

History of our Railway in a Nutshell

The railway transport on the Czech territory dates back to the first third of the 19th Century. The first railway on our territory was represented by a horse-driven rail Linz – Summerau – Horní Dvořiště – České Budějovice in 1828. Almost all of our railway lines were built under the reign of the monarchy. After the split of the monarchy the Czechoslovak republic was formed, which brought a new era of the Czechoslovak State Railways (ČSD). This process was disrupted by the first split of Czechoslovakia and the German occupation when the trademark of ČSD was replaced by ČMD/BMB under the Protectorate and by SŽ in the Slovak state for several years.

The predominant owner and operator of the railway lines on our territory throughout the history was mostly the state. However, the network was built primarily by private owners. Nowadays, the owner of the majority of railway lines in the Czech Republic is the state represented by the Railway Infrastructure Administration, state organization and Czech Railways, joint-stock company is the biggest national carrier.

The Czech Republic has an area of 78 863 km². The cadastral area of the property owned by the entities owning and operating the railway transport represents about 301 km². The average length of 0.12 km lines per 1 km² of the territory makes our railway network the densest in the world. The length of the Czech railway network as of 31st December 2006 was 9,492 km, out of which the length of single-track lines was 7,641 km, double-tracks 1,812 km and multi-tracks 39 km. Out of the total network length, 9,470 km falls on standard-gauge lines and 22 km on narrow-gauge lines. Electrified lines represented the total of 3,037 km, out of which 1 287 km were single-track lines and 1 750 km double- and multi-tracks. The power supply systems electrified 1,731 km of lines by direct-current voltage 3 kV or 1,500 kV and 1,307 km by alternating-current voltage 25 kV/ 50 Hz. The total structural length of tracks was 15,476 km. The railway network of the Czech Republic included 6,691 bridges – the total length of more than 147 km, 154 tunnels – the total length of over 38 km and 8,389 level crossings.

The railway spread into historical countries of the Czech Crown as a civilization and cultural phenomenon. Constructing a railway network was one of the most significant acts in the field of civil engineering which contributed to the development of towns and advanced the industrial revolution. The building of lines with regard to the current extensive terrain segmentation of the Czech Republic became a challenging civil engineering work and judging by today's standards we have to give our acclaim of how well it succeeded in being integrated in the countryside. As a matter of interest: Approximately 48% of the total track length lies in curves and 86% of the total track length in a gradient. The biggest gradient earlier requiring operation with a rack can be found in the section Tanvald – Harrachov and reaches 57‰. Nowadays, however, the Abt rack is used only occasionally and the common operation uses adhesive force.

The lowest-set station on our railway network is the station Dolní Žleb on the 1st Railway Transit Corridor on the border with Germany. The altitude at this station is 130 m. On the other hand, the highest-set point is the operating control post Kubova Huť in the section Strakonice – Volary. The altitude is here 995 m.

Over the course of 175 years of the railway transport existence in our country we can monitor two significant periods of the modernization of track technical parameters. The 50's and 60's of the 20th century introduced electrification of the majority of the strategically most significant national and international lines (as in 1903 the line Tábor – Bechyně was the first one to be electrified and the Prague Railway Junction during the period of the First Republic). Unfortunately, all lines in this category could not be electrified and the completion of the electrification of the primary railway network of the state is still awaiting us.

Currently, we are going through a second, even more significant period of fundamental modernization of our railway. If our railway system is to become a modern transport means of the 21st Century – inspired by the Japanese railways and those of highly developed states of the European Union, it must have technical parameters of its main lines modified up to the standard set by relevant international agreements. It mainly involves a higher line speed, line load class, structural gauge, platform building and technological equipment enhancing transport safety and the level of operation control. From the national and international perspective, the priority lies in the modernization of four transit corridors commenced in 1993.

During its existence our railway transported billions of passengers and billions of freight tonnes. At present it is ranked the 4th position in Europe with its volume of transportation.

Résumé from the legislative point of view

Czech Railways was established by the Act of the Czech National Council No. 9/1992 Coll. dated 20th December 1992 on Czech Railways which came into force as of 1st January 1993. At the same time the Czech and Slovak Federal Republic ceased to exist and two independent states were formed - the Czech Republic and the Slovak Republic. Czech Railways was established as a succession entity of the Czechoslovak State Rail, state organization.

By the Act of the Czech National Council No. 212/1993 Coll. dated 9th July 1993, the original Act on Czech Railways with effect from 13th August 1993 was amended and its full version was released by the Act of the Czech National Council No. 218/1993 Coll. dated 13th August 1993.

Conditions for the construction and operation of the railways and the railway transport, related rights and duties of natural persons and corporate bodies as well as the function of the State Administration and State Supervision related to rail matters but involving all kinds of guided transport systems, not only railways, were determined by the Parliament of the Czech Republic through the Railway Act No. 266/1994 Coll. dated 14th December 1994 which came into force as of 1st January 1995. This act was amended three times and its full version was released by the Act No. 35/2001 dated 26th January 2001.

Following the Resolution of the Czech Republic No. 766 dated 20th December 1995, the railways were split into the national and regional rails.

A crucial intervention in the organizational structure of the railway transport in our country was the split of Czech Railways, state organization into two succession entities – Czech Railways, joint-stock company and the Railway Infrastructure Administration, state organization - pursuant to the Parliament Act of the Czech Republic No. 77/2002 Coll. dated 5th February 2002. Both succession entities were established as of 1st January 2003. As of this date the Acts No. 9/1993 Coll. and 212/1993 Coll. expired.

The Railway Infrastructure Administration thus became the guarantor of the operability, modernization and development of the railway system of the Czech Republic.