



*Towards an
improved use
of underground
Space*

*In Consultative Status, Category II with the
United Nations Economic and Social Council
<http://www.ita-aites.org>*

Thirty-Third Annual Meeting – Prague 2007

Press Release

The International Tunnelling Association held its thirty-third meeting in Prague from 5 to 10 May, in conjunction with the World Tunnel Congress 2007 "Underground Space – The 4th Dimension of Metropolises" organised by ITA and the Czech Tunnelling Committee (CTuC). 1 200 persons participated to the Congress and ITA meetings were attended by representatives, delegates, observers and working group members from 43 of the 52 Member Nations of the Association.

MEMBER NATIONS REPRESENTED

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

MEMBER NATIONS NOT REPRESENTED

Algeria, Saudi Arabia, Chile, Indonesia, Iran, Lesotho, Morocco, Venezuela, Vietnam.

NEW EXECUTIVE COUNCIL

Members

M. Knights	United Kingdom	President	Until 2010
A. M. Muir Wood	United Kingdom	Honorary 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
W. Liu	China		Until 2008
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
G. N. Mathur	India	WTC 2008	Until 2008
F. Vuilleumier	Switzerland	Treasurer	Until 2010
C. Bérenguier		Secretary General	Until 2008

Experts

S. Calinescu	Romania	Internal Auditor	Until 2008
Pal Kocsonya	Hungary	WTC 2009	Until 2009

MEMBERSHIP

The Association has registered the membership of 19 new Affiliate Members (13 Corporate Members and 6 Individual Members); the total results to 52 Member Nations and 280 Affiliate Members (140 Corporate Members and 140 Individual Members) taking into account some resignations.

MAIN DECISIONS

- **The Association has a new name**
The General Assembly has decided as part of its strategy to change the name of the association as follows: **"International Tunnelling and Underground Space Association" / "Association Internationale des Tunnels et de l'Espace Souterrain"**
- **The General Assembly has approved the strategy 2007 plan**, including actions of communication, education and training as well as the consolidation of the administrative structure
- **Creation of two new committees**
 - Committee on Education and Training (CET): Chairman : A. Assis
 - Committee "Underground Space" (CUS)

COMMUNICATION

- **Tribune:** In 2007, the annual issue with focus on Czech Republic including the reports of 29 Member Nations, as well as the abstracts of the papers of the open session and a report of ĪTA Prime sponsors and supporters has been published and distributed at the occasion of the General Assembly.
- **ita@news:** In 2006 / 2007, 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 3,400 addresses and to the Member Nations and Affiliate Members.
- **Tunnelling and Underground Space Technology (TUST):** In 2006 (Volume 21), six issues of TUST were published, representing 700 pages. Issue 21, 3-4 is a double issue (print abstracts with full text on CD and in ScienceDirect) contains the 203 papers from the WTC Congress in Seoul.
- **Website:** The web site contains around 1 000 html pages and 875 pdf documents representing around 10,000 printable pages. The number of distinct visits is now around 25,000 per month, representing 500,000 hits per month. A new tool enabling WGs to better communicate has been implemented: mailing list for WG members and a ftp tool for exchanging large files. The new part "Underground structures worldwide" is under developing and a specific home page has been designed.

ITA OPEN SESSION ON "NEW FINANCING TRENDS AND CONSEQUENCES ON TUNNELLING CONTRACTS"

Introduced by Yann Leblais and coordinated by Y. Leblais and F. Vuilleumier

Presentations were made by : H. Marty-Gauquié of the European Investment Bank on "The European Perspective"; V. Piron of Vinci on "Why to invest in concession business ?"; M. Holfelder and A. Speer of Bilfinger-Berger on " New Financing Trends / Change in the economical approach from the Investor's and Tunnel-Contractor's point of view "; Y. Leblais on "PPP for tunnels – Perspectives for engineering firms?"; A. Dix Animateur of ITA WG3 on "Contractual Practices in Underground Construction: New Financing Trends and Consequences on the Tunnelling Contracts"; H. P. Wannick of Munich Reinsurance Company on "Insurance Cover as Part of the General Risk Management Strategy"; E. Šíp, Deputy Minister, Ministry of Transport of the Czech Republic, on "PPP Potential in the Czech Infrastructural Transportation Projects"

The session presented a comprehensive overview of the PPPs (Private Public Partnership) covering the whole chain of stakeholders: Institutional, Investor, Private Investor, Contractor, Engineering sector, Lawyer, Insurer and Owner. The session highlighted the long term involvement required from the stakeholders, the need of a strong management of the interfaces, a fair risk sharing and cover and, last but not least, a very strong investment in the design from the early bidding phase as it has to deliver successful answers for both construction and maintenance during long term operations. Finally, the session highlighted the large business opportunities.

