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Bridges under SŽDC Administration Are Safe and Not Dangerous for Operation

The fall of a footbridge over Vltava River in the Prague Park of Troja naturally arose the interest of the public in the state of bridges in the Czech Republic. With the exception of sidings, practically all such constructions on the railway are being managed by Správa železniční dopravní cesty (SŽDC). The railway infrastructure manager regularly controls all bridges and adopts necessary measures in case of need in order to preserve operation safety; however, this can be influenced also by overpasses belonging to other owners.

SŽDC assures the administration of 6,751 bridges and 18,236 culverts. The majority of them were built in the time of railway lines' construction, i.e. mostly in 1865 - 1910. Professional bridges' and tunnels' administrations operating at each Regional Directorate are responsible for their maintenance.

A strict methodology applies for bridges' administration

The system of bridges' administration on the railway is based on long-time experience from operating the railway infrastructure. It served also as a base for respective laws and regulations dealing with rules for inspections and a subsequent record of railway bridges. The total construction state of bridges or their selected parts is evaluated by a three-grade scale:

- Grade 1 – The construction requires normal maintenance only;
- Grade 2 – The construction requires repairs outside normal maintenance, e.g. complete renewal of painting, a local exchange of sleepers (bridge bearers), possibly repairing or exchanging some parts which could lead to operation restrictions;
- Grade 3 – The construction requires a building intervention, e.g. reconstruction of abutments, repairing or exchanging some parts the state of which could cause operation restrictions. However, this must not necessarily result in slow rides. Operating rail transport is not endangered either, including the safety point of view.

As shown by the chart hereunder, as of 31 December 2017 only about 5% of all bridges on the SŽDC network were in Construction Grade 3.

Inspections are carried out in regular intervals

Evaluation of the bridges' state is based on results from inspections in two levels - common and detailed ones. Common inspections concern also smaller bridge constructions such as culverts under the maintenance of individual bridges' and tunnels' administrations. They take place once per year; in case they are evaluated by Grade 3, inspections take place twice a year.

Detailed inspections are carried out only for bridges. They are conducted by inspection teams coming under the SŽDC organisational unit Technical Centre of Infrastructure (TCI). Therefore, these are carried out independently of common inspections.

Who owns bridges over the tracks?

Not all bridges on the railway are managed by SŽDC. This applies especially to road overpasses spanning over tracks which were usually transferred to municipalities by the formal ordinance of the government. In case a problem concerning the state of such a bridge or its part is found, the infrastructure manager always contacts the respective owner with a request to rectify the situation so that operation safety is not endangered.

Division of bridges according to their construction state



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