

**ASSOCIATION INTERNATIONALE DES TUNNELS
ET DE L'ESPACE SOUTERRAIN**

**INTERNATIONAL TUNNELLING AND
UNDERGROUND SPACE ASSOCIATION**

Compte Rendu de la 36^{ème} Assemblée Générale

VANCOUVER

16 – 19 mai 2010

Report of the 36th General Assembly

VANCOUVER

16 – 19 May 2010

The 36th meeting of the General Assembly of the Member Nations of ITA was held in Vancouver on 16 and 19 May 2010 under the presidency of Martin Knights (UK), assisted by the Executive Council Members (see encl. 1).

VOTING REPRESENTATIVES

South Africa	Antony Boniface
Algeria	--
Germany	Roland Leucker
Saudi Arabia	--
Argentina	Nicolas Posse
Australia	Simon Knight
Austria	Robert Galler
Belgium	Willy De Lathauwer
Bosnia-Herzegovina	-- (represented by France)
Brazil	Tarcisio B. Celestino
Bulgaria	-- (vote by correspondence)
Canada	Rick Staples
Chile	--
China	Yan Jinxin (on Sunday) and Guo Shanyun (on Wednesday)
Colombia	Andres Marulanda
South Korea	Jun S. Lee
Croatia	Davorin Kolic
Denmark	Jørgen Holst
Egypt	Ashraf Kresha
Spain	Miguel Fernández Bollo
United States of America	Brenda M. Bohlke
Finland	Ilkka Vähäaho
France	Alain Balan
Greece	George Dounias
Hungary	Zsolt Balogh
India	R. K. Khali (on Wednesday)
Indonesia	Mr. Rachmadi
Iran	Morteza Gharouni Nik
Iceland	-- (vote by correspondence)
Israel	--
Italy	Cesare Salvadori
Japan	Nobuhiko Sato
Kazakhstan	--
Lao PDR	-- (represented by Thailand)
Lesotho	--
Malaysia	Teik Aun Ooi
Morocco	--
Mexico	Roberto Malvido Arriaga (Sunday); Roberto González Izquierdo (Wednesday)
Montenegro	-- (represented by Croatia)
Norway	Thor Skjeggedal
Netherlands	Jan Jonker
Peru	Luis Velasquez
Poland	Anna Sieminska-Lewandowska I
Portugal	António Pinto de Cunha
Romania	Sorin Calinescu
United Kingdom	Donald Lamont
Russia	Mikhail Belenkiy
Singapore	Chun Nam Ow
Slovakia	Robert Turansky
Slovenia	-- (represented by Belgium)
Sweden	Örjan Wolff
Switzerland	Felix Amberg
Czech Republic	Martin Srb
Thailand	Suchatvee Suwansawat
Turkey	Yücel Erdem
Ukraine	--
Venezuela	--
Vietnam	--

Sunday 16 May 2010

1. Opening speech
2. Approval of the agenda
3. Approval of the minutes of the General Assembly 2009
4. Report of Activity of the Executive Council - Comments from the Assembly
5. Approval of new members
6. Report from the Auditor - Comments from the Assembly
7. Report of Activity of the Member Nations - Comments from the Assembly
8. Report of activity of the ITACET Foundation
9. Communication from the Sister International Associations
10. Financial report for 2009 - Comments and approval of the Accounts
11. Preparation of the election of the Executive Members
12. Preparation of the other decisions of the General Assembly on Wednesday 19 May 2010
 - 12.1 Presentation of the candidatures for the 2013 General Assembly
 - 12.2 Creation of new working groups

Wednesday 19 May 2010

13. Election of the Executive Council Members
14. Report on the Open Session held on Tuesday 18 May 2010
15. Working Groups and Committees: Reports and projects of activity - Approval
16. Appointment of the members of the Committee of Nomination
17. Appointment of the Auditor of the conformity of the actions of the Executive Council
18. Decision concerning the creation of new working groups
19. Preparation of the General Assemblies 2011 and 2012
20. Approbation of the Budget for 2010
21. Draft budget 2011 and 2012
22. Choice of the place for the General Assembly 2013
23. Other business
24. Closing address

A – ASSEMBLY ON SUNDAY 16 MAY

1 – OPENING SPEECH

The President Martin Knights welcomed the delegates of the 48 Member Nations represented and the representatives of the two sister associations PIARC (Mr. Pierre Schmitz) and ISRM (Mr. Derek Martin).

He thanked the President Rick Staples and all the members of the Canadian Association for the preparation of the 36th annual meeting of ITA, with a special mention to Rick Lovat, Chairman of the Organisation Committee, and to Marie Lanouette and Laurier Forget of the National Research Counsel from Canada.

President Martin Knights also underlined how frustrating it was to have to stay inside the room when such a beautiful view could be admired through the windows, but nevertheless thanked the organizers for such a spectacular venue!

At his request the Assembly stood one minute in silence to remember and reflect on all the people who contributed to ITA and are no longer with us and to celebrate their contributions to ITA.

This year ITA has invited Jana and Alice Eisenstein to come and receive the acknowledgement of all friends of Dan Eisenstein, past President of the Tunnelling Association of Canada and late Professor, to celebrate his life and contribution.

Andre Assis, former President of ITA, who knew Dan Eisenstein and his family very well, gave a short address.

Jana, Alice,

My good friends from ITA,

People who worked with ITA used to refer to us as "ITA family" and today I will talk about Dan as a member of this ITA family.

For me, it is quite interesting to say because I met Dan when I was 25, so a long time ago when I went to my PhD in Canada here, so it's my second homeland. And from Dan at that time what I learned was the art about tunnelling. I learned that he was a great professional, a great professor. And I have to tell you that even today as a university professor I am very much influenced by the way that Dan used to explain things, understand the physics and make the explanations simple. I keep for the rest of my life one of the lessons that I learned from him. At that time, in 84-85-86, Dan started to show to us his enthusiasm about ITA. He used to come to us and talk about his intention to become part of ITA and to work for this Association. The first time that I learned about this Association was during those years. And successfully Dan got inside the ITA family, became a President, and after that he gave to us in my personal point of view a second learning that how important is the human relationship, the politics, the geographical balance inside this kind of association. His presidency was a guide for us and this was a legacy. After his presidency he started to work for us in this association exactly showing how important it was to keep the balance among the different cultures and that we have around us in this table.

He helped me a lot during my presidency meantime when I was preparing to be candidate for ITA he came to Brazil only to have a meeting, only to talk to me about how I should behave and what ITA expected from me. So I devote him a lot about his legacy and his friendly help that he gave me.

One of the highlights about Dan was 2007 in Prague. He was feeling so happy to have the ITA congress in Prague, and I remember very well when we have a dinner together in a wonderful Spanish room in the presidential palace he has mentioned "look Andre, I had to leave this country and today I have to bring here inside the presidential palace the ITA family together to us". So that was very nice and at that time he was overflowing of happiness because the next ITA congress in three years from 2007 would be in Canada. This warm country that gave a place to him to come here, to devote to his profession, to grow his family, and the two daughters here Jana and Alice, now the grand sons and everything was prepared for today to be his coronation after Prague and here in Canada.

But he is here with us and my final word is to say to his family that Dan was a great friend, a talented professional and above all a member of ITA family.

Jana and Alice, my compliments and my tribute to Dan Eisenstein.

2 – APPROVAL OF THE AGENDA

This year the notice, the agenda and the files were sent on 16 and 17 March to all 55 Member Nations.

The Executive Director presented the agenda; it was approved without amendments.

3 – APPROVAL OF THE MINUTES OF THE GENERAL ASSEMBLY 2009

The minutes of the General Assembly 2009 were sent on 22 October 2010; they were approved with amendments made by the Executive Council and comments received from Belgium.

4 – REPORT OF ACTIVITY OF THE EXECUTIVE COUNCIL

The President reminded that the report of activity was sent to the Member Nations on 28 April 2010 and asked for the comments from the Assembly. (Encl. 2)

The President reminded the main items of the report, which were:

- ExCo meeting in Zagreb in September, which coincided with a conference on the proposed metro in this town, in Hamburg in November, in Dorking, President's home town in UK, in February
- start of the Foundation for the Education and Training (see item 8)
- strategy of the Association
- relations with the Member Nations (visited 25 Member Nations this year)
- development of new Contacts (Bahrain, United Emirates, countries of the Gulf, Bosnia-Herzegovina, Serbia, Montenegro, Lithuania, Argentina)
- development of the affiliate members (30 new ones)
- development of the "Prime Sponsors" and "Supporters"
- relations with Sister International Associations
- relations with the United Nations, the World Bank and with the European Union
- functioning of the Working Groups
- functioning of ITA COSUF
- functioning of ITA-CET
- functioning of ITACUS
- publications and communication: website, *ita@news letter*, TUST, ITA report, annual TRIBUNE and ITA Position papers

The reading of above items was illustrated by pictures showing the members of the ExCo during their various activities.

No particular remarks were expressed from the Representatives of the Member Nations.

The report was unanimously approved.

5 – APPROVAL OF NEW MEMBERS

5.1. Member Nations

The Association registered the membership of three new Member Nations: Argentina, Bosnia-Herzegovina and Montenegro.

The representative of **Argentina**, Nicolas Posse, delivered following message to the General Assembly:

"The Argentinean Tunnelling Association was recently formed; actually it started with Claude Béranguier's visit two months ago only. We have already 35 members from different areas and interest seems to be very strong. We already have many tunnelling projects: about 20 km of tunnel, metro and railroad in urban areas; over 70 km of tunnels in mountain areas, a particularly interesting one of over 52 km, and of course some water and sewage projects. We believe there is room for much more. Sharing information, sharing knowledge being part of this network and having all this great matter together and all your experience would be a lot of help for the industry to develop and create big opportunities in our country that is full of them."

The Executive Director read the message from **Bosnia-Herzegovina** to the General Assembly:

"Ladies and Gentlemen

I greet you on behalf of a newly established association for tunnels and underground structures of Bosnia and Herzegovina. We are proud of the fact that, in the early period of our existence, we are becoming a member of a large family. Tunnelling in Bosnia and Herzegovina has a long tradition; there are a large number of tunnels and underground facilities, which dates back to the middle Ages.

Over 57 tunnels are going to be constructed along the corridor through Bosnia and Herzegovina (Corridor 5c). A large number of tunnels will be reconstructed, and a large number of companies will invest funds for training of personnel for designing of tunnels and underground structures. ITA BH is already trying to provide information to all companies and individuals about new technologies in tunnel construction and designing. We are trying to keep track of all current and future projects in Bosnia and actively join promoting of the importance of tunnels and underground structures building, and thus implement ITA mission in Bosnia and Herzegovina. Currently we are informing all relevant entities about newly formed ITA BH in Bosnia and Herzegovina.

We will endeavour to provide information about our activities to ITA, information about designing and construction of underground facilities and tunnels, and I hope that ITA will provide us support.

I hope that you will benefit from our membership in the ITA, as we will benefit from your support.

We are looking forward to our future cooperation, Mehmed Mesihović."

The Executive Director read the message from **Montenegro** to the General Assembly:

"The ITA General Assembly, Dear colleagues and friends,

Due to my inability to attend the ITA General Assembly I have kindly asked Mr. Olivier Vion, the ITA Executive Director to read my short addressing to this body.

I would like to greet you all in the name of "Montenegrin Association for Tunnels and Underground Structures – ITA Montenegro". Our Association ITA Montenegro was founded only recently in the old European state of Montenegro, which has recently re-established its status in the UN.

The relief of Montenegro consists of mountains and hills and that is the reason why the first road tunnel in Montenegro was built only in 1880. An illustrative data of the previously mentioned speaks in favour of the fact that tunnels and bridges make 40% of the regional railroad Belgrade-Bar in the territory of Montenegro. Therefore we believe that the aforementioned is a reason enough to support our need to conduct surveys, make designs and build tunnels and underground structures.

I hope that you are all familiar with the application of "Montenegrin Association for Tunnels and Underground Structures–ITA Montenegro" for full membership in the ITA.

Therefore I believe that there are no obstacles for the General Assembly to accept our application for the ITA membership. I also hope that Montenegrin Association will soon after this addressing join the family of the ITA nations.

I wish you successful work and a good time in Vancouver.

In the name of ITA Montenegro, President of the Association, Prof. Dr Zvonko Tomanović"

These three Nations are accepted by the General Assembly.

