

Slovenia



Name: Slovenian Society for Underground Structures

Type of Structure: Non profit, open association

Number of Members: 116 members, 32 young members

ASSOCIATION ACTIVITIES DURING 2018 AND TO DATE

- Participation at WTC 2018 in Dubai
- Members Assembly and Elections
- Social events

CURRENT TUNNELLING ACTIVITIES

Karavanke Tunnel

Detail design for upgrading the existing single bidirectional transalpine base tunnel with a second tube to form a twin highway tunnel tube system. Total tunnel length is 8km with more than 1000m of overburden. The tunnel passes through very heterogeneous rock material from perm, carbon to Triassic formations, with squeezing ground and difficult hydrogeological conditions.

Karavanke Railway Tunnel

Detail design for security and technical upgrades of the nearly 8km long Karavanke railway tunnel, which was put into service in 1906. The scope is to remove the double-track line in the tunnel and build a single-track line, restore the damaged parts of the structure, arrange drainage and the catenary and to set up an intervention corridor for signalling, safety and telecommunication devices as well as systems to ensure fire safety in rail traffic and for safe and efficient rescue in case of accidents.

Second Track of the Divača-Koper railway line

Building permit design changes for upgrading the existing single track railway between Divača and Koper with a second track. The new railway line passes

through 8 tunnels (T1-T8) with a total length of 38km. All tunnels are single-tube tunnels; tunnels T1, T2 and T8 are designed with service tubes, which are to be used for rescue operations, while tunnels T4 and T7 have transverse exit tubes. The route of the second track runs on different formations of carbonate rocks characterised by numerous karst features (sinkholes, cracks, caverns, tunnels, underground caves, chasms etc.). The degree of karstification of individual areas is high.

Tunnel Pekel

Detail design of a 1.5km long double-track railway tunnel, as an upgrade of the railway line Maribor – Šentilj – state border. The tunnel with a cross section about 135m² has a maximum overburden 90m and less than 10m when crossing the existing highway H2. The H2 crossing is the main challenge as the tunnel runs through a low-bearing layer of clay and highly weathered marl causing risk of road deformations. Therefore, a stiff support system with two sidewalls is foreseen.

Tunnel Šentilj

Rehabilitation of an old block lined railway tunnel. Installation of bottom slab, drainage and waterproofing.

FUTURE TUNNELLING ACTIVITIES

Karavanke Tunnel

Start of construction for upgrading the existing single bidirectional transalpine base tunnel with a second tube to form a twin highway tunnel tube system. Total tunnel length is 8km and has more

than 1000m of overburden. The tunnel passes through very heterogeneous rock material from perm, carbon to Triassic formations, squeezing ground and difficult hydrogeological conditions.



Tunnel Šentilj

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Third Development Axis – South

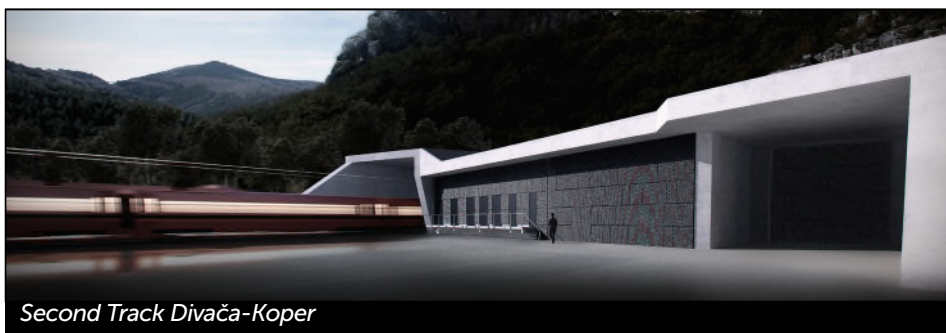
Building permit design for the execution of a new road link from the access point to Ljubljana–Obrežje motorway near Novo mesto to the Maline access point. Total length of the planned expressway amounts to 17.9km, and includes three bridges, four viaducts, two cut-and-covers, a 2.4km long tunnel under the Gorjanci hills, 10 overpasses, 9 underpasses and two lay-bys. The project is planned to be completed by the end of 2021.

Second Track of the Divača-Koper railway line

Detail design for upgrading the existing single track railway between Divača and Koper with a second track. The new railway line passes through 8 tunnels (T1-T8) with a total length of 38km. All tunnels are single-tube tunnels; tunnels T1, T2 and T8 are designed with service tubes, which are to be used for rescue operations, while tunnels T4 and T7 have transverse exit tubes. The route of the second track runs on different formations of carbonate rocks characterised by numerous karst features (sinkholes, cracks, caverns, tunnels, underground caves, chasms etc.). The degree of karstification in individual areas is high.

EDUCATION ON TUNNELLING IN THE COUNTRY

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Second Track Divača-Koper