In the late 1990s Hungary as a candidate country for EU membership, worked out several transport development projects in the field of rail, road, inland water and air transport, which are fit the long term strategic goals of transport development policy of the European Union. Therefore, these projects must be supported financially by the instruments of the ISPA. The main goals of these projects instruments are very useful for the renewal of certain parts of the underdeveloped Hungarian transport infrastructure on one hand, but they concentrate only on the main radial arteries of the rail and road network and mainly on the Danube ports on the other. For this reason, these projects strengthen the existing radial structure of the Hungarian transport network and contribute to the long term economic prosperity of Budapest. Other problems with these projects are that they do not help construction or technical renewal of existing or new transverse axes with international functions in the rail and road transport and also do not give financial support to the construction of new bridges over the Danube. But these new roads would offer alternative transit routes through Hungary and would enable much closer connections between the eastern and western parts of Hungary. These development projects must be worked out with a modified structure and must be harmonized with the long-term national objectives of regional development in the future.

Key words: transport development projects, regional disparities, less favoured regions, Hungary

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INTRODUCTION

The Instrument for Structural Policies for pre-Accession (ISPA) has been set up as part of Agenda 2000 of European Union (EU) and adopted by the session of European Council (Luxembourg, December 1997) in order to provide an enhanced pre-accession strategy. Three different pre-accession instruments were aimed at helping the candidate countries in their preparation for accession during a 7 year period, between 2000 and 2006 (DG Regio – ISPA 2000):

- SAPARD – for the modernization of agriculture and for rural development,
- PHARE – for institution building, developing community programmes, regional and social development and industrial restructuring,
- ISPA – for the support of infrastructural projects in the field of transport and environmental management.

The following sectors are expected to benefit from ISPA projects in Hungary:

a) environmental protection, which must be harmonized with EU standards during the next decade,

b) technical development of transport network in the country serving the extension of the Trans-European Transport Networks (TEN).

It should be mentioned that development of transport infrastructure in Hungary was neglected for some decades. In the era of the command economy this sector played a role subordinated to industry (Ehrlich et al. 1997). Consequently, considerable regional disparities prevailed in the technical level of transport infrastructure between the Budapest Agglomeration Zone and Transdanubia on the one hand, and between the advanced regions of Transdanubia and the lagging East Hungary on the other. These inequalities resulted in better transport accessibility and financial benefits for investors in the Budapest region and in Transdanubia, compared to the rest of the country.

After the change of power in 1990, the economy of Hungary underwent a long period of decline, when there was no possibility to start a general technical reconstruction in the field of transport for years. During this time an increasing number of foreign investors appeared in Hungary to found private firms and joint ventures, but they faced serious problems, in railway and inland water transport especially (Nádass et al. 1997). As a consequence in the second half of the 1990s there was a persistent economic pressure to invest high sums in all branches of the Hungarian transport sector for its rapid modernization and for the enlargement of the capacities. Experts have recognized that without these investments Hungary would not be able to join the advanced trans- and pan-European transport networks in time (Erdösi 1998).

The most serious problem is, however, that neither the Hungarian state budget, nor the funds of the Regional Investments Projects of the national Széchenyi Plan can finance these large-scale transport investments. This has led to a situation that an urgent need had arisen by 2000 to build and rehabilitate transport infrastructure and to link it to the transport network of the EU, in accordance with the national economic development strategy. This situation is calling for major investments from the EU, accounting for 7 to 10 per cent of all ISPA
resources addressed to Hungary. In this way the ISPA is to contribute to fund-
ing the development of Hungarian railway lines, roads, river ports and airports
taking into consideration requirements for sustainable transport and modal
change.

It must be emphasized that all projects submitted for the ISPA have to com-
ply with the national and regional development schemes, as well as with the re-
spective masterplans. In the course of project selection the priority schemes
were discussed with the representatives of the Regional (NUTS II level) Devel-
opment Councils of Hungary. The real problem is that some objectives of the
projects do not fit into the aspirations of microregions and in the interests of
many settlements in the lagging regions throughout the country.