5.2. Affiliates

5.2.1. Requests for membership

a) Corporate Members: 30

243	Shanghai Municipal Engineering Design General Institute (SMEDI)	China
244	Samsung C&T Corporation	South Korea
245	Dodam Engineering & Construction	South Korea
246	GS Engineering & Construction	South Korea
247	TESO Engineering Co Ltd	South Korea
248	Sambo Engineering Co Ltd	South Korea
249	Pazhooesh Omran Rahvar Consulting	Iran
250	Ssangyong	South Korea
251	Sinotech Engineering Consultants	Taiwan, Rep. China
252	PT Mass Rapid Transit Jakarta	Indonesia
253	Gall Zeidler Consultants	USA
254	Hyundai Engineering & Construction	South Korea
255	Gammon Construction Limited	Hong Kong
256	Adval AD	Bulgaria
257	SKE&C	South Korea
258	Doosan Engineering & Construction	South Korea
259	Posco Engineering & Construction	South Korea
260	Sunjin Engineering & Architecture	South Korea
261	Société Nationale des Autoroutes du Maroc	Morocco
262	Daelim Industrial Company Limited	South Korea

263	Daewoo E & C	South Korea
264	Hyundai Development Company	South Korea
265	Desoi GmbH	Germany
266	NCC Construction Denmark A/S	Denmark
267	Tunnelling & Underground Construction Academy (Crossrail)	United Kingdom
268	Intron	The Netherlands
269	Solétanche Bachy Tunnels	France
270	Esco Consultant & Engineers Co Ltd	South Korea
271	Lotte Engineering & Construction Co	South Korea
272	Joint Stock Company "Minskmetroproject"	Rep. Belarus

b) Individual Members: 10

375	Derek Penrice	USA
376	Verya Nasri	USA
377	Hassan Hamdi Nemat	Egypt
378	Ahmad Esavand	Iran
379	Victor Au Yeung	China
380	Barend Jacobus Jordaan	South Africa
381	Alain Mercusot	France
382	Philippe Bakhos	Emirates
383	Alain Balan	France
384	Aidin Eivazi	Austria

c) The voting delegates of the concerned Member Nations did not object and the General Assembly confirmed these candidatures.

5.2.2. Resignations

a) Corporate Members: none

b) Individual Members: 5

136	Richard J. Machon	Germany
169	Frédéric Pellet	France
238	Zdenek Eisenstein	Canada
334	Jesus M. Rohena	USA
369	Richard L. Bullock	USA

5.2.3. Exclusions

The exclusions of Affiliate Members, pronounced for non-payment of the subscription fee for over three years, are the following:

a) Corporate Members: 1

197	Red Horn Engineering PTE Ltd	Singapore
-----	------------------------------	-----------

b) Individual Members: 1

342	Goli Lamprini	Greece
-----	---------------	--------

5.2.4. The number of Affiliate Members therefore reaches 306 (Corporate: 180 – Individual: 126). (Encl. 4 and Encl. 5)

5.3. ITA-COSUF

5.3.1. Requests for membership: 4

68	Oresundsbro Konsortiet	Denmark
69	Arnold Dix	Australia
70	Agency for Roads and Traffic	Belgium
71	Basler & Hofmann AG	Switzerland

5.3.2. Resignations: 0

The General Assembly did not present any remarks concerning the four additional organizations that have asked to become member of the Committee ITA-COSUF; their candidature was approved. (Encl. 6)

5.4. ITA-CET

5.4.1. Requests for membership: 3

T-034	University of Transport and Communications	Vietnam
T-035	Unversidad Nacional de Colombia (Grupo de estudo de obras subterráneas - Geos)	Colombia
E-008	ARUP USA	USA

The General Assembly did not present any remarks concerning the 3 organizations that have asked to become members of the Committee ITA-CET (Committee for Education and Training); their candidature was approved. (Encl. 7)

5.5. ITACUS

5.5.1. Requests for membership: 15

4	ABTUS-BVOTS	Belgium
5	PB Americas	USA
6	Geodata SpA	Italy
7	Land Transport Authority Singapore	Singapore
8	Sao Paulo Metro	Brazil
9	Shenzhen Urban Planning & Research Center, China	China
10	Warsaw University of Technology Roads and Bridges Institute	Poland
11	Dr. G. Sauer Corporation	USA
12	Scott Wilson UK	UK
13	Kenaidan Contracting Ltd	Canada
14	Russian Academy of Sciences	Russia
15	CETU - Tunnels Study Centre	France
16	INSA Lyon LGCIE	France
17	NJU-ECE Institute for Underground Space and Geoenvironment Nanjing University	China
18	BB Power Construction and Mining	Canada

The General Assembly did not present any remarks concerning the 15 persons that have asked to become members of the Committee ITACUS (Committee on Underground Space); their candidature was approved. (Encl. 8)

6 – REPORT FROM THE AUDITOR ON THE CONFORMITY OF THE ACTIONS OF THE EXECUTIVE COUNCIL

As voted by the 2000 General Assembly, the Association decided to implement an action plan to reach the goals of the strategic scope of ITA becoming "the unquestioned leader of underground space".

In 2007 a motion on the strategy adopted by the General Assembly reaffirmed the vision of the Association as "ITA, the Leader in Tunnelling and Underground Space" with four main directions of action.

The three year plan of priority actions approved by the General Assembly for the 2007-2010 period has now come to term.

Since the last General Assembly, notable steps towards the achievement of the strategic goals were made as presented by the minutes of the Executive Council meetings and the extensive report prepared for the General Assembly, that outlines the progress registered.

During this year there has been a constant and lively debate in every meeting of the Executive Council, concerning the future actions and directions to improve the functioning of the Association.

The Ex-Co pursued its contacts with seven out of the potential new Member Nations which could become ITA members in a reasonable time, that is: Bahrain, United Arab Emirates, Bosnia-Herzegovina, Serbia, Montenegro, Lithuania and Argentina. Discussions are under progress with Belarus, Nepal and Monaco. Still no further progress was registered in the effort to promote the re-creation of a national group in New-Zealand. More efforts are needed to reach the proposed target.

The Ex-Co followed on with planned actions for improving relations with all international organizations contributing to the Sustainable Development of Underground Space and specifically with the UNITED NATIONS with notable efforts from the part of H. Parker in the framework of the Committee on Sustainable Development and HABITAT. Relations with the EUROPEAN UNION have been re-activated by the Ex-Co. Good results of the traditional joint professional cooperation continued also with all Sister Organizations.

Another constant item on every meeting was the development of Prime Sponsors and Supporters, with very good results that are more than the proposed target, not only in numbers but with a considerable geographical coverage.

As usual, the communication issues were always on every agenda of the Ex-Co meetings and visits were made in not less than 25 countries as compared to only 12 countries the previous year.

The Scientific, Technical and Training actions of the Associations have been continued through the various formats that are now in place: the three ITA Committees, ITA-COSUF, ITA-CET and ITACUS, the so called Task-Force groups and last but not least the traditional Working Groups of the Association. Improving the efficiency and the visibility of the WG was another theme of constant evaluation. The reports of activity of all these bodies are regularly presented to the General Assembly.

The organizational aspects of the priority action plan were also pursued according to the schedule.

The consolidation of the Secretariat was carried on, the Executive Director is now fully installed in office and took full responsibility since March 2009.

The Ex-Co also looked for the proper way to promote the activity of ITA in relation with the Media and the General Public. The auditor would like to make a special remark concerning the numerous articles and interviews given to the press by the President of ITA, an impressive action that helped in promoting the activities of the Association.

Dissemination of information through the consecrated channels represented by the ITA website, the ita@news electronic newsletter, the annual issue of Tribune and the ITA Reports and Position Papers continued and the content of the website is going to have the much awaited "Underground World Wide Space" section added very soon.

As a conclusion, the new strategy of the Association and the priority action plan has worked as intended and most of the goals set by the General Assembly have been achieved.

There is now time for the newly elected Ex-Co to look towards the future and prepare a new strategic action plan of the Association.

The General Assembly unanimously approved the presented report.

7 – REPORT OF ACTIVITY OF THE MEMBER NATIONS

Thirty-one Member Nations 2009 activity reports were published in the annual issue of TRIBUNE distributed in the bags of the participants to the Congress. One was received too late to be published but will be included in the website. All reports can still be sent to the secretariat to be published on ITA website.

The President reminded that the Executive Council is at the disposal of all, and in particular of the Member Nations that did not send any report in the past two years, to help them develop their activity.

a) South Africa

Tony Boniface of South Africa provided two updates.

Firstly Donald Lamont (Animateur of Working Group 5) had been informed that SANCOT had held a one day seminar in December 2009, which centred on the efforts being made to improve South Africa's safety record in shaft sinking work. It was a successful event and Jim Porter, the instigator of the event is keen to see SANCOT start a Working Group to take matters further. It is intended to do this and to keep Working Group 5 informed of the progress made.

Tony Boniface also noted that he had been asked by the Lesotho Tunnelling Society (LTS), to update the General Assembly on its organizational status.

Before going into this, it was however necessary to be reminded that SANCOT (SA National Committee on Tunnelling) is a Committee within the SAIMM. A few years ago the SAIMM changed its name from the "South African Institute of Mining and Metallurgy" to, the "Southern African Institute of Mining and Metallurgy". This has enabled it to open branches in Namibia and Zambia.

Discussions between SAIMM and the LTS are well advanced with a view to the LTS becoming a further (and new) SAIMM Committee, or a SAIMM Branch, would enjoy the administrative support of the SAIMM (as SANCOT does) whilst maintaining its national status.

b) Germany

Following decades of successful work on behalf of underground construction and public transportation STUVA celebrates its 50th anniversary in 2010. The jubilee conference will be held in the Tonhalle in Düsseldorf on June 17th and 18th, 2010.

The national ITA Committee "DAUB" will soon publish a recommendation on the "selection of appropriate tunnel boring machines". It will be available for download on the website www.daub-ita.de

The 2009 STUVA Conference was held in Hamburg in December. The motto was "Tunnels – key to Sustainable Mobility". More than 1 500 tunnellers from 28 nations attended one of the world's biggest events for underground construction. In connection with the STUVA conference the ITA Executive Council met in Hamburg. The ExCo members were invited to join the conference.

The German national ITA Committee "DAUB" proposes to hold the WTC 2015 in Germany (Munich). The WTC would be held in connection with the successful STUVA-conference which is held every second year in Germany normally end of November / beginning of December in uneven years. The STUVA-conference then will be held in May as a unique event with the WTC. Celebrating the WTC and General Assembly in Germany in 2015 would be in a consecutive sequence:

- 1975: very first annual meeting of ITA in Munich
- 1995 (20 years later): ITA-Conference and GA in Stuttgart together with STUVA-conference; the ITA annual meeting was called "WTC" for the very first time
- 2015 (again 20 years later): WTC and GA in Munich (Germany) "Coming back to the roots".

The proposal is announced by DAUB and strongly supported by STUVA (German Research Association for Underground Transportation Facilities).

c) Australia

The Australasian Tunnelling Society (ATS) takes this opportunity to offer to the assembly the city of Sydney as venue for the WTC in 2014. Simon Knights has reminded that Australia is a much opened market for all of the members of the family of tunnelling.

Vancouver is a marvellous venue, Sydney is very similar: sky, sea and space. One small difference however, Sydney is a little bit warmer.

Like Vancouver, Sydney has a harbour with ferries running back with some foods; it has both light rail and heavy rail connection with the airport, North and South coasts and the Blue Mountains.

In Vancouver, the Australian Member Nation had a good team supporting Australasia; and Mr. Knight introduced two of them in particular. Firstly Gary Ash, leader of bid team, Gary is a past chairman of ATS, a past member of the Executive Council and was a lead on Australia's very successful WTC in 2002. Secondly, Patty Buehler is the North American representative of Business Events Sydney, a partner in the Australasian bid. Patty is particularly well qualified to talk to any potential exhibitors.

In closing, S. Knights added that Australia is an environmentally aware country and Australasian society will endeavour to reduce the paper to a minimum.

