



ASSOCIATION
INTERNATIONALE DES TUNNELS
ET DE L'ESPACE SOUTERRAIN

AITES

ITA

INTERNATIONAL TUNNELLING
AND UNDERGROUND SPACE
ASSOCIATION

In Consultative Status, Category II with the United Nations Economic and Social Council

Thirty-Fourth Annual Meeting – Agra 2008

Press Release

The International Tunnelling and Underground Space Association held its thirty-fourth meeting in Agra, India, from 19 to 25 September, in conjunction with the World Tunnel Congress 2008 "Underground Facilities for Better Environment & Safety" organised by ITA and the Tunnelling Association of India (TAI). 1'000 persons participated to the Congress. 38 of the 54 Member Nations participated or were represented in the General Assembly, including 1 proxy and 2 votes by correspondence.

VOTING MEMBER NATIONS

South Africa, Germany, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, China, Korea, Denmark, Egypt, Spain, United States of America, Finland, France, Greece, Hungary, India, Italy, Japan, Kazakhstan, Malaysia, Norway, Peru, Poland, Portugal, Romania, United Kingdom, Russia, Singapore, Slovakia, Slovenia, Sweden, Switzerland, Czech Republic, Thailand, Turkey.

NON VOTING MEMBER NATIONS

Algeria, Saudi Arabia, Chile, Colombia, Croatia, Indonesia, Iran, Iceland, Israel, Lesotho, Morocco, Mexico, The Netherlands, Ukraine, Venezuela, Vietnam.

NEW EXECUTIVE COUNCIL

Members

M. Knights	United Kingdom	President	Until 2010
A. M. Muir Wood	United Kingdom	Honorary Life President	
H. Parker	USA	Past President	Until 2010
P. Grasso	Italy	Vice-President	Until 2010
E. Grov	Norway	Vice-President	Until 2010
Y. Leblais	France	Vice-President	Until 2010
I.-M. Lee	Korea	Vice-President	Until 2010
S. Eskesen	Denmark		Until 2010
K. Fukumoto	Japan		Until 2010
I. Hrdina	Czech Republic		Until 2010
M. Thewes	Germany		Until 2010
V. Umnov	Russia		Until 2010
B. Yun	China		Until 2011
P. Kocsonya	Hungary	WTC 2009	Until 2009
F. Vuilleumier	Switzerland	Treasurer	Until 2010
C. Bérenguier		Secretary General	Until 2011

Experts

S. Calinescu	Romania	Internal Auditor	Until 2009
D. Brox	Canada	WTC 2010	Until 2010

MEMBERSHIP

The Association has registered the membership of 2 new Member Nations, 28 new Affiliate Members (14 Corporate Members and 14 Individual Members); the total results to 54 Member Nations and 274 Affiliate Members (147 Corporate Members and 127 Individual Members) taking into account some resignations.

MAIN DECISIONS

- Acceptation of 2 new Member Nations, Kazakhstan and Peru
- Nomination of an Executive Director, Mr Olivier Vion (France) from January 1st, 2009.

COMMUNICATION

- **Tribune:** In 2008, the annual issue with focus on India including the reports of 28 Member Nations, reports of ITA Prime sponsors and supporters has been published in July and sent to members as well as distributed to the participants to the WTC 2008 in Agra.
- **ita@news:** In 2007 / 2008, six issues of the *ita@news* have been sent. The *ita@news* contents news from the association, the WGs, the Member Nations, the forthcoming events, the sister associations, The *ita@news* is sent to 7'700 addresses and to the Member Nations and Affiliate Members.
- **Tunnelling and Underground Space Technology (TUST):** In 2007 (Volume 22), four issues of TUST + 1 double dedicated to trenchless technology were published, representing 678 pages. The issue 22-2 contain the recommendation of WG2 on "Settlement induced by tunnelling in soft ground".
The contract with ELSEVIER terminated end of 2007. In 2008, ITA and ELSEVIER came to an agreement which allows ITA Members to access an electronic version of TUST (including archives). This subscription is paid by ITA.
- **Website:** The web site contains around 1 000 html pages and 900 pdf documents representing around 10,000 printable pages. The number of distinct visits is now around 28,000 per month, representing 530,000 hits per month. During the first half of 2008, the web site has been renewed including upgrading of Typo3, implementing of a new graphism and a new organization of the content. This new version of the web site is on line since September the 1st.
- **ITA – Reports:** Reports from ITA Working Groups will now be published by ITA under "ITA Reports". The first report to be published will be "Guidelines for good occupational health & safety practice in tunnel construction" prepared by WG5.

