

Optimizing the Resource, Maximizing Expertise For All Tunnel Professionals

2nd TLA 2010 - Your opportunity to meet asia tunnel leaders

2nd Tunnel Leaders Asia 2010

Your Speakers from TLA 2010



Woohong Um,
Director, Sustainable
Infrastructure Division
Regional and
Sustainable
Development
Department,
**Asian Development
Bank**



Rob Holden
CEO
Crossrail



K K LAU
Director
**Drainage Service
Hong Kong**



Paul Hoyland
Chairman
**British Tunnelling
Society**



Guo Shanyun
President
**Tunnel and Underground
works Branch of
China Civil Engineering
Society**



Lu Ming, Associate
Professor
**Hong Kong
Polytechnic
University**



Eystein Grimstad,
Expert
**Norwegian Institute
of Geology**



Rommel C. Gavieta
Vice President
the Philippines Metro



Rick STAPLES
President
**Tunnelling
Association of
Canada**



ALMAND, Kathleen H.
Executive Director
**National Fire
Protection
Association**



Yan Jingyi
Deputy Chief Engineer
**RIOH Transport
Consultants Ltd.**



Yang Linde
Professor
Tongji University



Chen Shaozhang
Chief Engineer
Guangzhou Metro



**Dato' Paduka (Dr.) Ir. Hj
Keizrul Abdullah**
Immediate Past
**President of The
Institution of Engineers,
Malaysia**

Spotlights

1. Share ideas with experts on perspective of Sino - Korea submarine tunnel
2. Introduction to Sino-Italy joint project: Archimedes Bridge
3. The Longest Subsea tunnel in Southeast Asia - the tunnel under the river Saigon Vietnam
4. New Austrian Tunneling Method in Design and Construction of City Metro

Remarks from Attendees

"Our visitor have provide me with great feedback with regards to conference. You are doing great job.
The presentation of Hong Kong-Zhuhai-Macao Bridge project was very interesting"
- Edward Yosilevsky Israeli National Roads Company

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Optimizing the Resource, Maximizing Expertise For All Tunnel Professionals

OTLA^{2nd}
Tunnel Leaders Asia 2010

Two Day Conference:

18&19 November

**Pullman Shanghai Skyway,
Shanghai China**

Dear Tunnel People,

With the increasing urban population and crowded transportation network in Asia, Tunnel Projects for transportation and utility are becoming significant for city planners. In China, several featured tunnel projects have already been accomplished or under construction like:

- Shanghai to Chongming across Yangtz River Tunnel
- China's first underwater tunnel-Xiamen Xiang'an Subsea Tunnel
- HongKong-Zhuhai-Macao Bridge Tunnel
- The Longest Subsea tunnel in Southeast Asia - the tunnel under the river Saigon Vietnam

Besides, a great deal of technology and innovation has been applied from design to plan; from new equipment to new materials; from construction to operation to ensure larger tunnels are possible and safer to us.

2nd Tunnel Leaders Asia 2010 is established to solve problems during planning, construction and operation. It is designed for over 50 new project owners, 30 experienced contractors and 150 tunnel industrial leaders and government officials who seek opportunity for long term cooperation. Combining acclaimed conference, brainstorming and a live case study for new project, TLA 2010 is sure to be a second to none stage for the industry and your business in Asia.

**Catch the chance to meet Asia tunnel elites at ATL2010
and I look forward to seeing you to 2nd Asia Tunnel
Leaders**

Thanks to sponsors for previous tunnel event :



