

## Forty-FIFth Annual Meeting - NAPLES 2019

**The International Tunnelling and Underground Space Association held its forty-fifth General Assembly in Naples, from 5 to 8 May 2019, in conjunction with the World Tunnel Congress 2019 "Tunnels and Underground Cities: Engineering and Innovation meet Archaeology, Architecture and Art", organized by ITA and the Società Italiana Gallerie (SIG) of Italy. More than 2500 persons participated in the Congress. 62 of the 78 Member Nations participated or were represented in the General Assembly.**

### MEMBER NATIONS PRESENT OR REPRESENTED

Albania, Argentina, Australia, Austria, Azerbaijan, Belarus, Belgium, Bhutan, Bolivia, Bosnia-Herzegovina, Brazil, Canada, Chile, China, Colombia, Costa Rica, Croatia, Czech Republic, Denmark, Egypt, Ecuador, Finland, France, Germany, Greece, Guatemala, Hungary, India, Iran, Italy, Japan, Kenya, Lebanon, Macedonia (FYROM), Malaysia, Mexico, Montenegro, Myanmar, Nepal, New Zealand, Nigeria, Norway, The Netherlands, Peru, Poland, Portugal, Republic of Korea, Romania, Russia, Serbia, Singapore, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Kingdom, United States of America, Vietnam.

### MEMBER NATIONS NOT PRESENT

Algeria, Bulgaria, Cambodia, Indonesia, Iceland, Israel, Kazakhstan, Lao PDR, Lesotho, Morocco, Panama, Qatar, Saudi Arabia, Slovakia, United Arab Emirates, Venezuela.

### EXECUTIVE COUNCIL

#### MEMBERS

Jenny Yan Jinxiu, China, President	(2019-2022)
Tarcisio B. Celestino, Brazil, Past President	(2019-2022)
Lars Babendererde, Germany, 1st Vice-President	(2019-2022)
Randall Essex, USA, Vice-President	(2019-2022)
Arnold Dix, Australia Vice-President	(2019-2022)
Giuseppe Lunardi, Italy, Vice-President	(2019-2022)
Abidemi Agwor, Nigeria, Member	(2019-2022)
Hamdi Aydin, Turkey, Member	(2019-2022)
Choi Hangseok, Korea, Member	(2019-2022)
Jeyatharan Kumarasamy, Singapore Member	(2019-2022)
Andres Marulanda, Colombia, Member	(2019-2022)
Jamal Rostami, Iran, Member	(2019-2022)
Gérard Seingre, Treasurer, Switzerland	(2019-2022)
Teik Aun Ooi, Malaysia, correspondent WTC 2020	(2017-2020)

Soren Eskesen, Denmark, correspondent WTC 2021 (2018-2021)  
Fermín Sánchez, Mexico, correspondent WTC 2022 (2019-2022)

## MEMBERSHIP AND DECISIONS

Albania, Kenya and Lebanon have been accepted as new Member Nations.

The Member nation of Mexico (Asociación Mexicana de Ingeniería, de túneles y de obras subterráneas, A.C.) will host the WTC 2022, in Cancun, from 22 to 28 April, 2022.

The Association has registered 16 new Affiliate Members (5 Corporate Members, 4 Individual Members, 4 COSUF, 3 CUS); the total results to 78 Member Nations and 259 Affiliate Members (165 Corporate Members and 94 Individual Members) taking into account some resignations.

2 new companies became Supporters: TPH Bausysteme GmbH (Germany) and Bentley Systems Europe B. V. (The Netherlands), total: 45.

## Strategy

Pursuing the strategy presented at the General Assembly in Bergen, the Executive Council worked on the different actions to be implemented.

Six goals have been identified to fulfill the ITA mission. For each goal, 3 or 4 actions have been identified to be completed during the next term. Progress will be monitored and reported annually at the ITA General Assembly.

## **GOAL #1 - Encourage Member Nations to actively develop and share technology, promote underground space and be active as a Member Nation in ITA**

Through the new Member Nations activity reports format, the sharing of information between the Member Nations and with the Executive Council and the secretariat has been more intense. For the past 2 years we have received 46 activity reports. In addition, several Member Nations provided ITA with examples of tunnelling works that have then been used for the video of "Tunnelling the world 2018".

During the year several seminars and training have been organized in the Member Nations such as North Macedonia, China, Belgium, Malaysia....

For several years now Member nations belonging to the same geographic area meet during the WTC and sometimes along the year to share their best practices.

### **GOAL #2 - Optimize the contribution of Working Groups and Committees through facilitating interaction with Member Nations & Sponsors, encouraging synergies, and deploying modern communication practices**

During the annual meeting with WGs Animateurs, Committees Chairs and ExCo members, it has been highlighted some important topics to be implemented such as improvement in coordination, focus and working with outside institution and increase the diversity in participating Member Nation. The secretariat is regularly contacting Member Nations to update the list of participants in the different Working Groups as well as the industry to find experts for the various Committees. The process of document reviewing has been improved and all documents published this year have followed this process.

At this stage it is necessary to find ways to help WGs to produce for every publication and guidelines related documents for training purposes in different format presentation but also audio visual.

### **GOAL #3 : Enhance Interaction with Industry**

Three main objectives have been set up to achieve goal n°3. During the year the following actions have been made:

- ☐ Follow up on collaboration with Prime Sponsors and Supporters:
  - Regular visits to PS,
  - Yearly meeting with PS at the occasion of each WTC,
  - Satisfaction survey completed in 2017, and used to realign objectives.
- ☐ Develop mutually beneficial initiatives with Industry:
  - PS invited to present at events adjoining ExCo meetings such as in Florianopolis.
- ☐ Regularly update tunnel market forecast and organize dissemination:
  - Second market survey finalized and disseminated at WTC 2017 in Bergen. An addendum on African market will be delivered at WTC 2019 Naples.

