

Bulgarian State Railways from Planned to Market Economy

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Bulgarian Geography and People

Bulgaria covers 110,100 km² extending from the west shore of the Black Sea to Serbia, Montenegro and Macedonia in the west. The Danube forms the greater part of Bulgaria's common northern boundary with Romania. Greece is to the south.

The country consists of three parallel east-west zones: the Danubian tableland in the north, the Balkan Mountains in the centre, and the Thracian Plain and Rhodope and Pirin Mountains in the south and southwest. About 75% is lowlands and the remaining area is hills and mountains. Nearly 30% of the area is forests.

The climate is moderate continental with dry, hot summers and cold, wet winters.

Government and Political Environment

In the Soviet Era, Bulgaria was a member of COMECON, but since the collapse of communism in 1991, it has followed the road towards a market economy. In April 1997, the reform-minded United Democratic Forces (UtdDF) coalition won a majority in parliament. With a new government and a currency board inaugurated in July 1997, the UtdDF embarked on an ambitious agenda of legislative reform, including new laws and amendments on banking, insurance, and concessions. The new government also launched a campaign against crime and corruption. In the fall of 1997, further market-oriented changes were promulgated in laws on foreign investment, taxation, and land ownership by foreigners. In 1998, parliament resumed debate on laws regarding telecommunications and development of mineral resources.

The currency board is producing the desired effect and the Bulgarian lev (BGL) has been pegged to the Deutsche mark (DM) at the rate BGL1000 = DM1. The government is required to maintain hard

currency reserves to cover all lev in circulation as well as commercial bank reserves in the central bank. By restricting new borrowing, the International Monetary Fund (IMF) believes that the government can make timely payments on its US\$9.5 million international debt. Inflation dropped from 484.2% in the first half of 1997 to 3.7% in July 1997. Ironically, high inflation helped to greatly reduce the BGL-denominated domestic debt of businesses and the government. The number of bankruptcies has been low, but weak players have been eliminated. In July, the European Bank for Reconstruction and Development (EBRD) and Oppenheimer participated in Bulgaria's first privatization of a major state bank. Five other such banks are to be privatized in the next 12 to 18 months. The new government has accelerated the pace of privatization in order to attract foreign investment, halted the slide in production, and focused efforts on increasing exports to generate revenue. The government is concentrating on privatizing some 1500 companies valued at \$943 million. Forty-three percent of the state ownership of these companies has been exchanged at three auctions for stocks held by citizens or turned over to investment funds, following the Czech model. A Bulgarian stock market opened in the fall of 1998 and is expected to play a vital role in capitalizing newly privatized enterprises.

Bulgaria's strategic location between Europe and Asia is a primary asset. The South Balkan Development Initiative, which stresses the East-West Crete Corridor No. VIII linking Bulgaria, the Former Yugoslav Republic of Macedonia, and Albania (thereby linking the Black Sea with the Adriatic), is strongly supported by the government and should lead to project tenders over the next 12 to 18 months. This initiative is receiving funding from the US Trade and Development Agency (USTDA).

The Railway Network

The Bulgarian State Railways (BDZ) network was constructed over a 70-year period beginning in 1860. It consists of approximately 4300 route-km (including 245 km of narrow-gauge track), 960 km (22%) of which is double tracked. Electrified sections (25 kV/50 Hz) account for 2640 km (61%) of the total route-km. The network is classified into two categories: trunk lines, and branch lines. Trunk lines form 2718 km (67%), and the remaining 1313 km are branch lines (Fig. 1).

The track consists mainly of 49-kg/m rails on concrete sleepers but there are some exceptions at crossings, switches, and on curves, where timber sleepers are used. About 13.4% of the track-km have welded joints; just 9 km has 60-kg/m rails.

For safety, most BDZ passenger trains operate at maximum speeds of 80 to 100 km/h. One 93-km section from Zvanichevo to Pazardjik allows maximum speeds of 120 km/h.

