

Date: 2 May 2017

## Tunnel Boring Machine Victoria Seeks a Milestone of the 3rd Kilometre

The second tunnel tube of the Ejpvovice tunnel (part of Homolka) is already almost 70 percent completed. These days, the tunnel boring machine Victoria has overcome nearly three kilometres of excavation of a four-kilometre-long north section of the tunnel. SŽDC succeeds in fulfilling a schedule of the most important section of the modernization of the line Rokycany – Plzeň. The complete opening of the tunnel is expected in December of 2018.

The modernized section is a part of the backbone of the trans-national transport network and Czech Railway Transit Corridor III which leads from Prague via Plzeň and Cheb to the state border with Germany. The track length is shortened by more than 6 kilometres in this section. The key issue of the modernization of the entire line is the construction of two single-track tunnels which will be structurally prepared for the ultimate speed ride of 160 kilometres per hour.

The construction of both tunnels was launched on 1 February 2015. In mid-2016, the excavation of the southern tunnel tube of the Ejpvovice tunnel was completed (part of Chlum). A total of 2056 rings were built there which represents the sum of length 4,112 metres. In the part of the tunnel under the Chlum hill, there were also built up concrete bases for the rail superstructure necessary for the installation of a fixed runway. The drainage pipeline is also completed along the entire length of the tunnel. On 26 September 2016, the excavation of the northern tunnel tube (part of Homolka) began to reach a length of three-kilometres.

*"Plzeň is one of the cities that should be accessible from Prague by train within one hour. Only the tunnel itself will shorten travel time between Prague and Plzeň by ten minutes. Thanks to the modernization of the entire line, the ride will accelerate by over one third compared to today. We expect to increase the frequency of express trains from Prague to Plzeň, Domažlice and to Bavaria",* says Mr. Dan Ťok, Minister of Transport of the Czech Republic.

Special attention was also paid to safeguarding traffic in the tunnel. The design of technological equipment meets the requirements of FRS of Plzeň Region. One of them was the construction of escape passages between the two tunnels serving for passenger evacuation and access for rescue workers. The passages are built in approximately 480 metres from one another. Until now, escape passages No. 1 and 6 have been excavated. The passage No. 2 is built from around two-thirds. All

construction activities outside the tunnels are basically completed. Only works on the gabion walls and the sloping of the line in the section Ejpovice - the entrance portal are ongoing.

*"I believe that as soon as we are able to transport our passengers comfortably and peacefully between Prague and Plzeň in less than an hour, many people will reconsider their views on the railway in general. After the completion of the entire line, when the modern train sets will be able to use the line speed up to 160 kilometres per hour, the railway will once again become a strong and confident competitor to the highway", says Mr. Pavel Surý, Director General of SŽDC.*

The tunnel boring machine Victoria has a cutting head diameter of almost 10 metres, a length of 115 metres and its weight is about 1800 tonnes. Its heaviest parts were transported from the German manufacturer Herrenknecht to the Czech Republic in an environmentally friendly way - by ship. The applied TBM technology (Tunnel Boring Machines) is one of the most modern tunnelling methods of work. Its advantage is above all speed, safety and environmental friendliness. Metrostav, as the only construction company in the Czech Republic, owns this machine and has an experience with its use.

*"The current course of work creates preconditions for finishing the excavation at the turn of September and October", says Mr. Pavel Pilát, Director General of Metrostav. "Our drifters manage their job excellently, even gaining recognition worldwide. It is sad that there is no similar project in our country where we would use their high level of expertise and experience. To keep crews trained, we need to seek work for them abroad", adds Mr. Pavel Pilát.*

#### **Marek Illiaš**

Správa železniční dopravní cesty, státní organizace

Telephone: +420 602 570 654

Email: [illias@szdc.cz](mailto:illias@szdc.cz)

[www.szdc.cz](http://www.szdc.cz)