Clean Air Action Group: Györgyi Bela, Erzsébet Beliczay, Ildikó Farkas, Tamás Fleischer, Ferenc Joó, István Magyar, Péter Mészáros, Zsolt Pápay, Lázár Pavics, Éva Révész and Alexandra Sujtó. The study was commissioned by the Hungarian Ministry of Environment and Ministry of Foreign Affairs. The study was completed in December 2002.**

1. The EU dilemma of satisfying transport needs versus sustainability

Transport is a major environment polluting sector. Its external costs, primarily those of road transport, place substantial burdens on state budgets and national economies. Already in 1991 the external costs caused by transport were estimated at 272 billion ECU in the countries of the European Community, out of which 201 billion (92 %) were attributed to road transport. Therefore the need has become increasingly urgent to establish an environmentally and economically advantageous transport policy. Nevertheless the common transport policy only began to take shape very slowly and almost 15 years later than the environmental policy.

Thanks to technological developments the pollutant emission of individual motor vehicles has diminished. As a result of that also the aggregate emission of several harmful components (nitrogen-oxides, sulphur-dioxide, etc.) has decreased. Due to the increasing volume of traffic, however, for other components (carbon-dioxide, platinum metals, extremely small-sized diesel exhaust gas particulates) the situation has considerably deteriorated. Land occupation and devastation of green areas has increased as a consequence of motor vehicle transport, without any improvement regarding noise and accidents.

According to EU experts a *sustainable transport system* is to contribute to enhancing the economic and social welfare of the population and it is to satisfy transport needs without depleting the natural resources or seriously damaging the environment and citizens' health. This formulation bears the same limitations as the Brundtland Report on sustainability: because needs should be restricted and not satisfied, the concept could be made operational. *The former supply-orientated policy should be replaced by an integrated demand-side management, with the aim of reducing the growth rate of transport.*

The common transport policy therefore has to serve two contradictory purposes. On the one hand the transport policy subordinated to developing the internal market should contribute to economic growth and to strengthening the social and economic cohesion, as a higher level objective. On the other hand the transport policy should also work in subordination to environment protection, which has received increasing emphasis as a consequence of the Maastricht Treaty. *It is very difficult to reconcile the two objectives. The growth of mobility should be curbed without restricting the economic development. Up to now, however, there has been a strong link between mobility and the growth of GDP, therefore separating the two is one of the most difficult tasks facing the Community.*

Also the measures taken by the Community to establish an internal market often act just against the environmental policy objectives. For instance demolishing the frontiers in order to enforce the principle of the „four freedoms" has substantially increased the traffic volume. The deregulation and privatisation of the transport market may also add to the volume of traffic, and without proper regulation this will further increase the pollution of the environment.

The primary aim is to establish social and economic cohesion everywhere. The policies related to that, e.g. connecting the less developed regions into the „bloodstream" of the Community, often end up in motorway construction which are contrary to the interests of environment protection. What is more, it was also found that there is no clear correlation between road network development and economic growth, and motorway construction will not bring the underdeveloped regions closer to the level of the more developed ones.[2]

[2] See: Roads and Economy. State-of-the-Art Report. T & E. Brussels, 1996.

The Community wishes to achieve an improved „modal split", a more favourable distribution of traffic between different sectors, by „revitalising" the railways and enhancing their competitiveness. They are planning to do this primarily within the transport programmes of the Trans-European Networks (TEN). Among the plans of the programme the majority are indeed railway projects, but it is questionable whether they will be implemented in the near future. In accordance with the principle of subsidiarity, the Community assigned the implementation of the programmes to the member states. In accordance with the principle of co-financing, the Community will pay at most 10 per cent (cohesion countries) of the investment projects. As a consequence the implementation of the projects is delayed for lack of financial resources. The TEN programme is widely challenged on the grounds that it will only generate additional traffic and will cut apart natural habitats.

The methods of Strategic Environmental Assessment (SEA) serve the purpose of integrating the environmental aspects into the political and investment decisions, and they are to contribute to assessing the possible damage and evaluating the realistic alternatives. Their effect, however, is limited because they are only brought into the decision-making process in the last phase.

In eight member states (Austria, Denmark, Finland, the Netherlands, Sweden, the United Kingdom, the Flemish region of Belgium, and Luxemburg) a national transport/environmental strategy has been or is being elaborated, but they have not as yet been enforced.

In order for the EU to be able to take efficient actions, it is necessary to reduce the number of questions which are to be decided upon with a consensus. It will be possible to form an efficient and fair price system, considered by the Community as one of the instruments of reducing mobility, if the taxation issues can be decided by a two-third majority voting. But as long as the member states keep carefully reserving their rights to impose taxes, it will not be possible to ensure that the optimal itinerary and the least harmful fuel type or transport mode is selected.

The price elasticity of the demand of transport is very low. Without adequate substituting services (public transport of equal standard) only very few people will give up using their comfortable cars. And the difference existing between the costs of using public transport services or using cars does not stimulate the substitution either. If rising car use costs were coupled with relatively decreasing public transport fares (together with the enhancement of services), then it would be more realistic to expect a change in the transport habits. But in most countries, like in Finland, Denmark and the United Kingdom, the greatest increase has been recorded in the costs of using public transport vehicles. This has further strengthened the already existing advantageous position of car transport.

The same applies to freight transport as well. If an enhanced standard and flexibility of railway transportation was coupled with rising road transportation prices, then it would be more realistic to expect a change.

In the past decades the market share proportions of the different transport sectors have changed unfavourably. Road and air transport have continued to gain ground, while railway and inland water transportation have lost some of their importance. As a consequence, in the main European traffic corridors and junctions the congestion has increased so much that it has become difficult to access the centres from distant regions, and therefore these areas have fallen into a disadvantageous competitive position. It has also become significantly more difficult to create internal cohesion and regional integration within the Union. In order to solve this problem the European Union set two main goals to be achieved by 2010: regulating the competition between transport sectors, and making the railway, inland water and maritime transport catch up with the

other sectors. Further tasks include creating links between transport lines, integrating the different transport modes and eliminating bottlenecks. Forming a fair price system remains a current issue to be tackled.

2. The Hungarian transport policy does not favour environment-friendly solutions

Chapter II demonstrates how false and wrong the focal points of the Hungarian transport policy are:

- it concentrates on constructing new motorways instead of maintaining and renovating the existing road network
- instead of supporting the environmentally friendly modes of transport it subsidises the road transport, car manufacturing and air transport with enormous funds and preferences.

The state of the Hungarian road network is much inferior to what is desirable. This was the conclusion of the World Bank's country study for 1999 as well. Therefore it is unreasonable to construct motorways to the detriment of investment projects in other transport sectors. The overdue maintenance and renovation work should be completed and the already existing roads and bridges are to be modernised.

The Declaration Towards a European Wide Transport Policy adopted at the Helsinki Conference in 1997 states that "Emphasis should be given to improved use of existing infrastructure and related services and, by applying appropriate methods of analysis to modernisation, to rehabilitation and construction projects." In Hungary only half (or less) of the funds needed are provided annually for maintenance on the 30 thousand km long main road network. For roads under local government management (with a total length of 105 thousand km), the situation is even worse.

Since 1983 the Hungarian Government has not paid for the costs of the services that it ordered from the Hungarian State Railways (MÁV), and which are not covered by the fares. After the change of regime it has no longer been possible to finance the loss of the passenger transport from the profits made earlier on the large volume Hungarian-Soviet freight transportation. Therefore the passenger transport branch of MÁV, and the whole company, has incurred heavy losses. As a consequence it is not possible to effect new investments to improve the competitiveness of the railways. In addition, there is not enough money for the necessary maintenance and renovation tasks either. As a result, the condition of both the railway tracks and the rolling stock has severely deteriorated.

Even today less than 80 per cent of the necessary investment resources are available at the MÁV, but in the past decades this level of resources has characteristically been under 60 per cent. This practice of the Hungarian State is contrary to the EU Regulation (EEC) No 1191/69 of the Council stating that if the state orders public transport services with a compulsory manner, and receipts from fares do not cover their costs, then the state has to cover the loss. Even so the Hungarian Government grants MÁV an enormous subsidy of tens of billions HUF per year, but rightly it is unwilling to undertake unlimited funding for MÁV's total losses because of some loose practices in the management of the company.

The situation of the VOLÁN (Interurban Bus Companies) is very much like that of the MÁV as regards financing, although it needs a much smaller subsidy. At the Budapest Public Transport

Company (BKV) , too, the conditions are similarly unfavourable. Since 1990 the Budapest Metropolitan Government has considerably reduced the amount of subsidy granted to the BKV: calculating at prices of the year 2000, it has deprived BKV of 352 billion HUF (in total) between 1990 and 2002, compared to the amount which it would have granted the company if it had maintained the level of the 1990 subsidy each year. The Budapest Metropolitan Government again has taken relatively few measures to support public transport.

The European Union's Green Paper „Towards Fair and Efficient Pricing in Transport" published in 1995 and its White Paper „Fair Payment for Infrastructure Use" released in 1998 clearly state that in every member state of the European Union there are considerable costs of road passenger transport and road freight transportation that are not paid for by the user, and that these external costs, in accordance with the polluter-pays-principle, are to be internalised in the prices of transport. The Presidency Conclusions of the Göteborg European Council (June, 2001) declared accordingly that "the Commission will propose a framework to ensure that by 2004 the price of using different modes of transport better reflects costs to society."

In Hungary the State's tax revenues related to fuels have been diminishing continuously since 1990. Between 1990 and 2000 the state revenues from taxes and contributions imposed on wages altogether increased at the same rate as the inflation, while revenues from excise duties and consumption taxes (predominantly made up of fuel taxes) increased at a much lower rate than the inflation.

The total tax content of fuels has been decreasing gradually: the tax content of petrol was 70.9 per cent in July 1998, 66 per cent in September 1999 and 59.8 per cent in May 2000. (These data contain both the excise and the value-added tax.)

Various calculations have proved that the taxes and duties included in fuel prices and imposed on motor vehicles do not meet the damage caused by road transport, therefore if this tax content diminishes, the portion of uncovered damage will be even higher.

Not only the tax content of petrol and the state revenues from that tax have decreased in the past few years, but also the prices of fuels in real value. For instance since 1992 the price rise of 95-octane petrol has been significantly slower than the inflation rate. Between 1991 and 2001 the inflation rate was 405 per cent, while for example the price of 95-octane unleaded petrol rose only by 276 per cent. This practice grants hidden subsidies to road transport, ad so seriously stimulates environmental pollution.

At the same time the price of diesel oil has risen slightly more than inflation. The rise calculated without value-added tax, however, just equalled inflation. It is also to be taken into account that the excise tax on diesel oil is much lower than that on petrol, although economic and environmental considerations alike argue in favour of having the same tax level for both types of fuel, what is more, the diesel oil tax should be higher, if possible.

