Russia

Name: Russian Tunneling Association (RTA)
Type of Structure: Non profit
Number of Members: Total number - 58

ASSOCIATION ACTIVITIES DURING 2018 AND TO DATE

The following events were organized and held in 2018:

- Thematic round table "Road and Railway Traffic Tunnels" (Moscow, March 22, 2018),
- Public workshop "Technology of Off-Form Manufacturing Traffic Tunnel Wall Structures by Placing Concrete Using Pumps on Secant Piles and Tangential Piles" (town of Shcherbinka, Moscow region, July 17, 2018),
- Scientific and Technical Forum "Trends and Problems of and Prospects for Development of Underground Construction" in partnership with the Tunnel Association of the Republic of Belarus (Minsk, Republic of Belarus, September 27-29, 2018).

The following vocational competitions were also organized and held:

- S.N.Vlasov Competition "Engineer of the Year of the Tunnel Association of the Russian Federation – 2018",
- Competition "The Best Use of Advanced Technologies for Construction of Tunnels and Underground Facilities",
- Competition of scientific papers (graduate theses) of students from higher education institutions.

News bulletins of the Tunnel Association of the Russian Federation and the professional magazine "Metro and Tunnels" were put out (4 issues of the magazine were published).

CURRENT TUNNELLING ACTIVITIES

17 stations were put into operation and 2 depots for rolling stock were built in Moscow in 2018 within the Moscow Metro Development Program. The excavation of 2-track main line tunnel (Ø 10.4m) between the under construction Metro Stations "Okskaya" and "Stakhanovskaya" on the Nekrasovskaya (Kozhukhovskaya) line was completed in the middle of December.

The Metro Stations "Novokrestovskaya" and "Begovaya" located near the stadium "Zenit – Arena" were put into operation in Saint Petersburg by the beginning of the 2018 World Cup, and another 3 stations ("Prospekt Slavy", "Dunaysky Prospekt" and "Shushary") on the extension of the Frunzensky Radius of the Saint Petersburg Metro were also prepared to be put into operation.

Corporate members of the Tunnel Association of the Russian Federation participate in large-scale programs intended to increase the capacity of the Trans-Siberian Railway and the Baikal-Amur Mainline. In 2018, the excavation of the second Baykalsky Tunnel leg was completed (its length is ca. 6.7km).

FUTURE TUNNELLING ACTIVITIES

Works on the development of the Moscow and Saint Petersburg Metro will continue.

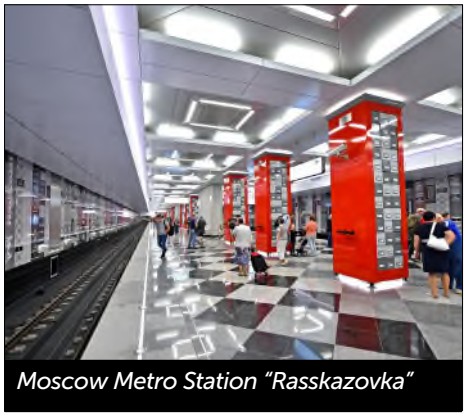
The planned total length of the Moscow Metro lines by 2022 is 450km.

According to the Saint Petersburg Metro Development Plan, the length of the Saint Petersburg Metro lines will increase from 113.6km to 155.5km by 2027. The number of metro stations will increase from 67 to 85 and the number of metro depots will increase from 5 to 7.

It is planned to resume the construction of the Krasnoyarsk Metro.

In the near future, it is planned to implement large-scale projects for the construction and reconstruction of railway tunnels within the reconstruction and development of the Trans-Siberian Railway and the Baikal-Amur Mainline (the development of the feasibility study for the construction of the second leg of the Severomuysky Tunnel at the Baikal-Amur Mainline will end).

The tunnel option for the construction of a railway crossing from the mainland to Sakhalin island may be adopted.



Moscow Metro Station "Rasskazovka"

Moscow Metro Station "Savelovskaya"

STATISTICS

1. **Length or volume excavated - % mechanized/% conventional during 2018 -** N/A.
2. **Amount (USD or EUR) of tunnelling/ underground space facilities awarded in 2018**
   N/A.
3. **List of tunnels completed**
   N/A.
4. **List of tunnels under construction**
   N/A.

EDUCATION ON TUNNELLING IN THE COUNTRY

Major higher education institutions which train and retrain specialists in underground construction:

- Moscow State University of Railway Engineering (MIIT),
- Moscow State University of Civil Engineering (MGSU),
- Moscow State Mining University (MGGU) of the National University of Science and Technology "MISiS",
- National Mineral Resources University "Mining University" (SPGU),
- Saint Petersburg State Transport University (PGUPS),
- Tula State University,
- Ural State Mining University (UGGU),
- Siberian State Transport University (SGUPS).