### **GOAL #4 : Encourage further Knowledge Sharing through Education and Training**

Training is one of the core of ITA. In order to help Member Nations, the ITA Committee on Education and Training is providing the possibility of training

sessions. The ITA ExCo has been working closely with the ITACET Foundation to find better ways for the organization of the training sessions. During the year, training sessions have been organized in France, UAE, Argentina, Kenya and Nepal. In addition, the ExCo started to work with different International banks and funding bodies to promote training when financing infrastructures that include tunnels & underground spaces.

One of the other axe of work concern a survey with Member Nations about the level of training on underground works for professionals obtaining degrees on civil engineering, mining engineering and geology.

### **GOAL #5: Enhance Tunnelling and Underground Space Awareness**

ITACUS is the main entity in enhance tunnelling and underground space awareness. It's also important to devel-op digital materials and share the good examples. This year, a success story of highspeed railway tunnels for PyoungChang Winter Olympics has been published in Tunneltalk.

We are also engaged to develop educational materials for non- engineers and disseminate them by posting on our website and Youtube.

In 2018 ITACUS organized three thematic workshops on underground spaces. Think Deep Sweden has been formed.

"Think Deep" publication being disseminated in coordination with ISO-CARP.

THINK DEEP National Action Program (TDNAP) is planned during WTC2019: Five National Action groups will partici-pate (Australia, UK, Nigeria, Nether-lands , Sweden).

Through ITACUS we have maintained and improved contacts with ISOCARP in participating in their congress and with other bodies such as UN Habitat , ACUUS, ICLEI....

The organization of specific training sessions on the use of underground space in developing countries is an im-portant action to help decision makers, planners, engineers to better know the benefit of using the underground space.

ITA and ITACUS have, together with the Member Nations and the ITA-CET, organised training session in Abuja, Nigeria done in March and another in Nairobi in December.

### **GOAL #6: Improve communication with Member Nations, Industry and General public**

In the strategic plan, actions concern a better planning of communication as well as sharing innovation and successful projects of Member Nations and Industry.

To perform this goal, we have this year emphasis the communication towards the member nation in the preparation of the General Assembly, in order that all Member nations can know sufficiently in advance what is planned and how to communicate. As for the previous year, the Member Nation reports will be disseminated to the

Member nations but more largely to all participants at the WTC. Through this magazine, which will be produced for the third year, ITA takes care to better communicate to the whole tunnelling industry the activities but also showcase the works and projects in all Member Nations.

From October, Anne Brissaud has joined the ITA staff as Communication Officer. We have now more possibilities to share information largely through the ita@news, specific information, the internal bulletin and of course with a publication as this one which allow a better communication from the ITA Executive Council towards the Member Nations and more largely the ITA family.

This year, the Member Nations have sent quite a lot material that has been used for producing the "Video of the Year" focusing on projects that have been achieved or were under construction during the year 2018.

We have also produced a video presenting in 10 minutes the ITA as well as for the previous year a video showing the tremendous event which has been the ITA Awards 2018 in China. All the videos are available on ITA Youtube channel.

## WORKING GROUPS & COMMITTEES

The following reports have been presented:

- WG2 - Guidelines for the Design of Segmental Tunnel Linings
- WG5 - Guide to ITA/BTS CAWG Report 10 for Clients and others not familiar with high pressure compressed air work
- WG14 / 15 - Handling, Treatment and Disposal of Tunnel Spoil Materials
- ITAtech – Practical approach for controlling the blasting vibration and optimizing advance in urban tunnelling
- ITAtech – Guidelines on rebuilds of machinery for mechanized tunneling excavation
- ITA COSUF - Current practice on cross-passage design to support safety in rail and metro tunnels
- ITA – FIDIC – Conditions of Contract for Underground Works (Emerald Book)

## OPEN SESSION

The Open Session, which took place on May 7th, was dedicated on "TUNNELS A RESILIENT LINK BETWEEN PAST AND FUTURE".

Panel:

- Bernard Cathelain – Grand Paris Express
- Paolo Guglielminetti – PwC
- Paola Firmi – RFI

- Martin Muncke – WG21
- Nobuharu ISAGO – Tokyo Metropolitan University
- Ed Taylor- WG6
- Jurij Karlovsek – WG22
- Salo Van der Woude – Arcadis
- M. Shijeta – Pacific Consultants

□ Two discussion themes :

- Tunnel life cycle considerations
- Maintenance, survey and repair works

The Session has been well attended. The main subjects were that engineers and financial people have to work together from the beginning to take into account maintenance as a crucial point.

Tunnels are difficult to replace so their operating life has to be long more than 120 years.

The structure of the tunnel is usually not the problem but that M&E. For this BIM can help a lot.

New survey methods are being developed and data analysis has to be improved. We can have data on nearly continuous basis.

Even though tunnels are built for long time state of the art is changing and therefore some changes are sometimes needed in the structure of the tunnels.

## NEXT ANNUAL MEETINGS

- **Kuala Lumpur, Malaysia, from May 15 to 21, 2020**, during the ITA-AITES WTC 2020 “Innovation and sustainable urban connectivity”
- **Copenhagen, Denmark, from May 14 to 20, 2021**, during the ITA-AITES WTC 2021 “Underground solutions for a world in change”.
- **Cancun, Mexico, from May 2 to 9, 2022**, during the ITA-AITES WTC 2022 “Going Underground: Great Solutions for a Modern and Sustainable World”.

The activity report is available [here](#)