One of the most important reasons for terminating the favoured status of diesel oil is that according to the latest research findings the exhaust gas of diesel engines is much more dangerous for the environment and human health than the exhaust gas of petrol engines. A further reason is that trucks and other utility motor vehicles using diesel oil cause much more damage to the roads than cars.

The European Union emphasises in its Common Transport Policy that petrol and diesel oil taxes must have the same level.

Opponents of raising the tax share of fuel prices most often bring forward the argument that it would generate inflation. Results of several international research programmes, in contrast, have

just shown that an increased taxation of the seriously environment-polluting and health-damaging activities and products would help reduce the aggregate social costs, which could contribute to a long-lasting reduction of inflation and to an enhanced economic competitiveness.

There are also other forms of subsidies to car transport which violate the EU requirements of free competition. An example of such subsidies is the tax and customs allowances given to car manufacturers. *In 2000 the Hungarian State released car manufacturing companies in Hungary (first of all Suzuki) from the payment of customs duties and taxes in the value of some 90 billion HUF.*

By virtue of the Act on State Budget, the Act on Legislation and the Act on Environment, prior to taking decisions affecting the State Budget of Hungary, the possible social, economic and environmental impacts of the decisions are to be assessed. Such assessments have never been carried out, and there is nothing to support the argument that these subsidies would serve the interests of Hungarian society in the most efficient possible manner. Similarly, the Act on State Finances prescribes that the use of budgetary funds should be public and transparent. In contrast, not even the Members of the Hungarian Parliament were given information about the extent of the subsidies. Granting preferences to car manufacturing means that the State is supporting a severely environment-polluting activity from public funds.

Such subsidies are presumably contrary to international agreements to which also Hungary is signatory, and they are incompatible with the European Union's directives on the protection of the environment and the freedom of economic competition.

Providing subsidies to car manufacturing companies is unreasonable economically, because this sum could be utilised much more efficiently in other areas. This is well illustrated by the value of the subsidy for one employee, which for „Hungarian" car manufacturing companies (calculating with the total number of six thousand employees) reaches 16 million HUF annually! If we really want to expand employment, then from this sum much more long-lasting jobs could be created in other sectors each year. What is more, together with the investment opportunity, these factories also obtained the larger part of the Hungarian market.

Granting such subsidies is thoroughly immoral, too, because in the meantime strong debates are going on whether the Hungarian State should or not provide additional, much smaller support for public health, education, culture, scientific research and environment protection, that is for sectors which will fundamentally determine our future.

Details of the scandalous activity of Suzuki, which has been assisted by each successive Hungarian Government in power, can be read in the relevant part of this study.

Environmental damages caused by *air transport* are substantial and they are rising at an accelerating rate. Its effects range from local noise to global climate change. The specific energy consumption of flying is much higher than that of the other modes of transport, and it contributes significantly to the greenhouse effect. In spite of all this, there is not any type of environment protection tax imposed on air transport, for instance there is no flying tax, there is no consumption tax or excise duty on the fuel of aeroplanes, and, there is no value-added tax on international flights. The Hungarian Government does its utmost to keep the Hungarian Airlines (MALÉV) alive from public funds and to develop the Hungarian domestic air transport system. Presently it plans to develop 13 rural airports with public funds, including also EU aid.

The reasons given for justifying the extensive state subsidies are in general the allegedly favourable economic impacts that can be expected from the expansion of air transport. The tendencies observed in the European Union prove that such opinions are mistaken.

The European Parliament adopted a resolution urging the taxation of kerosene for flights departing from EU member states. The resolution states that if a wider international convention cannot be attained, then, the EU has to take this step. What is more, it has to introduce other types of environmental charges as well. For example it has to impose charges that depend on the pollutant emission of the aeroplanes.

As far as the subsectoral division of labour in freight transportation is concerned, Hungary is in a worse position than the European Union regarding sustainable development, because in the EU the share of the more environmental friendly railway, water and pipeline transportation was 57.5 per cent in 1997, whereas in Hungary it was only 49 per cent, and from this portion has quickly deteriorated, falling to 40.4 per cent in 2000. Therefore *it is not true that regarding the modal split in freight transport, Hungary is still in a much more favourable position than the member states of the EU from the aspect of environment protection*. Between 1990 and 2000 in Hungary the more environment-saving transportation modes, mainly the railways, lost ground in general, while the share of road transportation, with the highest specific load to the environment, rose by 22.5 per cent.

In addition to these facts, the European Union's endeavours to increase the share of the much more environment-saving railways have to be recognised as a noteworthy signal.

Recommendations:

1. Direct and indirect subsidies granted to road transportation should be gradually eliminated.
2. Instead of constructing new motorways, emphasis should be placed on maintaining and renovating the existing public road network.
3. Railways and public transport should be supported, counterbalancing the damage to the environment and human health caused by road transport.
4. Subsidisation of Hungarian car manufacturing, which is not justified economically either, should be stopped.
5. Taxpayers' money must not be wasted on air transport which is particularly harmful to the environment.

3. Within Hungarian transport the international freight transportation has a greater share than the domestic

Between 1990 and 2000 the *volume* of Hungarian imports from the European Union tripled, while Hungarian exports rose to 2.5-fold. Imports from the European Union into Hungary increased from 49 per cent to 58.5 per cent, and Hungarian exports increased from 45.4 per cent to 75.2 per cent in the total external trade. In Hungary's foreign trade with the EU *the turnover of commodities, calculated as per origin for imports and as per destination for exports, is smaller than the turnover calculated as per contracts (which comprises mediation trade as well), therefore for the assessment above it is justified to take into account a proportion of 85 per cent in exports and 88 per cent in imports.*

In contrast to the rocketing foreign trade turnover, *customs revenues have plummeted*. That has deprived the Hungarian state budget of revenues compensating for the rise of environmental and other damage caused by transportation.

The main characteristics of the changes of exports from Hungary to the European Union during the mentioned ten years have been the following:

- In the Hungarian-EU direct turnover the exports expressed in tonnage rose by 27.9 per cent (increased from 8.4 million tons in 1991 to 10.7 million tons by 2000).
- The value of the exports increased from 4.8 billion Euros to 22.9 billion Euros.
- The specific value of exports rose from 578 Euros/ton in 1991 to 2144 Euros/ton by 2000.
- Hungary exported the largest tonnage into neighbouring Austria (3.4 million tons in 1991 and 3.7 million tons in 2000).
- Germany is in the first place in value, where Hungarian exports increased from 2.2 billion Euros in 1991 to 11.4 billion Euros in 2000.

Data of Hungarian imports from the European Union show the following significant changes:

- Imports to Hungary from the EU rose by 81.1 per cent (increased from 3.9 million tons in 1991 to 7.1 million tons by 2000).
- At the same time the value of the turnover of commodities increased from 5.2 billion Euros in 1991 to already 20.3 billion Euros by 2000.
- The specific value of imports rose from 1334 Euros/ton in 1991 to 2861 Euros/ton by 2000.
- Hungary imported the largest tonnage from Germany (1.3 million tons in 1991, and 2.1 million tons in 2000).
- Hungary also imported the highest value of goods from Germany worth nearly 2 billion Euros in 1991, and 8.9 billion Euros in 2000.

Some general statements can be made after comparing Hungarian exports and imports effected with the European Union:

- The difference between the specific ton value of exports and that of imports decreased from 756 Euros/ton in 1991 to 717 Euros/ton in 2000, and also the quotient of the two indexes diminished considerably in the mentioned period (that is the ratio of the specific ton value of imports to that of exports fell from 2.31 in 1991 to 1.33 in 2000), although the specific ton value of the imports still remains higher.
- The sensitivity to freight costs has diminished in principle, but at the same time intensifying international competition forces participants to reduce the absolute value of their transportation costs. *That in turn should divert transportation towards railway transportation having lower specific costs, if appropriate conditions are created.*
- Continuous supply of production can primarily be ensured by railway transportation, because on weekends and holidays road transportation is more strictly limited.

The above data comprise statistical processing as per destination for exports, and as per origin for imports. In order to calculate the values as per contracts, a correction with mediation trading is necessary, so that we can obtain the actual value of the foreign trade turnover data measured in natural weight.

In 2000 within each transportation mode *the percentage share of international freight transportation*, calculated as per freight ton-kilometres performance, was the following:

Railway	Road	Water	Air	Pipeline	Total
75.5	36.5	95.6	100.0	78.3	53.3

We conclude that *the transportation need of foreign trade has a determinant share in some transportation modes, and within the aggregate performance, too, it is 53.3 per cent.*

The great expansion of Hungary's foreign trade with the European Union in the past decade was the result of the re-orientation of its international economic relations, a non-recurring factor. From the European Community's enlargement experience, however, we can draw the conclusion that the newly acceding countries' foreign trade with the Community rapidly increases, therefore we can expect that this dynamic process will continue. This provides even more support for our argument: the further increasing turnover of goods should be diverted to the railways, because road transportation cannot be a solution to this problem.

Recommendation:

> Since the turnover of commodities between Hungary and the European Union is expected to keep growing dynamically, railway transportation, which causes much less environmental damage, should be used and developed for international freight transportation.

4. The sum of uncollected transit charges exceeds the total amount of EU support given to Hungary

The environmental damage caused by transport (external costs) is generally estimated at 5 to 8 per cent of the GDP. Projecting into purchasing power parity GDP, *in Hungary this* gives a value *between 1,605 and 2,235 billion HUF in 2000.* Nearly 90 per cent of the environmental damage caused by transport results from road transport. Due to the large proportion of black and grey economies in Hungary, which use almost exclusively road transportation, the share of damage caused by road transport may exceed 90 per cent.

We have calculated *how much less transit charges have been collected by Hungary* than the value prescribed by the Act on Motor Vehicle Taxes (which was approved by the EU, too). *Between 1992 and 2001, with this tax allowance Hungary subsidised EU-related road freight transportation, which causes increased load to the environment, by 2.74 billion Euros.* Hungarian trucks going through EU member states receive similar preferences. Considering, however, that the freight ton-kilometres that they cover are only about 40 to 50 per cent of those of the EU countries, we are justified in taking this amount of reciprocity into account. Therefore the sum of 2.74 billion Euros will be reduced to approximately 1.1 to 1.3 billion Euros. However, the fact remains that freight transportation companies do not pay for the damage that they cause, instead in both cases the damage is paid for by the population.

In the same period Hungary received 1 billion Euros support from the European Union. (This including all types of direct and indirect aid. Furthermore the utilisation of these aids is tied to complying with conditions that favour the suppliers of the EU.). Consequently Hungary has not received support, but in fact Hungary has subsidised the EU during all these years.

We have ascertained the cost of *damage caused by trucks to roads in Germany for one ton-kilometer* by a method drawn from the study of the European Federation for Transport and Environment (T&E): at 1994 prices this was 0.093 Euros per ton-kilometre on motorways, and 0.272 Euros per ton-kilometre on other roads. In our calculations we have used these values as cost coefficients.