TRAINING COURSE "TUNNELLING IN URBAN AREAS" May 3 and 4, 2007

Coordinated by D. Peila, Animator of ITA/AITES WG18 "Training", F. Gruebl, member of ITA/AITES Executive Council and J. Barták, Chairman of the scientific council of the ITA/AITES World Tunnelling Congress 2007.

125 participants, 38 of them not from Czech Republic, attended to the training course. Reports were presented by 21 lecturers from 14 countries, 5 of them ITA Prime Sponsor, and 13 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 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

- Agra, India, from 20 to 25 September, 2008, during the ITA-AITES WTC 2008 "Underground Facilities for Better Environment and Safety"
- Budapest, Hungary, from 23 to 28 May, 2009; during the ITA-AITES WTC 2009 "Safe Tunnelling for the City and Environment"
- Vancouver, Canada, from 5 to 10 May, 2010, during the ITA-AITES WTC 2010

WORKING GROUPS AND COMMITTEES

ITA Committee on Operational Safety of underground Facilities (COSUF)

Chairman: F. Amberg (ITA); Vice Chairman: D. Lacroix (PIARC); Tutor: C. Berenguer (ITA)

ITA-COSUF, founded at the occasion of the 31st General Assembly of ITA in Istanbul 2005, took a satisfying development during the last 12 months. In May 2006 the Committee celebrated in Lausanne (CH) its official inauguration with an audience of some 160 participants. Later in October 2006 a COSUF workshop was conducted in cooperation with the Polish National Tunnelling Committee and the Polish Main School of Fire Service. In addition, ITA-COSUF participated in different other international workshops and conferences organized by ITA: early October in London (sponsored by BASF), in November in Sharm-El-Sheikh, Egypt, as well as in Riyadh, Saudi Arabia.

On May 10, 2007, in context with the WTC 2007 and the 33rd ITA General Assembly in Prague the first ITA-COSUF workshop "New Aspects in Tunnel Safety" and the ITA-COSUF General Assembly 2007 were held in the Prague Congress Center. In addition, ITA-COSUF will fully participate to the usual events organized by ITA in the field of expertises. The number of corporate members has been raised to 50.

WG2: "Research"

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

The meetings were attended by 20 participants representing 13 member countries: Austria, China, Korea, Denmark, Spain, France, Italy, Netherlands, United Kingdom, United States, Sweden, Czech Republic, and Turkey. The recommendation on "Settlements induced by Tunnelling in Soft Grounds" was published earlier this year in the Tunnelling and Underground Space Technology journal, and training material prepared as part of the ITA's effort to disseminate the productions of the Working Groups. This material was used for the first time during the pre-conference training course in Prague. Two other documents are being developed, on the "Strategy of Site Investigations" and "Monitoring and Control of Underground Works". The draft recommendations were reviewed during the Prague meeting and are expected to be completed in the coming year. Several actions are also underway in the area of "Risk Management", with the participation of the Animateur in the ITA's dedicated task force, the preparation of training material to facilitate the dissemination of risk management practices, and the development of a new manual that would serve as a reference for future ITA "Risk Management" related productions. This document will complement the 2004 "Guidelines for Tunnelling Practices" issued by WG2 to cover all stages of the risk management approach, and include a review of case histories where risk management has been successfully used.

WG3: "Contractual Practices in Underground Construction"

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

The Group has identified the urgent need for a contractual practices ITA position paper on the fundamental importance of taking due regard for subsurface conditions in all manner of modern contracts. This document will be the first in a series of ITA contractual pronouncements addressing the most serious issues in underground construction and the appropriate responses contractually.

WG5: "Health & Safety in Works"

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

The Group met twice during the ITA General Assembly in Prague. Nine Member Nations participated in the meeting. Members were pleased to note that the "Safety in Tunnelling" booklet is now available in seven languages, the most recent translations being into Norwegian and Portuguese respectively. The revision of the "Guidelines for good occupational health and safety practice in tunnel construction" was completed in Prague. Two new work items were begun. One will gather information on tunnelling in contaminated ground and the other will address requirements for flexible ventilation ducts in tunnels under construction.

WG6: "Maintenance and Repair of Tunnels"

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

The Group met for two days in Prague the Czech Republic with Attendees for 14 Member nations, for the purpose of finalizing a draft of Guidelines for Fire Resistance for Metro tunnels. The Working Group anticipated the document will be ready for Final review later this year. The Working Group has posted on the ITA website this year The Study for Repair of Tunnel Linings, which is a compendium of repair methods for tunnel liners.