Best regards,

David SHAW

Project Manager

2nd TLA 2010 FAGO CHINA

OTLA^{2nd}
Tunnel Leaders Asia 2010

FAGO
PR&EVENTS

18&19 November
Pullman Shanghai Skyway,
Shanghai China

Why Attend

4 reasons you can't afford to miss

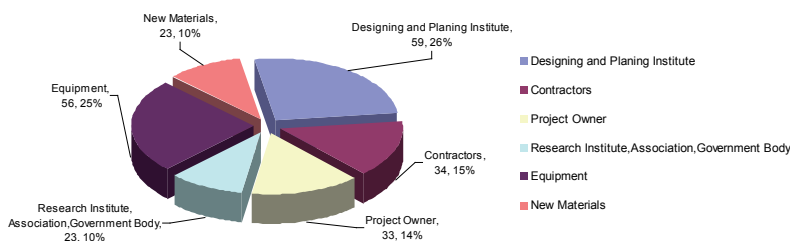
1. Exposure to project owners who are responsible for selecting technology and equipment for future tunnel projects in China and Asia.
 2. Meeting government officials and contractors for knowing more about planning tunnel project details.
 3. Coverage of new problems and solutions to these problems.
 4. Meeting with your present clients and make future clients via an efficient networking way.
- We schedule to increase the foreign presenter ratio so all the attendees can learn more during 2 days.

Who Should Attend

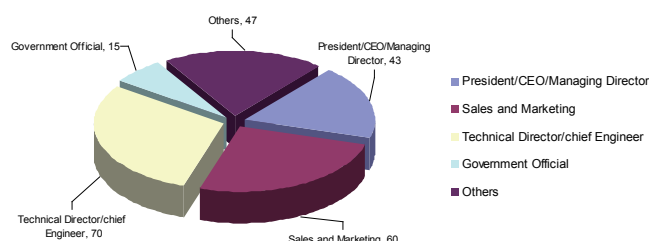
Target Market & Attendees

Tunnel Leaders Asia 2010 will target at Designing & Planning Institute, Project Owner, Contractor, Construction Company, Underground Equipment, Lighting Solution Provider, Ventilation Manufacture, Monitoring & Surveillance Equipment Provider, Waterproofing Solution Provider, Communication Solution Provider, Anti-fire Coatings manufacture, Surveying Solution Provider, Infrastructure Financial Body, Government Body, Law Firm and so force.

Attendees Types



Attendees Profile



Tunnel Leaders Brainstorming

Chairman: Guo Shanyun, President, Tunnel and Underground works Branch of China Civil Engineering Society

0900 Blueprint of Asian BOT (Build-Operation-Transfer) Model of Project Financing

Since the late 1980s, the number of Build-Operation-Transfer (BOT) type of infrastructure project that have been executed in Asia counts to approximately to 150. To meet the Asia's huge demand in infrastructure development and management, the unique BOT method will be implemented increasingly in the next decades to come in 21st century.

- Financing options for infrastructure projects
- Meeting the challenge: models of foreign participation
- Development of BOT

Woochong Um, Director, *Sustainable Infrastructure Division Regional and Sustainable Development Department, Asian Development Bank*

0930 Modern Silk Road --China-Korea Submarine Tunnel

Northeast Asian regions will become connected via high-speed railways, accelerating economic integration, when Korea's high-speed railways, Japan's Sinkan-sen, and China's high-speed railway (from Beijing to Shanghai, scheduled to be completed in 2013) are connected through undersea tunnels. The distance from Korea to Beijing via a Korea-China undersea tunnel would be similar to the distance traveling via North Korea, but the distance from Korea to the southern part of China, such as Shandong and Shanghai, would be significantly reduced.

- Optional routes to be chosen from
- Overall construction and co-financing between China and S.Korea

Jwa Sung-hee, President, *Gyeonggi Research Institute*

1000 Looking into the Chinese Tunnel Perspective

- Annual government Investment
- The booming Midwest tunnel market

Han Yali, Deputy Chief Engineer, *China Rail Tunnel Group*

1030 Tea Break ☕

1100 Project Presentation the A3 Hindhead Road Tunnel

The A3 trunk road is a major highway between London and Portsmouth on England's south coast. To tackle congestion and improve safety on this busy route – which carries an average of 28,400 vehicles per day – the Highways Agency is implementing a 6.5km dual two-lane highway scheme at Hindhead in Surrey. The scheme includes a 1.8km twin-bore tunnel which removes the trunk road from Hindhead village and from the Devil's Punchbowl, a famous natural landmark designated a Site of Special Scientific Interest and part of a Special Protection Area.