Between 1991 and 2000 the Hungarian road network sustained damage totalling 3,217 million Euros owing to Hungary's trade with the EU, and to transit transport of EU interests going through Hungary. Taking into account, however, that the Hungarian trucks going through EU member states cause damage to the infrastructure there, it is justified to reckon with reciprocity in this case as well (40 to 50 per cent). This damage of incredibly large value adds further weight to the argument that it is in the vital interest of both the member states of the European Union and Hungary to divert the greatest possible portion of this road freight transportation to the railways.

The modernisation of the border-crossing stations is not paid for by the users. PHARE pays for 30 per cent of the cost of the modernisation of the Hungarian border-crossing stations. Seventy per cent of the investment costs, as well as all the subsequent costs of operation, are to be covered by the Hungarian state. This practice, too, is contrary to the „polluter/user pays" principle of the European Union.

In 2000 in Hungary more than 81 per cent of the *railway freight transportation* was on electrified rail tracks. Thereby the railways are less sensitive to the occasional oil crises. Because road transportation is 100 per cent oil-dependent, whereas railway traction is only 30 per cent. Forwarding one freight ton on railways only requires about one-tenth of the energy that it consumes by road transportation. Consequently the direct dependence of railway traction on imported oil (as a result of the multiplication of the two effects) is only about 1/30 of that of road freight transportation.

The specific accident index of railways is only 1/33 of that of road transportation. Road freight transportation occupies at least three times as large an area as railways. And by taking into consideration the air and noise polluted zones along motorways as well, the land occupation of roads is at least tenfold compared to railways.

When calculating the *environmental and health damage* we have only taken into account the number of trucks of the EU member states and of the countries trading with them, as well as the extent of the extra charges that truck users should pay according to the study of the European Conference of Ministers of Transport in order to cover the environmental and health damage caused by them. The value of environmental damage sustained by Hungary between 1991 and 2000 was between 25 and 40 million Euros annually. During this period the sum of damage totalled some 326 million Euros. (All this should be understood above the infrastructural damage.) In the same manner we have calculated the amount of damage caused by Hungarian trucks in the European Union, which has rapidly increased lately: it rocketed from 11 million Euros in 1991 to 46 million Euros by 2000. With that the total damage caused to the EU member states' population surpassed 223 million Euros in the mentioned period.

In consequence *the trucks of the EU and the trucks transporting into the EU caused one and a half times as much damage to the environment of Hungary as the Hungarian trucks caused to the EU member states.* In addition, the costs of Hungarian freight transportation companies are significantly higher in the European Union than the costs of foreign carriers in Hungary. Therefore in this respect, roughly estimated, the damage caused by the EU to Hungary is twice as much as the damage caused by Hungary to the Union.

In the neighbouring countries surrounding Hungary, *fuel* prices are lower than in Hungary. Making use of the price difference, vast quantities of fuel are brought into Hungary in the fuel tanks of cars and trucks. Experts estimate that this quantity amounts to 30 per cent of the total fuel use in Hungary. The shortfall of taxes, customs duties and other charges causes the Hungarian state a loss of over 100 billion HUF annually. (Data for the year 2001: 125 billion HUF.)

By virtue of the Agreement concluded in 2001 between the European Union and Hungary, taking fuels in the tanks of road vehicles into the territory of the other concerned Contracting Party is free from customs duties, taxes and charges. As a consequence of that, Western European vehicles transiting through Hungary purchase fuel at lower prices in the neighbouring countries, and use it in the territory of Hungary: they pollute in Hungary, but the state does not gain any tax revenues.

The Agreement also means that even those very light legal regulations (partly adopted in 2000) had to be repealed, through which the Hungarian state had attempted to require that vehicles going through the country purchase fuel in Hungary, too.

Lately also *the smuggling of cigarettes* has reached enormous proportions. The National Customs and Financial Authority (VPOP) calculates that each year it loses 7.5 billion HUF in unpaid customs duties, excise tax and value-added tax. This situation is further aggravated by anomalies in accounting for daily allowances and wages, causing an additional shortfall of revenues of 10 to 20 billion HUF to the Hungarian state budget. As a result of evading the payment of taxes and contributions, the competitiveness of the railways was by more than 20 billion HUF lower in 1998 than that of the road transportation.

In June 2001 the Hungarian Parliament passed Act LXI of 2001 on the conclusion of Agreement between the European Community and the Republic of Hungary establishing certain conditions for the carriage of goods by road and the promotion of combined transport. . This happened despite the fact that the environmental non-government organisations strongly protested against it. This agreement is economically detrimental, it contributes to the increased devastation of the environment, and it is also contrary to several rules of law in force.

The Agreement seemingly aims at giving preference to the combined freight transportation, but its section referring to combined freight transportation mentions mostly general requirements only, and designates implementation of tasks that are not attached to any time limits. At the same time it provides substantial and very concrete new preferences for road freight transport, which will further increase the competitive advantage of road transportation as against other modes of freight transportation.

The European Union is forced to change its transport concept because of the excessive expansion of road transport. A growing part of the EU population fears the excessive pollution caused by trucks of the acceding countries, and opposes the enlargement of the EU. This can be prevented by implementing a transport policy which is more railways-orientated and thereby more environment-friendly. For this purpose Hungary can require new EU development aid as well, because by increasing the proportion of railway transportation Hungary is protecting the environment of the EU member states. It is an additional advantage that the railway companies of the EU member states will obtain more transport orders.

As a consequence of the favourable development of the situation in Yugoslavia, the current regional positions of road and railway transport will be completely rearranged. Today railways run freely in and out of Yugoslavia. This has eliminated the fundamental reason for allowing foreign truck companies to use the Hungarian road network virtually free from any taxes.

Recommendations:

1. In the negotiations carried out with the European Union, Hungary must make it clear that in the form of unpaid road charges Hungary is in fact subsidising the EU to a greater extent than the Union is supporting Hungary from all of its aid funds.
2. For trucks over an allowed total weight of 12 tons, road charges of such level are to be introduced gradually which cover all the total costs they cause.
3. In order to reduce the substantial damage caused by road freight transport in Europe, as well as in order to eliminate other related anomalies, freight transportation should be diverted in the largest possible degree to the railways.

5. Hungarian transport does not pollute the environment more than Western European transport

In Hungary recently almost all air quality protection legal regulations were completed and came into effect, which comply with the European Union's law harmonisation requirements. From our point of view the important elements of this package are: the Government Decree No. 21/2001 (II.14.) on Some Rules Related to the Protection of Air Quality, the Joint Decree of the Ministry of the Environment, the Ministry of Public Health and the Ministry of Agriculture and Regional Development No. 14/2001 (V.9.) KöM-EüM-FvM regulating among others the air pollution limits, as well as the Joint Decree of the Ministry of the Environment and Water Management, the Ministry of the Interior and the Ministry of the Environment No. 18/2001 (V.23.) KöViM-BM-KöM on the Environment Protection Supervision and Control of Motor Vehicles.

In addition to health legal limits they also set ecological limits for ecologically sensitive areas, as well as allowed values of carcinogenic pollutants and of deposits, including some that originate from transport. The limits are in line with the relevant EU values, with possibilities for tolerance limits for a transition period.

In another important field of environmental load prevention and management, a new decree came into force on Environmental Impact Assessment (EIA), also complying with the law harmonisation requirements of the EU (Government Decree No. 20/2001). For a large group of activities and facilities, environment protection permits can only be issued after the completion of a detailed EIA, while another group of activities and facilities may be obliged to carry out a detailed EIA by a decision of the Environment Protection Inspectorate. Major transport facilities, development projects and the connected industrial establishments, as well as major urban facilities attracting a lot of traffic may also be obliged to complete a detailed Environmental Impact Assessment.

Among the regularly measured air pollutants NO_2 and suspended particles are the two components which mainly result from transport. Similarly, several other substances that are important from the aspect of damaging human health, although not measured regularly, such as benzene and formaldehyde, are also emitted into the environment from the exhaust gases of motor vehicles. For the first three air pollutants both Hungarian and EU limits exist, while for formaldehyde there is no EU recommendation, but in almost every EU member state limits equal to the Hungarian value are in force.

Ozone, appearing as a so-called secondary air pollutant, is also mainly – although indirectly – related to transport. As far as the health damaging effect is concerned, these five air pollutants are the most important ones in connection with transport.

In 1990 the population of 12 Hungarian cities (which became noted as the „dirty twelve") breathed polluted air, increasing to 20 cities by 1997. Based on the data series of 2000 for the six months off the heating season, the latest State Public Health and Medical Officer's Service evaluation said the following cities were highly polluted: Budapest, Szeged, Sopron and Esztergom. In all four cities the 24-hour air quality limits were exceeded by the concentration of NO_2 more often than in 10 per cent of the measurements.

Thirteen cities have been placed into the "moderately polluted" air quality category owing to SO_2 pollution, and 10 cities owing to dust pollution. The ambient air quality was adequate only in 50 communities out of 109. After the 1998/99 qualification period, the number of polluted communities has fallen from 14 to 4. Nine have been placed into the "moderately polluted" category, and one, Almásfüzitő, has reached the "adequate" air quality category.

The urban population of the EU member states is exposed to severe air pollution, too. Some 15 per cent of the urban population are potentially endangered because they exceed the carbon-monoxide limits that are recommended for the long run taking sustainability into consideration. Ozone in the lower atmosphere (critical regarding transport) affects nearly 50 per cent of the urban population, and benzene also affects about half of the inhabitants.

The most critical hazards originating from transport, nitrogen-oxide and fine dust (PM_{10}) affect 65 and 90 (!) per cent, respectively, of the EU member states' urban population.

The *nitrogen-dioxide* load data of 1999 in Hungary show a few excesses in the 30-minute time range over the 100 $\mu g/m^3$ limit, mainly for the towns Pécs, Győr, Tatabánya and Vác. Measurements were carried out in the winter heating season of the years 2000/2001, and 14.5 per cent exceeded the limit in Budapest; around 10 per cent exceeded the limit in Székesfehérvár, Dorog and Balassagyarmat, while over 50 per cent of the measurements were over the limit in Esztergom.

Among the off-line stations the frequency of exceeding the limit was highest in Esztergom: 40 per cent, that is 20 days, followed by Sopron with 4 days, then by Szeged and Budapest with 1 - 1 day. In the PHARE stations there was no excess of the NO_2 level over 10 per cent, the highest occurrence being in Budapest with 1.3 per cent in Széna Square, which presumably means one day.

In the case of *carbon monoxide* again, the maximum values did not reach the limit in the PHARE measurement points in Budapest and in the country. At the same time the *suspended particle pollution* caused significant load in Budapest in areas with heavy traffic and in several smaller towns, often exceeding the limit.

The limit allowed for ozone in the lower atmosphere was exceeded in 11 EU member states and in 5 candidate countries (including Hungary) in the summer of 2001. Values were recorded above the information threshold value of 180 $\mu g/m^3$ currently in force in the EU and Hungary. The only limit excess reported from Hungary occurred in August in one of the stations. The highest observed measured concentration was 196 $\mu g/m^3$.

