Poland

Name: Subcommittee of Underground Construction

of Polish Committee on Geotechnics

Type of Structure: Non profit, open association

Number of Members: 68 members, 6 corporate members



ASSOCIATION ACTIVITIES DURING 2018 AND TO DATE

In 2018 the Polish Tunnelling Society (full name: Subcommittee of Underground Construction of Polish Committee on Geotechnics) continued working on the promotion of the underground space use in Poland. The Society co-organized and participated in the 3rd Conference Underground Structures 2018, which took place in April 2018 in Warsaw.

The representatives from Poland were present at ITA General Assembly and attended meetings of ITA Working Groups held during WTC 2018 in Dubai: Monika Mitew-Czajewska (president) - WG20, Anna Siemińska-Lewandowska

(secretary) - WG15, Dymitr Ganew - WG14.

Journals dealing with geotechnics and underground structures in Poland: Geoengineering - roads, bridges, tunnels (ISSN 1895-0426), Engineering and Construction (ISSN 0021-0315), Mining and Geoengineering (ISSN 1732-6702), Marine Engineering and Geotechnics (ISSN 0867-4299).

CURRENT TUNNELLING ACTIVITIES Road Tunnel in Warsaw – a part of south

The tunnel will be 2,700m long, with 3 lanes in each direction constructed by cut and cover. Construction works are in progress. Due date August 2020.

Construction of 2nd metro line in Warsaw, extensions of the existing central part:

- In east direction (3 stations, 6.3km)
- In west direction (3 stations, 7km)
- Construction method: TBM + cut & cover. Due date 2019.



Road Tunnel under Luboń Mały – south Poland

Over 2 x 2km tunnel on the S7 motorway from Kraków to Zakopane (polish skiing resort). Construction works in progress, 2200m executed, the method of construction - ADECO RS. Due date 2020.



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Construction of 2nd metro line in Warsaw, extensions of the existing central part:

- In east direction (3 stations, 8km)
- In west direction (5+1 stations, 12km)
- Construction method: TBM + cut & cover. Due date 2023.

Four Road Tunnels on S19 motorway, Via Carpatia, section Rzeszów -Barwinek

Four road tunnels (1.35km, 1.75km, 1.6km, 1.2km) on the S19 from Rzeszów to the state boarder. The conceptual design is under progress. Due date 2023.



Road Tunnel on S3 motorway Bolków-Kamienna Góra – south Poland

2.3km tunnel on the S3 motorway from Bolków to the state border. Design and build. Contract was signed in September 2018, design works begun. Due date 2023.

Road Tunnel under Świna river in Świnoujście – north Poland

The 1.44km long tunnel will connect the islands Uznam and Wolin. Construction method TBM – 12m diameter. Due date 2022. Design works begun.

Rail Tunnel in Łódź – Tunnel connecting Łódź Fabryczna and Łódź Kaliska stations

Length of the tunnel – 3km of double track tunnel, 4.5km of single track/twin tube tunnels; 2 underground stations; Construction method TBM + cut & cover. Due date 2022. Design works are completed, construction should start in summer 2019. Two TBM's – diameter 13.04m and 8.76m - were ordered.

FUTURE TUNNELLING ACTIVITIES

Two Road Tunnels on S1 motorway, the ring road of Węgierska Górka – south Poland

Two road tunnels (830m and 980m) on the S1 motorway from Bolków to the state boarder. The tender was announced in January 2018. In October 2018 the general contractor was chosen but after verification this decision was withdrawn. Final selection from the remaining bidders will be made in early 2019. Tunnels will be constructed using the sequential excavation method or ADECO. Due date 2022.

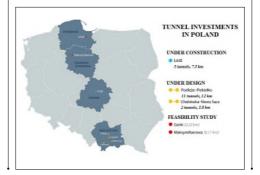
Eleven (11) Rail Tunnels – 12km length in total on the planned 58km long new rail route Podłęże-Piekiełko in the south of Poland. In addition two Rail Tunnels – 5.8km length in total on the rail route Chabówka – Nowy-Sącz, which will be modernized.

Environmental approval was obtained. The design works are in progress. Preparatory works and the design are to be completed by 2021. The construction and modernization is planned for 2020-2026



Two short rail tunnels in Górki (0.22km) and Maksymilianowo (0.11km)

A lot of short tunnels, under railway tracks, are currently being built across Poland.



STATISTICS

- Length or volume excavated %
 mechanized/% conventional during
 2019
 - 9550m mechanized/2200m conventional/2500m cut & cover
- 2. Amount (USD or EUR) of tunnelling/ underground space facilities awarded in 2018 €1490M
- 3. List of tunnels completed (0)
- 4. List of tunnels under construction(7) + (19 design stage)

EDUCATION ON TUNNELLING IN THE COUNTRY

Basics of Underground Structures (1st degree studies), Underground Structures I and II, Fire safety in tunnels – 2nd degree studies – Warsaw University of Technology, Faculty of Civil Engineering

Underground Construction (1st degree studies), Geotechnology of underground structures and tunnels, The impact of underground construction on surface and surrounding rock mass, Ventilation in selected underground facilities – 2nd degree studies - AGH University of Science and Technology, Faculty of Mining and Geoengineering

Underground Structures – 2nd degree studies – Wrocław University of Science and Technology, Faculty of Civil Engineering

Tunnels and underground passages – 2nd degree studies – Cracow University of Technology, Faculty of Civil Engineering

Elements of rock mechanics and underground structures – 2nd degree studies – Faculty of Civil and Environmental Engineering, Warsaw University of Life Sciences – SGGW

Underground structures – (1st degree studies) – Silesian University of Technology, Faculty of Civil Engineering

Underground structures (2nd degree studies) – Bialystok University of Technology, Faculty of Civil and Environmental Engineering