He ended with: "Please consider Sydney for the WTC in 2014".

d) Austria

- Austria started with the NATM Master course last year with 16 participants from all over the world, from India to Germany
- Austrian experts in NATM engineering will give a lecture of the tunnelling method in November (10-12) in Singapore in a 2-day seminar.
- In October 2010 the Austrian Tunnel Day will take place in Salzburg (6 October 2010)
- On 7-8th of October 2010, the Geomechanics colloquium will take place in Salzburg
- On 19th of April the construction work for the sections of the Koralm tunnel with a length of more than 30 km started.
- In the meantime the exploratory works for the Brenner base tunnel with a length of about 57 km started.
- Design for the 27 km long Semmering base tunnel is on a good way and the approval from the parliament is expected to be given end of 2010!

e) Canada

The Tunnelling Association of Canada, or TAC, is a small but active organization of professionals and corporations, who are involved in many aspects of tunnelling and the use of underground space both here in Canada and abroad. It is managed by a small volunteer Board of Directors, with elected Officers, operating under official established By-laws. The Association's stated purpose is to initiate, pursue and serve the interests of Canadian professionals involved in the areas of tunnelling, mining, underground space and related sciences, through the promotion and communications, education, conferences, workshops, publications, and social gatherings. Because of Canada's large geographical area, TAC is divided into five Regional Chapters, which conduct themselves locally through various technical and social events. TAC conducts a mandated Annual General Meeting, and holds a National Conference every two years in one of the regions, usually in September/October of even numbered years (the next conference is scheduled for Quebec City, in 2012). TAC communicates with its members using bulletins, e-mail notices, and by publishing a Canadian Tunnelling Magazine twice annually. This year, the Association has initiated two annual scholarships to promote the development of new tunnelling professionals in Canada. These inaugural awards, the Dan Eisenstein Memorial Scholarship, to a graduate student of a recognized Canadian university, in the amount of \$5000, and the TAC Student Award, to an undergraduate student of a recognized Canadian University, in the amount of \$1000, will be presented at the closing banquet on Wednesday.

f) Croatia

ITA Croatia has issued last year in June 2009 first bilingual (Croatian-English) book on conventional tunnelling in South-East Europe after more than 25 years. This book has been printed in 2 000 copies and distributed in 12 countries during the last 10 months.

This year ITA Croatia is issuing another book about tunnelling together with friends from ITA Slovenia. It is a translation of ITA Guidelines for safety and conventional tunnelling and is issued as a bilingual (Croatian-English) book. It will be promoted on June 19th, 2010, in Opatija, Croatia, on the ITA Seminar that is a part of a General Assembly of Croatian Chamber of Civil Engineers. ITA Croatia is expecting colleagues from Slovenia, Bosnia and Herzegovina and Montenegro, as well as tunnelling friends from Serbia, Macedonia and Albania.

Next year on April 7-9, 2011, ITA Croatia is organizing first Congress on Tunnelling in South-East Europe in Dubrovnik, Hotel la Chroma. The congress will be organized as international happening with invited lecturers, seminars and exhibition with the support of ITA and of Croatia's neighbouring countries.

g) United States of America

The US continues to have a strong tunnelling market in all sectors: water, transport, and urban development.

The US member nation will hold its annual meeting in June (20-23) in Portland, Oregon, to report on projects in the US in all geology using all methods.

Non technical workshops will be held on:

- Contracting practices
- Professional liability

Technical short courses include:

- Grouting
- Soft ground tunnelling industry focus on hyperbaric interventions
- Shaft and tunnel blasting
- Shaft design and construction

A number of scholarships for students are now available through the support and the UCA organization and members.

The current chair is Mr. David Klug.

The US countries as a supporting nation and recognizes France for joining the US. They invite and encourage the other Member nations to do the same.

h) France

First of all, the representative of AFTES, wished to express his pleasure to be in Vancouver, wonderfully welcomed by the Tunnelling Association of Canada.

He spoke about the interest shown by AFTES in ITA and informed the General Assembly about their projects.

AFTES supports both the use of the French language spoken by 250 to 300 million people all over the world and the spreading of their ideas in the English language. Therefore, they have decided to support ITA for the translation in French of their writings. In the other way, they continue to translate their recommendations in English (40 out of 85 including 30 available free of charge on their site) and since this year, their journal has become bilingual, French/English.

AFTES continued to work out recommendations with 20 active working groups including 2 in their launching stage: "Environment of work building in rural site" and "Tunnelling and Sustainable Development". A Working Group on "Uncertainties and Geological Risks" was animated by an Italian colleague; as a matter of fact, AFTES working groups are open to all French-speaking countries.

AFTES wished to make education a priority. A Master's degree is being created and should meet ITA's criteria. This Master's will be bilingual, with a first session planned in September 2011. This is a "post graduate" Master's in the process of being accepted by the "Conférence des Grandes Ecoles". This Master's includes 6 modules which deal with geosciences, management of a project, its conception and its construction, but also the operation and maintenance of the underground work. The teaching will be ensured by French and English professors and professionals, in French and in English. Naturally, collaboration and

cooperation with the Masters of Lausanne and Turin will be explored. The detailed programme will be presented to the ITA-CET Committee. Moreover, AFTES has made a donation to the ITACET Foundation to express its support in this training approach.

As can be noted, AFTES has today a volunteering policy to go along with ITA. Moreover, some AFTES Corporate Members have decided to be supporters.

AFTES is working for a better coordination among engineers, town-planners, and architects, and in that respect bears the launching of a national research project "Society and Environmental Use of the Underground". If this project is selected by the authorities, ITACUS will benefit from its results.

The representative reminded that the Congress of AFTES will be held in October 2011, in Lyon. The participants will find in their documents on their desk the bulletin of AFTES. Two topics out of five will be devoted to Underground Town-Planning. AFTES will be pleased to welcome the participants in this historical city to exchange on "Tomorrow's Underground Spaces". He confirmed that AFTES invites ITA to hold its ExCo meeting the days before their Congress. AFTES also invited young foreign engineers to participate in their training seminar.

Before ending, he talked about an important subject for them as they met to vote for their future President. He wanted to pay tribute to the quality of the candidates, Mr In-Mo Lee, Mr Eivind Grov and Mr. Yann Leblais. He wanted to explain his interest in the candidature of Yann Leblais who is the first French candidate in their history to present himself. He shares with him his attachment to the tunnelling community and its values, and he is convinced that Yann has an important role to play in the development of ITA and its management.

i) Hungary

As the Assembly remembers, last year congress (WTC 2009) in Budapest was a financial success for ITA. Many factors can influence organizing such congresses. These factors could be:

- inside Associations
- relation with ITA
- financial and economical situations of the host country
- international problems, recessions, etc., which can influence many countries and associations in the world

The new Executive Committee Hungarian Tunnelling Association (HTA) has to consider the mentioned problems, as the new ITA ExCo will do that.

The Hungarian Association will continue its program, focusing on the very important professional training, as well. The HTA will organize a local conference, where will be evaluated, among others, the past five years and the possible future program. Pal Kocsonya continues his work in the new Hungarian ExCo, as Past President. He is a candidate in the ITA ExCo as a Member. For this position he is supported by the HTA and the Ministry of Transport, who will involve HTA in advisory work for infrastructure of Transport Development – by continuing metro-program and other road and railway programs.

The new positions in the HTA are as follows:

- President: Dr. Tibor Horwath
- Vice-President: Mr. Zsolt Balogh,
- Secretary: Mr. Laszlo Szilvagy

Mr. Kocsonya finally asked the Assembly to accept the Hungarian voting delegate who is now Mr. Zsolt Balogh.

j) Iran

Maybe only a few people from tunnelling community know about tunnelling events in Iran. A few months ago they celebrated the tenth anniversary of Iranian Tunnelling Association and during these ten years they had really revolutions in tunnels and underground spaces.

In metro: there are metro tunnels under construction in seven cities in very difficult situation in very soft ground.

In road and railway: there are about 200 km of tunnels under construction.

In water conveyance: long tunnels are under construction: 60 km, 56 km and 34 km are only samples of long tunnels in Iran. 100 km of tunnels and underground spaces are under construction in dam constructions and some long urban tunnels have been constructed and opened just a few months ago.

The representative of Iran invited all experts and consulting companies to attend in huge projects under bid in his country.

k) Japan

Effective use of the underground space by eco-friendly construction technology is very timely as a solution to global warming. That is to say, we recognize that underground structures, for example, tunnels are superior structures not disturbing global environment such as biotope of several kinds of creatures as well as a suppressing effect against noises and vibrations.

In Japan, the underground structure has high *raison d'être* and has high degree of importance as an infrastructure and is located as essential structure from a viewpoint of land usage. They anticipate that there is a sustainable long term demand for tunnelling.

The Japanese representative invited the participants to find a brochure on their desk, entitled "Tunnelling activities in Japan 2010". In May, JTA published the brochure in accordance with a commencement of this ITA General Assembly and World Tunnel Congress 2010. The brochure introduces state-of-the-art tunnel construction technologies and the maintenance management technologies in Japan. The brochure consists of some projects of Shinkansen, the expressway, the urban railway the rain water main, and the nuclear plant, and the like. JTA should be grateful if the participants could use the brochure.

l) Malaysia

The interstate water transfer tunnel from Pahang to Selangor through the main mountains range of Peninsula Malaysia has started. It consists of more than 40 km of tunnels to bring water from Karak in Pahang to Ulu Langat in Selangor. TBM machines will be used together with drill and blast method.

Malaysia is noted for its SMART tunnel that serves both as traffic and water tunnel in the normal time. It is closed to traffic and used as a water transfer tunnel during flood season to the mitigation of Kuala Lumpur flooding problem during the monsoon rain in April/May and November/December periods.

Kuala Lumpur is holding an international conference on tunnelling and trenchless construction on 1-3 March 2011. Malaysia welcomes all the participants to this Conference and to visit beautiful Malaysia.

m) Mexico

On behalf of Mexican colleagues, who are coming to Vancouver this evening, the representative told to the participants that there are many important and interesting tunnelling projects under construction in Mexico. Therefore, they are eager to looking forward to participating in the ITA.

The representative would also like to invite all their friends, members of ITA, to visit them in Mexico.

n) Norway

As usual there is a high activity in the tunnelling activity in Norway. As an average there is 60-70 km of tunnels finished each year.

The Norwegian Tunnelling Society (NFF) is very active with more than 1000 personal members. Eivind Grov, professor at SINTEF/NTNU is the President and the participants are asked to give him their support at the voting on Wednesday as the next ITA President.

NFF has a booth at the exhibition and the participants are invited there for getting a copy of the latest publication on rock support.

At the 1st and 2nd of June this year, NFF is arranging a seminar on TBM application. Venue is Bergen, Norway, and it will be in English language. The seminar will be in the same time as the famous Bergen Music Festival.

o) The Netherlands

In Amsterdam there is the so-called M-Z metro line under construction.

The project has a negative public image. One of the causes is the problem with the stations. Leakages in the diaphragm wall give settlements of some old houses.

The problems are under control now and this year they started the TBM excavation.

They bored two hundred meters successfully. "So far, so good!"

p) Portugal

Underground works are in progress. Lisbon airport will be linked by the Lisbon metro network before the end 2010.

The Porto metro will start a second phase of expansion with the construction of 4 new lines that are under design.

Several underground power plants and hydraulic circuits linked to the construction of new dams or to pour reinforcement are also under construction or design.

To match this underground activity, the Portuguese Tunnelling Commission – CPT, organized on 4-5 March 2010 a Course on "Tunnelling in Urban Areas" (180 participants, 17 sponsors) and will organize on 18-19 November 2010 a meeting on "the Use of Underground Space" in Lisbon.

q) Romania

The tender for the new metro line in Bucharest, line 5, was launched in April 2010. Next week, the Client will announce the six finalists which will participate in the final phase. This sector of line 5 is about 9 km long, twin tunnels and 8 stations.

r) United Kingdom

The British Tunnelling Society invites the participants to a symposium in memory of Sir Alan Muir Wood. It will be held on 21st October 2010. A number of eminent speakers, most of whom knew Sir Alan well, are speaking.

The annual BTS Design and Construction Course takes place from 5th-9th July 2010. It will be at Warwick University. Warwick University is setting up an MSc Course in tunnelling and the BTS is supporting it.

The Compressed Air Working Group of the BTS is planning a workshop/seminar on high pressure compressed air interventions in March 2012. This is an emerging technology in tunnelling and it is hoped to have the support of ITA WG5 in this event.

s) Russia

In Russia, the major infrastructure project – "Construction of the combined (motorway, traffic and railway) road from Adler station to Krasnaya Polyana station" is being executed as part of preparation for the Winter Olympic Games 2014 in Sochi. The road length is 48 km. The road runs through the National Nature Park and consists mainly of bridges and tunnels. The total length of all the tunnels along this road is 27.5 km, including:

- 6 railway tunnels – 10.970 km
- 3 road tunnels – 6.866 km
- 3 service tunnels – 9.732 km

Six TBMs and more than 100 units of mining and general construction machinery and equipment are being used for construction of the tunnels.

Construction of the project started in 2009 and is planned to be completed in the middle of 2013.

Large number of foreign companies as well as active members of ITA is taking part in the project.

Yesterday in Russia, the 75th anniversary of Moscow metro was celebrated.

t) Singapore

Over the past year, the growth of underground infrastructure in Singapore continues at an accelerated pace led by projects from the public sector.