There are towns which are regularly placed into the category of "moderately polluted" communities owing to *particle pollution*. In 10 to 30 per cent of the measurements the values are above the limit (Kecskemét, Kiskunfélegyháza, Kiskunhalas, Dunaújváros, Mór, Oroszlány, Rakamaz, Gogánfa, Keszthely, Lenti). Among the PHARE stations in Budapest, excess of the

limit was above 10 per cent in two locations (Csepel, District XXI with 12 per cent, and Baross square, District VIII with 22 per cent) which means that limits were exceeded in principle on 8 and 15 days respectively.

Formaldehyde is emitted in high concentration with exhaust gases. It primarily damages the immune system, already in a concentration of 40 to 60 $\mu g/m^3$, which occurs in Hungary in 10 to 15 per cent of the flats, assessed in various communities of the country.

The limit for lead was exceeded only in Budapest, in 2000, in 8 per cent of the 25 measurements carried out in the Hungarian National Environmental Health Institute (OKI). Since leaded petrol is not distributed any more, the lead pollution status of the environment has improved significantly. Ten years ago, values 20 to 30 times over the limit were recorded near transport routes with heavy traffic. In the European Union the currently recommended limit is 10 µg/100 ml blood, while in Hungary there is no limit in force for the population.

In the new decree the limit for *benzene* is much stricter than it was earlier. Introducing a strict regulation is justified because it has been proved that benzene may start cancerous processes in humans. Leukaemia is the most common result. There are strict regulations in force for fuels, and this raises the hope that the limits can be enforced. Benzene is produced during combustion, especially in old engines that are not properly maintained.

The *Auto-Oil Programme*, conducted in two phases in the 1990s in the EU, is important for the improvement and regulation of motor vehicle emissions and fuels, and air quality. Five key pollutants were identified and their recommended load levels determined: CO (8-hour), NO_2 (annual), benzene (annual), PM (annual) and O_3 (8-hour). In the last few years new elements have been added to the legal regulations of the European Union as a result of the Auto-Oil Programme, among others in the fields of fuel quality, motor vehicle emissions and technical control systems.

In Hungary about 50 to 55 per cent of the population are affected by *noise* from road transport, and 8 to 10 per cent are affected by noise from rail transport. This is at a much higher level in urban environments (it can be estimated at 60 to 65 per cent). Near roads with heavy traffic, noise emission levels above 65 dBA can be observed in 98 per cent of the measurements, for example on several main roads of Budapest much higher noise emissions were recorded than 65 dBA.

The per capita pollutant emission from transport is higher in the European Union than in Hungary.

Recommendations:

1. Controlling of the harmful air pollutant and noise emission of motor vehicles should be made significantly stricter, with special regard to vehicles of high mileage performance.
2. Fines are to be set higher, especially for recidivist polluters.
3. Authorities responsible for controlling are to be strengthened.

6. Development of the Hungarian transport network must not be subordinated to international transit needs

The Trans-European Networks (TEN) comprise the main elements of the European networks of transport, telecommunications and energy, and creating the TEN also constitutes one of the pillars of the European common transport policy.

Within the issue of TEN, the investment projects necessary for establishing the network have obtained a decisive role, and their priority aim is to substitute road freight transportation. Eighty per cent of the capital expenditures are to be spent on railway development, and a further 9 per cent on establishing links between roads and railways. The plan reckons with constructing nearly 5000 km new high-speed railway tracks in the core area of the EU, mainly connected to the railway network of France, while going further from this area the other focal point is in the periphery (Greece, Portugal, Ireland, Finland), where the plan implies modernisation of the existing networks into highways, motorways, and traditional railways with modern technology, which are capable of carrying traffic at a speed of about 200 km/h. They plan to spend 400 billion Euros by 2010. Most of these funds are to be raised by the countries directly affected by the projects.

The basis of the TEN concept is that the overlapping networks are to connect the transport networks that already exist and operate within the individual regions. In the countries of Central and Eastern Europe wishing to join the European Union, however, it is by no means sufficient to consider the connection to the large European networks as the goal to be achieved. We must ensure that our incomplete national and regional level networks form working systems which are capable of providing adequate connection within the individual regions and countries. The interregional network cannot substitute this missing internal system. A precondition for the efficient operation of the trans-European main network is that the network (presumed to be under them) in fact *exists and operates well*.

In the European Union, the issue of extending the trans-European networks towards the East was placed on the agenda at the 1st Pan-European Transport Conference held in Prague in 1991. The second conference, organised in Crete in 1994, had identified nine corridors, and the third conference held in Helsinki in 1997 increased their number to ten. Even in these corridors, the lack of North-South connections is clearly visible in the Central European region.

From 1995 the transport ministers of the EU and of the candidate countries initiated a separate programme for those parts of the pan-European network that are outside the European Union, which constitute an extension of the TEN. The original objective of the programme named TINA was *to assess the transport infrastructure needs, to develop the evaluation method of the network and the development concepts, and to establish the information system of the TINA network.* But from the outset these elements have only obtained secondary priority, because *the main network elements are made up exclusively by the Helsinki corridors, by the extension elements of the TEN network, designed earlier from a Western-European viewpoint.*

According to the final report of the TINA the main network will comprise 13,497 km of railway tracks, 12,050 km of roads, 35 airports, 11 seaports and 49 river harbours, as well as the junctions and terminals of the network. Its construction will require some 66 billion Euros by 2015. Together with the supplementary network, the complete TINA network will be made up of 20,423 km of railway tracks, 18,353 km of roads, 38 airports, 13 seaports and 49 river harbours, and its total costs will surpass 90 billion Euros.

The formal objective of the TINA process was to implement an evaluation procedure, but in practice the outcome functions as if it were a political body's resolution about a network. At the same time a strategic environmental assessment has not been carried out for this network; it has not taken into account the social and environmental aspects or the network system considerations. In the last few years the Central and Eastern European countries have been gradually awakening

to the fact that the hastily accepted main network lines are not directed at all in the way required by the internal connections of the region.

While in Western Europe the establishment of the TEN network was driven by the *intention to connect the national networks,* in the Eastern part of Europe the initial consideration was to *extend* the TEN. The high-priority main network elements of the TINA network even today still reflect traces of this approach, and the additions expressing the connection needs of the accession countries are getting lost in the process.

The transport aims regularly contradict the document's own system of objectives. After the general objectives declaring regional balancing in Hungary, or the reduction of the country's single-centred character, either some meaningless transport solutions advocate spatial structural changes, or support priorities are given to network elements that explicitly increase the centralisation. Transport objectives have a very large inertia. They are slow to change. They live a life of their own and become independent from the comprehensive governmental and sectoral objectives. It is a problem that *the development of the main networks* carrying transit transport *have substantial priority* over local networks, which in itself has a centralising impact and not a levelling effect. Further problems are posed by the *structure* of the main networks, which causes further centralisation, reinforcing the capital vs. country imbalance.

Recommendations:

1. Constructing the main network carrying transit transport must not have priority over local networks.
2. The European transport corridors cannot be limited to motorways; in fact, they are to be based primarily on railways.

7. It is not practical to construct motorways in Hungary

According to our current scientific knowledge, humankind cannot continue for more than one or two decades exchanging 600 million motor vehicles for new ones every 10 to 15 years. Nor can it emit into the atmosphere the combustion products of as much coal, petroleum and natural gas annually as had been formed in the depths of the earth over several hundred thousand years. Therefore constructing motorways means investing hundreds of billions of HUF into an infrastructure that will most probably become superfluous within 15 to 20 years. This reason alone should be sufficient to put an end to the construction of motorways, but there are additional factors to support that as well.

Having assessed thoroughly the motorway needs in Hungary, the World Bank concluded that economically it is much more important for the country to maintain its existing road network than to construct new motorways. Inadequate road maintenance costs the Hungarian economy several 10s of billions HUF annually. Motorways do not relieve the congestion of the roads; each case proves that after a short transitional reduction, the volume of traffic returns to its former level on the old roads while substantial new traffic appears on the new motorway. In most cases it is not the supply that has to be increased by constructing new roads, but rather the demand (the need for driving cars and for road freight transportation) has to be reduced by imposing appropriate taxes

and charges, by traffic technical methods, improvements of public transport, parking regulations and by other means.

It is a misconception (although often asserted) that constructing motorways is not only an autonomous economic policy decision, but also a requirement set for the EU membership, or even already a precondition of becoming a member of the Union. The documents of the EU reveal that in the development of the Hungarian transport infrastructure they would not give priority to motorway constructions. According to their country report published in 1997 „Hungary probably will have to face a steady increase of the road transport, and will have to focus its efforts on using the railway transport and the inland navigation. This might encourage Hungarian authorities to change their current policy which concentrates primarily on road transport."

Another misconception is that motorways promote economic development and regional levelling. In the UK, for example, several cities that are easily accessible by motorway have shown weak economic performance and rising unemployment, while among other cities located further away from motorways there were numerous communities achieving a relatively quick development. When a motorway was built to a less developed region, this often caused the qualified labour force to migrate. The age structure of the population shifted into an unfavourable direction and the local markets sustained substantial losses. It was not accidental that Jack Short, Deputy General Secretary of the Conference of European Ministers (replying to a question in connection with motorway constructions in Hungary) stated that *„sometimes the role of transport investments in promoting economic growth is exaggerated ... I think that the development of the Hungarian economy depends much more on other factors than on the development of the transport infrastructure."* (Lélegzet, 1996/3.)

Commissioned by the Ministry of Environment Protection and Regional Development, in 1997 Deloitte & Touche prepared a comprehensive study titled „Interrelation Between Economic and Infrastructural Development in North-Eastern Hungary, with Special Regard to the Social, Economic and Environmental Aspects of Constructing the M3 Motorway" about the possible impacts of the M3 motorway on the economy of the affected region. The study concludes that *„the motorway in itself will not bring about economic upturn, because for that it is necessary that several factors are present simultaneously. Among these are included the technical development potential, qualified labour force, appropriate educational institutions, innovation-orientated entrepreneurs and enterprises, financial infrastructure offering traditional and venture capital, telecommunications infrastructure, as well as an enterprise-friendly political and economic environment and public administration."* And: *„It appears to be a well-founded assumption that at present it is not difficult to find investment opportunities where greater profitability can be attained than with motorways (e.g. hotel reconstruction programme)."* Furthermore: *„Through the demand it generates, the construction of the motorway has a favourable effect on the development of the connected services (restaurants, hotels, petrol stations, repair service shops, bank offices, shops and perhaps storage facilities, etc. to be established along the road). This is a local and/or community development impact, which covers a 2 to 10 km wide range along the motorway, but it has little regional development impact."*

Thanks to the motorway, the town Hatvan today accounts for one-fifth part of the total GDP of Heves county, and for one-third of all of its exports. This can indeed be largely attributed to the motorway, because as shown by international experience, motorways contribute to the regrouping of jobs. In many parts of the county a recession takes place or at least the development is slowing down, because Hatvan is draining away resources. The motorway does not further economic

development, but only modifies its spatial distribution - unfavourably. This is extremely detrimental for society as a whole, and is fundamentally contradictory to the expectations of the European Union as well, which aim to reduce the socio-economic differences between the individual regions.

