# **Thailand**

TUTG
Thailand Underground & Tunnelling Group

Name: Thailand Underground and

Tunnelling Group (TUTG), The Engineering Institute of Thailand under

H.M. The King's Patronage

Type of Structure: Non profit organization

**Number of Members:** 60 members

# ASSOCIATION ACTIVITIES DURING 2018 AND TO DATE

In 2018 the Thailand Underground and Tunnelling Group (TUTG) continued working to contribute the underground and tunneling education through the number of technical seminars, Technical Visit and Trainings.



# **CURRENT TUNNELLING ACTIVITIES**The activities during 2018 by TUTG are:

- Tea Talk Seminar was held on 30
   May 2018 "TBM Launching Tunnel Modification"
- 2. Tea Talk Seminar was held on 15
  August 2018 "Innovation for
  Sustainable Waterproofing in Tunnels
  and Underground Construction"
- 3. IPA Seminar on Press-in Technology in Thailand was held on 18 May 2018
- 4. Co-organizer of 4th Thai Geotechnical Conference 2018 (September 2018)
- 5. In-house Training for State Railway of Thailand, SRT (9-13 July 2017)
- 6. Organize the 3rd Training of
  - 'Tunnelling in Soft Ground' (13-15 June 2018)
  - 'Tunnelling in Rock' (21-23 November 2018)

# **Continuing Activities from last year:**

Preparation of Shotcrete Guideline Publication

# FUTURE TUNNELLING ACTIVITIES The tunnelling activities program by TLITG are:

- Co-organizer on the 14th International Conference on Shotcrete for Underground Support which will be held on 17-20 November 2019 at Nong Nooch Gardens, Pattaya, Thailand.
- 4th Training on 'Tunnelling in Soft Ground' and 'Tunnelling in Rock'
- Tri-monthly Tea Talk Seminar
- In-house Training for State Railway of Thailand, SRT (expected on September 2019)
- 6th Thai Geotechnical Conference (Co-organizer)
- Publish the Shotcrete Guideline













# **STATISTICS**

# 1. Length or volume excavated - % mechanized/% conventional during 2018

#### Flood Diversion Tunnel

Khlong Nong Bon to Chao Pha Ya River (The Bangkok Metropolitan Administration) – Approximately 500m (Mechanized)

### Orange Line

East Section (Mass Rapid Transit Authority of Thailand) – Approximately 300m (Mechanized)

#### Mae Tang

Mae Ngud – Mae Kuang Water Diversion Tunnel (Royal Irrigation Department) – Approximately 2,597m (Mechanized), and 4,135m (Conventional)

## 2. Amount (USD or EUR) of tunnelling/underground space facilities awarded in 2018

Track Doubling North-Eastern Line – Mab Kabao – Thanon Chira Junction – 7.9km tunnel length (State Railways of Thailand (SRT)) **US\$245M (Approximately)**.

Conversion of Overhead Line to Underground System, Rama III Project: Thanontok Terminal Station – Rama IX Bridge – 3.6km tunnel length (Metropolitan Electricity Authority) US\$60M (Approximately)

Conversion of Overhead Line to Underground System, Rama III Project: Rama IX Bridge – Chalerm Mahanakorn Expressway Section –6.2km tunnel length (Metropolitan Electricity Authority) **US\$47M (Approximately)** 

Replacement of the Overhead Line by the Underground Cable System (Nonsee Project) – 8.3km pipe jacking length (Metropolitan Electricity Authority) US\$86.5M (Approximately)

### 3. List of tunnels completed

Double track project on Eastern Seaboard Railway Contract 2: Wihan Daeng-Bu Yai with the railway tunnel. (State Railway of Thailand)

Blue Line Extension, (Mass Rapid Transit Authority of Thailand)

Flood Diversion Tunnel under Khlong Bang Sue (The Bangkok Metropolitan Administration)

#### 4. List of tunnels under construction

Orange Line – East Section (Mass Rapid Transit Authority of Thailand)

Mae Tang – Mae Ngud – Mae Kuang Water Diversion Tunnel (Royal Irrigation Department)

Flood Diversion Tunnel – Khlong Nong Bon to Chao Pha Ya River (The Bangkok Metropolitan Administration)

Track Doubling North-Eastern Line - Mab Kabao - Thanon Chira Junction (State Railways of Thailand (SRT))