Circle line

All tunnelling works on the 33 km circle line had been completed with the final breakthrough in August 2009. The city leg of the Circle Line was opened for revenue service on 17 April 2010, adding eleven new stations to the Mass Rapid Transit network. The entire line will be operational in 2011.

Downtown line

The 40-km fully underground line with 33 stations is being built in three stages. Works on all the various stages of the project have been progressing in earnest. For the project, Singapore will procure 34 numbers of 6.5 m outer diameter EPB TBMs.

Marina Coastal Expressway

The new 5 km long fully underground Marina Coastal Expressway costing US\$ 4 billion had begun construction last year. Progress is good.

Jurong Rock Cavern

Moving away from the transportation scene, the building of South East Asia first underground oil storage facility has reached a critical stage. Following the completion of 2 no of 132 m deep shaft, work on the 8 km mined tunnels has started.

In the pipeline

Some newsworthy underground projects in Singapore are taking shape. The first is an underground science city catering to research and development activities. When completed, an estimated cavern space of 290 000 square meters will be created.

Another initiative is to create an underground warehouse in the Western part of Singapore. When completed, a cavern space of 1, 1 million square meters will be created freeing up 46 hectares of land on the surface for other use, which is very important to Singapore as she is a very small nation with limited land space.

WTC 2014

In conclusion, Singapore would like to host WTC 2014 with support from Malaysia and Indonesia.

u) Switzerland

The annual Swiss Tunnel Congress was held in June 2009 and it also will be held this year. As this year, the world longest tunnel, the Gotthard Base Tunnel, will have its final breakthrough, the Swiss Tunnel Congress 2010 will pay special attention to that fact.

As the Swiss Tunnel Congress is now fully bi-lingual also in English, all participants are heartily invited to attend the Congress.

The English version of the Swiss Tunnelling Codes is now available. They cover all aspects of underground works starting with geological investigations and including design, construction, contracting, and they represent a comprehensive code scheme.

v) Czech Republic

International conference "Underground Construction" is taking place in Prague, Czech Republic, in June 2010.

Complete information about Czech Tunnelling shall be presented as well as some of international projects by invited speakers.

Everyone is welcome in Prague next month.

8 – REPORT OF ACTIVITY OF THE ITACET FOUNDATION

The Chairman of the Executive Board of the Foundation, Andre Assis, made a short presentation of the activities of the Foundation.

8.1 - Following the report presented during the GA 2009, the Foundation ITACET was officially created on September 25th, 2009.

As can be read on the foundation website: www.foundation.itacet.org, the creation was made by 13 Founders: six main founders form the Council of Foundation (Abdullah Al-Mogbel, CUC, Dar el Handasah, GEODATA, HERRENKNECHT and ITA), the seven others being BECKAERT, D2 Consult, Leoben University, Rick LOVAT and the member nations representatives from Austria, Brazil, Bulgaria; some donors are also helping for the financial resources from the Foundation: two companies from Saudi Arabia (Al-Ajmi and SAPAC) and two member nations representatives: France and Italy.

8.2 - According to its Mission Statement:

ITACET Foundation is to be developed into a centre of Excellence for Education and Training on Tunnelling and Underground Space Use.

ITACET Foundation fulfils its mission by notably financing, organising and sponsoring:

- Specialised Training Sessions
- Certificate courses in establishments of Higher Education
- Certified Trainee Programmes for Professional Development
- Creation of International Recommendations, Guidelines and Standards for Education and Training

The Foundation maintains close relationship with ITA WG 18 Training and with the Committee ITA-CET, which allows it to guarantee a good standard of its teaching programmes and of the choice of the lecturers.

8.3 - The Foundation organized its first actions:

- Workshop and Training Session in Riyadh (Saudi Arabia) from 6 to 9 December 2009 on the main topic “Tunnelling in hot climate conditions”
- Training Session in Vancouver (Canada) on 14-15 May 2010 on “General Tunnelling”

8.4 – The programme of the Foundation for next year will be finalized by the Council of Foundation in June 2010; the programme should comprise the following actions:

- Training Session on “Holistic approach for use of wet sprayed concrete for rock support” in Helsinki (Finland) at the occasion of the WTC 2011 on 20-21 May 2011
- Training session on “Immersed Tunnels” in Abu Dhabi in October 2010
- Training Session on “Design for Tunnelling” in Kuala Lumpur on 26-27 February 2011
- Training session on “Tunnel design, instrumentation and risk management” in Bangkok during the first week of July 2010

Some other training sessions (Bahrain, India) and Workshops (Singapore, Russia and Colombia/Peru) are under preparation.

9 – COMMUNICATIONS FROM GUEST SISTER ORGANIZATIONS

a) World Road Association (PIARC)

Pierre Schmitz thanked ITA for having invited the World Road Association to participate in its General Assembly.

Activity Report 2010 of the PIARC C4 Committee "Road Tunnel Operations"

The PIARC Technical Committees for 2008-2011 cycle

20 Technical Committees in 4 Strategic Themes:

- Strategic Theme A - Sustainability of the Road Transport System
- Strategic Theme B - Improving the furniture of services
- **Strategic Theme C - Safety of the Road System**
 - C.1: Safer Road Infrastructure
 - C.2: Safer Road Operations
 - C.3: Managing Operational Risk in National and International Road Operations
 - C.4: Road Tunnel Operations**
- Strategic Theme D - Quality of Road Infrastructures
+ Committee on Terminology and Translation Assistance

The C4 Technical Committee "Road Tunnel Operations":

- 51 Members designated by the PIARC First delegate of their countries (coming from 32 countries)
- 19 Corresponding Members designated by the PIARC First delegate of their countries (coming from 19 countries)
- 6 Associate Members designated by PIARC General Secretariat and the C4 Committee
ITA/ITES: Claude Berenguier and Willy De Lathauwer
- 63 WGs Associate Members designated by the C4 Committee

TOTAL: 139 experts coming from 38 countries

Issues and names of the 5 Working Groups

WG1 - Improve tunnel operation and maintenance

Leaders: Ch. Dalloz / J.-Cl. Martin (France) (33 members)

WG2 - Manage and improve tunnel safety

Leaders: B. Kohl (Austria) + J. Krieger (Germany) (42 memb.)

WG3 - Influence users' behaviour in tunnels

Leaders: M. Tesson (France) + E. Worm (NL) (17 members)

WG4 - Optimise tunnel ventilation and mitigate fires

Leaders: I. Del Rey (Spain) + F. Tarada (UK) (41 members)

WG5 - Evaluate, organise and communicate knowledge on tunnel operation and safety

Leader: P. Schmitz (Belgium) (15 members)

The C4 meetings, workshops and seminars 2008 - 2011

Paris	: 26-27.03.2008	-
Montreal	: 01-03.10.2008	+ first workshop
Madrid	: 25-27.03.2009	+ technical visits
Auckland	: 30.09-02.10.09	+ second workshop
Buenos Aires	: 22-26.03.2010	+ first seminar
St Petersburg	: 13-15.09.2010	+ third workshop
Xiamen	: 21-25.03.2011	+ second seminar
Mexico-City	: 25-30.09.2011	+ XXIII Congress

Actions in cooperation with ITA: 1. ITA-COSUF

- European Forum of Road Tunnel Safety Officers 4 and 5 November 2009 at Hotel Metropole, Lyon under the auspices of ITA COSUF, PIARC, and the European Commission

Actions in cooperation with ITA: 2. Riyadh

Dr. Fathi TARADA prepared a set of slides on road operation, which was presented on his behalf.

Actions in cooperation with ITA: 3. Buenos Aires

Technical Session VIII: TUNNELING OR CLASSICAL TECHNOLOGY. Moderator: Oscar Vardé, Argentina, and Soren Eskesen, Denmark	
Maldonado creek tunnel	S. Agostinelli, Argentina
Mechanical or conventional tunnels construction	Harvey Parker, USA
Specific aspects during road tunnels construction	Claude Bérenguer, France
Technical Session IX: TUNNELS CONSTRUCTION IN MOUNTAIN ZONES. Moderator: Juan Marcet, Argentina, and Claude Bérenguer, France	
Oswald Guasamín tunnel in Quito, Ecuador	Arturo Manzur, Argentina
Conceptual study of Agua Negra Tunnel	Martin Bofer, Argentina
Construction of Road and rail tunnels in mountain zones	Piergiorgio Grasso, Italy
TS X: CONSTRUCTION OF TUNNELS IN LOOSE SOILS AND URBAN AREAS. Moderator: Hugo Rizzo, Argentina, and Harvey Parker, USA	
New urban tunnel on Americo Vesputio avenue	José Sánchez, Chile
Metro Tunnels in B. Aires. Dvpt construction procedures	Alejo Sfriso, Argentina
Tunnels construction in loose soils and urban areas	Soren Eskesen, Denmark

Actions in cooperation with ITA: 4. Manual

Part I: Transverse subjects

1. Strategic issues
2. Safety
3. Human factors regarding tunnel safety
4. Operations and maintenance
5. Environmental issues linked with operations

Part II: Safety provisions

6. Geometry
7. Structural facilities related to operation and safety
8. Equipment and systems
9. Tunnel response to fire

Actions in cooperation with ITA: 5. Terminology

On the public pages in: www.piarc.org (→ Terminology)

Publication of the C3.3 technical reports (since Budapest)

Already published:

2009.R08

Tools for road tunnel safety management

Outils pour la gestion de la sécurité dans les tunnels routiers

To be published in 2010:

Road Tunnels: Operational Strategies for Emergency Ventilation

Tunnels routiers: Stratégies d'exploitation de la ventilation

Direction signing on a route incorporating tunnels

Signalisation directionnelle sur un itinéraire comportant des tunnels

All the technical reports are available for free on:

www.piarc.org (→ *Virtual Library* → *Technical reports*)

The C4 technical reports planned for the Congress

WG1: Road tunnel operations

1. Recommendations for strategic tunnel safety management
2. Good practice for road tunnel Emergency exercises
3. Recommendations on management of maintenance and technical inspection of road tunnels
4. Safety inspections (could be delayed!)
5. Life cycle aspects of tunnel equipments

WG2: Road Tunnel safety

6. Current practice for risk evaluation in road tunnels
7. Improving safety in existing tunnels

WG3: Influence users' behaviour in tunnels

8. Drivers' education

WG4: Air Quality, Fire and Ventilation

9. Road tunnels: Vehicle emissions and air demand for ventilation
10. Design fire characteristics for road tunnels
11. Guidelines on the applicability, cost effectiveness and operation of fixed fire fighting systems

WG5: Knowledge management

Road Tunnel Manual (Electronic encyclopaedia)

b) International Society Rock Mechanics (ISRM)

Derek Martin, Vice President of ISSMGE for North America, first presented the greetings from the president John Hudson who could not be present, and then presented shortly the activity of ISRM: *"The only working group of which the ISRM and ITA collaborate on is the securisation for tunnels it is the WG 2 and they are meeting this afternoon and I understand there will be a deliverable appearing next year that brings together the work that that group has been focused on. So that is the only area that we have collaboration with the ITA. Of course there are many other working groups within the ISRM with our other sister societies. Perhaps there are some other ones that we will be sharing in the future."*

c) Relationships with the United Nations Organisation

Harvey Parker: *"Our strong relations with the UN continued over this last year. ITA participated into the organisation of a UN conference on infrastructure in a sustainable urbanisation in the information era. The forum was held at the United Nations in New York last May and I participated as a respondent. In March of this year ITA participated in a world urban forum, a huge mega conference and we are very pleased that this participation was made possible by our member nation CBT Brazil. And we thank Brazil for participating in that conference. Our relations with the United Nations are mostly directly with ECOSOC, and UN Habitat which we have very good relations with and we look forward to expanding this cooperation with the commission on sustainable development in the future."*

d) Relationships with the European Union

Martin Knights: *"Indirect link we have with the European construction platform and MK has been asked to be a co-organiser for one of the working groups which has interest for the tunnelling industry. Some of the criteria and strategy through the European Union over the next five years will include the promotion of underground space for mobility, for public health and it is Martin Knights' job to try to make sure that the tunnelling profession gets the hearing of the European Union. ITACUS as well has a direct link with Brussels and the European Union as well. So gradually but surely ITA is improving its communication with the EU."*

10 – FINANCIAL REPORT FOR 2009

10.1. Closing of the Accounts 2009 - Report from the Auditor

The closing accounts for the year 2009 were sent to the Member Nations along with the notice to the General Assembly. (Encl. 9)

The closing has been prepared by the Treasurer of the Association, while the certification, sent along with the accounts, has been made by the Swiss Auditor DSK, in accordance with the decisions of the 2004 General Assembly.

In the absence of the Treasurer, who could not join the Assembly for private reasons, the President commented on the documents.

