

Transition of Hungarian Railway Transport

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In 1989, many countries in central and eastern Europe, including Hungary, were faced with the complex task of reforming their centrally planned societies into market-driver economies. The task has been made more complex by the fact that these countries simultaneously had to modernize and stabilize their economies and societies. The old centrally planned system meant that these countries were not integrated into the world economy in a balanced manner and had deprived them of the tremendous advantages of international division of labour and cooperation.

These changes were necessitated by the deepening economic, social and political crises in the region. For example, since the 1970s, the average per capita GNP of countries in the region decreased from 32% of that of the USA in 1976 to 27% in 1989. The 1989 and 1990 reforms were followed by an unprecedented crisis in central and eastern Europe due to the general world and European recession. By the end of 1993, there had been a 20% cumulative drop in GDP in the central and eastern European countries and real GDP did not pick up until after 1994. The worldwide recession affected investment especially badly and private and public consumption also fell in most countries.

From 1994 to 1996 all the central and eastern European countries had growth rates of 4% to 6% and the relatively rapid growth continued in 1997. Poland, the Czech Republic, Slovenia, and Hungary are showing relatively high growth rates based on investment and export booms, and consumption has also increased.

The recovery and growth are based on a number of economic measures including:

- Large cuts in budget deficits
- Strict monetary control and high interest rates
- Currency devaluation
- Freely convertible currency at sustainable slipping devaluation of exchange rates
- Eliminating trade barriers

- Break up and privatization of state monopolies
- Price liberalization
- Wage controls

Representative Reforms of Hungarian Transport Sector

The Hungarian macroeconomic indicators show that the country's investments, exports, imports, and private and public consumption are increasing significantly over the last few years.

However, the service sectors, especially transport, have seen massive changes in market demand during the transition period. For example, in the last 10 years, the railway's share of passenger transport dropped by 10% and road transport now takes 87%. Similarly, railway freight transport dropped by 30% and road transport now takes 51%, with the remainder split between water transport (6%) and pipelines (15%). The ratio of public to private transport is 32% to 68%. These changes in Hungary are representative of the patterns elsewhere in central and eastern Europe.

Reasons for Declining Railway Passenger and Freight Traffic

All the central and eastern European (CEE) railways, including the Hungarian State Railways (MÁV), experienced sharp drops in passenger transport. The main reason was the bankruptcy of the large state-owned enterprises, as well as a sudden increase in ownership of private cars.

In most of these CEE countries, many railway passengers were travelling on discount tickets provided by their state employers. After the break up and privatization, the restructured companies tried to cut costs by reducing staff, resulting in the drop in rail passengers. Despite people's reduced purchasing power, private car ownership increased as waiting lists disappeared when relatively cheap used cars became available from the West.

Romania and Hungary saw the greatest decreases in railway freight traffic. The amount of freight carried by MÁV continued shrinking and the 1994 volume in tonne-km was just 33% of the 1989 level.

The main reason for these huge drops in each CEE country was the shift from bulk freight for heavy industry to high-value consumer goods carried by private road transport. However, there were other international contributing factors like the collapse of the Council for Mutual Economic Assistance (COMECON), the disintegration of the former Soviet Union, the reorientation of trade links towards road-dominated western Europe, as well as the war in former Yugoslavia.

