# General Assemblies

## 2006 General Assembly

### Closing Presentation by A. Assis

Download the Presentation

## Thirty-Second Annual Meeting – Seoul 2006

The International Tunnelling Association held its thirty-second meeting in Seoul from 22 to 27 April, in conjunction with the World Tunnel Congress 2006 "Safety in the Underground Space" organised by ITA and the Korean Tunnelling Association (KTA). The meetings were attended by representatives, delegates, observers and working group members from 35 of the 53 Member Nations of the Association.

### MEMBER NATIONS REPRESENTED

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

### MEMBER NATIONS NOT REPRESENTED

Algeria, Saudi Arabia, Bulgaria, Chile, Colombia, Croatia, Indonesia, Iran, Iceland, Lesotho, Malaysia, Morocco, Mexico, New Zealand, Slovenia, Ukrainia, Venezuela, Vietnam.

### NEW EXECUTIVE COUNCIL

**Members**

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<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Title</th>
<th>Duration</th>
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</thead>
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<tr>
<td>H. Parker</td>
<td>USA</td>
<td>President</td>
<td>Until 2007</td>
</tr>
<tr>
<td>A. M. Muir Wood</td>
<td>United Kingdom</td>
<td>Honorary President</td>
<td></td>
</tr>
<tr>
<td>A. Assis</td>
<td>Brazil</td>
<td>Past President</td>
<td>Until 2007</td>
</tr>
<tr>
<td>K. Ono</td>
<td>Japan</td>
<td>First Vice President</td>
<td>Until 2007</td>
</tr>
<tr>
<td>M. Knights</td>
<td>United Kingdom</td>
<td>Vice President</td>
<td>Until 2007</td>
</tr>
<tr>
<td>H. Wagner</td>
<td>Austria</td>
<td>Vice President</td>
<td>Until 2007</td>
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<tr>
<td>Y. Erdem</td>
<td>Turkey</td>
<td>Vice President</td>
<td>Until 2007</td>
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<td>M. Belenkiy</td>
<td>Russia</td>
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<td>E. Grov</td>
<td>Norway</td>
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<td>F. Gruebl</td>
<td>Germany</td>
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<tr>
<td>Y. Leblais</td>
<td>France</td>
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<td>Until 2007</td>
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</tbody>
</table>
P. Grasso Italy Until 2008
W. Liu China Until 2008
I. Hrdina Czech Republic Until 2007
F. Vuilleumier Switzerland Treasurer Until 2007
C. Berenguier Secretary General Until 2008

Experts

S. Calinescu Romania Internal Auditor Until 2006
G. N. Mathur India WTC 2008 Until 2008

MEMBERSHIP

The Association has registered the membership of 17 new Affiliate Members (10 Corporate Members and 7 Individual Members); the total results to 53 Member Nations and 267 Affiliate Members (131 Corporate Members and 136 Individual Members) taking into account resignations.

COMMUNICATION

Tribune:

In 2006, the annual issue with focus on Korea included the reports of 32 Member Nations, as well as the abstracts of the papers of the open session; a report of ITA Prime sponsors and supporters has been published and distributed at the occasion of the General Assembly.

ita@news:

In 2005 / 2006, six issues of the ita(at)news have been sent. The ita(at)news contents news from the association, the WGs, the Member Nations, the forthcoming events, the sister associations,… The ita(at)news is sent to 2,200 addresses and to the Member Nations and Affiliate Members.

Tunnelling and Underground Space Technology (TUST):

In 2005 (Volume 20), six issues of TUST were published. Altogether, there were 59 articles with contributing authors from 23 countries. Issue 20/6 included eight papers from the WTC Istanbul Open Sessions. At least six issues will be published in 2006 (Volume 21), including one double issue (21/3-4: print abstracts with full text on CD and in ScienceDirect of 200 papers from the WTC Congress in Seoul – distributed to delegates at the congress). The special issue on Trenchless Technology will appear in 2007.

Website:

The web site contains more than 500 html pages and 400 pdf documents representing around 5,000 printable pages. The number of distinct visits is now around 17,000 per month, representing 400,000 hits per month. New pages have been added such as papers and presentations of the training course, workshops in Istanbul and Sao Paulo, @news and ITA Open Session in Istanbul. The backend structure to enable to edit pages, especially from Member Nations, is now operational.

ITA OPEN SESSION ON RISK MANAGEMENT OF TUNNEL
PROJECTS

The Open Session on Risk Management of Tunnel Projects, held on the 25th April, heard three speakers from the ITA Working Groups, a speaker from the Korean Tunnelling Industry and finally a speaker from the International Insurance Industry.

There was a good debate and exchange of ideas on proactive management of risk. It is hoped the Open Session will promote a safer environment, better quality and reduced incidents in the tunnelling industry.