ITA OPEN SESSION ON CONTRACTUAL PRACTICE WORLDWIDE

During the Open Session, presentations were made by : A. Assis and J.M. Barros, Brazil on "An independant view of the Pinheiros Station Accident (Sao Paulo Metro) and lessons learnt for future contractual arrangements"; H. Ehrbar of Alp Transit Gothard, Switzerland on "Contract models in Underground Construction – Experiences from an owner point of view"; Y. Leblais, ITA Vice President on "Contractual practices worldwide – Engineering sector views"; C. Genschel from Bilfinger+Berger on "Contractual practices worldwide – Contactor's View and Wishes"; A. Dix Animateur of ITA WG3 on "Contractual practices worldwide – Tailoring new contractual frameworks for the demands of the local market"; H.K. Sharma of Satluj Jal Vidyut Nigam Ltd, India, on "Contractual practices in tunnel and underground works in India"; D.G. Kalkade of Jaiprakash Associates Ltd, India on "Contractual practices in tunnel and underground works in India"

The session presented a comprehensive overview of the different points of view concerning the contractual practices. Each actor of the underground works expresses its views and wishes and the way to improve the contractual practices. The lessons learnt in different cases are also very fruitful. Finally, a lively discussion took place between the different lectures and the audience.

TRAINING COURSE "TUNNEL ENGINEERING"

Coordinated by D. Peila, Animator of ITA/AITES WG18 "Training", P. Grasso, member of ITA/AITES Executive Council and Prof. Tiramamurthy, Chairman of the technical council of the ITA/AITES World Tunnelling Congress 2008.

200 participants, 40 of them outside India, attended to the training course. Reports were presented by 16 lecturers from 12 countries, 6 of them ITA Prime Sponsor, and 9 of them ITA animateurs or members of the ITA executive council. The high class lecturers gave 12 hours of excellent presentations about conventional and (especially) mechanized tunnelling in long and deep tunnel and urban areas, both from the theoretical point of view and with the discussion of many relevant case histories. Engaged discussions showed the high interest of the participants.

NEXT ANNUAL MEETINGS

- Budapest, Hungary, from 23 to 28 May, 2009; during the ITA-AITES WTC 2009 "Safe Tunnelling for the City and Environment"
- Vancouver, Canada, from 15 to 20 May, 2010, during the ITA-AITES WTC 2010 "Tunnel vision towards 2020"
- Helsinki, Finland, from 21 to 26 May, 2011; during the ITA-AITES WTC 2011 "Underground spaces in the service of a sustainable society"

WORKING GROUPS AND COMMITTEES

ITA-COSUF Committee on Operational Safety of underground Facilities

Chairman: F. Amberg (ITA); Vice Chairman: D. Lacroix (PIARC); Tutor: C. Bérenguier (ITA)
No meeting in Agra.

ITA-CET – Committee on Education and Training

Chairman: A. Assis; Vice Chairman: D. Peila; Tutor: C. Bérenguier

ITA-CET held its inaugural seminar at the Politecnico di Torino, Italy, on 20 May 2008, which was attended by 32 representatives of Education and Training Institutions coming from 15 different countries from all continents. The concept of the Committee was unanimously accepted. In Agra, on the occasion of the ITA WTC 2008, the Committee met for analyzing administrative, organization and membership matters, training products and future actions. The next technical meeting was set to Frankfurt, on 05 December 2008. Presently, ITA-CET has 20 members, from 14 different countries.

