

Czech Republic

ACTIVITY REPORT 2013

Czech Tunnelling Association ITA-AITES (CzTA) – Česká tunelářská asociace ITA-AITES
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The society was founded in 1982 and has corporate members as well as individual members.

CzTA provides up-to-date information, gives the possibility for the presentation of their theoretical and practical activities;

Organizes or arranges regular training courses (“Tunneling Afternoons”);

Publishes a quarterly magazine TUNEL for its members and other interested professionals (in collaboration with the Slovak Tunnelling Association);

Organizes three year cycles of conferences with international participation under the name of “Underground Constructions Prague”;

Organizes its own working groups focused on the issues that are hot topic in the Czech Republic;

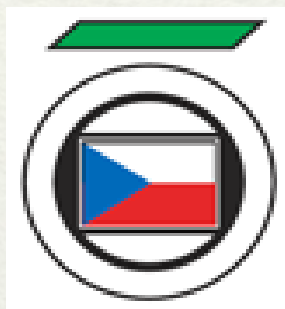
Publishes handbooks focused on topics from the underground structures;

Supports the professionals to present their knowledges abroad;

Familiarizes the interested public with the issues of underground constructions;

Organizes excursions to construction places in Czech Republic and abroad, too;

Supports unregular courses for its members and professional public.



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CONSTRUCTION LOTS WITHIN MYSLBKOVA - PELC TYROLKA SECTION OF THE CITY CIRCLE ROAD (BLANKA TUNNELS).

The largest underground construction project, which is currently being implemented in the Czech Republic is the Blanka complex of tunnels in Prague.

This extensive construction is being built within the framework of the development of the north-western part of the City Circle Road (the inner circle), in the Malovanka – Pelc Tyrolka section.

The total length of this section is 6.382km; the aggregate length of tunnels in this section reaches respectable 5.5km.



Emergency stopping bay in the Bubeneč mined tunnel (photo Jakub Karlicek)

PRAGUE METRO LINE V EXTENSION, SECTION VA DEJVICE – MOTOL.

The operating section VA of the metro line is 6.12km long; it contains three mined stations (Červený Vrch, Veleslavín and Petřiny) and one cut-and-cover station (Motol).

Červený Vrch station is located under Evropská Street. It is designed as a mined, single-span structure with one cut-and-cover concourse. The depth of the intermediate platform under the terrain surface on the station centre line is 27m. The track centre distance is 13m.

Veleslavín station with its centre approximately under Evropská Street is

located in the space between a current Czech Railway's track and the eastern section of K Cervenému Vrchu Street.

The station is designed as a three-span structure mined shallow under the surface, with an intermediate platform 19m under the surface. The track centre distance is 15m.

Petřiny station is designed as a mined, single-span structure with an intermediate platform at 37m under the terrain surface. The track centre distance is 14.7m. A dead-end tail track housed in a single-track tunnel located between the two running tunnels is connected to the station in the direction of Motol station.

Motol station is a shallow-located cut-and-cover station with side platforms. The glazed station roof structure allows daylight to illuminate the platform. The two-storey station structure is designed in cast-in-situ reinforced concrete. The concourse is on the under-the-platform level.

A subway under Kukulova Street with exit ramps ending at two opposing bus stops and on hospital grounds links to the concourse.



Connection of the left-hand track to the existing metro line (photo Jiri Junek)

MODERNISATION OF ROKYCANY – PLZEN RAILWAY TRACK SECTION

The project solves the overall modernisation of the track. The length of the tunnels between the eastern and western portals amounts to 4,150m.

The final section between Plzen-Doubravka intermediate station and Plzeň main railway station is led along the existing track bed.

After the completion of the modernisation project, the total length of the track will be reduced by approximately 6.1km.

Owing to the proposed horizontal and vertical alignment of the track it will be possible to increase the speed limit over the track to 120km/h up to 160km/h for trains with classical cars and 160km/h for trains with tilting bodies.

The crucial object of the track modernisation project is undoubtedly the construction of the Ejpovice tunnel, which is formed by a pair of single-track tunnels interconnected with each other by 8 cross passages. The tunnels will be driven using a full-face mechanised tunnelling shield with the diameter of approximately 9m.