



Romania

Name: Romanian Tunneling Association – ART

Type of structure: National Association

Number of members: 8 corporate members, 85 individual members

2016 ACTIVITIES

Main activities:

- Working Group - Research:
- Implementation of Eurocodes (1, 2, 3, 7 and 8) in Romanian tunneling works;
- Reviewing norms for seismic response and waterproofing in tunneling.
- Relationship with MN from: Poland, Hungary, Croatia, Greece, Turkey, Bulgaria (see EETC and SETC).
- Constructii subterane (Underground constructions) Magazine (special issue).
“Works on Metro Line 5. Special conditions for TBM on Eroilor 2 station.”
“Commissioning of Line 4: Parc Bazilescu – Straulesti”.
- Electronic News Bulletin.
- Website under construction.
- General Assembly of ART to be held in October 2017.

TUNNELS – UNDERGROUND WORKS

Metro Line 5

Lot 1.2 - Valea Ialomitei Sector (cut and cover tunnel, station and depot) awarded to Max Bögl.



Lot 1.1 – Raul Doamnei – Eroilor (6km), TBM method tunnels, 9 stations cut and cover method awarded to ASTALDI-FCC-DELTA ACM -AB CONSTRUCT JV.

Tunnel: TBM 1 (started on 21 September 2013) and TBM 2 (started on 22 November 2013) total length 6065m.

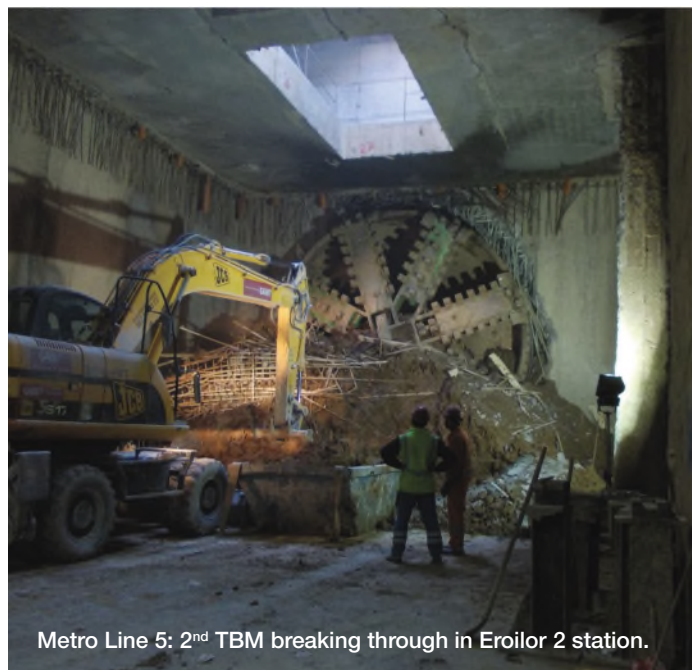
Tunnel TBM today: 98% performed (100% between Raul Doamnei – Academia Militara; 100% between Academia Militara – Eroilor 2; 0.8km more to be done under Eroilor 2 station and Dambovită River).

Stations: All stations 100% structure performed.

Under works: 85% for railway, finishing, installations awarded to a JV formed by: Astaldi SpA, Alstom Romania, TIAB Sa, Aktor & Schindler.



Metro Line 5: 1st TBM preparation for passing through Eroilor 2 station.



Metro Line 5: 2nd TBM breaking through in Eroilor 2 station.

Commissioning Metro Line 4 in March 2017.

- Section 3, Bazilescu – Straulesti: 2 stations, 1 depot, 2.7km in length.
- Stations performing: Laminorului: 100%; Straulesti: 100%; 1 depot: 100%; cut and cover works: 100%.
- TBM tunnels: 1.8km 100% performed.



Danes & Sighisoara Railway Tunnels

Above: plan with tunnels: Danes – 800m length, 98% works in progress.; Sighisoara – 300m length, 100% works done.

Below: Danes Tunnel – works in progress.



FUTURE ACTIVITIES

Preparing tender for the Metro Line 6.

Preparing the tender for Metro Line 6. Metro Link between Central Railway station “Gara de Nord” and “Henry Coanda” (Otopeni) International Airport. Tender Documents, Feasibility study and Preliminary Design performed by a JV from Padeco (Japan), Metroul SA (Romania) and Oriental Consult (Japan).

Preparing the tender for Metro Line 4, Section 2: Gara de Nord -

Progress - Metro Link between Central Railway station “Gara de Nord” and Southern part of Bucharest - in Feasibility study.

- 12km length
- 15 stations