- The construction methodology- progressive mechanical excavation
- The "permanent" primary lining

Paul Hoyland, Chairman, *British Tunnelling Society*

1130 Panel Discussion: Sustainable Tunnel Construction Solution

Han Yali, Deputy Chief Engineer, *China Rail Tunnel Group*
Paul Hoyland, Chairman, *British Tunnelling Society*
Kikuchi Yusuke, Division Manager, *Obayashi Corporation*
Rommel C. Gavieta, vice president, *the Philippines Metro*
Didier Lacroix, Director, *CETU*

1200 Luncheon 🍴

Voice from Tunnel Giants

1330 Cutting-edged TMB Method

1400 The Longest Subsea tunnel in Southeast Asia - the tunnel under the river Saigon Vietnam

- The approach to immersed tunnel system
- Sustainable and economic effects to state-of-the-art works

Kikuchi Yusuke, Division Manager, *Obayashi Corporation*

1430 New Austrian Tunneling Method in Design and Construction of City Subway

In case the advantages of NATM – flexibility in term of shape, size and support of tunnels, relatively low costs, and applicability in nearly all conditions – shall be used, the owner, and the contractor, have to accept their responsibility

- CRD engineering methods or double side pit construction
- Design and construction of secondary lining
- NATM effects on environment

Dr. Liu Zhaowei, Deputy Chief Engineer, *China Railway Tunnel Group*

1500 Tea Break ☕

1530 Shotcrete Key Technical Q-system Advance for Sprayed Lining

Considering the case of sprayed concrete, alkaline accelerators should be avoided completely to remove the hazard, rather than specifying additional personal protective equipment. A live risk register is one good communication tool but it may not be enough on its own. For example, in a tunnel constructed using a sequential excavation method with a sprayed concrete lining, there may be considerable scope for the construction team to vary the construction method.

- Volume control rebound shotcrete
- Control of the thickness of sprayed concrete
- Sprayed concrete strength testing

Eystein Grimstad, Expert, *Norwegian Institute of Geology*

1600 Government of the Philippines on Improved Estimation of Underground Works

- Master plan for metro manila: existing projects and proposed development projects
- Government of the Philippines on the transport system estimation method
- Philippine Government to assess the new method proposed project's success in practice

Rommel C. Gavieta, Vice President, *the Philippines Metro*

1630 Design and Construction of Immersed Tunnel

The project area is seismically active and portions of the tunnel lie in ground that must be stabilized against liquefaction. The immersed tunnel is being built in eleven sections, or "elements," each roughly 135 m long, 15.3 m wide and 8.6 m high (443 feet long, 50 feet wide and 28 feet high) and weighing about 18 000 metric tonnes (20,000 short tons). The cross section of the tunnel is structurally a rectangular concrete box section provided with a separate tube for each track direction.

- The development of domestic and international situation at home and abroad immersed tube tunnel
- Foundation Construction
- Review of the Qiantang River immersed tube tunnel

Chen Shaozhang, Chief Engineer, *Guangzhou Metro*

1700 Cocktail party 🍸

Revelations throughout Tunnel Electronical & Mechanical Technology

Chairman: Paul Hoyland, Chairman, British Tunnelling Society

0900 Real-time Monitoring System Working in Auto TBM System

- Tunneling GSV intelligent total station applied in automatic tunnel boring machine
- Wireless data transmission and image processing, together with the Internet technology applied to real-time three-dimensional computer graphics.

