# Hungary

Name: Hungarian Tunnelling Association

Type of Structure: non-profit, open association

Number of Members: 53 individual and 19 corporate

members



## ASSOCIATION ACTIVITIES DURING 2022 AND TO DATE

Two afternoon professional meetings have been organized by the Association and two day site visits and excursion at the M85 motorway tunnel construction site (near Sopron, Hungary) and at the Zentrum am Berg (ZaB, Austria). Thanks for the help of the Austrian Tunnelling Association especially Prof. Robert Galler.

The association board had four meetings. At the end of the year the social evening (St. Barbara evening) was organized with the Medallion for Tunnelling given to Mr. Janos Schulek.

#### **CURRENT TUNNELLING ACTIVITIES**

 Expressway M85 Sopron bypass: 790m long twin tunnel under Bécsi hill. Both tunnel's primary support has been completed and the sealing works, secondary lining is in progress. Construction started in 2020.  Reconstruction of five stations of the M3 metro line. For the most part the reconstruction is complete.

#### Tunnels in different planning phases:

- Connection of the Csepel and Ráckeve HÉV (suburban railway) to Kálvin tér (downtown). The permit plans for the underground section (Közvágóhíd – Kálvin tér) was submitted by a consortium to the authorities. The railway authority permit is still pending.
- The connection of the Szentendre HÉV (suburban railway to Csepel and Ráckeve HÉV) detailed feasibility study is complete.
- The under Danube tunnel connecting Déli and Nyugati railway stations detailed feasibility study has been completed.
- Detailed design of the northern sector of the M0 motorway, including a 2km and a 3.2km pair of tunnels is expected to start in 2023.

#### **FUTURE TUNNELLING ACTIVITIES**

- The Expressway M85, Sopron bypass tunnel under Bécsi hill will complete construction works by the first half of 2024.
- Reconstruction of the Várhegy hill tunnel, Budapest. The 160 years-old brick vault tunnel is planned to have new sealing and reinforced concrete lining. The length of the tunnel is around 350m, with a crosssection of 75.5 – 93.7m2.
- The M0 motorway, north section, twin road tunnel with 2 x 2 lanes will start this year. The cross-sectional area of each tunnel is around 98 106m2. The length of tunnels is 2030m and 3345m. Construction start is dependent on the financial resources available.

#### **STATISTICS**

#### 1. List of tunnels completed

Ventilation cross-passage for the M4 metro line 20m long conventional.1

### 2. List of tunnels under construction

Expressway M85 Sopron bypass, twintunnel under the Bécsi hill (2 x 780m).

### EDUCATION ON TUNNELLING IN THE COUNTRY

- Budapest University of Technology and Economics, Faculty of Civil Engineering
- University of Győr, Faculty of Civil Engineering