

Name: Turkish Road Association

Type of structure: TRA is an open association. Its function is to promote, coordinate and spread studies and research in the field of roads, highways, motorways, tunnelling and other underground works.

Number of members: As of January 1st, 2018, TRA has 610 members of which 532 are individuals and 78 are corporate members which represent Universities, Consultants, Contractors, Manufacturers and some of the other Governmental Organizations.

ASSOCIATION ACTIVITIES DURING 2017 AND TO DATE

- 1) "Yavuz Sultan Selim Bridge and Northern Peripheral Highway Seminar and Exhibition" was held on January 18-19, 2017 at the Sheraton Ankara Hotel & Convention Center with great success.
- 2) "2nd Roads, Bridges and Tunnels Fair" was organized on May 24-26, 2017 at the Congressum Ankara with great participation.
- 3) "7th National Symposium and Exhibition on Asphalt Pavements" was held on November 29-30, 2017 at the Sheraton Ankara Hotel & Convention Center again with great success.

In the Ayaş Railway Tunnel, the longest railway tunnel in Turkey and the sixth in the world, total of 8,000m excavation and final concrete lining works were completed. The tunnel is constructed using the New Austrian Tunnelling Method.

Other Railway Tunnels

The construction works of the T26 Tunnel, which is located at the Bilecik-Bozüyük part of the Ankara-İstanbul High Speed Railway Line, are continuing.

The construction works of the 10,000m long double tube Nurdağ Tunnel, which is a part of the Mersin-Adana-İncirlik-Osmaniye-Gaziantep High Speed Railway Project, are continuing.

Gerede Tunnel

In the 4.5m diameter Gerede Drinking Water Tunnel, the longest water tunnel in Turkey with its 31,592m length, total of 24,250m construction works were completed.

Mavi Tunnel

The construction works of the 17,000m long 4.2m diameter Mavi Irrigation and Drinking Water Tunnel are continuing.

FUTURE TUNNELLING ACTIVITIES

3 Level Big Istanbul Tunnel

The 3rd tunnel project to be constructed under Bosphorus is the Big Istanbul Tunnel, which is a 3-storey multi-use highway and railway undersea tunnel. The tunnel will have a diameter of 16.8m. The middle storey will be used by metro, and others will be used by

CURRENT TUNNELLING ACTIVITIES

Ovit Tunnel

The Ovit Highway Tunnel project is located between İkizdere, Rize Province and Ispir, Erzurum Province in Turkey. The mined section of the tunnel is approximately 12.6km long. At the western end of the tunnel an approximately 1.4km long avalanche tunnel, with the same cross section is added. The tunnel becomes one of the longest tunnels in Turkey with the length of 14km.

New Zigana Tunnel

The New Zigana Tunnel project in Turkey is

cars. The tunnel length is 6.5km. The deepest point will be 110m under sea level, and 45m under the bottom of Bosphorus. The survey, project and engineering services tender of the project has been done. The project is now in the design stage.

Dolmabahçe-Kilyos Tunnels

The Dolmabahçe-Kilyos Tunnels Project consists of three sections. In this section there are 6 tunnels, which will be excavated by NATM. The total length of tunnels are approximately 20.4km.

Kağıthane-Büyükçekmece Tunnels

On the Kağıthane-Büyükçekmece Tunnels Project there are 8 tunnels. Two different methods will be used for these tunnels. The first two tunnels will be excavated by NATM and the others will be excavated by TBM. The total length of this eight tunnels are approximately 26.7km.

Harem-Küçüksu Tunnels

The Harem-Küçüksu Tunnels Project consists of 3 double tube tunnels. The total length of this three tunnels are approximately 9.2km.

Yenisahra-Bostancı-Küçükyalı Tunnels

The Yenisahra-Bostancı-Küçükyalı Tunnels Project consists of two sections. In this sections there are 2 double tube tunnels and total length of these tunnels are approximately 6km.

STATISTICS

1. Length or volume excavated - % mechanized / % conventional during 2017
Highways tunnels excavated with 100%

currently under construction and when it is completed it will have a 14.5km length. The two lane tunnel will connect the Gümüşhane and Trabzon provinces in Turkey's north east, and will be located at an altitude of over 1,200m above sea level. The construction of the tunnel will replace the existing route over the Zigana Pass, which reaches an altitude above sea level of 2,032m.

Kırk Tunnel

Rize and Erzurum provinces are connected by the double tube 7,105m long Kırk Tunnel Project. 7,063m excavation and support with 1,069m final concrete lining were completed in both tubes.

Eğribel Tunnel

A total of 10,286m excavation and support works were completed in the 5,905m long double tube Eğribel Tunnel.

Sabuncubeli Tunnel

The 4,070m long double tube Sabuncubeli Tunnel is connecting the cities of İzmir and Manisa, and is expected to be completed in June 2018.

Salarha Tunnel

A total of 4,231m excavation and support works were completed in the 2,945m long double tube Salarha Tunnel in the Black Sea Region. The tunnel is planned to be completed in 2019.

Prinkayalar Tunnel

The 2,246 m long single tube Prinkayalar Tunnel is connecting the cities of Erzurum and Artvin, is expected to be completed in 2019.

Ayaş Railway Tunnel

conventional method and railways tunnels excavated with 5% conventional method and 95% mechanized method.

2. Amount (USD or EUR) of tunnelling / underground space facilities awarded in 2017
3. List of tunnels completed:
 - Bayraklı Tunnel (İzmir)
 - Belkahve Tunnel (İzmir)
 - Erkenek Tunnel (Malatya)
 - Selçukgazi Tunnel (Bursa)
 - Güneyce Tunnel (Rize)
 - T2 Tunnel (Rize)
 - Beşirli Tunnel (Trabzon)
 - Kanuni Avenue Connection Tunnel (Trabzon)
 - Bağışlı Tunnel (Trabzon)
 - T1 Tunnel (Trabzon)
 - T2 Tunnel (Trabzon)
 - GÇY-T3 Tunnel (Gümüşhane)
 - GÇY-T4 Tunnel (Gümüşhane)
 - GÇY-T5 Tunnel (Gümüşhane)
 - Çınarcık Tunnel (Giresun)
4. List of tunnels under construction:
 - Ovit Tunnel (Rize)
 - New Zigana Tunnel (Gümüşhane)
 - Kırk Tunnel (Rize)
 - Eğribel Tunnel (Giresun)
 - Sabuncubeli Tunnel (İzmir)
 - Salarha Tunnel (Rize)
 - Prinkayalar Tunnel (Erzurum)
 - Ayaş Tunnel (Ankara)
 - T 26 Tunnel (Eskişehir)
 - Nurdağ Tunnel (Gaziantep)
 - Gerede Tunnel (Bolu)
 - Mavi Tunnel (Konya)