



# Spolufinancováno Evropskou unií

---

## Nástroj pro propojení Evropy

### Tisková zpráva

Date: 20 April 2017

## ETCS System To Safeguard Line Section Between Petrovice u Karviné and Břeclav

Today, the implementation of the European Train Control System (ETCS) on the line section between Petrovice u Karviné and Břeclav was festively launched in Přerov. ETCS is a part of the ERTMS system for railway traffic control in the whole European Union. Its objective is to ensure smooth international railway operation among different systems of national railways.

*"This most modern system will safeguard three line sections at once: from Petrovice u Karviné to Bohumín with a length of 14 km, from Bohumín to Přerov with a length of 92 km and from Přerov to Břeclav (outside) with a length of 98 km. Therefore, the implementation concerns a line 204 km long. Its selection was based on the fact that it is completely covered by the GSM-R mobile radio network. This constitutes together with ETCS a compact unit which will be ready for use within the whole European network",* says to this project Mr. Mojmír Nejezchleb, Deputy Director General of SŽDC for Infrastructure Modernisation.

It is precisely the incompatibility of individual national signalling and safety systems with high requirements on equipment of tractive vehicles which currently creates an obstacle for improving effectiveness of railway transport both on the national and on the international level.

*"The ETCS system should gradually replace 20 different mutually incompatible national train control systems and thus enable running trains in the whole European territory without the necessity to exchange tractive vehicles at the borders. The main task of ETCS is ensuring safety and active intervention into train control in case of a human error factor",* says Mr. Zdeněk Chrdle, Director General of the AŽD Praha company, about practical use of the system. The company AŽD Praha will act as a supplier of the project which should be completed in May 2019.





# Spolufinancováno Evropskou unií

---

## Nástroj pro propojení Evropy

The whole system consists of a line part and an on-board one. Based on information about stations and crossings safety installations, the line part transfers authorisation for ride in the given section to the mobile part. This information contains data on the section's length, the validity duration of the authorisation for ride and more information important for the train's running. The line part transfers basic data on the static speed profile, the line profile or temporary speed restrictions.

Introducing the unified European Train Control System will require technical modifications at the Traffic Control Centre in Přerov which controls a vast area in the affected section of Czech Rail Transit Corridor II. Technical modifications will have to be made at railway stations which are not controlled from the Přerov Centre. This concerns the line section Petrovice u Karviné - Polanka nad Odrou (outside) and Přerov Station, which is being controlled as a separate unit.

The installation will work with so-called fixed balises located in the trackage and serving as a referential point for an exact localisation of the vehicle's position so that the train control system can exactly determine the position of the train. If sensors on the lower side of the vehicle register a balise, the mobile ETCS part ensures that this information is transferred to the radio block centre by means of the GSM-R mobile radio network. On the contrary, the radio block centre based on the information about the position and known state of the fixed trackage infrastructure sends the information about allowed speed and other necessary instructions to the driver. The vehicle or the mobile part of the ETCS system installed on it sets by calculation and use of known train parameters the ideal speed curve and ensures safe supervision on the vehicle's speed. Thanks to continual radio communication, the driver is permanently under control if he observes all instructions given to him.

The construction designated as ETCS Petrovice u Karviné – Ostrava – Přerov – Břeclav is co-financed by the European Union under the programme Connecting Europe Facility (CEF). Total investment costs of the project amount up to CZK 707,201,000 (VAT excluded). The EU support rate is 85% of eligible costs. The amount of the subsidy reaches up to € 20,519,708, i.e. CZK 554,934,983 at maximum.





# Spolufinancováno Evropskou unií

---

## Nástroj pro propojení Evropy

Construction Designation	ETCS Petrovice u Karviné – Ostrava – Přerov – Břeclav
Construction Investor	Správa železniční dopravní cesty, státní organizace
General Designer	SUDOP PRAHA a.s.
Supplier	AŽD Praha s.r.o.
Term of launch	09/2016
Term of completion	05/2019
Total construction costs	CZK 707,201,000 (VAT excluded)
Approved EU contribution	CZK 554,934,983

Kateřina Šubová  
Správa železniční dopravní cesty, státní organizace  
Phone: +420 724 240 718  
Email: subova@szdc.cz  
[www.szdc.cz](http://www.szdc.cz)

**Note:**

*The author bears exclusive responsibility for this publication. The European Union does not bear responsibility for any use of information contained therein.*