Neglect of the infrastructure problems of the less developed regions may
lead to serious economic consequences. While many features of globalization
can be discovered recently in the regional development processes of the coun-
try – together with the effects of the new regionalism (Nemes Nagy 2000) – at
the same time several microregions are suffering from increasing inequalities
as a result of the differentiation. According to their economic situation and per-
spectives, the microregions of Hungary can be classified into four categories:
winners, starting up, stagnating and losers (Horváth 1999, Horváth and Rechni-
tzer 2000).

Materials published by the Ministry of Transport and Water Management in
2000 summarized the guidelines and objectives of the National ISPA Strategy
in the field of transport (MTWM 2000).

TRANSPORT PROJECTS SUBMITTED FOR COFINANCING
BY THE ISPA

Rail transport

Three important projects aim to remove major bottlenecks and obstacles to
traffic development by reducing travel times, raising reliability and comfort and
improving other quality parameters of rail services. These projects focus on
lines of the Hungarian sections of strategic importance for the pan-European
Corridors (Fig. 1), giving higher capacity and potential for all kinds of interna-
tional freight and passenger traffic between Hungary, Austria and the
neighbouring candidate countries. Railway lines under reconstruction or mod-
erization are as follows (Fig. 2):

1. Zalalóvá – Zalaegerszeg – Boba line in Western Transdanubia.

This section is the continuation of the new railway link, which was con-
structed between Hungary and Slovenia with a PHARE support and opened in
October 2001. It would be impossible to use the new link in an efficient and
economic way without a considerable increase of the travelling speed along this
section. Electrification is also required to reach the level of uninterrupted ser-
dices that competing routes and modes can offer. This line is part of Pan-
European Corridor V.


The importance of traffic in the corridor leading from Hungary to Romania
grew during the years of crisis in Yugoslavia. It is now an established transit
route towards the Balkans and the Black Sea continuing the Vienna–Budapest transit corridor. Increased speed, safety, reliability and comfort are vital for making rail services more competitive in comparison with other modes of international and transit transport between Hungary and Romania. The line forms part of pan-European Corridor IV.

Fig. 1. Helsinki Corridors in railway transport in Hungary
1 – Corridors with numbering, 2 – railway lines, 3 – national boundary

Fig. 2. Railway development projects co-financed by the ISPA
1 – railway line sections to be developed, 2 – double track electrified lines, 3 – single track electrified lines, 4 – double track non-electrified line, 5 – single track non-electrified line, 6 – national boundary
3. **Budapest – Győr – Hegyeshalom line in Northwest Hungary.**

   This project is the second phase of a modernization programme for the Budapest–Vienna railway line, which started in the early 1990s. It will result in shortened travelling times, improved safety and other transport conditions, consequently in enhanced competitiveness of rail services, for it is the most important corridor linking Hungary to other EU countries via Austria. This line is also part of pan-European Corridor IV.

**Road transport**

There are three projects along the pan-European Corridors (Fig. 3) and proposed for ISPA support in the period between 2000 and 2006. All of them are the elements of the TINA (Transport Infrastructure Needs Assessment) network (Fig. 4).

![Fig 3. Helsinki Corridors in road transport in Hungary](image)

1. **Strengthening of significant main and transit roads and associated engineering structures (for ca 470 km of public roads).**

   Acknowledging that the ISPA did not support the M3 and M7 motorway projects in the late 1990s, a new application was submitted in the second half of 2000. It was related to the national programme of pavement strengthening aimed at achieving the EU standard capacity and at meeting Council Directive 96/53/EC about the working loads of axles of 11.5 tons as a maximum. (For the time being the working loads of axles are 10 tons in Hungary.) In order to meet EU requirements a significant length of public roads and bridges have to be strengthened by 15 per cent within 7 years. This project includes roads, which
are actual elements of the present TINA network and will not be developed into expressways in the future. All sections under these projects accommodate already existing traffic, which is expected to grow in the foreseeable future.