Extending the road network is an extremely capital-intensive investment activity. Constructing one metre of motorway costs 1.3 to 2 million HUF, and it has a very long pay-back period. In many cases most probably such investments never pay back the invested capital. What is more, these investments draw away resources from other areas of the economy. They are slowing down economic development.

The construction and use of motorways causes substantial environment pollution. An enormous quantity of building materials is used for constructing one kilometre of motorway, and as much energy as would be consumed by one car travelling 20 million kilometres. Along both sides of the motorway, 6 km on each side, a „tunnel" of polluted air is formed. This pollution damages the health of those travelling in the motor vehicles most of all, because they inhale the exhaust gases from the vehicles in front of them almost directly. On the motorways many more vehicles travel and at much higher speed than on other roads. Therefore the number and severity of accidents are also higher than on roads with less traffic. In the European Union the greater the total length of motorways is in a country, the more people die on the roads.

Recommendations:

1. Hungary does not need the construction of the planned 800 km long new high-speed road network (especially not the motorways).
2. In order to achieve regional development and regional levelling, the qualification level of the local labour force should be enhanced, the infrastructure in the wider sense (including information technology and the supply networks) should be developed, and nature's values are to be preserved.

8. All arguments are in favour of developing the Hungarian railways

Keeping in view the requirements of the European Union, too, the Hungarian State Railways (MÁV) has been making efforts to separate (from an accounting point of view) the track railways division and the enterprising (commercial) railways division, to develop its customer relations, as well as to establish specialised directorates and to start organising regional railways. All these measures, however, have not been sufficient to even reduce substantially the accumulated development backlog of the tracks or the rolling stock.

Implementing the objectives of the railway development requires a few high priority „development actions":

- network modernisation and implementation of high-speed transport in accordance with the EU concepts, in connection with the establishment of the European transport corridors;
- suburban transport development; enforcing a certain passenger transport logistical concept through forming transport associations;
- development of combined transportation within freight transportation, and enhanced participation in building up logistical centres;

- resolving the issue of regionalising the secondary railway lines; settling their status in a comprehensive manner.

The efficient implementation of the development objectives may consolidate the position of the railways within the Hungarian and the European transport system. As a result the railways' share of transportation may become stabilised above the average values characteristic of the European Union: between 7 and 9 per cent of passenger traffic, and 20 to 22 per cent of freight transportation by 2015.

The Hungarian railways have produced very favourable results both in the absolute sense and in comparison with road transport from the aspect of environmental effects. The specific emission values are by an order of magnitude more favourable for railways than for road. Furthermore, between 1993 and 1998 the air pollution caused by railways decreased substantially for each component, both in the absolute and the specific (grams/passenger kilometre + freight ton kilometre) value. A reduction of 43.3 per cent of soot (particulate) emission took place at the railways between 1993 and 1998 (g/kWh), owing to the modernisation of diesel engines.

The emissions of the CO_2, CO and NO_x have only slightly decreased after 1995, which indicates that in the existing rolling stock there is not much more reserve to reduce emissions. Measures to cut further the traction-related air pollution require large-scale investments. As far as the noise load is concerned, the obsolete rolling stock produces very unfavourable results both in noise in the passenger coaches and noise caused by passing trains.

While it is an ever recurring proposal of environmentalists that the excessive road traffic has to be diverted to the railways, the possibility of such replacement is seldom precisely assessed. One attempt was in the study titled *„Strategic Environmental Impact Assessment of the Széchenyi Plan's Motorway Development Programme"*.[3] The analysis concludes that railway passenger traffic may substitute for a considerable volume of road traffic. (The 8 InterCity train pairs per day shuttling on the line Budapest–Debrecen–Nyíregyháza replace at least 1000 cars per day, which means 1.5 million passengers annually.) InterCity services are similar on some other lines, but providing services of such frequency on certain lines would require the construction of double-track railway lines.

The Ro-La combined freight transportation still does not work at full capacity, but even the elimination of the hindering conditions would not result in a substitution of considerable proportions. It is the containerised combined transportation which constitutes the true potential for substitution.

Recommendations:

1. The development and economic rehabilitation of the railways is a state responsibility that cannot be shifted to anyone else, and it is theoretically founded on the need to correct the market distortions resulting from the existing externalities of the transport sector.
2. The state should pay for that part of the public services which it had ordered from the railways, and which are not covered by the fares.

[3] Fleischer, Tamás et al. Studies of the Institute of Environmental Sciences of the Budapest University of Economic Sciences and Public Administration, No. 6, 2001, p. 7074.

3. Nevertheless it is justified that state subsidies should have certain conditions. Such conditions may be to attain a more efficient operation, to establish the transport associations including all public transport companies of the concerned region and to develop the combined freight transportation.
4. Simultaneous increase in the frequency of regular long-distance passenger and InterCity services should be made possible by constructing the second track, where required.

9. Substantial state resources are needed for enhancing the railways' performance

The area of railway-related environmental protection is regulated by Hungarian, European Union, UIC and multilateral international contracts. It can be stated that by taking over the legal regulations of the European Union, by separating the track railways company and the enterprising railways company, and by numerous other measures the Hungarian railway policy is mostly prepared for the European Union membership as far as legal regulations are concerned.

In many fields where considerable environment pollution occurred in the past, environment protection investments have been effected, or the concerned activity itself has been terminated. There is a state-funded damage clearing process going on to clear away the pollution accumulated in the past. Illegal waste dumping sites are being eliminated, and also the soil pollution of the chemical transfer stations, fuel storage and loading stations, and in addition the heating systems of the service areas are being renewed. In many cases, however, the measures to prevent further damage are missing, especially where these would require further investments.

There is no existing *air pollution* regulation for vehicles now in operation. For some diesel vehicle types the air polluting effect is substantial in the areas of national parks. The MÁV, which is making efforts to renew its ageing rolling stock, and yet unable to slow down the ageing process, is re-motorising some types of its engines. These vehicles are equipped with up-to-date mechanical engineering devices, but only a few dozen have been manufactured. Adjusting the quality parameters of railway transport to the European average still requires a lot of work in other fields as well.

At present the modernisation of some key elements of the railway infrastructure is going on with substantial EU support (track renovations and related investments, e.g. modernisation of stations and safety equipment), which will bring progress both in long-distance transportation and in suburban transport, but it will take another 15 to 20 years until the up-to-date parameters are attained on the whole primary network. In the larger part of the railway network it is often impossible to maintain even the current conditions. This is definitely a hindrance to the competitiveness of the railways compared to road transport. Similarly there is a problem with the inflexible organisational structure of the railways, which still reflect the former system of a planned economy.

It is important to rationalise the railway track network. In a period of 10 years, 300 km of secondary railway lines will be reconstructed from used but still good rail materials obtained from primary railway lines. The now separated independent track railways company has more reserves of material which can be re-cycled. Electrification will continue. There are no plans to locate centrally controlled passing places on single-tracked railway lines. On certain lines (e.g. Budapest–Pécs) these could significantly increase the traffic carrying capacity of the railway lines.

The condition of the railway cars cause further problems in *passenger transport*. In suburban transport around Budapest, putting renovated passenger cars into service will gradually improve comfort, but this will not resolve the capacity problems. The situation is similar in long-distance transport (with the exception of the InterCity services). It is an urgent task to renew and/or to enlarge the whole rolling stock (on some lines, e.g. between Budapest and Miskolc by purchasing double-deck coaches). We also need to improve the timetables, and to offer more direct travelling or more convenient connections between passenger trains. As of 1st January 2002 secondary railway lines may be operated privately, but up until now there has been no candidate for such an undertaking, owing to the lack of adequate publicity and to other factors.

There are numerous opportunities for the railways in the field of *suburban transport* in and around Budapest as well, which could be implemented in most cases through solutions requiring substantial investments. In the vicinity of other cities, similar situations are less frequent, nevertheless there are regions where a typically suburban type transport can be seen already at the moment. In order to serve this transport need, it is necessary to take development measures which are similar to those implemented in the region of Budapest. New stops should be constructed which offer favourable conditions for changing to the urban public transport network, the tracks should be renovated, new vehicles should be purchased, and tariff communities and transport associations should be formed.

Market competition in *freight transportation* is expected to become a reality before 2006, before introducing the free use of railway tracks, because Hungary undertook to open up 20 per cent of its primary railway line capacity as of the date of its accession to the European Union. The usability of the tracks will be further facilitated by building up the ETCS (unified European safety system). The rival railway companies will be allowed to move freely on the Hungarian tracks with their own multiple-current-type engines, on payment of track use charges. Although this may bring down the profitability of the Hungarian railway companies, but it is favourable for reducing the environmental load of road transportation.

Increasing competition will exert pressure on MÁV as well. Thanks to both the accession of Hungary to the European Union, and the Hungarian and European economic growth, it is probable that the volume of transport will continue to grow steadily on the railways, too. At the same time it is almost certain that the railways will not be able to keep up the pace with the quick growth rate of the road transportation volume, and the share of the railway freight transportation will further decrease. The big question is how efficiently will the railways fight for getting a share from the increase in freight. To what extent will the new transportation needs manifest themselves on the railways rather than on the roads?

The increasing transportation needs will in all likelihood play into the hands of transportation companies that carry smaller sized goods with flexible services. Most probably road transportation and connecting transportation will form an organic part of these services. At the same time as a result of the globalisation processes, production will become ever more polarised and transportation distances will increase steadily. The environmental effects of transportation will be the least unfavourable if these connecting transportation sections make up as small part of the total transportation distance as possible. It is a key issue to create appropriate conditions for the combined freight transportation on the Hungarian railway network, too.

Under *combined transportation* most people today still understand the Ro-La trains, which are at the moment operating rather clumsily. But this is a less efficient method than the transport without accompaniment, because it is superfluous that the trucks and their drivers travel as well. It

is essential to improve the conditions of the containerised and the exchange box transportation, by enlarging the terminals and by providing a train service which covers the entire railway network and ensures quick arrival to the destination. A precondition for this is to reorganise the entire freight transportation system (traffic order of freight trains and ancillary trips, freight car ordering system, engine direction, etc.). In Hungary the transportation distances are so short that the double reloading may become a factor impairing the competitiveness if the system does not work with Swiss precision!

The *unrestricted use of railway tracks must be allowed* as soon as possible as a precondition for creating an efficient rail freight transport system. The profit-orientated (not state-owned) railway companies are better able to adapt their services to the needs of their customers, and to utilise their labour force more efficiently and in a more versatile manner. Due to their smaller size, their management system is also simpler, and they are able to respond more quickly to changes. The private railway companies would not necessarily be competitors to the larger state-owned railway company, because they would focus on business segments from which the less flexible MÁV cannot benefit at present, for it cannot even attend to those segments.