Investment Priorities

The European Commission has announced an action plan aimed at establishing a Pan-European railway network covering Western Europe, Central and Eastern Europe (CEE), and the countries of the former USSR.

Bulgaria has demonstrated its interest in establishing a transport corridor between Europe via the Caucasus to Central Asia, as well as extension of the Crete Corridors towards the Near East and North Africa. The government has signed an agreement with Georgia, Azerbaijan, Turkmenistan and Uzbekistan, permitting free transit of freight, a prerequisite for increasing traffic along the Asia-Europe corridor.

Considerable experience has been gathered in determining the national priorities related to the Crete Corridors. Between 1993 and

1999, business and general plans have been elaborated, pre-investment and feasibility studies have been carried out, and financing schemes for the construction, etc., have been prepared for all transport infrastructure in the country, including: railways, roads, seaports, and the airports. Projects to rehabilitate BDZ, and the Bulgarian motorway and road networks have been prepared by European consultants with funding from the EU Phare programme.

The backbone of the Pan-European transport network in Bulgaria has been defined by the Transport Infrastructure Needs Appraisal in the Central and Eastern European Countries (TINA) project. Links between corridors have been determined and prioritized with the aim of achieving them by 2015.

To reach these goals, the Ministry of Transport has adopted a 4-year Medium-

Term National Investment Programme for the period 1998–2001 and beyond. The programme encompasses 40 projects, including 15 railway projects of regional importance; nine projects have 144 sub-projects. The total investment needed to implement all the objectives amounts to more than 420 million euro (US\$1 = 0.98 euro).

In addition to the Medium-Term National Investment Programme, the Ministry of Transport has drafted an Investment Programme for National Transport Priorities, encompassing 35 national transport projects, covering railways, roads, combined transport, sea, river and air transport located along the corridors crossing Bulgaria. The total sum amounts to about 5 billion euro. The implementation plan includes state investment as well as credits from international financial institutions, public-private and private

concessions, foreign loans, aid, etc.

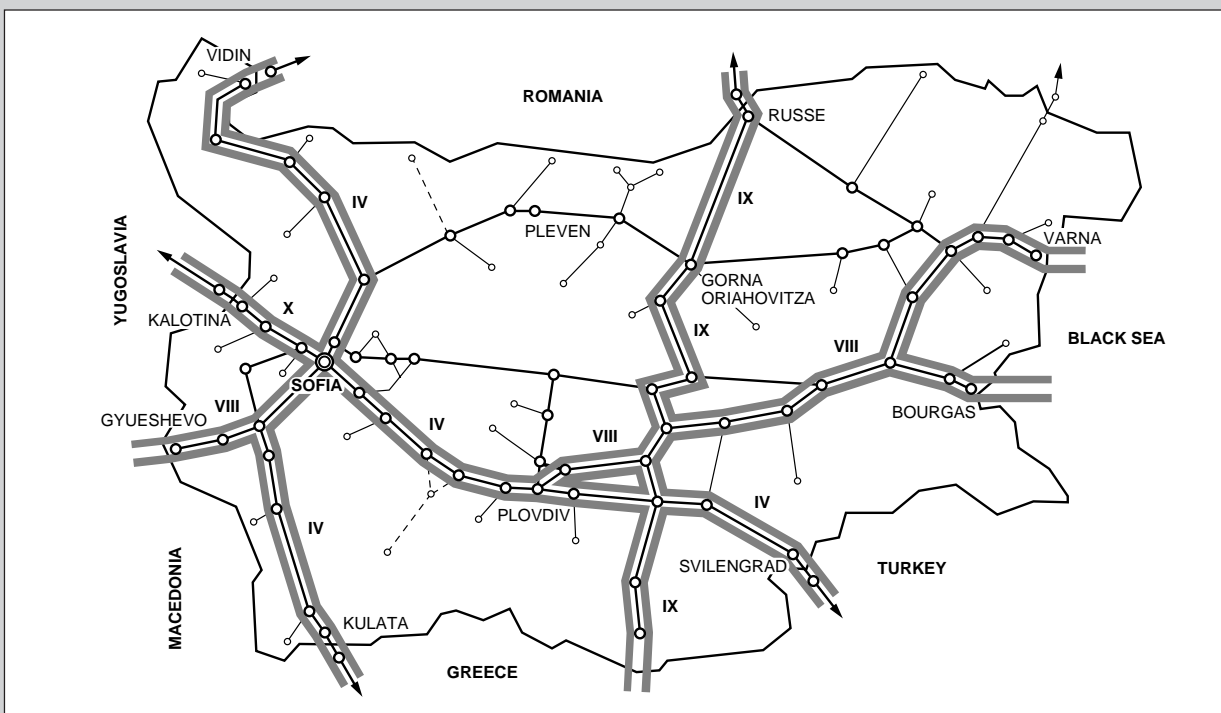
The railway infrastructure development programme includes the following main projects:

Corridor VIII (Durrës–Kaftan/Kafassan–Skopje–Gjueshevo–Sofia–Plovdiv–Bourgas/Varna)

This corridor has political, economic, regional, and national significance. In addition to the three countries that it passes through, Corridor VIII is attracting great interest from Italy, Turkey, Greece, the Commonwealth of Independent States (CIS), and countries in the Near East. The project is also strongly supported by the European Commission and EU Phare programme, and countries from the Caucasus to Central Asia have expressed their support too.

The USA is also lending political and financial support via President Clinton's

Figure 1 Transport Corridors through Bulgaria



Source: BDZ

South Balkan Initiative. The US Bechtel Group Inc. has conducted a pre-investment study funded by USTDA.

Development of the corridor in Bulgaria includes:

- Construction of a direct railway link between Sofia and Skopje through a new 2.3-km cross-border tunnel, reconstruction of Gjeshevo Station on the Bulgaria–Macedonia border, and reconstruction of the Radomir–Kjustendil–Gjeshevo branch line. The first construction stage will total some US\$10 million with partial funding of 0.9 million euro from the Phare programme to start reconstruction of Gjeshevo Station.
- Completion of electrified double-track Plovdiv–Stara Zagora–Karnobat–Varna line at an estimated cost of 77 million euro.
- Construction of combined transport terminal in Sofia. Feasibility studies were completed in late 1998 in cooperation with Sea Land Service, Inc., the largest US-based ocean carrier and a leader in the global shipping

industry, with financing provided by USTDA and Sea Land. Operation of a special container shuttle-train between Sofia and Thessaloniki in Greece is planned to start by May 1999. The estimated investment is about US\$50 million.

Corridor IV (Dresden–Prague–Bratislava–Gyor–Budapest–Arad–Craiova–Sofia–Thessaloniki/Plovdiv–Istanbul) with branches IVA (Nuremberg–Prague), IVB (Wien–Gyor), and IVC (Arad–Bucharest–Constansa)

The main projects related to this corridor in Bulgaria are as follows:

- Construction of a new combined (road and railway) bridge over the Danube between Bulgaria and Romania. The British consultants GIBB have conducted feasibility studies on the bridge location and design. Corridor IV studies by the consultants TEAM and Italferr suggest that Vidin (Bulgaria) – Kalafat (Romania) is the best location for the bridge which is estimated to cost US\$190 million including

improvements to road and rail access in both Bulgaria and Romania.

- Reconstruction, modernization and electrification of the Doupnitza–Koulata line (136 km). The design and tender procedures have already been completed and a contract will soon be signed with the German company, ADTRANZ. The estimated cost of 32.8 million euro will be provided by the Phare programme.
- Modernization and electrification of the Plovdiv–Dimitrovgrad–Svilengrad line at an estimated cost of US\$358 million.