ITACUS – Committee on Underground Space

Chairman: Han Admiraal; Vice Chairman: Ray Sterling (Member of ACUUS); Tutor: Harvey Parker (ExCo)

Members of the Steering Board of the ITA Committee on Underground Space – ITACUS, met in Agra on September 21 and 22, 2008 on the occasion of the World Tunnel Congress. This meeting was held in advance of a formal meeting of the Steering Board scheduled for October 9 and 10, 2008 in Monaco on the occasion of a conference organized by the French Association for Tunnelling and Underground Space (AFTES). During the previous meeting of the Steering Board in Sao Paolo on June 27 and 28, 2008, the programme for the committee was finalised and approved by the Steering Board. This work programme was presented to and approved by the ITA General Assembly 2008 in Agra, India and thus provided the formal approval for ITACUS to continue its activities in promoting the consideration of underground space use and effecting planning of this resource around the world. The Steering Board of ITACUS will continue making contact with other international organisations, especially in the field of Regional and Urban Planning. One of the short term objectives of ITACUS being to seek first contact with these organisations, to develop further relations, so as to create awareness of what the use of underground space has to offer. ITACUS sees it as part of its mission to create a worldwide dialogue on the use of underground space. ITACUS calls on any organisation or institution which has an interest in the use of underground space, to register its interest by contacting the ITA secretariat. Committee membership is open to organisations and institutions and particularly the participation is sought of City Government representatives.

WG2: "Research"

Animateur: E. Leca (France); Vice-Animateur: Chung Sik Yoo (Korea); Tutor: S. Eskesen (Denmark)

The meetings were attended by 9 participants representing 7 member countries. WG2 is currently working on the preparation of two reference documents which relate to the “Strategy for Site Investigations of Tunnelling Projects” and “Monitoring and Control of Underground Works”. The draft recommendations were reviewed during the Agra meeting. It is expected that a final draft of the former document will be produced for the Budapest meeting in mid-2009, and that a revised draft of the latter document be available for review at that meeting. The Group has also been initiating a new set of actions in the area of “Risk Management”, with the aim of contributing to the dissemination of the risk management approach in practice. During the past year, a consolidated training document has been prepared, based on the 2004 “Guidelines for Tunnelling Practices” issued by WG2, and the preparation of a new reference manual has been started. This document should complement the 2004 publication to cover all stages of the risk management approach, and include a review of case histories where risk management has been successfully used. A first draft of the document is expected to be prepared by the end of 2009. Areas of future activities for WG2 have also been discussed during the Agra meeting. These should include a joint initiative to be conducted with the ISRM on site investigations for rock tunnels.

WG3: "Contractual Practices in Underground Construction"

Animateur: A. Dix (Australia); Vice Animateur: M. Smith (United Kingdom); Tutor: M. Knights (United Kingdom)

Following interesting discussions on various projects and contractual issues arising, Working Group 3 embarked on the preparation of a checklist for all parties as a guidance for the objective assessment of underground tunnelling contracts. The goal is to have the document finalised by the next meeting in Budapest. It is anticipated that this document will form the basis of an ongoing and dynamic basis upon which contractual matters will be assessed by the ITA.

WG5: "Health & Safety in Works"

Animateur: D. Lamont (United Kingdom); Vice Animateur: M. Vogel (Switzerland); Tutor: V. Umnov (Russia)

Working Group 5 met twice during the ITA General Assembly in Agra. Thirteen Member Nations participated in a lively and productive meeting. Members agreed to update and extend “Safety in Tunnelling” booklet. This booklet continues to be available in a various languages, Hindi being the most recent, and WG5 agreed to persuade future WTC host nations to produce a translation of the booklet in their language. The revised “Guidelines for good occupational health and safety practice in tunnel construction” should appear as the first document in the ITA Report series this year. Good progress on WG5’s draft guidelines on ventilation ducting in tunnels was reported.

WG6: "Maintenance and Repair of Tunnels"

Animateur: H. Russell (USA); Vice Animateur: R. van den Bosch (The Netherlands); Tutor: W. Liu (China)

Working Group 6 Repair and Maintenance of Underground Structures, met on September 21, 2008 with representatives from 7 member nations and discussed the progress on our new document Structural fire protection for metro systems which the Working group plans to present to the Assembly in Bucharest in 2009. In addition presentations were made on fire protection for the Gotthard Base Tunnel in Switzerland and recent emergency repair work on the Boston Subway in the USA.