10.2. Approval of the accounts

The report, supported by the delegates of Canada and USA, was unanimously approved.

The General Assembly unanimously gave their quitus/approval to the Executive Council and notably to the Treasurer for the financial situation and the management for 2009.

11 – PREPARATION OF THE ELECTION OF THE EXECUTIVE MEMBERS

Each of the prospective President's candidates, Eivind Grov (Norway), Yann Leblais (France) and In-Mo Lee (South Korea), gave a short presentation about themselves, about their experience, about what they think about the tunnel industry.

The names of candidates to the other position at ExCo were reminded.

The Executive Director reminded to the Assembly the voting procedure for Wednesday.

12 - PREPARATION OF THE OTHER DECISIONS OF THE GENERAL ASSEMBLY ON WEDNESDAY 19 MAY 2010

12.1. Presentation of the candidatures for the 2013 General Assembly

Two candidatures were received in due time from Greece and from Switzerland.

The representatives from Greece and from Switzerland presented the candidature of their country for the organisation of the annual meeting and of the General Assembly 2013.

The corresponding decision will be made during the second part of the Assembly on Wednesday 19 May.

12.2. Creation of new working groups

This year a new working group was created on "**Seismic effects**" that has been proposed and encouraged by the Chinese Member Nations. The proposed animateur is Professor Qiu (China) and the group will start in the afternoon. Everyone interested was invited to participate to the group.

Creation of an ITA "Technology Group"

The initiative was born from a round table in Hamburg in 2009 hosted by the magazine "World Tunnelling". The theme was to talk to industry leaders about current themes, problems and opportunities that were in the tunnelling industry in the moment.

After that the meeting carried on because of a question of Lok Home (Robbins): "What more can industry do, to help ITA?"

From then on a core group was formed, a first meeting was held in Zurich in March 2010 and a decision was made to make a first proposal for the present General Assembly:

- Vision: *Promote new technologies and methods for the development and construction of sustainable underground space*
- Aims:
 - Form an opinion – evaluate
 - Co operation & development of industry
 - Benchmark technology
 - Promote technology
 - Improve quality
 - Raise awareness – including Education/Training
 - Make industry sustainable

Recommendation and actions:

- During WTC 2010: Communicate to GA/ meeting of the CG for preparing programme of the year 2010-2011
- 2010-2011: Preparing official motion for creating a platform. Establishing a list of topics, organization of the platform, contacts with industry interested
- WTC 2011: Submission of motion to the GA. First meeting of the platform

Muir Wood lecture 2011: The ExCo voted unanimously to ask Professor Robert Mair to be the second lecturer of the ITA Muir Wood Lecture during next year WTC in Helsinki. (Encl. 10).

The President closed the first part of the General Assembly and invited the delegates to meet again on Wednesday 19 May 2010 at 9 am.

B – ASSEMBLY ON WEDNESDAY 19 MAY

The President opened the second session of the General Assembly.

13 – ELECTION OF THE EXECUTIVE COUNCIL MEMBERS

a) Appointment of the scrutineers:

- Simon Knight Delegate from Australia
- Robert Galler Delegate from Austria

b) Voting delegates

Present: 42

Votes by correspondence: 2 (Bulgaria, Iceland)

Votes by proxy: 4 (Bosnia-Herzegovina, Lao, Montenegro, Slovenia)

Absolute majority for the first round is: 25

Absolute majority for the second round is: 24 (no vote by correspondence)

It is reminded that an absolute majority is needed to be elected.

c) Result of the election of the President

	1 st round	2 nd round
Eivind Grov	12	-
Yann Leblais	13	16
In-Mo Lee	23	30 elected

d) Result of the election of 4 Vice-Presidents

The 4 candidates obtained following results and were declared elected:

Yun Bai	32	
Soren Eskesen	30	
Ivan Hrdina	35	
Markus Thewes	41	1 st Vice President

e) Result of the election of the additional Executive Members

The 9 candidates for 6 seats obtained following results:

	1 st round	2 nd round
Tony Boniface	22	12
Amanda Elioff	26 elected	
Nikolaos Kazilis	24	13
Pal Kocsonya	29 elected	
Davorin Kolic	21	10
Bjarne Liljestrands	20	10
Rick P. Lovat	44 elected	
Chun Nam Ow	27 elected	
Daniele Peila	35 elected	

5 members were elected, that means one seat remains free.

f) Appointment of the Treasurer: Felix Amberg, presented by the Executive Council, was appointed unanimously. This nomination was supported by the delegates of Belgium and Brazil.

14 - REPORT ON THE OPEN SESSION HELD ON TUESDAY 18 MAY – TITLE: "GROUND REFERENCE INFORMATION FOR BIDDING TUNNEL PROJECTS - CURRENT PRACTICE, SHORTCOMINGS / BENEFITS AND FUTURE CHALLENGES"

The Session, which was very well attended, prepared by Markus Thewes and Soren Eskesen, was chaired by Martin Knights.

The programme was set down in order to hear the views of all parties involved in practice; that means the client's, the consultant's, the contractor's view and also the lawyer's view; in all there were seven speakers representing five countries and three continents.

It started with the consultant's view: "Requirements for geotechnical investigations for a minimization of risks in shield tunnelling". Markus Thewes presented what to do to minimize the risks in underground and more specifically he talked about the face pressures calculations and miscalculations and how to minimize the ground risks.

Then Joe Gildner from the United States expressed the client's view; emphasizing what should be included in the contract documents and what should be left out in his opinion.

The lawyer's point of view was presented by Arnold Dix from Australia: "Bringing Certainty to the Unknown: The Role of Law in the Apportionment of Underground Construction Risks" In short, Mr. Dix explained the role of the law; what can the law do, what can the law not do and what has to be accounted for in the contract documents.

With the title "Ground Reference Information and Risk Sharing - Different Countries – Different Solutions", Michael Rehbock from Switzerland presented the consultant's point of view on risks sharing. He presented some international projects and then the Swiss methods of contracting. From the projects presented one single conclusion could not be drawn, one has to adjust the contract to the type of project.

Then went the "TBM Manufacturer's Perspective" where Marco Giorelli from Canada spoke about ground reference requirements for EPB tunnelling and said that the TBM manufacturers wanted to be earlier involved in the process.

Finally two contractors' points of view were presented, first by Ulrich Wadepohl from Germany and secondly Bob Steer from the USA who both explained their point of view in terms of what should be included in the bid documents.

Then after the presentations there was a lively discussion, with a lot of good points of view.

In conclusion, Mr. Eskesen thought that based on the lively debate and the good presentations the topic was felt to be an interesting one and probably a potential topic for further discussions either in a technical session or in a future open session.

The President thanked Atsumu Ishida, the animateur of WG 12 "Sprayed concrete use", Jan Rohde, the animateur of WG 15 "Underground and environment", and Gérard Seingre, the animateur of WG 17 "Long tunnels at great depth", for having given a summary update of the work of their group to the audience at the beginning the Open Session.

15 – WORKING GROUPS AND COMMITTEES: REPORTS AND PROJECTS OF ACTIVITY

15.1 - ITA-COSUF: Chairman: Felix Amberg (Switzerland), Vice-Chairman: Didier Lacroix (France), Tutor: Claude Bérenguier – Report presented by the Chairman:

ITA COSUF has currently 62 members coming from 17 countries. The core of ITA COSUF is composed by the three Activity Groups (AG):

- AG 1: Interaction with European and International activities
- AG 2: Regulation and best practice
- AG 3: Research and new findings

Through these AG's the following activities have been developed in the last 12 months since the General Assembly 2009 in Budapest:

- ITA-COSUF Workshop, 4 – 5 November, Lyon: "Safety challenges"
- ITA-COSUF sponsored the ISTSS (International Symposium on Tunnel Safety and Security), 15 – 18 , Frankfurt
- three Steering Board and two AG meetings

A special emphasis should be put on the report "Survey of existing regulations and recognised recommendations (rail, metro, and road)", which can be downloaded from the ITA COSUF website.

ITA COSUF held the first forum for Road Tunnel Safety Officers, 4-5 November, 2009, together with the European Commission. The next forum will take place in 2011. The safety officers were introduced by EU Directive 2004/54/EC and the forum offers a platform to exchange knowledge and experience.

The ITA - COSUF Award for outstanding activities and to support dedicated work of students within the scope of ITA-COSUF was awarded to B Niemen, the Netherlands.

The next General Assembly will be held in Helsinki at the occasion of the WTC.

15.2. – ITA-CET: Chairman: Andre Assis (Brazil), Vice-chairman: Daniele Peila (Italy), Secretary General: Claude Bérenguier – Report presented by the Chairman:

17 members from 14 Countries attended the committee meeting

15.2.1 – Development of the Committee

Membership: 45 members

Board 2010 – 2013: 6 members: Andre Assis (Brazil), Chairman, Daniele Peila (Italy), Animateur of the WG18, Vice-Chairman, Fulvio Tonon(USA), Robert Galler (Austria), Jian Zhao (Switzerland and Claude Bérenguier (Secretary General).

Data Base for lecturers: The Committee is gathering the Resumes and preferred topics for potential lecturers during the training which are organized by ITA and by ITACET Foundation; 40 persons already answered.

15.2.2 – Status of the preparation of the portfolio of the Committee

Workshops and Training Sessions

In addition to the seven already accepted six new proposals were accepted after amendments:

- Monitoring and Control
- Immersed Tunnels
- Utility Tunnels in Cities
- Principles in Tunnel Design
- Tunnel Innovations in Tunnelling
- Underground Space Use.

Three other proposals will be studied later:

- Geo-Investigation.
- Numerical Simulation in Tunnels.
- Maintenance and Repair

Endorsement for Master Courses

- Professional Master Course: proposal from the French Association (AFTES) presented by Michel Deffayet; the ITA endorsement will be pronounced after providing names of lecturers.
- Msc Diploma: discussions on the ITA endorsement are on-going; the decision will be made at the next meeting.

Endorsement for short courses: The principle of this kind of endorsement was accepted providing that the course will not be business oriented and that representatives of ITA will participate to the organization and to the course itself.

On line Courses: The concept was presented by Fulvio Tonon; the principle was accepted with the same conditions than the short courses plus a special request concerning the system of validation of the acquired knowledge by the students.

15.2.3 - Programme of the Foundation July 2010–June 2011: For information only

Two-day Training Session - Helsinki: WTC 2011: 20-21 May 2011 “Holistic Approach for Use of Wet Sprayed Concrete for Rock Support”.

Other Training Sessions

- Abu Dhabi: Immersed Tunnels – October 2010.
- Bahrain: Utility Tunnels in Cities – Time to be decided.
- Malaysia: Principles of Tunnel Design - 26-27 February 2011.
- Thailand: Tunnel Design, Instrumentation and Risk Management: November 2010.
- India: Health and Safety and one another topic – to be confirmed.
- Austria: Numerical Simulation – Time to be decided

Seminars

- Argentina: Construction Methods for Tunnelling: 22-23 October 2010
- Russia (Sochi): Holistic Approach for Modern Conventional Tunnelling – October 2010.
- Singapore or Korea or?: Innovation in Tunnelling – Place and Time to be decided
- Colombia or Peru: Topic and Time to be decided

Specific invitations for representatives of Developing Countries

Sponsorship of practical training during MS courses

MS courses on Mechanized Tunnelling in Torino: ongoing action with Daniele PEILA.

15.2.4 – Next Meetings

- Late 2010 at the occasion of a conference, preferably in Europe.
- Helsinki: Monday 23 May 2011 at the occasion of the WTC 2011.

15.3. – ITACUS: Chairman: Han ADMIRAAL (Netherlands), Vice-Chairman: Ray STERLING (USA), Tutor: Harvey PARKER (USA) – Report presented by the Chairman.

15.3.1 - Activities since the General Assembly of Budapest 2009

The Steering Board of ITACUS met on occasion of the 12th ACUUS World Conference in Shenzhen, China in November 2009. The ITACUS chair was invited to give a short address to those present during the Opening Ceremony. In this address the ITACUS chair stressed the importance of cooperation between both associations in order to create awareness worldwide on the use of underground space.

In January 2010 the ITACUS chair met with the President of IFME (International Federation for Municipal Engineering) in Helsinki. First talks were held on possible cooperation and of making underground space a theme within IFME. The first meeting will be followed-up with a presentation by the ITACUS chair during an IFME Board meeting in Alborg, Denmark, in May 2010.

The ITACUS chair, vice-chair and secretary-general met in Paris in March 2010 to discuss preparations for the meetings in Vancouver and also the submittal of an outline for a 2-day seminar to ITACET.