Corridor X (Salzburg–Ljubljana–Zagreb–Belgrade–Nis–Skopje–Veles–Thessaloniki)

The main investment for the Bulgarian section of this corridor is modernization of the railway line from Sofia to the former Yugoslav border at an estimated cost of US\$50 million.

Corridor IX (Helsinki–St. Petersburg–Pskov–Vitebsk–Kiev–Ljuba shevka–Kishineu–Bucharest–Rousse–Dimitrovgrad–Alexandroupolis)

The main projects related to this corridor in Bulgaria are as follows:

- Expansion and modernization of the Rouse–Gjurgeu border crossing, including repair of the existing combined (road and railway) bridge over the Danube. This project has a considerable number of sub-projects financed by the Bulgarian budget and Phare programme.
- Modernization and development of road and railway infrastructure in the Rousse–Veliko Turnovo–Stara Zagora–Dimitrovgrad direction, including electrification of non-electrified railway sections.
- Development of the border crossing infrastructure at the Greek border using Bulgarian state funding, credits from the

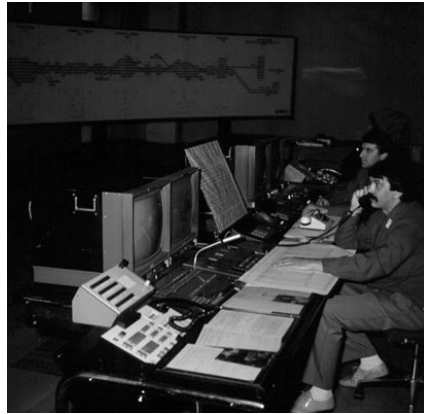


Class 44000 Skoda-built electric locomotive standing at Plovdiv Station

(Y. Akiyama)



Portal of cross-border tunnel in B02 network (BDZ)



ATC Control room in Sofia (BDZ)

European Investment Bank and the EU Phare-ITNERREG programme for cross-border cooperation.

- Development of combined haulage and improvement of the combined transport terminal at Dimitrovgrad at an estimated cost of US\$30 million.

Corridor VII (Rhine–Main–Danube)

The main project is construction of a combined transport link for haulage in the Rousse–Varna direction in order to speed cargo transport from and to the CEE along the Danube using river port–railway–sea port links.

Rehabilitation of BDZ

A comprehensive study on the status of BDZ carried out in cooperation with the Phare programme has defined the projects needed to improve the functioning of BDZ. World Bank and EBRD missions to Bulgaria helped set the priorities and funding by loans from the World Bank,

EBRD, the Bulgarian Export Credit Agency, Phare and local resources.

About 40 sub-projects connected with overall restructuring and rehabilitation of railways in Bulgaria are being implemented at a total cost of US\$300 million. The major sub-projects are as follows:

- Renewal of the permanent way of main lines
- Provision of equipment for track maintenance and repair
- Provision of rail welding equipment
- Provision of information management systems for freight transport, passenger services, accounting, and data transmission
- Renewal of signalling and telecommunications equipment
- Provision of spare parts for locomotives and wagons
- Rehabilitation of passenger carriages

The EU has played a major role in supporting the rehabilitation and development of

BDZ, especially from the aspects of safety and efficiency. In particular, the following EU Phare projects are at an advanced stage:

- Delivery of axle-counters for safety control, totalling 1.36 million euro
- Delivery of train dispatcher radios, totalling 2.0 million euro
- Delivery of 19 digital PABX, totalling 3.0 million euro
- Delivery of an Automatic Train Protection System (ATPS) for the Plovdiv–Stara Zagora–Bourgas section, totalling 10.15 million euro

In 1999 and 2000, the EC Large-Scale Infrastructure Programme will provide financing totalling 20.0 million euro to rehabilitate 62 km of permanent way. After the new Railway Transportation Law comes into force, we hope that the Bulgarian railway system will switch to a real market economy including a market for higher management skills and knowledge. The new environment will require less day-to-day government involvement and will secure much better financial performance. ■



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