

PRAGUE, 15. July 2019

## Almost a Billion Crowns for Better Safeguarding of Railway Crossings

Správa železniční dopravní cesty (SŽDC) invests approximately CZK 1 billion per year for a better safeguarding of all types of railway crossings. Every year, the level of safeguarding gets better at approximately 150 level crossings. Due to serious collisions caused by inobservance of road traffic rules by its participants, SŽDC also currently re-evaluates regulations for the preparation of further constructions related to increasing safety at railway crossings.

From the middle-term point of view, the number of collisions at railway crossings is decreasing thanks to extensive investment activities of SŽDC, although the number of registered road cars increases as well as equipment and apparatuses diverting attention of drivers (mobile phones, navigation etc.).

"Our main priority is completing or installing barriers to railway crossing signalling equipment on roads of Category I, II. and III and on local and purpose-created road communications anywhere where it is technically feasible, advisable and all participants of the building licence procedure can agree on it", explained Mr. Jiří Svoboda, Director General of SŽDC. At the end of last year, 117 crossings from a total number of 164 on roads of Category I were equipped with barriers. Up to the end of this year, 15 more should be added and the majority of the remaining ones should get barriers up to the end of 2023. In some cases, adding barriers is not possible for technical or capacity reasons; this may also concern a line where railway operation is practically not active.

All crossings under reconstruction where tracks cross asphalt roads will be newly equipped not only with light warning signals but also with barriers. "A price analysis demonstrates that the financial difference between crossings with barriers and without them equals 10 - 15% of total investments which is quite acceptable considering the important contribution in safety from the all-society point of view", adds Mr. Svoboda. Composite barriers with modern and durable reflexive components will be used for equipping railway crossings.

Another SŽDC priority is increasing safety at railway crossings in cities and communities or on sites of frequent serious accidents. In most cases, barriers are being added with functionality of sequential lowering of their beams; level crossings are reconstructed or closed and replaced by grade-separated ones or by substitute access. Costs for completely equipping a crossing with only St. Andrew's crosses - including barriers - amount usually to CZK 10 million. Adding barriers' beams to current crossings costs several million crowns.

Due to a substantial growth of investment and operation costs related to modernization and maintenance of crossing signalling systems, the number of crossings must also be systematically decreased. Therefore, SŽDC submitted in May 2019 a draft Concept for closing railway crossings and creating their substitutes. "There is always a certain risk that a collision of railway vehicles and road traffic participants may occur at level crossings of the railway and the road. That is why we must continuously decrease the number of these level crossings and thus reduce the current risks", completed Mr. Svoboda. During last year, it was possible to close 26 level crossings. This number could increase in case the amendments of respective legal regulations in preparation get approved as these would result in transparent rules for closing railway crossings.

One of the ways to increase safety at railway crossings is installing modern technologies. In three localities, more specifically in Pardubice, Olomouc and Studénka, SŽDC is testing detectors of obstacles. Cameras recording the situation on local storage are currently installed at several dozens of railway crossings. Testing camera technology with automatic detection of offences and road cars' registration numbers is now finished. A condition for using the technology is sufficient data connectivity of the given locality and an interest to cooperate on the local administration's side (with a connection to communities with extended competence). In cooperation with communities, cities and the Czech Police as well as with community and city police bodies, SŽDC is prepared to develop such provincial solutions. At this moment, intense cooperation is in progress with the city of Úvaly where cameras are already installed and the city has positive experience with their use. A considerable decrease of offences occurred already at a crossing with such an equipment.

In order to minimize risks of collisions of railway and road vehicles, SŽDC cooperates with other entities such as Ředitelství silnic a dálnic (Directorate for Motorways and Roads – ŘSD) or roads' administrations. These are responsible for repairs and maintenance of road sections connected to railway crossings; this can concern e.g. adding profiled horizontal traffic signs emitting sound and vibration effects when crossed by a road vehicle or the installation of a so-called light barrier based on LED technology. Last but not least, consistent maintenance of distance warning signs including their optical highlighting must be assured.

Every year, SŽDC prepares preventive events pointing out at the necessity to observe road traffic regulations in the vicinity of railway crossings. For the holiday months this year, it prepared videos reminding of rules for a safe railway. These contain also photographs from real accidents; one of them is focused on consequences caused by inattention of a road car driver in the vicinity of a railway crossing. The videos can be found on the website: https://www.szdc.cz/o-nas/bezpecnost/kampan-szdc-bezpecna-zeleznice.

As of 31 December 2018, the Czech railway network had 7,858 railway crossings in total, from which 3,720 were safeguarded by St. Andrew's crosses and 4,138 were equipped with light and sound signalling (from which 1,418 moreover with barriers). 164 railway crossings were situated on roads of Category I, 570 on roads of Category II and 1,466 on roads of Category III. Further 1,774 level crossings are situated on local roads and 3,884 on purpose-created roads.

Správa železniční dopravní cesty, státní organizace

Phone: +420 601 380 700 Email: press@szdc.cz

www.szdc.cz