



DRILLING



PREPARATION



BUILDING



EXPLOITATION



TUNNEL CONSTRUCTION IN ASIA

Trends, Developments and Opportunities

March 1-2, 2023 | Sheraton, Kuala Lumpur

Organised by:

**SOUTHEAST ASIA
INFRASTRUCTURE**

**Indian
Infrastructure**

Sponsor so far:

Exhibitors:



Tunnel Construction in Asia

Mission

- Tunnelling has become an integral part of infrastructure development across Asia. Infact, Asia is one of the fastest growing markets for tunnel construction with significant demand coming from sectors such as metro rail, railways, highways, water supply and sewerage disposal, hydropower and irrigation.
- Some of the noteworthy tunnels that will be completed in the coming years across the region are Bangabandhu Tunnel in Bangladesh, being constructed in the port city of Chattogram. It is the first underwater tunnel in South Asia which is expected to strengthen the connectivity between Bangladesh and its neighbouring countries. Sri Lanka too inaugurated one of the longest irrigation tunnels in South Asia, which will benefit more than 0.1 million families with access to potable water. The strategic Zojila tunnel in India is already nearing the halfway mark of completion.
- Advancements in tunnel technology and underground space engineering have played a pivotal role in faster and more efficient construction. The large size tunnel boring machines are one example of such advancement; with other areas of underground engineering also becoming highly sophisticated. Technologies are being used for better geological and geotechnical investigations; aerial and , photogrammetry-based surveys are being conducted and GPS-based systems with high accuracy levels are being adopted for mapping difficult terrain. New and innovative materials are being used to improve the durability and strength of tunnels.
- With a greater emphasis on safety, video surveillance systems, wireless communication, entrance detection control systems, electrical fire signalling systems, SOS call boxes, etc. are also being explored. The Zojila tunnel in India is being developed as a smart tunnel with safety features such as a fully transverse ventilation system, CCTV monitoring, emergency lighting, traffic logging equipment and a tunnel radio system in place.
- Going forward, the tunnelling sector is expected to thrive in the Asian region- given the government's focus on infrastructure development. There already exists a large pipeline of tunnel projects across countries that will offer abundant opportunities to EPC contractors, equipment and material suppliers, and consultants.
- The mission of this virtual conference is to analyse the key trends and developments in the tunnel construction market in Asia, discuss the experience and challenges in tunnel construction, and highlight the upcoming opportunities. The conference will also highlight the technologies and best practices in tunnel design, engineering and construction and showcase noteworthy projects.

Target Audience

The event is expected to draw participation from executives, managers and decision-makers from:

- | | |
|---------------------------------------|---|
| - Project developers | - Fire safety organisations |
| - Metro rail operators | - Consultants (design and engineering) |
| - EPC contractors | - Construction material organisations (steel, cement, grouting, gaskets, soil reinforcement, etc.) |
| - Road developers | - Technology providers (TBMs, excavators, drill rigs, cranes, loaders, roadheaders, shotcrete machines, etc.) |
| - Hydropower developers | - Etc |
| - Railway operators/boards | |
| - Water and Sewage project developers | |

AGENDA (Tentative)

KEY TRENDS, DEVELOPMENTS AND OUTLOOK

- ❖ What are the key trends and developments in the tunneling sector?
- ❖ What are the challenges being faced in the sector?
- ❖ What is the future outlook for the tunnel construction market in Asia?

SEGMENT FOCUS: CURRENT PRACTICES, EXPERIENCE AND UPCOMING PROJECTS

- ❖ METRO RAIL TUNNELS
- ❖ RAIL TUNNELS
- ❖ ROAD TUNNELS
- ❖ HYDRO TUNNELS
- ❖ WATER AND SEWAGE TUNNELS

- What are the current construction techniques/best practices in tunnel construction?
- How are the new and emerging techniques helping to attain cost benefits?
- What are the key challenges and lessons learnt?

The session will include presentations on key under- construction and completed tunnel projects across Asia

CONTRACTORS' PERSPECTIVE

- ❖ What has been the experience of contractors?
- ❖ What are the biggest issues and challenges? How are they being addressed?
- ❖ What are the new techniques being adopted?
- ❖ What specific steps are being taken to fast-track construction work?