After initial contact made by the ITACUS tutor with the secretary-general of ISOCARP, the ITACUS chair contacted the executive director of ISOCARP. During this short meeting it was agreed to further explore the contact between both organizations and possibly draw up a MoU. ITACUS was invited to attend and take part in the ISOCARP World Congress in Nairobi, Kenya in October 2010.

Following the publication of the first White Paper, a second White Paper on the Planning of Underground Space was published by ITACUS in both English and French on occasion of the Vancouver ITA-WTC.

Currently 18 organizations are a member of ITACUS and a further 49 individuals are part of the LinkedIn group.

15.3.2 - Outreach and advocacy

ITACUS sees it as its most important aim to reach out to others and advocate the use of underground space. Apart from developing tools to support this, ITACUS is establishing contact and further cooperating with other international organizations. ITACUS calls on the ITA Member Nations to also reach out to local governments and contact decision makers. ITACUS will continue to develop tools for this which can be used to support these actions. A good example of this is the way AFTES is working with the Regional Planning and Economic Council for Greater Paris. A national committee has been established and calls on ITACUS for support.

A second approach ITACUS would like to develop in the near future is to work with so-called Underground Space Advisory Teams. This model is taken from ISOCARP's Urban Planning Advisory Teams. Possible cooperation between ITACUS USAT's and ISOCARP UPAT's is something to be considered. Member Nations have an important role in this as well, making contact with National City or regional governments and suggesting the use of an USAT.

A third approach is the way ITACUS is reaching out on behalf of ITA to other international organizations.

The ties with ACUUS are seen to be important given the different approach to Underground Space and organizations which are member of ACUUS. ITACUS has been fully integrated into the program of the next conference in Singapore in 2012. ITACET will be asked to organize 2-day seminar with ITACUS before the conference.

ISOCARP, IFHP and INTA are international planning organizations working together and which are open to pursuing further ties with ITACUS. ISOCARP has suggested a MoU between ITA (ITACUS) and ISOCARP.

IFME, the International organization of municipal engineers, architects and lawyers is an organization with which ties are being developed as stated above. Developing this cooperation, ITACUS will take part in their World Congress in 2012 in Finland. The possibility of a 2-day seminar will be discussed as will the possibility of a MoU between IFME and ITA (ITACUS)

The last organization ITACUS is looking to for exploring further contact is ICLEI, the organization of local governments in the area of sustainability. Members are local governments often at the political level. First contact needs to be made, opportunity for this during their World Congress in Korea in September 2010

15.3.3 - Future activities

The ITACUS Steering Board will meet again on occasion of the SB10 Euroregional Conference in Maastricht in October 2010. This is a conference on sustainability and zero-emission buildings. ITACUS has been asked to contribute to a Roadmap 2020 that is being prepared for local and regional policymakers. ITACUS will also provide 'coaches' for work sessions during the conference.

The ITACUS will also meet during the Helsinki 2011 WTC. An ITACUS Annual General Meeting and Open Meeting will be organized during this congress.

ITACUS will publish a third White Paper on Sustainable Development of Underground Space by the end of 2010. Contacts with other organizations will be pursued. ITACUS looks forward to hearing from Member Nations and being engaged in their activities to spread the word on Underground Space Use.

15.4. – ITATECH: presented by Martin Knights (UK).

The participants to the meeting were: Lok Home (Robbins), Tom Melbye (Normet), Daniel Ruckstuhl (BASF), Felix Amberg (Amberg) Olivier Vion and Martin Knights (ITA).

The idea was to promote an evaluation and provide guidelines for Member Nations and other working groups and committees regarding technology and the interface with safety, trainings and sustainability.

Lok Home was elected as Chairman. By next GA in Helsinki the group will develop a modus operandi, strategy and aims, potential membership and interfaces with the other Members of the ITA family.

In Helsinki the group will come with a proposition for an action plan to launch the group.

Industry wants to play a more pro-active role to help ITA in being a leading voice for the underground issues.

15.5 - WG 2 – Research: Animator: Eric Leca (France), Vice-Animator: Chung Sik Yoo (South Korea), Tutor: Soren Eskesen (Denmark) - Report presented by Barry New:

The group met on Sunday, May 16th. The meeting was attended by 18 participants representing 12 member nations; China, Czech Republic, Denmark, France, Japan, Italy, Netherlands, Spain, Thailand, United Kingdom. USA.

The activity of WG 2 since the Budapest meeting has focused on the preparation of three reference documents which relate to

- "Monitoring and Control for tunnelling projects"
- "Strategy for Site Investigations of underground works"
- "Risk Management for tunnelling and underground work"

The recommendation of "Monitoring and Control for tunnelling projects" has since the Budapest meeting been issued to the Executive Council and reviewed by the Executive Committee. Comments have been partly received. The document is currently being updated for re-issue to the ExCo.

The work on the document "Strategy for Site Investigations of Underground Works" Works was progressed and an updated version will be circulated shortly after the Vancouver meeting. National site investigation documents have been collected. Member nations are asked to provide project examples. It is expected that a final draft can be discussed at the Helsinki meeting. WG 2 liaises with ISRM on a joint initiative on the site investigation document.

On the risk management subject a lecture was presented at the ITA-CET pre-conference training course. An outline of the supplementary document to the 2004 "Guideline on Tunnelling Risk Management" was discussed. A summary of collected case histories of projects where the risk management procedures have been successfully implemented is being produced and will be included.

An outline document on "Assessment to pipeline damage associated with tunnelling" was presented and debated by the group for future action. It was agreed to progress this subject. Also presented was a draft paper on "Fibre Reinforced Concrete for segmental tunnel lining". The authors were requested to change the document into a guideline/recommendation seeking input from other member nations.

15.6. – WG 3 – Contractual Practices: Animator: Arnold Dix (Australia), Vice-Animator: Martin Smith (Switzerland), Tutor: Martin Knights - Report presented by the Tutor:

The project of the group over the last two or three years is to review the ITA contractual practices and publications and make them applicable to contemporary life today. They have eleven member states who are active members of the working group.

In furtherance to the ITA's commitment to promoting the development of underground space they produced an issues framework which exposes the issues critical to successful underground project contracting and everybody is urged to consider the issues raised in this framework as part of the subsurface contractual risk management strategy. The WG has reviewed all the ITA propositions and they formulated it in an issues framework and during 2009 and 2010 they did a complete revision of our draft that they had last year. Working group 20 contributed comments to the draft and they had two industry experts, John Reilly and Terry Mellors, to review the details of the drafts. They now have that framework ready and completed and it will be published in the next couple of months. Now they are going to take the issues framework and road test it, compare it with the FIDIC document just to see whether it stands up to the clauses that are in the FIDIC contract and it is fit for purpose.

15.7. – WG 5 – Health and Safety: Animator: Donald Lamont (United Kingdom), Vice-Animator: Martin Vogel (Switzerland), Tutor: Vitaly Umnov (Russia) – Report presented by the animateur:

Working Group 5, “Health and Safety in Works”, met once during the 2010 ITA General Assembly in Vancouver. Donald Lamont from UK was Animateur. Unfortunately neither Martin Vogel from Switzerland the vice-Animateur nor Vitaly Umnov from Russia, the ITA Tutor was able to attend.

In total, representatives from only six countries attended this year – Australia, Germany, Norway, Singapore, UK and the USA. Nevertheless this was a productive meeting.

ITA Booklet - Safety in Tunnelling

WG5 completed the update and review of the content of this booklet and hopes to submit a final version to the Secretariat in early autumn 2010. Financial assistance with the graphic artwork was provided by the BG Bau in Germany. No funding was required from ITA.

Guidelines for Good Occupational Health and Safety Practice in Tunnelling

WG5 was very pleased to note that this document has now been published as a dual language Croat/English text by Croatia. WG5 understands that a French language text may soon be produced by ITA.

Guidance on the safe use of temporary ventilation ducting in tunnels

This was a major work item over the past year. A final revision of this document was circulated for comment by e-mail prior to the meeting in Vancouver. Apart from the addition of some references, the text is complete and should be sent to the Secretariat within a few weeks.

Training courses – Health and Safety content

WG5 noted with approval that the excellent training course held prior to the WTC included a lecture on occupational health and safety in tunnel construction. It also reviewed the syllabus for, and gave its support to the 2-day course on “Occupational health and safety in tunnel construction” within the portfolio of courses offered by ITA-CET.

Future work items

The number of tunnel projects which potentially require high pressure compressed air interventions was noted. No country has yet published guidance on this issue. It was therefore agreed that the WG would undertake a preliminary study of the topic, with a view to producing guidance in the future. The WG noted the British Tunnelling Society was proposing a workshop on this topic in early 2012 and would seek to be in a position to contribute to the event.

The WG recognised that shafts were an often neglected but hazardous aspect of tunnel construction and would undertake preliminary studies of the range of shaft sizes and types constructed along with their respective health and safety problems. This was with a view to liaising with South Africa and SANCOT at the 2011 GA/WTC, over possible future publications on the topic of shafts.

15.8. – WG 6 – Maintenance and Repair: Animator: Henry A. Russell (USA), Vice-Animator: René van den Bosch (Netherlands), Tutor: Yun Bai (China) – Report presented by the Animator:

The Working Group met on Sunday 16 May 2010. The meetings were attended by 8 representatives from 8 member nations, they were: Austria, China, Denmark, Germany, Netherlands, Norway, United Kingdom, and the United States of America.

The Working Group discussed the completion of the development of *Guidelines for Structural Fire Resistance for Metro Tunnels*. This document is an adaptation of our recent work on *Guidelines for Structural Fire Resistance for Road Tunnels*, which is on the ITA web site. This work required the inclusion of specific elements unique to a passenger rail systems and the modifications time / temperature curves for heat release from fires in a passenger rail system. The Working Group has submitted the final draft to the executive council for comment. However, they will not release the document until September of this year due to recent research developments which the Working Group believes should be included in this document. The Animateur expressed his appreciation to the following member nations for their extensive support in the development of the Structural Fire documents which they have prepared. They are France, Germany, Netherlands, Sweden, Switzerland, United Kingdom, and the United States of America.

The Working Group is pleased to announce that the conclusions and recommendations from *Guidelines for Structural Fire Protection for Road Tunnels* have been included in the latest revision to the National Fire Protection Association's, document, *NFPA 502, Standard for Road Tunnels, Bridges, and other limited Access Highways, 2008 Edition, as amended*. In addition the European Union's European railway Agency (ERA) has adopted their Guidelines and recommendations and is included in the Technical Specification for Inter-operational Safety in Railway Tunnels (TSI). This is a significant acknowledgement of the work performed by the Association and in particular of the member nations who participated in the development of the Guidelines.

Presentation was made to the Group by Dr. Hongwel Haung, of Tongi University China, on *Current State-of-the-Art of Safe Operation of Roadway Tunnels in China*.

Due to the recent interest in the work being produced by the Working groups the Animateur would like to point out to the member nations that the Working Group in the last 6 years has produced three major documents while he was the Animateur. He wished to take this opportunity to thank all members of the Working Group for their diligent efforts to produce valuable work for the tunnelling community.

The working Group has decided to continue to monitor the current events in the State-of-the-art of Fire Protection in tunnels and this sub group will be led by Rene van den Bosh of Netherlands. The working group has also decided to develop a document on the control of groundwater in operational tunnels. This subgroup will be led by Henry Russell, the Animateur.

The Group wishes to invite any members of the Association who would like to participate in the development of this report to contact the Working Group members or the Animateur.

15.9. – WG 9 – Seismic Effects: New Animator: Wenge Qiu (China), New Vice-Animator: Gary Kramer (Canada), Tutor: Jian Zhao (Switzerland) – Report presented by the Vice-Animator:

13 members from 9 different countries were present.

Basically the agenda for the group was the re-initiation of the working group 9. The members discussed on seismic effects in tunnels and the general conclusions was that tunnels perform very well in seismic events but that is not necessarily common knowledge both in general public and in the tunnel community. So the Group established a number of objectives began a discussion on future task. The on-going activities of the WG will be the implementation of the future tasks.

Primary objective for the working group: Recognizing that properly designed and constructed tunnels and underground space perform very well during seismic events, the objective of WG 9 is to advocate their use as a safe alternative to other forms of infrastructure in highly seismic regions of the world.