TRAINING COURSE

The second Training Course for young professionals and students has been organized under the hospices of the ITA, KTA and FIDIC-KAIST-KENSA training Center and chaired by H. Parker, ITA President, and Sung-Wan Hong, KTA President. The course covered the most important aspects related with tunnel construction and relevant tunnel examples were presented and discussed. The course had a length of 2 days, 8 hours of lesson a day and it was attended by 130 students and young professionals coming from seven countries, especially from Korea (112). The didactic material developed by the various teachers will feed the section Training of ITA web site.

TASK FORCE ON TUNNEL SECURITY

An Ad Hoc Meeting on the subject of tunnel Security was held on Tuesday April 25, 2006. Twenty two persons from 16 countries participated in the meeting. The participants were informed of the general nature of the 3 previous annual meetings. Harvey Parker gave a power point presentation on the results of work that is being done in the USA for future implementation by ITA. The group discussed the importance of action by ITA and the confliction difficulty and sensitivity of the subject. The group agreed ITA should continue to work on this subject. They also agreed to work closely with COSUF. Finally, Arnold Dix agreed to gather a list of relevant events for future use by ITA.

ITA TASK FORCE ON UNDERGROUND WORLDWIDE CONSTRUCTION

The Underground Structures Worldwide (UWW) is a part of the ITA Website denoted to provide information to the general public, including decision makers, young professionals, students, etc. The information is divided into three main categories : why and how go underground and types and purposes of underground structures. Also information is provided on safety, case-histories, statistics and future projects.

NEXT ANNUAL MEETINGS

- **Prague, Czech Republic, from 5 to 10 May, 2007**, during the ITA-AITES WTC 2007 "Underground Space-The 4th dimension of Metropolises".
- **New Dehli, India, from 22 to 27 September, 2008**, during the ITA-AITES WTC 2008 "Underground Facilities for Better Environment and Safety"

WORKING GROUPS

ITA Committee on Operational Safety of underground Facilities (COSUF)
COSUF was installed by ITA General Assembly 2005 in Istanbul. It is based on the potential of eight European Research Projects launched during the last five years in the field of safety in traffic tunnels. An inaugural symposium inviting all interested worldwide will be held on 30/31 May 2006 in Lausanne, Switzerland.

**WG2: "Research"**

*Animateur: E. Leca (France); Vice Animateur: Y. Takano (Japan); Tutor: H. Wagner (Austria)*

The meetings were attended by 16 participants representing 12 member countries: Austria, China, Korea, Denmark, Spain, France, Italy, Netherlands, United Kingdom, United States, Singapore, Czech Republic. The recommendation on “Settlements induced by Tunnelling” has been finalized and is now ready for publication. Two other documents are being developed, on the “Strategy of Site Investigations” and “Monitoring and Control of Underground Works”. A review of both draft recommendations was completed during the Seoul meetings, and a new action plan agreed for the coming year with the view of having the documents finalized for the 2007 Prague meeting. The group also identified “Risk Management” as a key area for future developments. This program would include actions aimed at facilitating the dissemination of risk management practices, review of case histories, as well as an update of the 2004 “Guidelines for Tunnelling Practices” issued by WG2 in 2004.

**WG3: "Contractual Practices in Underground Construction"**

*Animateur: A. Dix (Australia); Vice Animateur: M. Smith (Switzerland); Tutor: Y. Erdem (Turkey)*

WG3 has completed the review and characterisation of all prior ITA contractual propositions. In order to provide guidance for contracting in the future it is proposed that WGs mission is to provide a unified framework that can be applied internationally on all underground projects which articulates the special issues to be considered when contracting and provides guidance on where more specific information can be obtained.

**WG5: "Health & Safety in Works"**

*Animateur: D. Lamont (United Kingdom); Vice Animateur: W. Chromy (Germany); Tutor: M. Belenkiy (Russia)*

Nine Member Nations participated in the meeting. In addition to the versions of the “Safety in Tunnelling” booklet which have already been printed in Germany, Switzerland and Austria, it has now been translated into Arabic, Russian and Czech/Slovak. The revision of the “Guidelines for good occupational health and safety practice in tunnelling” had not progressed as quickly as intended and it was now hoped to have this document completed prior to the 2007 meeting.

A proposal to develop a guidance document on “Rescue containers/blast shelters” was endorsed.

**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 Seoul Korea, with attendees from 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 review later this year.
WG11: "Immersed & Floating Tunnels"

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

A first meeting was attended by 12 participants from nine countries, namely Denmark, Finland, France, Japan, Netherlands, Norway, Sweden, United Kingdom and United States. A second meeting was held with 14 participants including China. Information was exchanged on new projects and developments around the world, and group activities over the next 12 months were organized: a searchable database is to be prepared.