Fig. 4. Development projects co-financed by the ISPA for road, inland water and air transport

1 – main road sections connected to road strengthening programme, 2 – road sections to be constructed into motorways, 3 – sites for river port development projects, 4 – new international and domestic airport projects, 5 – primary main road, 6 – secondary main road, 7 – national boundary, M0, M1, M3, M5, M7 – existing motorways with numbering

2. The next phase of the M0 expressway project (construction of the eastern section of Budapest bypass ring to connect the M3 and M5 motorways).

This section will form part of the transit routes crossing Hungary in southwest–northeast direction and provide a link to the already existing section of the M0 between motorways M1, M7 and M5 (Pan-European Corridor V and link to Corridor IV). The construction of this major section of M0 is going to facilitate the development of traffic and result in gains in terms of travelling time and safety for all kinds of passenger and freight road traffic (local, international and transit) through and around the Hungarian capital. It will substantially improve the environmental and living conditions for the inhabitants of the eastern and northeastern parts of the Budapest agglomeration zone.

3. Construction of a new expressway (M43) between the M5 motorway and the Hungarian-Romanian state border.

Primary road No. 43 is located in the southeastern part of Hungary, at present providing connection between primary road No. 5 and Nagylak, the most important border crossing towards Romania. The new expressway M43 will run parallel to the old primary road 43 and will connect the M5 with a new border.
crossing point at Csanádpalota. This expressway will form part of the Hungarian section of the pan-European Corridor IV. The local, international and transit traffic between Szeged and the Romanian border has been growing rapidly over the past years, due to the Yugoslav crisis which diverted much of the international traffic to and from the Balkans. The construction of 58 km long two-lane M43 would make it possible to relocate some portion of traffic from the primary road No 4 stretching between Budapest and Arárd (Hungarian-Romanian border crossing) via Szolnok and Püspökladány, and to limit its growth.

Inland navigation

There are four multifunctional projects in this branch of transport submitted for ISPA support within the period 2000-2006 (Fig. 4):


   This project is intended to play a key role for the development of navigation on the upper stretches of the Hungarian section of the Danube and to facilitate the combined transport traffic between Hungary and EU countries. The project includes the construction of a Ro-Ro terminal on 120 hectares, and of a 10 km long railway line connecting the port with the nearest section of the public railway network. Within the port territory an additional 8 km long railway line plus the facilities of the functional Ro-La terminal are also to be built. The port is situated in the hub of the rapidly developing Northeastern Region of Hungary, within 10 km of a huge industrial park and the city of Győr, regional centre of Northern Transdanubia. The port is also connected to motorway M1 (pan-European Corridor IV). The planned terminal will serve as the link of the port to the railway network. The multimodal interconnections are aimed at gaining greater use of inland waterway transport.

2. Construction of a new spinal access road to Budapest-Csepel Danube Port.

   The second project connecting to inland navigation is aimed at removing a severe bottleneck hindering the potential development of Csepel Port, the largest centre in Hungary for multimodal international and domestic freight transport using the Danube navigation and the major TINA Danube port in Hungary. It is therefore a top priority of the Inland Navigation Strategy with regard to both the national and EU considerations. The growing number of foreign vessels in trade with Hungary and the similarly growing share of Hungarian vessels in the foreign commerce with EU member countries require better road access to Csepel Port in order to serve shippers resident in Budapest and in its suburban industrial zones. The new spinal access road will bypass the settlement of Csepel and eliminate the traffic bottleneck by establishing an efficient waterway-road link and will ensure the coexistence and further development both of the Csepel urban district and of the port. So the project includes the construction of 8 km long motorway with ample dimensions for a quality connection with the M0 motorway.

3. Construction of a building and service quay for the accommodation of border control and customs services in the Danube port of Mohács on the Hungarian–Yugoslav border.
The growing number of international cruise liner traffic and an increased demand for inland waterway transport require wider range of services. To separate state activities from entrepreneurial ones a market friendly neutral working space for the authorities and mooring facilities are planned to be constructed suited for the support of round the clock border controls of Schengen-type. The project includes the construction of a new building for the control authorities and a 240 metres long quay along the bank of the river.

