

LEADERS

Executive decisions

Olivier Vion has a packed schedule as executive director of the International Tunnelling Association. He spoke to George Demetri

Outline your education and career to date

I graduated from the Ecole Supérieure des Travaux Publics (masters degree in civil engineering) in 1986, and then studied a second masters in human resources as a trainee.

During the next five years, I worked as marketing development engineer in Germany and France for a subsidiary of Lafarge Cement. I entered tunnelling while at Lafarge, where I was in charge of developing new products, such as back-grouting (Channel Tunnel), sprayed concrete, and special cement and additives for various projects, such as tunnels for the high-speed line between Lyon and Marseilles.

I then worked for a couple of years for a subsidiary of Bouygues as deputy commercial manager. In 1994, I started my own company, specialising in marketing for the worldwide tunnelling industry.

We started a weekly newsletter, which is still published – the ‘European Newsletter of Underground Works’ – to inform the industry of future European tunnelling projects. It is through the communication business that I began to work with the ITA as editor, first of ‘Tribune’ magazine and some years later of the ITA website.

I have also been very active inside the French Tunnelling Association (AFTES), co-ordinating the southwest region, being a member of numerous working groups, and secretary general of the French Committee for Underground Space Use.

In 2009, I became executive director of the ITA. I embarked recently on a sustainable development course.

What are your responsibilities as executive director?

ITA was founded in 1974, by 19 member nations, with the aim of sharing knowledge within the tunnelling industry. For 25 years, nearly every ITA activity was carried out on a voluntary basis. The executive council began a strategic think-tank, which led to a vision of the ITA as the ‘unquestioned leader in subsurface space’.

One of the ways of achieving this goal was the creation of a permanent body – the ITA

secretariat. Until 2009, the secretariat was led by the secretary general, who was a member of the executive council. In 2008, it was decided to replace the secretary general with an appointed executive director.

My role as executive director is to manage the association according to directives issued by the president and the executive council, who are elected by the member nations. With my team and external resources, we deal with the day-to-day affairs of 64 member nations, 190 corporate members, 30 supporters, 12 prime sponsors and the tunnelling industry in general.

Communication is one of the ITA’s main tasks. We promote the use of underground space to decision makers, the wider public, architects and planners, but also promote tunnelling via technical and scientific publications. The ITA website has two main sections: one dedicated to the general public with information on the use of underground space; the other dedicated to our members and tunnelling specialists.

Published since 1996, ‘Tribune’ magazine reports on members’ activities and there is also a bi-monthly electronic newsletter. We have great faith in social networks and contribute to our LinkedIn group, as well as to other groups. The ITA is a federation of member nations, and our main goal is to respond, help and support our members.

What are the current main thrusts globally of ITA policy?

The main thrusts are those stemming from the ITA vision, approved by the general assembly in 2000, and confirmed in 2007; these focus on technical, education, safety and, more recently, on the use of underground space for better and sustainable development.

Since its beginnings, the ITA has been greatly involved in technical issues and, to achieve this



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goal, has set up 12 working groups (WG). These gather experts and specialists from ITA member nations to discuss specific topics and, when necessary, write authoritative guidelines.

During the early days, most of the working groups focused on technical subjects, research and contractual practices. But, in 2000, it became clear that the ITA had also to be involved in safety and education. Of course, the theme of safety was already one of our concerns, but after the fire in the Mont-Blanc tunnel and the various studies carried out, the relationship between construction and operational safety became even more obvious. As a result, in 2007, the ITA, in conjunction with the World Road Association (PIARC), formed a special

committee on the safety of underground facilities.

In terms of education, the first step has been the creation of a working group on training; this has involved universities to consider how ITA can provide information to the global student population. In 2005, in Istanbul, ITA organised its first training course just before the World Tunnel Congress (WTC); since then, a training course is organised every year at WTC.

But it was clear that this was not enough. So, a committee on education and training was created – the University Network – where all tunnelling professors can meet regularly. During the past few years, the ITA has been asked regularly to organise or take part in training courses. Consequently, it formed the ITACET Foundation on training and education, which involves many of our partners.

Another ITA initiative is to promote to decision makers the use of underground space as a means of making cities more resilient. This was the main theme of our last open session during the 2011 Helsinki congress (WTC), and will be pursued during future congresses in Bangkok (2012) and Geneva (2013).