Hungary's accession to the European Union will in all likelihood have some unfavourable consequences in the railway transport, which are the result of the *increasing traffic*. Noise and other vibration will increase with the increasing traffic, and may affect the population, primarily in the densely populated areas. The increasing volume of traffic will result from the contribution of both the expanding freight transportation following the EU accession of Hungary, and the passenger transport that will become more popular when high-quality services will gain ground. In the suburban transport, traffic increase is also expected due to the enforcement of local environment protection aspects (providing competitive alternatives to individual transport). Passive noise protection measures (installing noise abatement walls) are unfortunately much more frequently used than measures to reduce the rolling and braking noise (by means of using disc brakes and/or plastic brake blocks).

These impacts will be favourable in the field of railway transport, and most of theses processes have already started. The legal regulations and measures necessary to reduce and eliminate the local environment pollution resulting from activities carried out to ensure the traffic service (sewage production, air pollution from coal heating, soil pollution of underground storage tanks, etc.) are in compliance with the statutory requirements of the European Union.

Only an efficient *management team* will be capable to form competitive services at the state railways company. The interests of the railways should be represented not only within the transport sector, but also in the other sectors. Capable managers are needed both in the ministry and the MÁV, who will put an end to the exposure of railway transportation to the sudden changes in politics. The separation of the track railways company and the enterprising railways company, and within that the division into passenger transport and freight transportation departments has already been done. It is still desirable to introduce a financial accounting system which would ensure more transparency and would clarify the intricate financial relations between the MÁV and the limited liability companies owned by the MÁV. Furthermore a system of incentives should be established for employees at all levels, because at present the railways' employees do not have an interest in enhancing the quality of their work. Besides trade unions truly should strive for more favourable working conditions.

Several methods are known in Europe and in the world to reform railway transport, but we should use only those which have proved to be really efficient – the "escaping forward" approach

as a way out. By eliminating secondary railway lines, reducing the number of trains and the staff at stations or by closing down loading areas, good statistical results may be obtained, but we can not expect to achieve a rise in the number of passengers or an extra volume of dispatched goods. Extending steadily the services and enhancing their standard are more likely to result in success both in the field of railway transport and of the environmental aspects of transport. No matter how much we develop the railways, we cannot achieve adequate results if road transport maintains its current advantageous position, which is the result of the inappropriate regulation and the unfair pricing (inexpensive or free use of the infrastructure, lack of environmental taxation, etc.).

With a transport policy that advances railway renovation and development, and furthermore eliminates the factors currently still hindering free development, it is possible in the near future to meet the interests of Hungarian transport and environment protection, as well as the expectations of Hungarian citizens and the criteria of the European Union. To achieve this, however, a political will is needed, which should be clearly formulated already in the first year of the current government's term of office, and it is necessary that they do take specific steps for the implementation.

Recommendations:

1. With a defensive policy, cutbacks and narrowing down of services, the situation of the railways can only be improved statistically; in order to make it competitive a large-scale development and the enhancement and extension of the services are needed.
2. Within the MÁV the employees are to be made interested in every job to perform high standard work.
3. Information to favourably present the image of the railways should be enhanced. The railways' relation to passengers and freight transportation customers should be improved.

10. Combined transportation can be significantly extended

The importance of developing combined freight transportation, especially the unaccompanied transportation, which can be considered as the most favourable also from an environmental aspect, is recognised by the Hungarian transport policy and emphasised by the transit agreement concluded between the European Union and Hungary, too. But apart from general statements no effective measures have been taken to develop the combined freight transportation.

Under the present economic and social circumstances the combined transportation is not competitive. Although this transportation mode has several recognised advantages, for the freight transportation enterprises the decisive parameter is the economic advantage of the combined transportation. Through combined transportation the costs of fuel, maintenance and repair may diminish, the useful life of the motor vehicle increases, and in unaccompanied transportation not paying the driver's wages also constitutes a saving. (Due to the low Hungarian wages, the latter is a far less important factor than for the Western-European enterprises.) But the customer ordering the transportation does not perceive the potential cost saving, because both the Ro-La and the unaccompanied transportation need a lot of organising work. They are less flexible and slower activities, where it is necessary to adjust to railway time-tables. They are multi-player activities, since the transportation company will get in contact with the operators and the railway companies.

The competitive disadvantage is not only the result of the high prices of this transportation mode, although this is undeniable (Ro-La transportation, making up the larger part of the Hungarian market of combined transportation is much more expensive than road transportation for the same distance), but also the consequence of the risks related to this transportation mode. By abolishing the administrative barriers of the combined transportation, developing the logistical and reloading centres, constructing combined transportation terminals, modernising the railway tracks, and by supporting the development of the rolling stock and the pool of vehicles (both for the railway operators and the road freight transportation companies) the flexibility of this method of goods transportation may be enhanced significantly. Unfortunately in Hungary the railway infrastructure is not prepared for carrying the transit traffic or international freight transportation starting from Hungary on railways in a much larger amount than at present. In Hungary a development in the opposite direction can be seen as compared to Western-European countries, because in Hungary the use of Ro-La trains is more popular, the rate of utilisation of these trains is high, whereas unaccompanied transportation (more favourable for the environment) is less preferred. In the future special emphasis should be placed on developing containerised transportation and other unaccompanied modes of transportation.

For Hungarian transportation companies it is very difficult to create the appropriate technical conditions for international road freight transportation. During the modernisation of the pool of vehicles they do not pay attention to supply their pool of vehicles with trailers that are suitable for unaccompanied combined transportation. At present the combined transportation is not chosen by freight forwarders and transportation customers because of its economic advantages in the narrower sense of the word. Freight transportation companies can obtain international road transportation licences only in a limited quantity, Austria being a bottleneck for the companies. At present it can be considered as the main incentive for using the combined transportation mode, especially for making use of the Ro-La trains, if, in return for using them, Austrian prize licences are distributed for road freight transportation.

International road transit transport going through Hungary does not meet any substantial barriers in Hungarian territory. This is clearly proven by the fact that the international agreements are disadvantageous for Hungary. Practically there are two instruments that may stimulate foreign transportation companies to utilise the combined transportation in Hungary: the traffic restriction at night and at weekends, and the transit charge. The latter presumably does not exert any effect upon the demand because of its low level and especially as a consequence of the numerous preferential licences. The bilateral agreements and the extra licences of the transit agreement have practically opened up the roads for the road transportation companies: Hungary is no obstacle. Owing to the low level of the transit charge (that is the motor vehicle tax imposed on foreigners) this instrument of the transport policy does not fulfil its role, namely that the damage caused to Hungary is paid for, and consequently the externalities of road transit transport are not internalised for this large number of vehicles. And the system of road charges is not yet wide-spread enough to be able to substitute for transit fees.

The development of the combined transportation is closely connected to the transformation of the railway market. It is probable that in the near future the *„railway market creation”* will be implemented, and the establishment of a freely accessible unified European network may create more favourable conditions for combined freight transportation, because the administrative and technical obstacles will be abolished, which up until now have raised difficulties for the railway freight transportation. The implementation of the liberalisation is also made urgent by the fact that

this process has already been started some time ago in the area of road freight transportation. But the success of the liberalisation will be influenced by the character of the market structure that will be formed (whether a multi-player market will in fact be established), where there is market competition. Perhaps Hungarian companies will not be able to meet the technical and safety prescriptions that are now being formed in the European Union, and perhaps they will not be able to get prepared for the competition before opening up the market.

Recommendations:

1. At the railways the necessary conditions should be created for substantially extending combined freight transportation (primarily containerised transportation).
2. The demand for the transportation of goods should be diverted into this direction, mainly by introducing road charges, by levying increased taxes on overweight vehicles, and by imposing further traffic restrictions.

11. The European financial institutions should not support the construction of motorways

The following European Union and international financial institutions participated in the funding of the transport investments discussed in Chapter XI:

M0 and M2 highway: PHARE and European Investment Bank (EIB), earlier the World Bank
M1 motorway: EBRD
M5 motorway: EBRD, Commerzbank AG
M3 motorway: EIB, Kreditanstalt für Wiederaufbau
Hungarian State Railways Co. (MÁV): EIB, EBRD.

We think that it was a mistake that the European financial institutions have participated in the construction of the Hungarian motorway network because of the characteristic features of these projects.

Foreign support helps construction of the section of the M0 motorway between the M3 motorway and the No. 2 main road. This extremely expensive investment has destroyed irreplaceable natural values, while it has not improved at all the transport situation of Budapest. What is more, partly owing to the traffic-attracting facilities that have located along the highway, it has generated additional motor vehicle traffic that earlier did not exist. It has also proved to be a mistake to construct the Győr–Hegyeshalom section of the M1 motorway. Because of the high motorway tolls, most of the vehicles kept using the old road. The operating company went bankrupt, and the Hungarian state had to repay most of the loans and their interest. We have a similar objection against the M5 motorway as well. It was made a toll motorway, and therefore traffic flooded the neighbouring communities, while the state is paying the substantial losses of the operating private company.

Hungary is a small country with a small population and of medium development level, and the population's purchasing power is low as compared to that in the European Union. Because of all these factors the motorways can reckon with much less traffic than in Western Europe. The tolls cannot be determined at any discretional amount, and consequently the motorways cannot be profitable. The M1 and M5 motorways exemplify that in Hungary motorway construction cannot

be placed on a commercial basis. Having drawn this lesson, the Hungarian state itself has started to construct motorways from budgetary funds, and it is introducing such low tolls which do not even cover the operational costs. Government agencies try to secure public acceptance for motorway construction by arguing that these programmes generate positive social benefits as driving forces of regional development. (This argument is particularly relevant to the M3 motorway.)

Among the international financial institutions *the World Bank* was the *first to recognise* that the Hungarian motorway construction cannot be profitable even if one takes into account its economic effect on the concerned region. It has pointed out that it is much more advantageous if Hungary uses the available resources for the maintenance and modernisation of the existing roads. The EIB, the EBRD, the KfW and the PHARE, however, are undermining the correct practice that could follow the World Bank's stand.

Regional development and regional levelling desired to be attained through the construction of motorways belong rather to the realm of myths and distorted arguments than to the world of positive facts. Now we will enumerate some further reasons:

- Motorway construction promotes the movement of human and material resources from the periphery towards the centre (and thereby promote further polarisation) at least as much as they promote the levelling process.
- When taking investment decisions, low transport costs and good physical accessibility are only one among several dozens of various aspects to be considered.
- Undoubtedly the construction itself creates jobs, but the completed motorway, by making transportation cheaper, renders other factors of production (among them also labour) more expensive, and thereby its impact is against employment.

Not even the support granted to MÁV by the EIB and the EBRD can be treated without reservation. If this aid substitutes for the omitted consolidation by the state budget, then it was useless to pay the interest.