4. Construction of facilities for the border control and customs services in the port of Szeged on the Hungarian-Yugoslavian border on the Tisza river.

At present the border city and regional centre of Szeged (located on the pan-European Corridors IV and X/B by the Tisza river) lacks headquarters for border and customs control and for traffic authorities established especially for the control of inland water traffic. There is a single basin public port opened for traffic in 2000. As the navigation on the Danube has been blocked by the bridges at Novi Sad (Yugoslavia) collapsed during the war in 1999, part of the Hungarian export commodities is shipped from the port of Szeged. The project includes the construction of a new building for the control authorities near the state owned basin according to the border control standards.

Civil aviation


The top priority of the infrastructure strategy concerning civil aviation is given to the development of Budapest Ferihegy International Airport and the construction of a third passenger terminal in order to accommodate the accelerating growth of international passenger traffic. The project includes an airport passenger terminal with a capacity of 5 million person per year, with a total area of 50,000 m², 50 check-in counters, an automated baggage sorting system, 12 contact stands with passenger loading bridges, 10 remote stands (project deadline: 2005, see Fig. 4).

2. Debrecen Airport development project.

This airport is the only regional one in Eastern Hungary with paved runways on 416 hectares ready for serving medium sized and big airplanes. The airport is situated near the second largest city in Hungary, surrounded by main roads No 4 and 47 and equipped with railroad tracks. The airport receives 1200 aircrafts in a year of which 300 are international flights. The Debrecen Airport plays an important role in the development strategy of air transport within the country. It also links Eastern Hungary, North Romania and Western Ukraine to the international air transport circulation. The project includes flight safety development, the establishment of a logistic centre, and infrastructure development in the years 2002 and 2003.

3. A development project for Balaton Airport (Sármellék, by the western part of Lake Balaton).

Balaton Airport is the only domestic civil Transdanubian airport with 2500 metre long paved runway, located near the pan-European Corridor V, situated in
the centre of a region with places of interest and touristic sites of world reputation (Lake Balaton, Hévíz, Zalakaros). Its setting has a great significance for the regional development in relation to Hungary’s accession to the EU. Balaton Airport could become a regional international airport and part of the European network of regional airports. The project includes reconstruction and improvement of the runway and taxi ways, the passenger terminal, the general aviation terminal, establishment of cargo and duty-free area, modernization of runway lights, landing system, and control tower.

THE MAIN EFFECTS OF THE ISPA PROJECTS ON REGIONAL DEVELOPMENT

It is well known that the political changes in Central and Eastern Europe and changes in the orientation of the main international – and also trans-European – traffic flows have had both favourable and unfavourable impacts on the pattern and direction of transport in Hungary. Transdanubia was a beneficiary, while the eastern regions of Hungary (mainly the regions situated between the Tisza river and the Hungarian–Romanian state border) were the losers in this process.

The main regional aspects of the changes of transport infrastructure and service in the 1990s were the following (Erdösi 2001):

a) The quality of the railway network has been differentiated further at regional level and developments of the network of main roads have focused on North Transdanubia, that is on the most developed area of the country.

b) The density of private cars shows a new regional pattern, closely correlating with the incomes of the population. Recently areas and settlements with heavy industries in Northeast Hungary have lost their former pivotal position, while Transdanubia and the Budapest Agglomeration Zone are emerging as leaders with regard to car ownership. As a result the traffic flows on the main roads in the Budapest Agglomeration Zone and Transdanubia have an increasing trend.

c) Within the structure of public passenger transport the share of long-distance traffic running to Budapest and regional centres (Győr, Miskolc, Szeged, Pécs and Debrecen) has increased, while that of local traffic has diminished.

Therefore, we have to point out the spatial structure-related dilemmas of transport development, first of all the effects of its concentration on the pan-European networks undesirable in terms of rural development.

Among these circumstances the main features of the 13 development projects worked out for different branches of transport and submitted for cofinancing by the ISPA must be evaluated critically from the regional viewpoint, because a number of problems have arisen from the main objectives of these projects. They can be summarized as follows.

