

PORTUGAL



Name of Association: Comissão Portuguesa de Túneis e do Espaço Subterrâneo (CPT) – Portuguese Tunnelling Association and Underground Space.

Type of Structure: Committee of Portuguese Geotechnical Society (SPG), non-profit association. The board of the CPT is made up of President Raúl Sarra Pistone, Vice-Presidents: Nadir Plasência and Isabel Fernandes, General Secretary Luis Miranda, Assistant Secretary João Gouveia and Treasury Gonçalo Diniz Vieira.

Number of Members: 70 individual members, 8 corporate members

ASSOCIATION ACTIVITIES DURING 2023 AND TO DATE

- Registration of the UW in Portugal and constructed by Portuguese companies in other countries
- Analytical work on the practice and contractual forms for public procurement in underground works
- Development of contributions to the revision of the Public Contracts Code
- Publication of the document "Technical Guide on Safety and Health in the Design and Construction of Underground Works" aimed at the legislative framework on safety and health in underground works (GT3)
- In March 2023 the GT4 organized a BIM event in Lisbon, with great success, together with the counterpart working group of the Geotechnics of the Transport Commission
- Life Cycle Asset Management: Identification of the different methodologies used in the inspection and monitoring of the different tunnels. Participation in the EUTF group on "Predictive maintenance and refurbishment"

Events organized during 2023:

- 1st Workshop BIM/SIG on Linear Infrastructure, Lisbon, 1st March 2023
- Workshop on Construction of Tunnels of Lisbon Drainage Master Plan, Lisbon, 27th October 2023
- 6th International Seminar - Rethinking our Cities using the Underground Space, Porto, 17th November 2023

CURRENT TUNNELLING ACTIVITIES

Currently there are five urban underground projects in progress, located in the cities of Lisbon and Porto. Lisbon Metro Projects

- a) two projects integrated into the Expansion Plan of the Lisbon

Metropolitan Network for the extension of the Yellow and Green lines. New lines from Rato to Cais do Sodré.(approx. 2km long, two new stations and new links to the existing stations (Contractual cost: c. €120M).
b) Red line, new line between São Sebastião and Alcântara, in Lisbon, 4km long, four stations (Contractual cost c. €330M).

Porto Metro: Two projects integrated in the Expansion Plan of the Porto Metro network are under construction. The Pink

line between Casa da Música/Boavista Station and Aliados Station/Praça da Liberdade, over 3.2km in length, three ventilation shafts; and the diversion tunnel of the Vila River (contractual cost: €189M).

The Yellow Line: between Santo Ovídio and Vila D'Este, aprox. 3.2km extension on double track, three new stations and one Ventilation and Emergency Shaft (PVE) (Contractual cost: c.€99M).

- a) New Ruby Line, estimated cost €299M, would have a length of 6.3km and includes two tunnels, a new bridge over the Douro River and six new stations, three of which are on the surface.
- b) The General Drainage Plan of Lisbon (PGDL), of the Lisbon Municipality. Includes the construction of two tunnels with an internal diameter of 5.5m. The first is the Monsanto-Santa Apolónia tunnel (TMSA, about 5km long) and the second is the Chelas-Beato tunnel (TBC, about 1km long). The excavation of these tunnels is being carried out by an EPBM with a cutting diameter of 6.41m.

FUTURE TUNNELLING ACTIVITIES

1. Workshop BIM/SIG flyer



2. Workshop Site visit



3. Lisbon Drainage Tunnels



4. 6th International Seminar: Rethinking our Cities



5. Expansion of the Lisbon Metropolitan Network. Santos Station construction



6. Porto Metro works in progress