WG12: "Shotcrete Use"

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

Three tasks are about to be completed. (1) The State of the Art Report, (2) Information on sprayable mortars for fire protection, (3) Compilation of standards on nozzlemen certification. The task on the evaluation on fiber reinforced shotcrete is underway with test being carried out at Hagerbach test gallery (Switzerland). Three new tasks are established. (1) Construction accidents related to shotcrete, (2) Suggested method for shotcrete panel test preparation, (3) Fire protection for shotcrete.

WG14: "Mechanization of Excavation"

Animateur: K. Fukumoto (Japan); Vice Animateur: F. Amberg (Switzerland); Tutor: K. Ono (Japan)

The status of previous reports was checked. Out of the mission of WG 14 the leaflets for demonstrating the current status in mechanized tunnelling have been approved and will be sent to the representatives of the member nations in order to be filled out. Additionally three topics have been chosen on which the WG will work: Training courses and education for young engineers, high-lightening the benefits of the mechanized tunnelling and risk management and insurances.

WG15: "Underground Works and the Environment"

Animateur: J. K. G. Rohde (Norway); Vice Animateur: J. Y. Kaneshiro (USA); Tutor: H. Parker (USA)

The Working Group meetings were attended by 8 representatives from 6 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 2006). The meeting had three presentations; one project with conflict with the public due to ventilation towers, one project from UN ranging underground facilities in urban areas and one presentation on planning of the environmental impact assessments and risks of a tunnel project. The working group agreed on a working structure for the coming period with focus on the external environment during construction and operation of underground facilities.

WG16: "Quality"

Animateur: C. Oggeri (Italy); Vice Animateur: Alex Sagy (Israel); Tutor: M. Knights (UK)

The group met twice and 7 (seven) participants, plus the Tutor M. Knights (UK), were registered, from Korea, Israel, Japan, Norway and Italy.
The group has received the invitation coming from the Executive Council to define the new directions for its activity and it has proposed to define, in the next year, the interactions of the various tunnelling stages and the methods for a better evaluation of the efficiency of the project.

A didactical example will be also provided. The PPT presentation for the ITA AITES website is also ready.

**WG17: "Long Tunnels at Great Depth"

*New Animateur: G. Seingre (Switzerland); Vice Animateur: M Shimokawachi (Japan); Tutor: F. Vuilleumier (Switzerland)*

The meeting was attended by 13 members from 7 different countries: China, France, Italy, Japan, Korea, Sweden and Switzerland. The meeting focused on two aspects: presentation of relevant case histories of the new alpine base tunnel, and comments of outline of the Group’s next report on long hydraulic tunnel at great depth. The working group elected Gérard SEINGRE of Switzerland as new animator.

**WG18: "Training"

*Animateur: D. Peila (Italy); New Vice Animateur: H. Admiraal (The Netherlands); Tutor: F. Gruebl (Germany)*

The meeting was attended by 7 members coming from France, Italy, Japan, Germany, The Netherlands, Romania and USA. The work carried out after Istanbul meeting and the organisation of the second edition of the Post-Graduate Master Course endorsed by ITA were discussed and analysed. France delegate presented again a didactic tool for teaching purposes which is now available on the web and the WG members agree that this product is a valuable tool for teaching purposes and recommend a diffusion of it through ITA web site. A web link will be set in the WG Training page. The list of professors involved in tunnelling teaching was started and implemented.

A wide discussion on the standard list of subjects which should be provided by Universities for a good preparation of a tunnelling engineer was developed and a final document was prepared and will be circulated and put on the ITA web site. A new vice-animateur was elected by the members of the group: H. Admiraal form The Netherlands.

**WG19: "Conventional Tunnelling"

*Animateur: H. Ehrbar (Switzerland); Vice Animateur: R. Galler (Austria); Tutor: A. Assis (Brazil)*

During the ITA World Tunnel Congress 2006 at Seoul the Group had one meeting. 16 delegates representing 13 nations were discussing the final draft of the Working Group Report on conventional tunnelling. The Working Group report shall show the main subjects of conventional tunnelling to engineers who are not specialists in conventional tunnelling and to decision makers in client’s organizations.

After an interesting discussion the final draft has been approved for publication with some minor changes. For the next World Tunnel Congress the items “construction contract” and “monitoring” will be the main topics to be discussed, with the aim to prepare two separate, more detailed reports.

**WG20: "Urban Problems, Underground Solutions"

*New Animateur: M. Thewes (Germany); New Vice Animateurs: G. Arends (Netherlands) and J. Nishi (ACUUS); Tutor: H. Parker (USA)*
In the Working Group there were 10 attendees from 9 countries. A new animator and vice-animator were elected. The group worked intensely in pursuit of its objective of creating an overview of the typical challenges of urban city planning and the sustainable solutions which are offered by the underground space. The structure of the first product of this working group, a comprehensive report on urban problems, underground solutions, key decision factors and unique case histories, was discussed and agreed upon. Work towards a draft version of this report will continue.