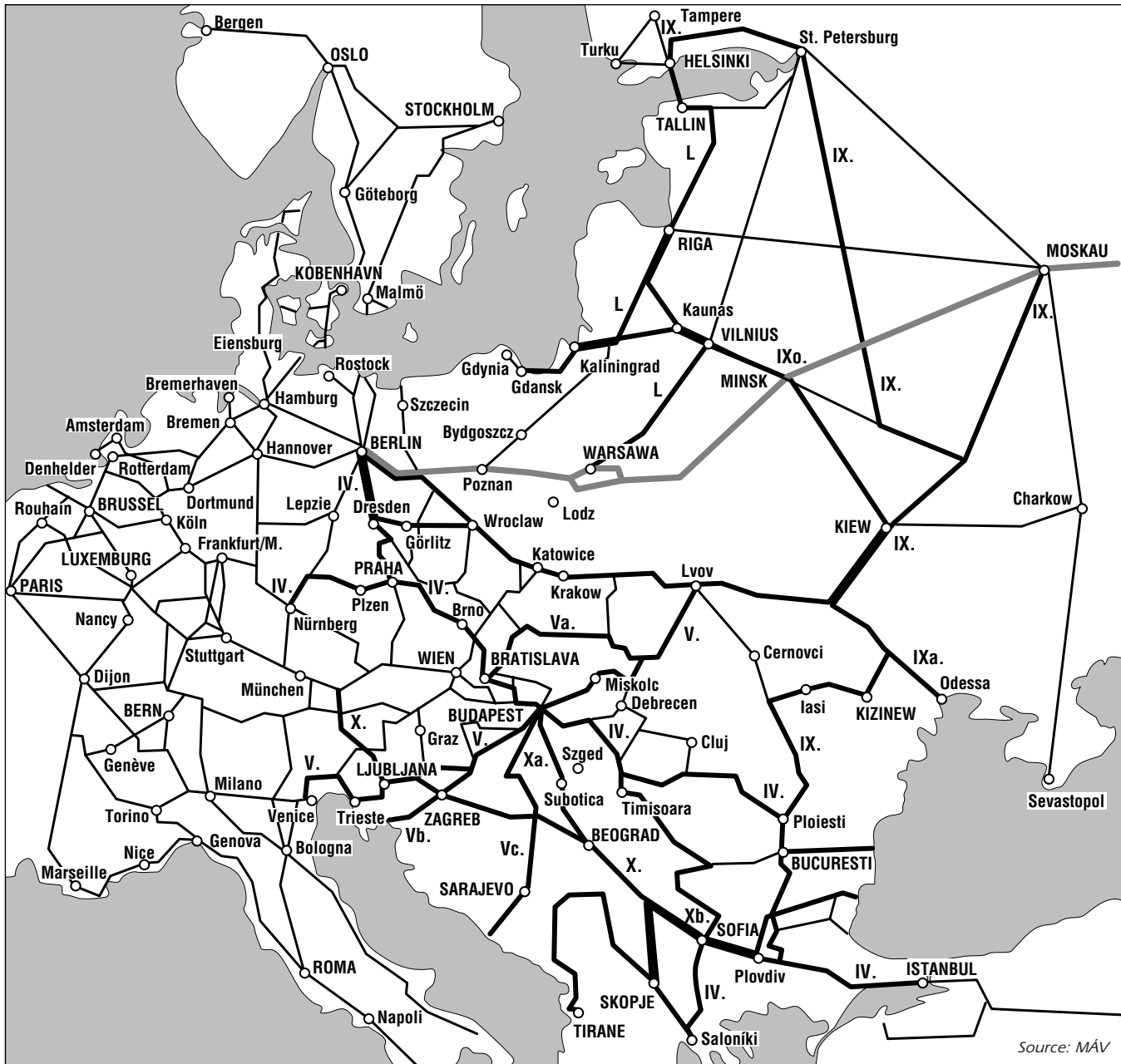
The CEE railways all responded similarly to the changing circumstances. They rationalized and modernized their rolling stock (scrapping obsolete wagons and purchasing and leasing special wagons adapted to changing demand); focused services more at origins and destinations and less at railway junctions; established regional marketing offices for direct contact with clients; introduced overnight freight trains between major cities; and last but not least, gave high priority to improving international combined transport. Since the transport chain is only as strong as its weakest link, which is often at international borders, the CEE railways proceeded with negotiations with railways of neighbouring countries in an attempt to reduce border crossing times.

However, despite all these efforts, the negative trends seem irreversible as the CEE economies are moving towards just-in-time services and a market-oriented understanding of total logistics costs. As a result, most of the CEE railways are increasing their share of passenger transport in the total rail traffic.