WG11: "Immersed & Floating Tunnels"

Animateur: Ch. Ingerslev (USA); Vice Animateur: J. Baber (United Kingdom); Tutor: Y. Leblais (France)

The Working Group 11 met twice with 8 participants from 6 countries. Information was exchanged on projects and developments around the world, and group activities between now and the next ITA Annual Congress were organized as follows:

- The catalogue of immersed tunnels will have 14 new pages added after review and at least nine others prepared for review.
- The catalogue of utility tunnels will be uploaded to the web site.
- An owner's guide is being prepared. At least 8 sections will be placed on the web site after review. Drafting of the remaining 11 sections will be started.
- A special ITA working paper on dredging will be prepared.

WG12: "Shotcrete Use"

Animateur: T. Celestino (Brazil); Vice Animateur: A. Ishida (Japan); Tutor: E. Grov (Norway)

The ITA Working Group gathered 17 members from 11 Nations. Major decisions were: preparation of an illustrated version of the recently released State of the Art Report; preparation of new specifications for the testing program on the evaluation of fibres for shotcrete reinforcement; releasing the information on fire protection sprayable mortars on the ITA web page; continuation of interaction with EFNARC with respect to nozzleman certification; and a new task on shotcrete curing and durability.

WG14: "Mechanization of Excavation"

Animateur: L. Babendererde (Germany); Vice Animateur: F. Amberg (Switzerland); Tutor: K. Fukumoto (Japan)

In order to promote mechanised tunnelling within the industry the WG14 wants to be a prime source for information on the current level of Tunnel Boring Machine technology. Within the next 7 months it is anticipated to have the WG Web Site running with information on the advantages of mechanised tunnelling in soft ground and in hard rock together with a selection of challenging projects. Country representatives will be asked to submit projects for this list.

WG15: "Underground Works and the Environment"

Animateur: J. K. G. Rohde (Norway); Vice Animateur: J. Y. Kaneshiro (USA); Tutor: I.-M. Lee (Korea)

The Working Group meetings gathered 7 representatives from 7 Member Nations. The meeting reviewed the final draft report on Environmental and Sustainable Reasons for going Underground which will be ready for issue in near future. The meeting had 5 presentations; one on the topic of asbestos fibres and drainage of natural springs, the second on ventilation structures, drainage and tunnel muck, the third on various environmental aspects as waste storage, drainages and environmental challenges during construction, optimum subway station configuration to minimise environmental impacts, and different attitudes as it relates to tolerable limits for noise, vibrations etc. impacts in various countries. The overall goals for the group as they relate to environmental and social impacts are to communicate the 1) advantages and opportunities by going underground, 2) challenges by going underground and 3) recommendations and guidelines when going underground

WG17: "Long Tunnels at Great Depth"

Animateur: G. Seingre (Switzerland); Vice Animateur: M Shimokawachi (Japan); Tutor: P. Grasso (Italy)

The 9th meeting in Agra was attended by 7 members from 6 countries. The WG meeting was dedicated to the final lecture of the updated WG report. Two new chapters have been had to first version of the report: special conditions for hydraulic tunnels and special conditions for subsea tunnels.

WG19: "Conventional Tunnelling"

Animateur: H. Ehrbar (Switzerland); Vice Animateur: R. Galler (Austria); Tutor: F. Vuilleumier (Switzerland)

The meetings gathered 14 delegates representing 13 nations, on the elaboration of guidelines on contractual practices in conventional tunnelling were discussing. The ITA WG 19 Report on conventional tunnelling, which will be published soon shows the flexibility of this method. Owners and contractors can only profit of this flexibility if the contracts allow it. It's the aim of the working group to give guidelines on the main aspects which have to be considered in contracts for conventional tunnelling to realise the high flexibility of the method. During the meetings at Agra the Working Group started this new work with presentations of different national solutions and the definition of the content of the new paper. The discussion should be continued during the next World Tunnel Congress at Budapest.

WG20: "Urban Problems, Underground Solutions"

New Animateur: Amanda Elioff (USA); New Vice Animateur: Wout Broere (Netherlands) Vice Animateur: J. Nishi (ACUUS); Tutor: H. Parker (USA)

There were 14 attendees from 9 countries. The group has made more progress towards its objective of creating an overview of the typical challenges of urban city planning and the solutions which are offered by the underground space. The second full draft of the report on urban problems, underground solutions, and key decision factors was reviewed by the group. The second focus was a review of the case study projects about ingenious underground solutions worldwide. We have 13 completed case studies and another 12 case studies in progress.