# ITA Activity Report 2017



The information supplied with be published in the ITA Activity Report magazine and distributed at WTC 2018 in Dubai and with the June/July issue of Tunnelling Journal. Please completed the form below (please type everything in upper and lowercase – no CAPITALS) and return it to secretariat@ita-aites.org (or <a href="mailto:dropbox">dropbox</a>) no later than February 23<sup>rd</sup>, 2018. See example below

Name of Country: Brazil

Name of Association: Comitê Brasileiro de Túneis - Brazilian Tunnelling Committee

Type of Structure: non profit, open association

Number of Members: 254 members, 23 corporate members

Association logo: Please supplied as a separate file (jpeg or high-resolution pdf - minimum of

300 dpi)

## Association Activities during 2017 and to date

The Brazilian Tunnelling Committee – CBT – organized in São Paulo during 2017 its main event, the 4<sup>th</sup> Brazilian Tunnelling Congress, held together with the 9<sup>th</sup> International Symposium on Geotechnical Aspects of Underground Excavations in Soft Ground (in cooperation with TC 207 of the ISSMGE) and the International Seminar Latin American Tunnelling. The congress had over 500 attendees and 37 companies participated in the exposition. The congress also included a two day pre-conference tunnelling course and site visits.

During the Congress, Prof. Figueiredo Ferraz Award was delivered for the first time. The award was created to encourage undergraduate students to prepare and publish course completion and research papers in tunnelling, including areas like design and construction, operation, maintenance and reinforcement of tunnels, underground works and underground space planning.

Almost every month, CBT organized evening presentations (twelve) for members and non-members, about different themes, including academic research, case histories, new technologies etc. Corporate members were invited to deliver presentations about projects and their technologies.

The traditional "Echoes of the WTC" event was held after WTC-Bergen, with presentations about the news from the General Assembly, WG activities, technical papers from Brazilian authors and summaries of the technical sessions. The event had live internet transmission.

At December 4<sup>th</sup>, for the first time, the "Tunnel Day" was held, with a ½ day program. The chosen topic was "rock bolts", and included a presentation based on the WG and ITATech material, two roundtables with participation of owners, contractors, designers and bolt manufacturers. The day was crowned by a barbecue, sponsored by corporate members.

The Young Member group was also active, with 4 activities, including a site visit and 3 joint presentations by a Young Member and a Senior Tunnelling Specialist.

## **Current Tunnelling Activities**

Year 2017 was quite hard in terms of economic stagnation and political crises. Therefore investments from Public sector as well as from Private sector in infrastructure Projects were very small. No significant new works are reported for the year 2017, only continuities or conclusions of undertakings that were already ongoing or contractual milestones of ongoing concessions contracts.

Highway BR-116/SP Concession had its duplication at Serra do Cafezal (hilly area) concluded and released for traffic in December, four NATM road tunnels were ready for traffic (https://www.youtube.com/watch?v=LnUkEF5vijA&feature=youtu.be).

Water supply ring network for São Paulo great area are under construction in order to interconnect its water reservoirs. Reservoirs Jaguari and Atibainha had its interconnection completed and commissioned. A sector of 6.4 km of extension, around 55% of the interconnection length, is comprised of tunnel.

### Works on progress are:

- i. Tunnels at ring road sector north in the São Paulo great area;
- ii. Tunnels at ring road in the city of São Sebastião (north coast of São Paulo state);
- iii. Tunnels at ring road in the city of Caraguatatuba (north coast of São Paulo state);
- Tunnels at Tamoios Roadway duplication from the city of Caraguatatuba to the city of São José dos Campos (São Paulo State); and
- v. Tunnels at Blue Line Expressway in the city of Salvador (Bahia state).

#### **Future Tunnelling Activities**

São Paulo Metro line 6 - Orange Is expected to be resumed by the second semester of 2018, underground works and detailed design.

For the coming years, and as the economic crisis in the country is overcome, it is expected that metropolitan lines projects will be resumed (Porto Alegre, Belo Horizonte, for example), as well as expansion in the current networks (São Paulo, Rio de Janeiro, Brasília).

Federal Railway Network concessions contracts are to be extended. All Brazilian regions will have railway network expansion in order to increase its capacity. The expansion will be comprised of several tunnels.

#### **Statistics**

- 1. Length or volume excavated % mechanized / % conventional during 2017
- 12,695m, and ~  $1,159,000m^3$ , 99.5 % conventional / 0.5 % mechanized TBM
- 2. Amount (USD or EUR) of tunnelling / underground space facilities awarded in 2017 USD 350,000,000
- 3. List of tunnels completed
- Sabesp Atibainha
- Serra do Cafezal
- PB Energia
- 4. List of tunnels under construction
- Contorno de São Sebastião/Caraguatatuba SP
- Rodoanel Norte SP
- Nova Subida Tamoios SP
- Nova Subida Petrópolis RJ
- Metrô-SP Linha 4
- Metrô SP Linha 6 (contract stalled)
- Contorno Jaraquá do Sul SC
- PCHs (TBM) SC Small Hydropower Project

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Should we have any questions or need any additional information we will contact you

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