Future Trends of CEE Railways

Quite clearly, as the CEE countries transition to market economies, structural changes

Figure 1 Trans European Network



in their economies and foreign trade, coupled with increased cost sensitivity and some transition side effects will result in declining demand for freight transport. The development of telecommunications and information technology is expected to have a similar impact on transport in general. In most CEE countries, freight transport volumes by 2000 will still be much lower than in 1990, although some growth from 2000 to 2010 will probably bring freight volumes back to near the 1990 level, but they are unlikely to be larger. It is well known that passenger services have lower productivity (measured in

traffic units per employee) and higher costs than freight services. At the same time, passenger fares tend to be lower in CEE countries for social policy reasons. The unprofitable passenger services are undermining the profits of the companies' freight services, meaning they cannot afford to lose more freight traffic.

Railway Financing Problems

The distorted financing of CEE railways inherited from the old planned economies has caused many problems typified by the

example of MÁV. Until 1982, ticket revenues plus government subsidies exceeded the costs of passenger transport. However, the increasing gap between revenues (including subsidies) and costs since 1983 meant that MÁV was forced to cross-finance passenger services from freight profits. It also meant that freight customers were financing social policy. This cut into the freight competitiveness and diverted resources from new investment and essential maintenance, resulting in deteriorating infrastructure and rolling stock. In the early 1990s, the dramatic decline in MÁV's freight volume led to insufficient

profits from freight to cover passenger services. In 1994 and 1996, MÁV freight operations generated no profits and the railway was forced to finance operations with short-term loans guaranteed by the government from Hungarian commercial banks.

In 1994 and 1995, the government was forced to exempt MÁV from repayment obligations relating to operation loans. Financing part of passenger operations from guaranteed short-term loans proved to be very expensive.

Between 1989 and 1996, ticket prices increased by about 5% in real terms but the increase occurred before 1993 and prices have declined in real terms since then. During the same period, MÁV's passenger cost recovery ratio (passenger revenues/transport costs) declined from 32% to 22%.

Restructuring Measures

The first need was to make the railways more competitive and market oriented. A number of EU directives concerning railways proposed the following measures:

- Writing off old debts
- Abolishing flat-rate subsidies and introducing fully compensated public service obligations (PSOs)
- Allowing third party access to infrastructure
- Retaining infrastructure under public control, ensuring interoperability and use by international operators
- Separating infrastructure and operating accounts
- Running operations on a commercial basis
- Establishing self-financing except for infrastructure

Based on these recommendations, MÁV and the railways in Poland, the Czech Republic, Hungary, Slovenia and the Slovak Republic, have made some

progress in liberalization, deregulation and privatization.

The MÁV management recognized the need to increase its knowledge of the transport market and has made greater use of market research techniques and marketing methods. Special marketing divisions have been established at the most important network nodes. The number of MÁV employees has dropped by 33% compared to 1989 and unprofitable assets, such as marshalling yards and rolling stock were sold off. Since 1992, non-railway activities like freight forwarding, wagon and carriage repair, building and track construction, printing, and track-side landscaping, have been spun off. As a result, on 31 December 1996, MÁV was the sole shareholder of 55 companies, the major shareholder in 8 companies, and a minor shareholder in 41 companies. MÁV is continuing to spin off non-railway units, and is contracting out non-railway services in passenger operations and freight transport.

The major steps in the restructuring and changes in the relationship between the government and MÁV were as follows:

- Approval of new 1993 Railway Act and establishment of Hungarian State Railways PLC (MÁV) on 1 July 1993
- Agreement on 1 February 1995 (renewed for 3 years on 20 January 1996) between government and MÁV defining each partners' obligations with particular regard to financing of PSOs and separation of infrastructure and operations accounting
- Agreement by 1994 and 1995 government decrees on writing off old MÁV debts related to operation loans

These decisions tried to take into account the best practices of railway restructuring, as well as the EU regulations, including EU Directive 91/440 EEC, 95/18 EEC, and 95/19 EEC on equal access to railway networks for all qualified third-party operators, licensing of railway operators, and allocation of railway infrastructure capacity and charging of infrastructure fees, respectively.

