In the beginning of the 90’s in last century there was established a concept of modernization of railway transit corridors in selected directions. The variant of modernization was chosen and it has to be said that it was the best solution, mainly because of the very poor technical condition and neglected qualitative development of the technical parameters of existing lines.

There was made a study by consortium of companies SUDOP PRAHA a.s., SUDOP Brno s.r.o. and DRS ČR for a future view of new (high-speed) lines in 1995. The consortium in selected directions proposed the line for approx. 250 km/h and main purpose was to record these lines in the land plans.
In November 2006 the tender for the first part of high-speed line concept was issued in the Czech Republic:

- High speed line – analysis of transport relations and prospective possibilities of transport system in selected directions.

- Contracting Authority: Ministry of Transport – Section Strategy, public transport and ecology

- Prepared by SUDOP PRAHA a.s. - Department of transport conception

- The Study was made in November and December 2006 and subsequently discussed in the beginning of 2007.
Final assessment for operation in Europe and the Czech Republic

The transport connection by high-speed line is optimal for connection of bigger cities (it means over 500 thousand inhabitants, distance 150 – 300 km), it means operation of the Central European region:

- Prague - Dresden (Berlin / Leipzig)
- Prague - Regensburg / Nürnberg (München),
- Brno - Vienna / Bratislava,
- Ostrava - Katowice / Žilina.

In the Czech Republic there is reasonable only connection of Prague – Brno – Ostrava.
In the end of 2007 there was made a tender for study:
- Updating of the concept for high-speed railway line in the Czech Republic
- Contracting authority: Ministry of the Transport – Department for Transport Policy and Environment
- Prepared by: SUDOP PRAHA a.s. - Department of transport conception
- The object of the work was to analyze the solution of the problems of the following aspects:
  - Passenger transport

**In general**

The study had to check transport needs of high-speed line in selected directions. These needs have been demonstrated in terms of transport, especially in national line Prague – Brno – Ostrava. Thanks to implementation of this spinal axis of high-speed line, it will significantly increase the availability of goals in the Czech Republic and the Central Europe. In cross-border relations there have been proven demands for high-speed lines in the connection Brno - Wien.
To determine the technical solution of high-speed railway connection, there were in accordance with conception of EU in consideration two basic variants of high-speed line:

- Construction of new lines for speed around 360 km/h (up to 18 ‰, rarely up to 35 ‰)
Network Diagram – variant high-speed line
In 2010 there was awarded Phase B

- Phase B – Proposal of technical and technological solutions, assessment of alternatives, result solution, economic evaluation.
- It is a conceptual study, where the main aim was to check thoroughfares and problems in each region.
- Studies have been commissioned by Ministry of Transport – Railway Department (ing. Kušníř)

Prepared by:

- Prague - Dresden - Ing. Kalčík (including connection to the western part of the Czech Republic)
- Prague - Liberec - IKP Consulting Engineers
- Node Prague – SUDOP PRAHA (the new connection 2, separation of suburban and long-distance lines)
- Prague - Brno – SUDOP PRAHA
- Brno - Břeclav – SUDOP Brno
- Brno - Přerov - Ostrava - MCO
- Prague - Pilsen – SUDOP PRAHA (as part of feasibility study 2010)
In 2012, the contracting authority, Czech Railway Infrastructure Administration, awarded following studies and they are processing these studies at present:

Territorial technical study (including financial cost-benefit analysis), New track Prague – Beroun/Hořovice, prepared by: SUDOP PRAHA a.s. - department of transport conception (205).

The main goal of this variant is to check possible solution and decide the optimal connection of new lines in Prague railway junction.

In the beginning of 2013 consortium of contracting authorities Czech Railway infrastructure Administration, Ministry of Transport, Středočeský region, Liberecký region awarded Feasibility study „Railway connection Prague – Mladá Boleslav – Liberec“. Prepared by: IKP Consulting Engineers as leader in consortium with SUDOP PRAHA a.s. and subcontractors AF-CITYPLAN, NDCon
In March 2013 there were awarded two territorial technical studies by Czech Railway Infrastructure Administration:

- Prague – Benešov (first part of the quick connection Prague – Brno): Prepared by: SUDOP PRAHA a.s., department of transport concepts

In 2013 Czech Railway Infrastructure Administration prepares these studies of high-speed lines:

- Conceptual studies for the whole network
- Processing of marketing technical economic study
- Determination of technical parameters
- Feasibility study in selected directions
- Other territorial technical studies

The aim of all these works is not only territorial stabilization and protection of the tracks, but it also serves as basis for the other stages of project documentations.