The banks do not care about the economic efficiency of the investments they finance, because the state guarantees the repayment under any circumstances.

Recommendation:

> Support of the international financial institutions should be utilised only for developing environment-friendly transport modes (railways, public transport).

12. The ISPA aids are of ambiguous value

Up until now in Hungary the ISPA has only granted support for railway investments. Nevertheless, it did not exert any favourable environmental impact through this support, because the Hungarian state, taking advantage of it, uses the funds „saved" in this manner to accelerate the construction of motorways.

From the *six transport programmes approved* by the Commission of the EU, three programmes aim at the rehabilitation of the railway lines, two provide technical help for the preparation of the former projects, and one programme provides technical assistance for the elaboration of the programme related to the strengthening of road surfaces.

In the second half of the year 2000 Hungary submitted applications for ISPA support for three projects in the field of road transport:

1. Reinforcement of major main roads, transit roads and connecting engineering structures in order to comply with Council Directive No. 96/53/EC concerning the necessity to raise the axle-load bearing capacity of roads to 11.5 tons.

2. Construction of a 46 km long new road of 2 x 2 lanes between the M3 and M5 motorways in the Eastern section of the M0 highway (Budapest ring road), including 9 junctions and 15 major engineering structures.

3. Construction of the M43 highway between the M5 motorway and Csanádpalota (Hungarian-Romanian border). Phase I comprises the construction of a 57.4 km long two-lane highway, which can be developed into a motorway in the future, with junctions and 12 major engineering structures, including a new bridge over the Tisza river.

It would be necessary to implement the national programme of road surface stengthening (for which Hungary submitted one of the above applications) only because of the heavy trucks that are qualified as overweight vehicles at present. But we strongly oppose financing this work from public money (including also the ISPA support). *The expenses of strengthening the roads to an axle-load bearing capacity of 11.5 tons from the current 10 tons are to be categorically charged to the operators of heavy trucks.* In its Common Transport Policy published in 2001 the European Union points out that cars are responsible for only 16 per cent of the maintenance and renovation costs of main roads, while vehicles heavier than cars are responsible for 84 per cent.

The Clean Air Action Group wrote a letter to the Transport Ministry, to the Hungarian minister responsible for EU aids, and to Michel Barnier, Commissioner of the European Commission on the Regions, pointing out that this support is detrimental both from an economic and an environmental point of view, and that taxpayers' money should rather be spent on investments that are useful for the society.

The decree establishing the ISPA states that the aids are to promote sustainable development and sustainable mobility. Extending further the possibility of road freight transportation, however, is contrary to both the principle and the practice of sustainable mobility. There is nothing to justify, apart from the interests of a small economic interest group, that a seriously environment-polluting activity is subsidised from public funds.

Recommendations:

1. From the ISPA aids and other EU funds for transport only railway developments are to be financed in the future.
2. The expenses of the road surface reinforcement programme are to be borne by the operators of vehicles with an axle load of over 10 tons.

13. The development plans of the Budapest Agglomeration do not serve the protection of the environment

Transport plays a decisive role in the unfavourable development of the Budapest Agglomeration's environmental conditions. Within the region, Budapest, Budaörs, Szentendre, Vác and Cegléd are cities which are qualified as polluted communities. Százhalombatta is qualified

as moderately polluted. Transport is predominantly responsible for air pollution. The pollution conditions of Százhalombatta and Vác are jointly determined by industrial activities and transport.

In Budapest there are 51 main roads which are ranked as areas exposed to especially great noise load according to the EU classification, where the noise level is between 71 and 77 dB during the day, and between 66 and 72 dB at night. The noise limits relating to road motor vehicles are appropriately harmonised with EU regulations. Vehicles that are newly put into operation meet the noise limits needed for the issuance of the type licence (the initial licence to put a new vehicle into service), but considerable part of the already operating vehicles has a higher noise level than that.

The following plans are related to the development of the agglomeration:

- National Territorial Development Concept (1997).
- Long-Term Strategy and Action Programme for the Development of Environment-friendly Transport and Transport Infrastructure. (Ministry of Environment Protection and Water Management, draft, October 2001.)
- Strategic Plan of the Mid-Hungary Region. (Tera Ltd., 2001.)
- Regional Planning Scheme of the Budapest Agglomeration. (General planner: Pestterv, 2000.)
- Strategic Programme of the Development Council of the Budapest Agglomeration (1999).
- Development Plan of the Transport System of Budapest. (General planner: FŐMTERV Co., 2001.)
- The M0 Ring Road Around Budapest (1999).
- Regional Planning Scheme of Pest County, preparatory phase (2000).
- Integrated Strategic Plan for the Transport of the Mid-Hungary Region. (General planner: Közlekedés Ltd., 2001-2002.)
- Development Programme of the High-Speed Road Network of the Széchenyi Plan. (Ministry of the Economy, 2000.)

Each of these documents recognises that the agglomeration sprawl, and the increasing transport needs that it generates, cause degradation of the natural environment and thereby deterioration in the environment. We can read high-sounding phrases and recommendations regarding the need to alleviate the unfavourable consequences. One of the drafts points out that the development projects in public transport, if they are implemented and are coupled with appropriate standards, will probably be able to maintain the current share of public transport. We have no doubts about the sincere good intentions behind these ideas. But the *limitations of the approach* condemn these aspirations to failure from the outset.

Those preparing these programmes wish to optimise the transport needs, they want to find the solution which equally satisfies the requirements of the economy, the regional development and the environment. This approach undoubtedly constitutes a favourable shift away from the attitude which builds upon completely satisfying transport needs, and then additionally seeks an „environment-friendly" implementation. In an earlier phase of environmental damage and unfavourable processes this could have been satisfactory. *But today a more radical solution is necessary: to substantially reduce transport needs.* Because the preconditions based on quantification (objectivity) are inevitably missing for such an "optimisation", obviously the natural environment will be the loser in the bargaining process, because the stakeholders of opposite interests have much stronger influence.

The other fundamental deficiency of the plans is that they do not recognise that in order to stop urban sprawl, which is growing wildly exceeding any limits, the Act on Local Governments should be amended, because it allows local governments virtually free discretion.

The environmental, social and economic impact assessment carried out for the Regional Planning Scheme of the Budapest Agglomeration has examined several variants. One characterises the conditions that can be attained if the goals included in the transport policy are implemented. By achieving these objectives, by developing railway and water transport, maintaining their transportation performances and making efforts in order to improve public transport, *we could preserve current conditions. In that case, improvement in the state of the environment cannot be expected.*

Another variant presumes that with an improving standard of living, motor vehicles will be exchanged for new ones more quickly, and the regulations currently in force will be observed in full, and these in turn will result in a modest reduction of emissions.

A further variant started from the presumption that the emission limits stipulated for the environment and human health must be observed in full both in the urban areas and in the so-called environmentally sensitive areas. The plan's transport policy objectives are not sufficient to accomplish this.

Recommendations:

1. Instead of optimising the economic, regional development, environment protection and transport interests, a substantial reduction of the transport needs should be set as a goal to be achieved.
2. The current share of public transport should be preserved, and efforts should be made to increase its share.
3. Part of the subsidies granted to the Budapest Public Transport Company (BKV), to the Hungarian State Railways Company (MÁV) and to the VOLÁNBUSZ Co. (Coach Service Company) should require establishing a transport association of these companies.
4. The emission limits must be strictly enforced.

14. Nothing controls the wildly growing urban sprawl

The Hungarian practice of regional development is not explicitly contradictory to the legal regulations of the European Union. There are some discrepancies though. In the EU, we think that community planning and community development are properly combined. On the other hand, local governments in Hungary have a very broad scope of authority relating to land use regulation (allocating areas to be built up, area zoning, green area proportions), but all these do not pose any legal obstacle in the way of Hungary's accession to the Union. (The issue of land use can be found scattered in the materials of the various directorates of the EU. They only paid real attention to the conditions that the accession countries set for land purchase by foreign citizens.) The disproportionately quick sprawl of communities is not a heritage from the past regime or the „product" of the period of transition, because the developed industrial countries are also struggling with the same problem.

Why do we feel it necessary to deal with the regional development issues separately, when examining the conditions of Hungary's accession to the European Union in connection with transport and environment? If current tendencies continue in the Hungarian communities, and especially in the Budapest Agglomeration, then it will be difficult to comply with the EU requirements for ambient air quality, waste management and sewage treatment even after the agreed preparatory period. Hungary will not be able to meet the principles related to social cohesion and regional levelling either, even if these are difficult to account for. Within a few years' time Hungary will squander its biodiversity (which could be one of the most important assets in its "dowry" when joining the European Union), and that is irreversible.

One of the European Union's regional development priorities is to reduce existing regional inequalities. In Hungary there are considerable differences between the individual regions, and these have not diminished in the last 5 to 6 years. The discrepancies are significant within Pest County, and even more marked in the Mid-Hungary region.

"Sustainable development" is also one of the key words. Several research programmes of the European Union (e.g. *"Cities of Tomorrow"*) are investigating how European communities of the future should look. Preserving green areas and forming contiguous green networks around communities, are included only among the recommendations for the time being.

Another instrument serving sustainability is the *rehabilitation of towns, the revitalisation of urban brown fields*, in order to allow a more efficient utilisation of the infrastructure. Only recommendations are formulated in the various OECD and EU studies. On 25th October, 2001, the Clean Air Action Group organised an international conference on brown fields, whose participants formulated similar recommendations.

The European Union does not have a general recipe for sustainable development of communities. From the beginning of the 1970s, however, 15 to 20-year urban rehabilitation programmes have been implemented, almost in every EU country with substantial state or EU support. They did not make the same mistake as American towns where uncontrolled market resulted in whole urban districts becoming slums and losing their economic potential. *In the last few years further urban rehabilitation programmes have been launched in the EU, now by making use of the common EU funds.* In 2001 the Secretary of State of the Hungarian Ministry of the Economy declared that they are not planning to change their current building policy which predominantly supports new construction only. They only wish to start larger-scale rehabilitation after Hungary's accession to the European Union, using EU funds. We think that this concept is at least worth reconsidering.

At the 2001 Lisbon conference (held with the participation of transport ministers of 30 European countries, as well as of Canada and the United States of America), delegates did not manage to resolve the contradiction between the rising needs for freight and passenger transport, and the environmental and land use considerations. Many people thought that the new type employment modes and the tele-working would modify transport needs, but practice has not justified these expectations. Opinion polls show that American citizens fear crime and unemployment less than transport problems caused by megalopolises sprawling over half-county areas and the resulting constant necessity to travel.

