

# Hungary

**Name:** Hungarian Tunnelling Association

**Type of Structure:** non-profit, open association

**Number of Members:** 63 members, 21 corporate members



*M85 motorway bypass at Sopron*

## ASSOCIATION ACTIVITIES DURING 2020 AND TO DATE

In 2020 the Association held just one General Assembly because of the pandemic. The annual General Assembly was held on 27th of February, where a new Presidency was elected. The President of the Hungarian Tunnelling Association remained dr. Tibor Horváth. The Presidency has started the organization of the Tunnelling and Civil Engineering Day Conference to be held in November 2021.

The invited keynote lecturer is Prof. Robert Galler from Austria.

## CURRENT TUNNELLING ACTIVITIES

### Tunnelling activities in progress:

- Expressway M85 Sopron bypass, 100m long twin-tunnels under Bécsi hill, started in 2020.
- M4 metro line, a 20m long ventilation cross-passage was excavated in 2020
- Reconstruction of seven stations on the M3 metro line.

## Tunnels in different phases of planning:

- Budapest, Galvani boulevard, cut and cover twin tunnel with 2 x 2 lanes is in the preliminary design phase. The planned length of the road tunnel is about 760m.
- M0 motorway, the west sector project is in the preliminary design phase: 7,980 – 9,800m long twin road tunnel for 2 x 2 lanes (cross-section area 98-106m<sup>2</sup>).
- National Radioactive Waste Repository at Bataapáti, 2 x 131-144m long

underground disposal chambers (cross-section area 126m<sup>2</sup>) are in the construction plan phase.

- M100 highway, three twin tunnels are in the construction plan phase - one separate tunnel of 230m length and the two others of 330m and 400m length, with a bridge between.
- H5 (Csepel island – Calvin square M4 connection) metro line preliminary planning, site investigation started.

### FUTURE TUNNELLING ACTIVITIES

- Expressway M85, Sopron bypass, tunnel under Bécsi hill, construction continues.
- Reconstruction of Várhegy hill tunnel, Budapest. The 160 years-old tunnel with a brick vault is going to have a new sealing and reinforced concrete lining. The length of the tunnel is around 350m, with a cross-section area of 75.5m – 93.7m<sup>2</sup>.
- M0 motorway, north section, twin road tunnel with 2 x 2 lanes is to be excavated. The cross-sectional area of each tunnel is around 98-106m<sup>2</sup>. The length of tunnels are 2,030m and 3,345m. It has an approved construction plan.

### STATISTICS

#### 1. Length or volume excavated - % mechanized / % conventional during 2020:

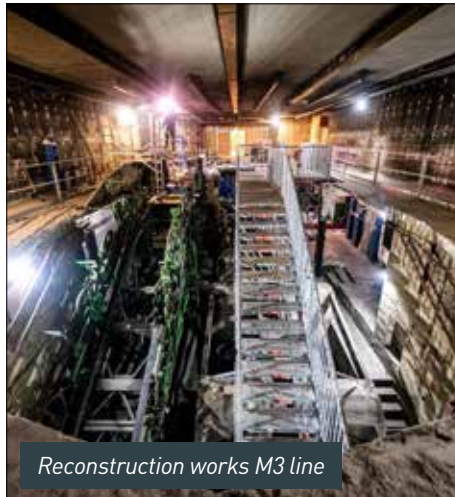
Conventional tunnel 220m no mechanized section at Expressway M85 motorway Sopron bypass, Twin-tunnel under Bécsi hill. Budapest Metro 4 ventilation tunnel and shaft 20m length, conventional

#### 2. List of tunnels completed:

Ventilation cross-passage for the M4 metro line 20m long, conventional

#### 3. List of tunnels under construction:

Expressway M85 Sopron bypass, twin-tunnel under Bécsi hill



*Reconstruction works M3 line*

### EDUCATION ON TUNNELLING IN THE COUNTRY

#### Budapest University of Technology and Economics

Faculty of Civil Engineering

#### University of Győr

Faculty of Civil Engineering, short course

#### University of Miskolc

Faculty of Earth Science and Engineering, short course