COUNTRY PLANS AND PERSPECTIVE

- ❖ What have been the trends and developments in the tunnelling sector in your country?
- ❖ What are the new techniques and technologies being used for tunnel construction?
- ❖ What are the issues and challenges?
- ❖ What are the upcoming tunnelling projects?

TECHNIQUES/METHODS OF TUNNELLING (TBM, NATM, DBM, MICRO-TUNNELLING, ETC.)

- ❖ What has been the experience in the country in terms of adoption of techniques/methods of tunnelling?
- ❖ What are the key considerations in the selection of the technique/method of tunnelling? What are the specific features (cost per km, equipment, material and manpower requirements, etc.) of the techniques/methods adopted?
- ❖ What are the key issues and challenges? What is the future outlook?

EQUIPMENT SHOWCASE (EXCAVATORS, DRILL RIGS, CRANES, LOADERS, ROADHEADERS, ETC.)

- ❖ What are the emerging trends and advancements in the equipment segment?
- ❖ What have been the biggest issues and challenges? How are they being addressed?
- ❖ What is the future outlook?

FOCUS ON CONSTRUCTION MATERIALS

- ❖ What are the emerging material requirements for tunnel construction (steel, cement, anchors, explosives, girders, etc.)?
- ❖ What are the new options and innovations (shotcrete material, fibre and rock reinforcement, geosynthetics, etc.)?
- ❖ What are some of the new initiatives in this segment? What has been the impact on costs?

SMART SAFETY SOLUTIONS FOR TUNNELS

- ❖ What have been the recent technological solutions deployed for ensuring safety in tunnel construction?
- ❖ What are the advancements in the field of safety? What are the issues and challenges being faced?
- ❖ What are some of the best practices?

DESIGN, ENGINEERING AND PROJECT MANAGEMENT

- ❖ What are the current design and engineering practices being followed?
- ❖ What are the technological advancements and innovations in this field?
- ❖ What are some of the best practices and noteworthy projects? What lessons can be drawn from these?

TUNNEL REPAIR AND REHABILITATION

- ❖ What are the emerging solutions for tunnel repair and restoration?
- ❖ What is the role of technology in tunnel rehabilitation and asset management?
- ❖ What are the new innovations and advancements for tunnel maintenance?

CHALLENGES AND RISKS IN COMPLEX TERRAIN

- ❖ What has been the experience in tunnel construction in geographically difficult locations?
- ❖ What are the challenges associated with the planning, design and construction of such tunnels? How are these being addressed?
- ❖ What are some of the noteworthy projects? What can be learnt from them?

PREVIOUS SPEAKERS

The list of speakers at the first edition of **Tunnel Construction Asia** included (*in alphabetical order*):

- ❖ Lt Col Manish Kapil
Joint Director, Bridges and Tunnels, **Border Roads Organisation**
- ❖ Dr Florian Krenn
Managing Director, **Geoconsult**
- ❖ Sabu Thomas Mampilly
Business Manager FRA&A-AMEA Region & Tunnels Manager - Middle East, **Etex Group**
- ❖ M.M. Madan
Advisor -Tunnelling & Hydropower Group (National Council on Construction Equipment and Hydro Power), **ASSOCHAM**
- ❖ Mukesh Mokha
General Manager, Technical, **Bajaj Reinforcement**
- ❖ Prabhat Mittal
Vice President – Tunnelling & Mechanical Cutting, **Sandvik Mining and Rock Solutions**
- ❖ Weni Maulina
Engineering Division Head, **Jakarta MRT**
- ❖ G.B. Nagendra
General Manager, Projects, **Konkan Railway Corporation**
- ❖ Nick Osborne
East Asia Transport Sector Leader, **Mott MacDonald**
- ❖ Daniele Papais
Senior Engineer, **FAMA SRL**
- ❖ C. Sankaralingam
Advisor – Divisional Corporate, **L&T Construction**
- ❖ Ilmari Siikanen
Sales Engineer, **Robit Group**
- ❖ Arjun Jung Thapa
Director General, Department of Roads, **Ministry of Physical Infrastructure and Transport, Nepal**