Besides the open and hidden subsidies granted to motorization, the greatest obstacles to the harmonious development of communities are the *low land use taxes*. In Germany local governments are advised to introduce differentiated taxes depending on whether the aim is to increase or decrease the building density. In the wake of widespread indignation in England, war

was declared on the sprawl of communities a few years ago. Today 60 per cent of the new constructions replace old buildings or rehabilitate deteriorated areas. Substantial tax revenue resources are designated for reducing the risks of developments in urban brown fields. Entrepreneurs are stimulated by tax allowances to make brown field investments instead of green field investments. Sprawl is prevented by imposing increased taxes on lands which are taken away from agricultural cultivation. In Hungary we have not done this. Calculations have not yet been prepared about how much can be saved by forming more compact communities. Several Western-European examples prove that *big cities can be viable even today if they have abundant public spaces, renovated buildings and large well-tended parks, as well as a high-quality public transport network extending over the whole region around the city.* Munich is such a successful city: it is compact, urban and at the same time green.

Copenhagen's development has also been exemplary in the past fifty years. The Netherlands have formulated as a principle in their national development policy that land use and transport are to be jointly treated. In their 1990 national transport structural plan they laid down that *compact communities have priority over sprawling towns.* According to the so-called „ABC" regional development policy, public services and jobs with a substantial number of employees are only allowed to be located in „A" type areas (which are provided with good public transport services and bicycle path network).

The Hungarian Act on Local Governments (passed in 1990) *quite uniquely in the world granted the lay local body of representatives the right of both imposing regulations and issuing building permits without the communities having to take into consideration the national interests or even the interests of the neighbouring communities.* This has caused local governments to keep modifying their regulations for the benefit of investors, thinking only in terms of election periods, often ignoring the wishes of their own electors. The opinions of the building and other specialised authorities carry no weight, because decision-makers only have to comply with the laws, and many essential laws and regulations do not contain any environmental and/or human health provisions, or only state them as desirable aims. Besides the Hungarian State Public Health and Medical Officer' Service, the transport authority's opinions are also insubstantial. This is most spectacularly illustrated by the example of building permits granted to shopping malls, where the insufficiency of the roads never led to the refusal of permits. Similarly, the regional and national governments do not have a substantial say in the decision-making either. (For Budapest, the same can be said about the relation of the Budapest Metropolitan Government and the district local governments. However the Metropolitan Government has some room for manoeuvre as a result of forming the metropolitan framework regulation and having the right to rezone areas, but during the long preparatory process the framework regulation has become so soft, that it is practically ineffective.)

In some cases the practice of the European Union is only taken over formally in Hungary. This is clearly illustrated by the delay of local governments in preparing their environment protection programmes. The Act on Environment Protection, passed in 1995, provides that each local government shall prepare its environment protection programme prior to elaborating the community planning schemes. There are no deadlines and sanctions in case of default, and up until today this has not been rectified. In Western Europe the communities make efforts in cooperation with the population and the entrepreneurs to elaborate the most efficient environment protection programmes possible (in order to improve their competitive position), whereas in Hungary even Budapest has just recently approved such a (unfortunately rather weak) programme. Instead of a

joint programme, in most communities citizens are fighting desperately against the environment-destroying resolutions of their local government's body of representatives.

New construction is unfavourable from a regional development point of view, for the newly built detached houses and residential parks have been located in green areas, where schools, work, etc. are only accessible by car. *The economic stimulating effect still remains* if instead of these *the renovation, reconstruction and purchase of urban flats are given increased support. What is more, renovations involve energy saving and a higher specific live labour need and GDP rise, than the construction of new flats. A further advantage is that this does not generate at the same time any additional load to the transport networks.*

The spontaneous development of the so-called enclosed gardens is a source of serious tensions in Hungary. By referring to formerly acquired rights, social grounds, or simply by taking advantage of the laxity of controls, permanent homes are being built in the place of the temporary tool sheds. In some communities subsequently the residents are able to force the construction of infrastructure network from the local government (sometimes including the establishment of a public transport stopping place as well).

Shopping malls have constituted the most spectacular real estate developments in Hungary since the change of regime. In a few years 52 shopping malls and 40 hypermarkets have been built in Hungary. Since 100 to 150 thousand inhabitants can keep one shopping mall, in principle the maximum number of such facilities would be between 65 and 100 in Hungary. At the same time the purchasing power in Hungary is one-third of that in Western-Europe. The growth of the purchasing power does not keep pace with the development of commercial facilities, therefore the new shopping malls drain away the purchasing power from shops near the flats of inhabitants, which are also accessible on foot. As a consequence, a substantial part of the retail trade and other local enterprises will lose ground, and the inner areas of the town will deteriorate. The urban structure will alter and human relations will degrade. All this affects most severely the disadvantaged part of society, that is the elderly, the physically disabled and the poorer households without cars. The construction of shopping malls hits the small communities even more gravely; commerce there can virtually become completely atrophied. Already the fact in itself that in Hungary much less households in the country have cars, than big city households, should prompt decision-makers to impose regulations more prudently.

Problems could be alleviated by introducing the regulatory practice of Western European countries. In the Netherlands regulations prescribe in a manner broken down for types of goods the existence or construction of public transport services that are required for locating individual shopping facilities. Detailed economic, commercial, transport and environmental impact assessments are required for facilities with a shopping area of over 1000 square metres. In Hungary preliminary environmental impact assessment is only prescribed by the law for facilities with an area over 10 thousand square metres, and the law grants the Environment Protection Inspectorate a discretionary right to order a detailed impact assessment.

The rapid increase in the number of large shopping malls is stimulated by the fact that the builders and operators of these facilities do not have to pay for many of their costs. *The shopping malls can only be constructed and maintained in operation by means of huge direct and indirect subsidies from the state and/or the local government. While public areas and public buildings are kept up by the state and the local governments at an ever falling standard, the „good debtor" giant corporations that are well provided with capital can construct the shopping malls predominantly (in some cases in as much as 80 per cent) from bank loans. That is the money of*

the population is spent on constructing and maintaining these shopping facilities with their huge air-conditioned cubic capacity.

Some transport investments in Hungary seem to be irrational (for example the Eastern section of the M0 highway's Northern part, and the planned further construction of the Northern section towards the West across the Danube), and in the light of a more thorough analysis it can be seen that these transport investments serve the interests of the shopping malls located there, or planned to be constructed there, and they are in connection with the higher purchasing power population of the Western side of Budapest. In contrast, construction of the connection between the M0 highway's existing section and the M3 motorway is delayed, because this section would go through peripheral districts of the Eastern side of Budapest, where the income levels are lower and it is less profitable to build shopping malls at the moment.

The *office building* fever *in the inner city* has mostly subsided. The area of office premises that have not been rented out for a longer period is on the increase. At the end of 2000 in Budapest out of the more than one million square metres of office premises in total, 25 per cent were unoccupied. At the same time office constructions continue in outside areas of the town owing to the better parking possibilities and cheaper building plots in green areas.

At the end of 2001 the Hungarian Parliament modified the Act on Arable Lands. Unfortunately in the year-end legislation rush most of the Parliament Committees did not support or did not even discuss several amendment proposals of the Environment Protection Committee, which, upon the initiative of the Clean Air Action Group, would have ensured better protection for the arable lands and green areas. By doing so, they also ignored the recommendations of the OECD and the European Union relating to land protection.

The economic, technical and social assessments for shaping a policy to ensure sustainable development are missing, just as the data necessary for elaborating efficient programmes and for imposing regulations, which would provide a legal foundation for contesting local government decisions that are mistaken and often arousing suspicion of corruption.

It is a frequent phenomenon in both halves of Europe that transport development is in contrast with environmental aspects. In such cases usually the better-positioned transport ministry gets the upper hand. This situation can only be avoided by setting up national development agencies where the transport, environmental and spatial structural tasks are in the hands of one decision-maker. In Denmark and the Netherlands such agencies have been working for a long time, and now the UK is also planning to establish an integrated national development agency.

Substantial financial resources should also be available for the implementation of the objectives. At present local governments rezone their areas because of their funding situation, which does not correspond to their tasks, or just by referring to such grounds. It is necessary to reform the management of local governments, which would make them interested in a sustainable land management. And furthermore, financial resources are needed, from which it is possible to compensate temporarily the local governments which preserve, maintain and do not build up their green areas. (In the long run these local governments will probably gain more, because their revenues from recreational, health and sports tourism will be higher, and real estate prices will also grow.)

Recommendations:

1. The Act on Local Governments should be reviewed, and the unreasonably extended land-use rights of the local governments are to be restricted.
2. Settlement planning schemes are to be harmonised with plans (interests) at different levels (small regional, regional and national), with the objectives of environment protection and with transport development.
3. The management of local governments should be transformed so that they become interested in a sustainable regional development and in improving the environment of the communities.

15. The green belts are being damaged and the tracing of roads is wrong in the Budapest Agglomeration

One of the key issues is *to prevent the expansion of built-up areas and to stop using up the green areas.* The Regional Planning Scheme of the Budapest Agglomeration (BATT, 2000), too, takes up a strong position on this question. The "GREEN BELT" Programme it has formulated outlines a space utilisation concept in which (within the bounds of possibility) *spatial structure would not be determined if possible by tentacle-like expansion of the industrial, residential and commercial areas along the roads, and by the reduction and isolation of green areas, but on the contrary, spatial structure would be determined by the continuity of green channels (in given cases even along the transport channels) and the urbanised areas would remain islands within the structure.* This objective definitely constitutes a favourable turn as compared to the traditional and spontaneous agglomerating tendencies, and it should be welcomed as an aim to be achieved, but at the same time it requires very firm and determined ideas in the course of taking practical measures, because it defies a spontaneous but customary development tendency.

The objective is accepted, but short-term interests act against it. Therefore it is crucial to form a system of instruments which makes the approved long-term objectives attainable in agreement with those concerned, and not against them. Areas already rezoned can not be put back to their original category (except in exceptional cases), because *the real estate value is reduced,* which should be compensated for.

The starting point of the regional planning programme is just the realisation that *if the green areas are used up and the built-up areas grow together, the consequence will be an increasingly lower level utilisation for the whole region in the long run. This phenomenon is a typical social trap situation: it is not enough to recognise the process that is going on, because one community in itself is not able to withdraw from the process even if it clearly perceives where it will lead to.*

Those parts of the communities which up until now have only lost of their value, may be renewed, the central parts may become more dense and the core of the community may obtain an urban appearance. Therefore in fact the community is not deprived of the appreciation of its areas in this case, but the area appreciation is relocated, and the existing parts of the community start to gain value. Up until now it has just been the process of drawing new areas into utilisation in an extensive manner, which has prevented existing parts of the community from being renewed and becoming more valuable. The aim of the planning scheme is therefore to launch such a more intensive type of settlement management and to reverse the processes that currently act against it.

Recommendations:

1. A system of incentives should be elaborated to make local governments interested in preserving their green areas instead of using them up.
2. Only the Eastern section of the M0 highway should be constructed along the trace of the connection at Gödöllő.

General recommendation:

We must ensure that the specialised authorities, non-government organisations and citizens have a say in the preparation and control of decisions. In the work of the central and local governments it is necessary to enforce the provisions of the Aarhus Convention, the right of citizens to obtain information on the environment, to have substantial influence in the decision-making and to have access to justice.

(Translated by Zsolt Jeney)