These projects focus on the main radial arteries of the railway and road networks and on the Danube among the waterways. For this reason the projects would strengthen the existing radial structure of the Hungarian transport network on the one hand, and contribute to the long-term economic prosperity of Budapest on the other hand (6 projects of the 13 ones serve the direct economic interests of the capital).
Construction or technical renewal of existing or new transversal axes of the rail and road transport with international functions has been neglected. It is a real problem, because there are several important lines with transversal functions in the territory of the country which – after their modernization – would be able to connect marginal regions with the prosperous ones, serving both pan-European and national economic interests.

No financial support has been provided for the construction of new bridges over the Danube which would offer alternative international transit routes through Hungary on the one hand and would enable much closer economic and social contacts between East Hungary and Transdanubia on the other hand. The shift in the structure of international transit traffic of foreign vehicles crossing Hungary in the early 2000s has not been taken into consideration. Construction of bypass roads avoiding many towns suffering from different negative effects of the heavy transit traffic (air pollution, noise, traffic accidents etc.) has been neglected.

As a consequence the provisional transport development projects to be cofinanced by the different EU projects must be worked out with a modified structure and must be harmonized with the long term national interests of regional development.

REFERENCES

Rozvoj dopravnej infraštruktúry v Maďarsku sa niekoľko desaťročí zanedbával. V dobe direktívneho hospodárstva zohral tento Sektor rolu podriadeného priemyslu. Preto v technickej úrovni dopravnej infraštruktúry medzi aglomeráčnou zónou Budapešti a Zadunajskom na jednej strane a medzi rozvinutými regiónmi Zadunajska a zaostávajúcimi regiónmi východného Maďarska existujú značne rozdiely. Výsledkom je lepšia dostupnosť regiónu Budapešti a Zadunajska, a tým aj v porovnaní so zvyškom krajiny výhodnejšie postavenie investorov.

V deväťdesiatych rokoch minulého storočia Maďarsko ako kandidátska krajina Európskej únie vypracovalo niekoľko projektov rozvoja dopravy v oblasti železníc, riečnej a leteckej dopravy, ktoré zodpovedajú dlhodobým strategickým cieľom politiky Európskej únie. Preto tieto projekty musia byť finančne podporené nástrojami ISPA. Kritické skúmanie hlavných cieľov týchto projektov ukázalo, že sú veľmi užitočné pre obnovu istých častí nedostatočne rozvinutej infraštruktúry maďarskej dopravy na jednej strane, ale prítom sa sústreďujú len na hlavné radiálne tepny železničnej a cestnej siete, a najmä na dunajské prístavy na strane druhej. Takto tieto projekty posilňujú existujúcu radiálnu štruktúru maďarskej dopravnej siete a prispejú k dlhodobej hospodárskej prosperite Budapešti.

Dalšie problémy spojené s týmito projektami sú, že nepomôžu výstavbe alebo technickej obnove už existujúcich či nových priečnych osí, ktoré majú medzinárodné funkcie v železničnej a cestnej doprave, ani neposkytujú finančnú podporu výstavbe nových mostov cez Dunaj. Nové cesty by prítom ponúkli alternatívne tranzitné trasy cez Maďarsko a umožnili by oveľa tesnejšie spojenie medzi východnou a západnou časťou Maďarska. Do úvahy sa nevzal ani posun v štruktúre medzinárodnjej tranzitnej dopravy zahraničných vozidiel, ktoré od roku 2000 prechádzajú cez Maďarsko, Zanedbala sa výstavba obchvatov okolo miest, ktoré teraz trpia negatívnymi účinkami znečistenia vzduchu, hluku, dopravné nehody atď.

Z tohto dôvodu treba vypracovať provizórne projekty rozvoja dopravy so zmenenou štruktúrou, ktoré musia byť v súlade s dlhodobými národnými záujmami procesu regionálneho rozvoja v budúcnosti.

Preložila H. Contrerasová