An impressive example of the type of underground space that can make cities more resilient is the SMART project in Kuala Lumpur, Malaysia. The tunnel is designed to prevent flooding of the city centre and eases traffic in the downtown area.

Outline the purpose and work of some of the working groups

From the start, ITA has had a WG dealing with contractual practices. This group has published some 30 recommendations or guidelines. Recently, it focused on a contractual framework checklist specifically for subsurface construction contracts.

Another very important group for the tunnelling industry is the one on immersed and floating tunnels – the only forum where specialists in this discipline can meet, and exchange ideas on the state of the art and best practice. This group publishes on the ITA website a regularly updated list of all immersed tunnels. Having published a leaflet in 1999 for decision makers, they are now working on more comprehensive guidelines on what owners need to know, as well as documents for the planning, construction and operation of immersed tunnels.

On another topic, the health and safety WG publishes regular guidelines and leaflets on best practice. Some of these are for engineers, but one, 'Safe Working In Tunnelling', is updated regularly and translated into some 10 languages. There are also working groups dealing with planning and environment, in which not only tunnelling engineers but also people involved in environment and sustainable development can take part.

How is ITA coping with the huge amount of tunnelling going on globally, in terms of education?

Education is one of the key drivers of the tunnelling industry. After a decade or so of relatively little global tunnelling, we now have a booming industry. This is mainly due to developing countries that need to cope with urbanisation and development. ITA appreciated this some years ago and is trying to promote the global development of skills, having been involved for many years in master studies in Italy, Switzerland, Spain and other countries.

The ITA has been asked regularly to organise training sessions, which was why it promoted the creation of ITACET. Through this new foundation, ITA and its partners are able to help member nations organise training sessions, featuring high-level lecturers, anywhere in the world. In the coming months, ITACET will participate in training in Mexico, Nepal, Cambodia and India. We also need to raise the profile of tunnelling to students and are preparing material to achieve this goal.

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Part of the ITA remit is to benchmark best practice – but how do you do that and how is it communicated to the global industry?

We hope that the working groups have now established best-practice benchmarking all over the world. In fact, member nations designate working group members, each of whom are expected to pool best-practice information with other members to the benefit of all. Indeed, most of the recommendations we publish are based on such shared best practices. Best results are achieved when the member nation has a 'mirror group' dealing with the same theme as the working group.

One question asked at a recent WT roundtable was 'What can companies do to help ITA?' – what can they do?

In fact, companies already do a lot for ITA. First, there are company members from various member nations. Companies support ITA financially and, consequently, the member nations; they also participate in working groups, symposiums and training sessions.

Companies have been involved with ITA

since 1980, following the creation of the 'corporate associate member' category. It was already clear that ITA and its member nations could not achieve their goal of sharing best practice without the help of companies. Of course, we expect a lot from companies; they allow their staff to participate in WGs and committees, sharing their experience with colleagues from other companies in order to promote best practice globally.

During the 2011 Helsinki general assembly, a new ITA-TECH committee was established, dedicated to technology. This committee will be active mainly through company work. Its objectives are to develop for the underground industry technical ideas and concepts based on emerging technologies; establish technical guidelines and recommendations for new technologies as a basis for safe applications and future standards; recognise emerging market and industry needs and trends that will influence business; create a common understanding and acceptance of such systems/technologies as a basis for market uptake, and provide an environment for the exchange of regular technical information.

Do you agree with the assertion that we are entering a 'golden period' for global tunnelling?

We entered this period already some years ago, when countries like China and India began to develop their metro systems, build sanitation and water-transfer tunnels, and construct large dams and related underground structures. Today, the industry, which, during the 20th century had been concentrated mainly in Europe and North America, is now a truly global phenomenon.

The ITA is seeing this development through the interest shown by new countries wanting to join it. In the past few years, new members have included Argentina, Azerbaijan, Belarus, Bosnia and Herzegovina, Laos, Nepal, Panama, Serbia and the United Arab Emirates; many others will probably join shortly.

Numerous reasons may underlie the global tunnelling boom. This includes the development of mega-cities around the world, with their demands for energy, transportation, sanitation and water; the consequences of climate change, and the need for underground solutions that can prevent flooding, create new micro-climates and provide solutions to earthquakes.