WG11: "Immersed & Floating Tunnels"

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

The Working Group met on Sunday 6th May 2007. The meeting was attended by 17 participants from eleven countries, namely Australia, Canada, Czech Republic, Denmark, France, The Netherlands, Norway, Sweden, Turkey, United Kingdom and United States. A second meeting was held the following day with 19 participants including Finland, Germany and Italy. Information was exchanged on projects and developments around the world, and group activities over the next 12 months were organized: data for a searchable database is to be uploaded initially as technical papers.

WG12: "Shotcrete Use"

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

A total of 21 participants from 13 countries attended the meeting. Decisions were made with respect to preparation of a guideline for nozzleman certification in cooperation with EFNARC; for the fiber-reinforced shotcrete tests, early-age

properties will be obtained; interaction with other organizations which regularly release information related to shotcrete will be improved.

WG14: "Mechanization of Excavation"

New Animateur: L. Babendererde (Germany); Vice Animateur: F. Amberg (Switzerland); Tutor: K. Fukumoto (Japan)
.Information of standards and manuals in mechanized tunnelling is now listed on the ITA webpage, together with a continuously updated data base of challenging mechanized tunnelling projects, which shows the latest state of the art in TBM tunnelling. Three items were identified, relevant subgroups created, leaders elected and actions to be taken defined: On risk management and insurances of TBM tunnelling, on training courses and on demonstration of benefits of mechanized tunnelling. The training courses will be held at universities selected through ITA in nominated nations and a sponsorship scheme will be put in place.

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 were attended by 8 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 (May 2007). The meeting had 6 presentations; one on the topic of ground vibrations from railway tunnels, one on air quality, tunnel ventilation and ventilation towers, the topic of tunnel spoil, extension of a metro tunnel and disposal and different environmental aspects, benefits and challenges by using the underground space. By the end of the meeting there were a discussion of different topics related to underground use and the environment and also future works of the group. A list of different aspects on ground vibrations from underground facilities, aspects related to air, water and excavated materials will be prepared by the end of June this year. These will be communicated among the members by e-mail. The long term goal of the group is to prepare guidelines and recommendations on environmental aspects related to underground facilities.

WG16: "Quality"

Animateur: C. Oggeri (Italy); Vice Animateur: Alex Sagy (Israel)
The activity of the group has come to a conclusive phase of its activity during this session, with the preparation of a technical addendum to the already published general report. The main recommendation that arises from the work done is the need for a strict connection with Risk management and all the aspects that allow for a control of all the phases of a tunnel project, mainly those which are conditioned by great uncertainties.

WG17: "Long Tunnels at Great Depth"

Animateur: G. Seingre (Switzerland); Vice Animateur: M Shimokawachi (Japan); Tutor: P. Grasso (Italy)
The meeting was attended by nineteen members from twelve different countries: Canada, China, France, India, Italy, Korea, Norway, Slovakia, Slovenia, Sweden, Switzerland and United Kingdom.
The meeting focused on 2 aspects: - Presentation of relevant case histories of the new alpine base tunnels and Himalayan hydraulic galleries; - The Group's next report on long hydraulic tunnels at great depth.

WG18: "Training"

Animateur: D. Peila (Italy); Vice Animateur: H. Admiraal (The Netherlands); Tutor: M. Thewes (Germany)
The meeting was attended by 9 members coming from Brasil, Czech Republic, France, Italy, Germany, Rumania, Sweden, Finland, and The Netherlands. The work carried out after Seoul meeting was discussed and the existing Post Graduate Master Courses, endorsed by ITA, were illustrated. A wide discussion on the proposed Committee on Education and the relationships with the WG activities was held and the WG decided to support the idea of this Committee, if the General Assembly approves it, provided that both the Committee and the Working Group jointly develop a framework of cooperation. The Members have also decided the strategy on how to provide with new material the Training page on ITA website. The discussion was held on the development of future activities members were charged with preparing proposal outlines for the next meeting.

WG19: "Conventional Tunnelling"

Animateur: H. Ehrbar (Switzerland); Vice Animateur: R. Galler (Austria); Tutor: F. Vuilleumier (Switzerland)
During the WG meeting, it could be noted that the work of the last few years, the general report on conventional tunnelling can be published after the final approval by ITA's Executive Council within a few weeks.
26 delegates representing 16 nations were discussing on the two new projects of the working group: the elaboration of a guideline on monitoring in conventional tunnelling and the elaboration of a report on special aspects in construction contracts in conventional tunnelling.

WG20: "Urban Problems, Underground Solutions"

Animateur: M. Thewes (Germany); Vice Animateurs: G. Arends (Netherlands) and J. Nishi (ACUUS); Tutor: H. Parker (USA)
In the Group there were 18 attendees from 12 countries. The group has made good 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 first product of the working group, a 33 page draft report on urban problems, underground solutions, and key decision factors was approved for further finalisation. Projects for unique case histories to be appended to the report were chosen.