Implementation Objectives

WG 9 Objectives:	Primary Responsibility:	Timeframe:
Assist ITA members in the process of seismic design of tunnels by developing and making available a set of general guidelines for seismic analysis, design and detailing of tunnels.	Qiu	2 to 3 years
Present guidelines in a series presentations/workshops.	Qiu	2 to 3 years & ongoing
Identify seismic research study needs for the tunnelling industry.	Kramer + All	1 year & ongoing
Encourage an update of state of the art design/research paper.	Qiu	2 to 3 years
Update list of resources - update the bibliography on the ITA web page.	Kramer	6 months
Update database of existing tunnel performance in light of recent seismic events.	Volunteer	1 year & ongoing
Encourage participation from other ITA members and countries to participate in WG 9.	Qiu, Kramer	Immediate

Opportunity Areas I:

- Fault crossings – concepts & details for crossing/repair
- Portals – what are the problems/design requirements
- Level of analysis - dynamic or static – 2D or 3D
- Effects in rock tunnel compared to soft ground
- Deep tunnels versus shallow tunnels
- Instrumentation of tunnels for collection seismic response data and distribution of results
- What is the magnitude of seismic events/conditions that become a problem for tunnels?
- Special detailing requirements that may be of benefit to tunnel design

Opportunity Areas II:

- Interface between tunnels and other structures (deep excavations, shafts, stations, cut-and-cover)
- Modeling of tunnels – numerical, physical testing of tunnels – centrifuge, full scale
- Classification of tunnels and other underground structures with respect to building code requirements
- Areas of reported damage to tunnels – small scale and large scale
- Development of a suggested checklist for inspection of tunnels after seismic ideas & reporting forum

15.10. – WG 11 – Immersed and Floating Tunnels: Animator: Christian Ingerslev (USA), Vice-Animator: Jonathan Baber (United Kingdom), Tutor: Yann Leblais (France) – Report presented by the Animator:

The Working Group met on Sunday 16th May 2010. The meeting was attended by fifteen participants from nine countries, namely Canada, China, Denmark, France, Italy, The Netherlands, Norway, United Kingdom and United States. A second meeting was held the following day with thirteen of those participants.

The Working Group discussed at length the Alfred Haack *Report on the Evaluation of ITA Working Groups*. The Working Group is continuing with production of its Owners Guide to Immersed Tunnels, the first sections of which were uploaded to the ITA server before this Congress for public access. Greater emphasis will be placed on early uploading of further sections as they are produced. The Catalogue of Service Tunnels was also uploaded, as was the Immersed Tunnel Glossary of Terms. The Working Group will continue liaising with relevant other working groups. The working group was not able to understand criticisms in the evaluation and recommendations in the Report since these items are already part of the agreed tasks. It was also noted that once constructed, the potential depth, length and operation of an immersed tunnel would be no different to that of an equivalent soil or rock tunnel. The Working Group agreed that perhaps the perception of outsiders might not adequately reflect the intentions of the Working Group and that this should be addressed by better publicizing its activities and its output as it is uploaded to the ITA server.

Attendees reported on projects in their countries and with which they were involved. A number of additional project sheets have been submitted and are to be uploaded. PowerPoint reports were made on Limerick (Ireland), Bjørvika (Oslo, Norway), Busan-Geoje (Korea), Söderström (Stockholm, Sweden), Marieholm (Gothenburg, Sweden), HZMB and five other Chinese tunnels, Tyne (UK), The 2nd Coen and NZL (Amsterdam, The Netherlands). There was considerable discussion during these presentations. The Working Group is working on sections for an “Owners Guide” (General Principles) as reported last year. Discussion followed to determine progress on those sections drafted during the past year. While some

progress was made, the Working Group agreed to make greater efforts to speed the progress. Sections to be prepared during the coming year and authors for these were agreed; sections will be reviewed before uploading. If further comments are received, these sections can always be updated. Of the additional sections suggested last year, fire protection, element and expansion joints, cracking and concrete construction were completed. The attendees acknowledged that other proposed sections were not completed. A start will be made after the Congress on the environmental paper.

The Working Group decided in future to place greater emphasis on submerged floating tunnels (SFT) as indicated in the name of the Working Group. It was also agreed that this working group is the correct forum for this. A list of topics will be prepared similar to that of the Owners Guide; these will be expanded and placed on the server. Safety, fire and flooding are topics of great importance. It was also noted that four members of the Working Group would be going to the ISAB 2010 Symposium in China in October to make presentations on SFT and the ITA Working Group's role.

In response to a request from ITA CET, a 2-day course on immersed tunnels has been prepared and the response to a call for presenters has been overwhelming. This course is expected to be run in October.

Other tasks for the Working Group over the next few months were identified. A section will be prepared on rubber joints and extra provisions for these that are currently being demanded; research has shown that much of this may be unnecessary. Threats to tunnels was an additional section needed that would be prepared.

15.11. – WG 12 – Sprayed Concrete Use: New Animator: Atsumu Ishida (Japan), New Vice-Animator: Odd-Bjorn Kleven (Norway), Tutor: Eivind Grov (Norway) – Report presented by the Vice -Animator:

The meeting was attended by 19 participants coming from Brazil, Canada, Finland, France, Iran, Italy, Japan, Norway, South Africa, Sweden, Switzerland, Thailand, United Kingdom, and U.S.A.

15.11.1 - New animateur and vice-animateur

The group elected Atsumu Ishida for new animateur and Odd-Bjorn Kleven for new vice-animateur. Thanks are given to former animateur, Tarcisio Celestino.

15.11.2 - Activities

Evaluation on fibre-reinforced sprayed concrete

The Group has agreed to recollect the valuable information of toughness testing and fibre reinforcement from many member nations. Mike McPhee and Tarcisio Celestino will be in charge of preparing questionnaire.

Nozzleman Certification

Discussion was made for future activity on this subject after Catherine Larive summarized the paper in the Southern Africa Conference on certification schemes around the world. Janne Lehto presented a recent output of nozzleman certification from EFNARC. The group decided to continue this subject to endorsing the paper and the EFNARC documents in ITA web site.

Mix design and durability

After the report by Tony Boniface on curing and durability of sprayed concrete, published in the last years South African Symposium on Sprayed Concrete, the group decided to move on to the discussion on mix design and durability. Especially the difference between sprayed concrete and cast concrete are focused. The group decided to collect many information regarding design and durability from member nations and industries. Tony Boniface and Odd-Bjorn Kleven will be in charge of this activity.

Water proofing

Technology of water proofing arise interest among the member of this WG. Tarcisio Celestino will compile information available to see the possibility for a future task. Information about performance and consequences on the structural design and behaviour of the lining will be the main focus.

15.11.3 Information and announcement from the members

Tommy Ellison presented his recent results on Simulator for training robot operators.

Rusty Morgan announced recent publishing of his book, Shotcrete – A Compilation of Papers.

Atsumu Ishida briefly reported two international conferences on shotcrete, Shotcrete for Underground Support XI (Davos, Switzerland) and Engineering Developments in Shotcrete 2010 (Queenstown, New Zealand), both held between Budapest meeting and Vancouver meeting.

15.12. – WG 14 – Mechanization: Animateur: Lars Babendererde (Germany), Vice-Animateur: Felix Amberg (Switzerland), Tutor: Katsuji Fukumoto (Japan) - Report presented by the Animateur:

16 Participants from 9 Countries attended the meetings in Vancouver.

The Minutes of Meeting 2009 were accepted by the present members without any changes.

Pro- and Con-List Mechanised Tunnelling

The Animateur informed the WG about the current status of the document. As requested by the ExCo the document has been sent out to the WG 19 “Conventional Tunnelling” for comments.

The Animateur had the chance to discuss on the second day the document with WG19. The WG had strong objections against the document but were interested to participate in the elaboration of a comparable, but commonly written document.

As they did not meet after this discussion, the Animateur proposed to accept the offer and to elaborate a first draft format.

List of Challenging Projects

The current status of the list and the related documents has been explained. They were reviewed by the ExCo as well. Feedback is that the document would be uploaded once there is a separate email address for the submittal process. The process itself was demonstrated to the members.

Once the WG has a special email address for data response, the list is ready for upload onto the website. During the WTC the ExCo was asked to organise the additional address.

But they would need more project submittals from the Member Nations (MN). Only Japan submitted one project so far. The relevant pdf-forms for project submission were made available to the tenants for further distribution within the MN and will be emailed again to the WG once the address is available.

Further the WG proposed to prepare a short introduction to the “Criteria of Challenging Projects”. This should include a short promotion for mechanised tunnelling and an explanation of the purpose of this document and the list itself. Nasri Verya volunteered to elaborate this introduction.

WG Animateur Questionnaire

A questionnaire was distributed to all WG Animateurs for comment. The questionnaire was elaborated by Alfred Haack in which he reviewed the current work of the working groups and as well suggestions for the future work. The suggestions were discussed within the group. One of the key points to combine the WG 14 with 17 and 19 was declined by all members.

Another proposal was to elaborate a WG statement about the questions and limits of automation in TBM tunnelling.

It was agreed that this could be a topic for later work.

Update of Download Area

It has been detected that the current documents, available for download from the WG site are at least ten years old and such outdated. It was agreed in the meeting that the documents should be updated and further documents integrated. The future documents should be a compilation of national guide lines, standards etc.

The following members agreed to search for and mail updates:

Guidelines on TBM selection	AFTES (France)	Felix Amberg
	Austria	Felix Amberg
	Japan	Hiro Hazama
	Hong Kong (Geo)	Nick Shirlaw
	Norway	Arnulf Hansen
	Singapore	Nick Shirlaw
	USA	Brian Fulcher
TBM Construction	CEN	Werner Glatz
Compressed Air Regulations	Germany	Lars Babendererde
	OSHA USA	Brian Fulcher

If anyone, who has not been present at this meeting, is in possession of a comparable document or for another nation, he would be invited to submit as well.

Future work in WG

Brian Fulcher proposed a document describing the general development of mechanised tunnelling. It has been discussed within the group and is viewed as a valuable part within the information purpose of this group. Due to the already listed topics for this year, it was proposed to readdress it in the next year.

15.13. – WG 15 – Environment: Animator: Jan Rohde (Norway), New Vice-Animator: Yoshikazu Ota (Japan), Tutor: In-Mo Lee (South Korea) - Report presented by the Animator:

The Working Group met on two occasions and was attended by 6 representatives from 6 Member Nations, Sweden, Italy, Japan, Korea, United States, and Norway.

The Working Group’s report on "Environmental and Sustainable Development Reasons for Going Underground" was presented in the open session the 18th May.

The future goals of the working group as they relate to environmental and social impact are to communicate the following:

- Environmental challenges by going underground
- Environmental recommendations and guidelines when going underground

It was agreed to combine the two topics in one report.

The meeting had 6 presentations from each of the countries on vibrations, ventilations, muck disposal and recycling, ground water inflow, cultural and historical preservation.

The group discussed the contents and recommendations from the A. Haack report and agreed upon most of the comments and will require clarification on some.

The working group also agreed upon the future programme and goals and the time schedule for the works. The working group also discussed strategies to receive more case histories on challenges and solutions and will prepare a new questionnaire requesting member nations' guidelines, statutes, regulations, laws etc. regarding environmental aspects of underground projects.

Mr. Ota from Japan will rotate in as the new Vice Animateur, and Mr. Kaneshiro of USA will rotate out but will continue to participate and be an active member of the WG.

The WG will interface with all other WG on related issues.

15.14. – WG 17 – Long tunnels at great depth: Animateur: Gérard Seingre (Switzerland), Vice-Animateur: Minoru Shimokawachi (Japan – could not attend), Tutor: Piergiorgio Grasso (Italy) - Report presented by the Animateur:

The meeting was attended by 11 members from 9 different countries: Argentina, Canada, China, France, Italy, Japan, Norway, Sweden, and Switzerland.

Eight of the attendees were former members to the working group.

The first part of the meeting was dedicated to presentation of projects:

- An extended presentation was given on the Bioceanic Central Corridor Project between Mendoza in Argentina and Santiago de Chile. On the central portion of this private new freight railway line a 52 km long tunnel is projected. The international treaty between Argentina and Chile was signed and ratified last year. The final phase of feasibility study has been started.
- Short information was given on the state of advancement of the European base tunnel projects: Lyon-Turin, Brenner and the Gotthard. The final breakthrough of the world longest traffic tunnel is previous in October of this year.
- 2 other projects were presented:
 - Citybanan railway line in Stockholm (Sweden)
 - Nant de Drance pumped storage power plant in Switzerland. Where one of the Loetschberg hard rock TBM is now reused to drive a 5.5 km long adit.
- The vice animateur gave a presentation on Constitution and Facilities of Long Railway-Tunnel at Great Depth in Japan. He gave to all meeting participants a copy of the annual report the Japan Tunnelling Association.

All the presentations will be sent by e-mail to all group members.

During the final part of the meeting the future of the working was discussed. The WG report is now published. It is now downloadable on the ITA-Web site. The objective of the WG 17 has been successfully reached. (Copies of the WG report were given to meeting participants.)