MÁV's restructuring has not fully implemented the main guidelines of EU Directive 91/440 EEC—the requirements for autonomous management and separation



Rebuilt V43 electric locomotive at Szolnok Station

(MÁV)

of infrastructure from operations have been almost fully achieved, but old debts have only been partially written off, and open access to infrastructure has not been implemented yet.

The establishment of MÁV and the conclusion of the contract with the government was a significant step towards independent management, but to ensure genuine management autonomy, it was necessary to establish a clear distinction between PSOs and commercial services. Although the process of creating a fully autonomous management has already started, the government still regulates domestic freight tariffs (to be liberalized in the near future) and all domestic passenger fares. However, MÁV can offer special business discounts and these are used widely in freight transport. The management autonomy is partly restricted by the government's responsibility to improve the railway infrastructure and to act as the guarantor for large loans. This means, it may make investment decisions based on political rather than economic considerations. For example, the government has given high priority to constructing a costly (but uneconomic) new railway link with Slovenia, and to electrification of three other lines. A concession basis has been chosen for the electrification, which will permit more reliable and economic train operations, but it will be much more expensive than direct financing from the state budget. The resultant shortage of funds has resulted in the postponement of the urgently needed rehabilitation of core infrastructure and rolling stock.

Separation of infrastructure from operation has already been achieved. The 1993 Railway Act provides for separation of accounts while the separation of assets, expenditure, and revenues as well as accounting rules are defined by the 1996 joint decree of the Minister of Transport and the Minister of Finance. The infrastructure organization, which consists

of the Directorate for Track, Bridges and Buildings and the Directorate for Signalling, Telecommunication and Power Supply, has been entirely separate from the commercial operations since 1 January 1996.

MÁV 1999-2007 Development and Rehabilitation Programme

At present, the MÁV technical standards only partly satisfy the general operation and safety requirements for advanced European railways and the expected service levels for national passenger and freight transport. This is due to insufficient investment and maintenance over the past decade as a result of shortage of funds. The long-term lack of reconstruction and maintenance means that the original technical standards can no longer be restored or preserved in many sections. The MÁV development and rehabilitation programme matches MÁV's long-term needs and the requirements for joining the EU. The major aims are to complete projects under way, to rehabilitate (restore original traffic speeds and service standards) national main links in the European railway transport corridors (Fig. 1) defined in the Helsinki and Crete conferences, and to modernize bridges to eliminate speed and weight restrictions.

There is some moderate emphasis on renovating passenger facilities (buildings and platforms), providing higher-standard services and improving safety (construction of level crossings, installation of signalling equipment, etc). Limited funding resources

prohibit full achievement of the targets, necessitating the search for further funding sources such as private loans, contributions by local governments, concessioning, etc.

This development and rehabilitation programme will ensure that MÁV meets the EU requirements and satisfies the required technical, safety, and service standards.

One of the main benefits of the rehabilitation programme will be reduced journey times on main lines due to higher average speeds.

About 1000 km of main line tracks and 200 km of branch lines will be reconstructed. Three large river bridges and 16 other large bridges, as well as 30 to 40 auxiliary structures will be renewed, eliminating speed and weight restrictions on 340 km of tracks. Ride comfort will be increased and environmental pollution from track noise will be reduced by using modern welded tracks.

Another important benefit will be improved train and road safety resulting from installation of the European Train Control System (ETCS) and rehabilitation of level crossings on main roads.

The European seat reservation system is being implemented to provide real-time information and information systems using optical cable, and other track-side equipment will be installed to provide continuous tracking of freight wagons and goods from dispatch to delivery. Regionalization and separation of the passenger and freight businesses are the next stages in this process. ■



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