Lu Ming, Associate Professor, *Hong Kong Polytechnic University*

0930 Extra-long Tunnel Ventilation Design

The exhaust gases from cars and lorries make ventilation necessary for road tunnels. Many different systems have been used, ranging from full transverse ventilation, i.e. ventilation air is supplied and exhausted via terminal devices distributed along the tunnel, to longitudinal ventilation, which in one way tunnels takes full advantage of the air flow induced by the traffic. The flow situation can be complicated; an example is two adjacent, interconnected, longitudinally ventilated one-way traffic tunnels. The need for computer modeling is obvious.

- Numerical simulation
- One-way traffic road tunnel ventilation force of the Numerical Simulation
- Showing Case--Tunnel ventilation test Dabaoshan

Yan Jingyi, Deputy Chief Engineer, *RIOH Transport Consultants Ltd.*

1000 LED Tunnel Lights Recommended Technical Specifications

Yu Anqi, Deputy Director, *State Quality Supervision and Inspection Center*

1030 Tea Break ☕

1130 Tunnel Traffic Incident Detection System

1200 Luncheon 🍴

Spotlight in Tunnel Design

1300 Harbour Area Treatment Scheme - Hong Kong tunnels

The Harbour Area Treatment Scheme is collecting and treating the sewage on both sides of Victoria Harbour. Here you can learn about why the scheme was implemented, its phases and what the polluter pays principle is doing to help improve the water quality of our world renowned harbour.

- The overall sewage collection on both sides of the harbour, which is no easy task given the size of the catchment area
- the largest treatment facility at Stonecutters all over the world
- the operation and maintenance of all sewage treatment in Harbour Area Treatment Scheme

K K LAU, Director, *Drainage Service Hong Kong*

1330 Tunnel Risk Control

Martin Smith, Managing Director, *Matrics*

1400 The Prospect Sino-Italian Cooperation Project - The Bridge of Archimedes (Submerged floating tunnel-SFT)

The concept of submerged floating tunnels is based on well-known technology applied to floating bridges and offshore structures, but the construction is mostly similar to that of immersed tunnels: One way is to build the tube in sections in a dry dock; then float these to the construction site and sink them into place, while sealed; and, when the sections are fixed to each other, the seals are broken. Another possibility is to build the sections unsealed, and after welding them together, pump the water out.

- The philosophy of Archimedes Bridge
- Ge Fei**, Associate Professor, *Mechanics Chinese Academy of Sciences*

1430 Tunnel fire safety design

Many new Rapid Transit Systems are being planned, designed and constructed in major cities in the world. Generally, nations are launching these projects with the aim of building and operating an efficient and effective land transport network that is integrated, efficient, cost-effective and sustainable to meet the needs of their urban population. With the above aim in mind, Builder / Owner / Operator of such rapid transit systems (RTS) not only have to ensure the safety of the railway but also that of the safety of commuters who use the system. Therefore, it is necessary to adopt a vigilant fire safety design that would meet the international standard as well as to incorporate comprehensive fire safety strategy to protect the life safety of transit's commuters, minimize loss of property and to facilitate evacuation, fire fighting and rescue operation in the event of an emergency.

David Charters, Director, *BRE Global*

1500 Tea Break ☕

1530 Application of A System-based and a Scenario-based Risk Analysis to the Driskos Tunnel

- A scenario-based method has been used for the Specific Hazard Investigation (which aims at studying all kinds of risks)
- A system-based risk analysis has been performed to support the decision about restrictions or not of the transport of Dangerous Goods (DG) in the Driskos tunnel.

Didier Lacroix, Director, *CETU*

1600 Where We Are Now? Crossrail

- Crossrail became a key element in the Mayor's London Plan due to expected population and employment growth, providing a direct link between Canary Wharf, the City, West End and Heathrow.
- Design vision principals include a modern railway to support London, suit passengers and integrate with the Network.

Rob Holden, CEO, *Crossrail*

1630 Closing Address

Yang Linde, Professor, *Tongji University*