The tutor and the animateur have proposed to group members to decide to stop the WG 17 because the job has been done. The second option was to identify clear tasks on specific problem to work on. For this option the animateur asked for an active participation of group members on the writing of documents. The animateur informs group members on the analysis of Prof. A. Haack. Three proposals came from group members:

- Focus on adits: survey function, construction, final functionality, safety...
- Construction methodology selection
- Guideline: contract for long and deep tunnel (in cooperation with WG 3)

The animateur informed the working group members that he has decided to continue only for 2 years and not on the last subject.

Finally the WG members agree to let the new ITA-Board decide himself to stop or not the WG 17.

15.15. – WG 18 – Training: Animateur: Daniele Peila (Italy), Vice-Animateur: Han Admiraal (Netherlands), Tutor: Markus Thewes (Germany) - Report presented by the Animateur:

The meeting of WG 18 was attended by members from Brazil, Thailand, the Netherlands, Italy, Egypt, France and Germany. After the meeting in Budapest, last year, we agreed on a transition period with regards to the cooperation between WG18 and ITACET committee. Following the meeting of animateurs in Vancouver and the advice given by Alfred Haack as appointed by the ExCo to look into the working of the working groups, a deep discussion on the future of the cooperation and activities was held.

The vice-animateur will write a position paper detailing the discussion. This paper will be given to Alfred Haack.

During the discussion working group members reached the conclusion that the most important tasks for which the working group was started have been completed. This includes the database of university courses, university professor network, development of courses before WTC's, and development of didactic material. From all these activity the ITACET committee evolved and has reached a relevant number of members. For this reason WG18 members strongly recommend to the ExCo to take into account the possibility of the integration of WG 18 into the ITACET committee thereby holding only one meeting during the WTC on Monday. They will ask those member nations not yet represented in WG 18 to propose names for working in this field.

They further proposed to integrate the tasks of WG 18 into various activity groups within the ITACET committee, given that the latter has evolved from WG 18, but now provides a bigger and more diverse platform to fulfil these tasks.

Activity groups can be, but are not limited to: knowledge management, new teaching tools and methodologies, training at early level of education (pre university activity, high school, training of technicians).

With regards to the latter a questionnaire will be send to the member nations and industrial partners of ITA (like prime sponsors) to understand which are the real needs in this field. This task will be taken up either by the working group or an activity group of ITA-CET depending on the decision of the ExCo reached in terms of the proposal to integrate.

15.16. – WG 19 – Conventional Tunnelling: Animateur: Heinz Ehrbar (Switzerland); Vice Animateur: Robert Galler (Austria), Tutor: François Vuilleumier (Switzerland) - Report presented by the Animateur:

The WG 19 had two meetings during the ITA World Tunnel Congress 2010 at Vancouver. Unfortunately the tutor, François Vuilleumier, could not come to the meetings due to personal reasons.

1st Meeting, Sunday May 24, 2010, 14:00 to 17:30

14 participants representing 12 nations attended the meeting of the working group on Sunday afternoon.

The meeting was opened with a short overview on the activities of the group since the World Tunnel Congress 2000 at Budapest. The most important event since then was the meeting on October 8, 2009 at Salzburg during the geomechanical colloquium. 11 participants were discussing the new project of the working group 19, the elaboration of guidelines on the special contractual aspects of conventional tunnelling. Some boundary conditions were stipulated. Also the draft of the ITA Contractual Framework for Underground Construction Contracts, a paper prepared by working group 3 was discussed at Salzburg and the feedback was given to ITA Secretariat and to the Working Group 3.

During the Sunday afternoon's meeting of this year the participants were informed about the evaluation on our activities by the Executive Council. This evaluation says, that

- WG is (*not?*) dealing with its original topic
- there is a thematic overlapping with WG 3
- No real perspective for topical future work visible

The Executive Council recommends:

- Widening the definition of “Conventional Tunnelling”, not only covering “NATM”
- Closer contact with the industry to find out their demands and requirements
- Thinking over merging with WG's 14 (mechanized tunnelling) and 17 (Long Tunnels at great depth)
- Focus on specific technical topics related to Conventional Tunnelling, e.g structural design, machinery, type of explosives

A discussion was held on the opinion of the Executive Council. The Working Group Members did not agree that there should be no real perspective for topical future work visible. In a short discussion some important topics were listed which will give work for the next ten years. Future topics can be the design of the inner lining for conventional driven tunnels, the use of different excavation methods, monitoring for conventional tunnelling etc.

A merger with other groups makes no sense for the participants, due to the fact, that conventional tunnelling has its special boundary conditions. Common projects as e.g. a joint report together with working group 14 on excavation methods can make sense.

In the future the working group will try to invite more people to give presentations in the working group. This could be also an opportunity for manufacturers and contractors.

Due to the fact that Working Group 19 is working only on one topic during 3 years, the Executive Council may get the impression of low activity. They believe that it is better to produce one substantial paper every 3 to 5 years with a good quality than many papers in a short time.

After this start-up discussion they began their work on their main topic, the guidelines on special contractual aspects for conventional tunnelling. Once more the participants pointed out the big interest in such a paper related to special boundary conditions of conventional tunnelling as they are the variable round length, the variation of the cross section in a short distance, the high flexibility in the shape of the cross sections and in the use of auxiliary construction methods in the case of changed ground conditions.

The first draft of the guidelines, which was given to the participants, was considered to be too much related to the European experience with unit price contracts. The delegates from the US will prepare their viewpoint with a special focus on design-build contracts and design-bid-build contracts.

The table of content will be changed and an additional chapter on project delivery methods will be integrated.

It is the aim of Working Group 19 to have a more detailed second draft for the next meeting at Helsinki, corresponding to the working schedule fixed at Budapest.

The future work will be done in cooperation with the working group 3, "Contractual practices".

2nd Meeting, Monday 17 of May 2010, 14:00 to 15:40

11 participants represented 8 nations in the second meeting.

The only topic of the meeting was the discussion of the paper on the "Application of Tunnel Boring Machines versus Drill & Blast, Conventional Tunnelling and Submerged Tunnels", prepared by the Working Group 14.

The Animateur of Working Group 14, Lars Babendererde attended the meeting and explained the view of Working Group 14.

A very intense discussion was held. The delegates of WG 19 took the decision, that they cannot support this paper because many statements base on opinions and not on facts.

It is more target-aimed for the working group 19 to elaborate a joint paper on the different excavation methods, based on hard facts.

The next Congress at Helsinki could be a good opportunity to start with this project.

15.17. – WG 20 – Urban Problems – Underground Solutions: Animateur: Amanda Elioff (USA), Vice-Animateur: Wroout Broere (Netherlands) and Vice-Animateur: Junji Nishi (ACUUS); Tutor: Harvey Parker (USA) - Report presented by the Animateur:

Working Group 20 with the topic "Urban Problems – Underground Solutions" met twice on Sunday and Monday. The meeting was well attended with 21 participants from 12 countries: Australia, Finland, France, Japan, Netherlands, Singapore, China, Italy, Iran, Hungary, UK and the USA.

As reported previously, the WG-report will be directed to planners and decision makers to provide creative and efficient ideas for the solution of urban problems and will serve as a decision aid. The focus of this product will be somewhat less on technical details but more on strategic aspects of urban planning, may they be of social, economical, ecological or aesthetical background.

The group progressed 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 seventh draft of the working group's first product (a report on urban problems, underground solutions, and key decision factors) was reviewed among the group. The action items that originated from the Budapest meeting were reviewed and most had been followed up in the last year. The text of the report was discussed in detail and remaining points were assigned to group members for completion or fact checking. Given the status of the report, a final draft is expected after summer 2010. An outside technical editor will be contracted with as well as a graphics designer to edit the appendix (discussed below)

Included as an appendix to the report will be a collection of 15 to 20 worldwide case history examples that will provide illustrations of notable underground solutions to urban problems. Additional projects for these case histories were collected over the last year. A number of projects have been formatted in a uniform presentation format, and a number will be formatted in the coming period. This appendix is intended to be a "living" document, such that new projects – as they are identified – can be added and viewed on the ITA website an its links.

The meeting also included presentations on the Alaskan Way Viaduct replacement, underground projects in Shanghai, including the Hongqiao Hub and on the Japan Deep Underground Usage Act and the project it as enabled.

The animateur attended the initial hour of the ITACUS steering committee meeting.

16 – APPOINTMENT OF THE MEMBERS OF THE COMMITTEE OF NOMINATION

In compliance with the procedures adopted at the General Assembly in 1993, the committee is in charge of preparing the future elections.

Since the death of Sir Alan Muir Wood, the Committee of Nomination is composed of the President, the Past President and the former President.

Therefore, for the year 2010-2011, it is composed of: In-Mo Lee – President, Martin Knights – Past President and Harvey Parker – Former President.

The Chairman of the Committee is the Past President Martin Knights.

17 – APPOINTMENT OF THE AUDITOR OF THE CONFORMITY OF THE ACTIONS OF THE EXECUTIVE COUNCIL

The General Assembly unanimously confirmed the choice of S. CALINESCU proposed by the Romanian Committee for the year 2010.

18 – DECISION CONCERNING THE CREATION OF NEW WORKING GROUPS

No specific demand received from the Member Nations.

19 – PREPARATION OF THE ASSEMBLIES 2011 AND 2012

a) Assembly 2011

Pekka SärKä presented the progress of the preparation of the Congress 2011 in Helsinki; as well as a short film; this presentation did not give rise to any remarks from the Member Nations.

b) Assembly 2012

Vince Suwansawat presented the progress of the preparation of the Congress 2012 in Bangkok; this presentation did not give rise to any remarks from the Member Nations.

20 - APPROBATION OF THE BUDGET FOR 2010

The budget for 2010 (Encl. 11), sent to the members with the invitation to the General Assembly, was presented and commented by the President.

The General Assembly unanimously approved the budget for 2010.

21 - DRAFT BUDGETS 2011 AND 2012

The draft budgets for 2011 and 2012 (Encl. 12) also sent with the invitation to the General Assembly, were shortly commented by the President.

No comment from the Assembly.

22 – CHOICE FOR THE PLACE OF THE GENERAL ASSEMBLY 2013

The vote gave the following results:

- Greece: 22 votes
- Switzerland: 26 votes

Switzerland will organize the Congress and the General Assembly of the Member Nations in May 2013 in Geneva.

23 – OTHER BUSINESS

Alan Muir Wood lecture: the lecturer for WTC 2011 will be Prof. Robert Mair from Cambridge University chosen by the Executive Council among the candidatures received.

24 – CLOSING SPEECH

The President Martin Knights concluded the Assembly. He first welcomed the new elected President and ExCo members for the following three years.

Then he thanked all the secretariat team, Bettina, Christiane, Claude and Olivier, and all the team at Lausanne, for their valuable support that he has had on a regular basis during his three years of Presidency.

Then he thanked all his friends and colleagues on the ExCo, those who are still staying and those who will go, for the long relationship that he enjoyed very much.

He underlined also the privileged to have had them in his home town in Dorking, UK, in February for the final working ExCo during his Presidency. There they had a good model for managing the ExCo meeting and he hoped that it will be adopted for the future meetings: that style of informality but sincerity to get things going and not to be stuck to the old round table formative way, but trying to progress things, really get involved and be energetic about the way they run the ExCo.

He also thanked the British Tunnelling Society for the support they gave him over the last ten years, particularly Donald Lamont who has been his colleague at general assemblies and also Barry New and Anthony Umney who have regularly supported him as part of the British contingent of the General assemblies in the tunnel world of the congress.

He thanked also his company Jaccobs who supported him very positively over the last five years.

And importantly Martin thanked, Jennifer, his wife, who not just performed wife duty but also really enjoyed sharing and participating in the life of the ITA. She had been verily proactive.

Martin Knights expressed his wish to urge the working groups not to slow down any of the momentum at all when they leave the GA this year: *"There is no excuse at this stage not to keep continuing the communications that we have in between the general assemblies. It is beholden on us to make sure that we are continuing our work in producing and publicizing what we are doing the working groups and over the last two years with a great improvement in the number of publications that we have for the working groups"*.

"It's great to meet every year in fabulous locations but we can't just forget about progressing the working groups once we leave. We have got to maintain that momentum."

Then he congratulated the successful candidates who had been elected and also to Switzerland for hosting the venue in 2013.

"And once again I have to thank everybody in the room who has had the confidence to elect me as President for the past three years. I have enjoyed it very much. I continue my association because I believe in the aims of the ITA and I found great comfort from the friendship that I have from everybody within this room. So thank you very much for allowing me to be President of the ITA. Thank you."

The President

The Executive Director

Martin Knights

Olivier Vion