PARTICIPANTS IN OUR TUNNEL CONSTRUCTION CONFERENCE

The organisations that have participated in our previous conferences on “Tunnel Construction in India” include Aarvee Associates, Adcos, AECOM, AF Colenco, Afcons, Aker, Aldesa, Amberg Engineering, Bangalore Metro Rail Corporation, Bekaert, Border Roads Organisation, Chennai Metro Rail, CMRL, COWI, Dassault, DFCCIL, Delhi Jal Board, Dextra India, Delhi Metro Rail Corporation, Draeger Safety, DRDO, DSI Bridgecon, Duraflex, Dywidag, Egis, FOGTEC, Gammon, Gates, Geoconsult, Geo Constech, Geodata, Giertsen Tunnel, GMR, GMW, HCC, Herrenknecht, Hill International, Hitachi Zosen, Hochtief, ILF Asia, IRB Infrastructure, Ircon International, Isolux Corsan, ITD Cementation, Jaipur Metro, JCB, Jindal power, Jindal Steel, JMC Projects, JSW Infrastructure, K Rajagopalan & Co, KEC International, Kolkata Metro Rail Corporation, Kross Air Distribution Systems, Konkan Railway Corporation, Krishna Hydro Projects, KSK Dibbin Hydro Power, Kutch Railways, Larsen & Toubro, Lahmeyer, Leighton, L&T, Leica Geosystems, Lombardi, Louis Berger, Lucknow Metro Rail Corporation, MC Bauchemie, Mumbai Metro, Mumbai Rail Vikas Corporation, Mumbai Metropolitan Region Development Authority, Municipal Corporation of Greater Mumbai, Newkem, NHAI, NHIDCL, NHPC, National High Speed Rail Corporation, Nina Precept, Normet, North East Frontier Railway, Northern Railway, NTPC, OBO Betterman, Outokompu, Patel Engineering, Poyry, Precision Drawell, Railway Board, Ramboll, RDSO, Renesco, Rex Polyextrusion, RITES, Robbins, RVNL, Sandvik, Savronik Sistem, SERING Ingegneria, SEW Infrastructure, Sika India, Simplex Infrastructure, SJVN, SMC India, SMEC, SMS Infrastructure, SNC Lavalin Engineering, Spectrum, Star Drilling, Sterling Wilson, Sunil Chemicals, SUCG Infrastructure, Systemair, Systra MVA Consulting, TAM Construction Chemicals, TCE, Telcon, Telegra DOO, Terratec, THDC, Tata Power, Tata Projects, Tej Engineering, Totem, etc.

DELEGATE FEE

Delegates	Standard Fee	Discounted Fee 30% USD	Discounted Fee 15% USD
One delegate	900	630	765
Two delegates	1,500	1,050	1,275
Three delegates	2,100	1,470	1,785
Four delegates	2,700	1,890	2,295
Five delegates	3,300	2,310	2,805

There is a special fee applicable for Government agencies, tunnel project owners, hydro power producers, metro rail operators, railway operators, road authorities, water utilities. Delegate fee for single person is 300 USD till January 20. Delegate fee for single person is 375 USD till February 10 and 400 USD thereafter.

- 30 per cent “early bird” discount ends on January 27, 2023
- 15 per cent “early bird” discount ends on February 10, 2023
- Registration will be confirmed on the receipt of payment.

ABOUT THE ORGANISER

The conference is being organised by **India Infrastructure Publishing**. India Infrastructure Publishing is a company dedicated to providing information on the infrastructure sectors in India through magazines, conferences, newsletters and research reports. We bring out high-quality, world-class products backed by over two decades of experience, an extensive knowledge base, as well as relationships with all key stakeholder groups across the infrastructure sectors: power, renewable energy, oil and gas, ports and shipping, roads and bridges, telecommunications, aviation, railways, water, health, housing, banking and infra finance. We also publish a series of reports, including Tunnelling in India, Hydro Power in India, Urban Rail in India, Road Development in India and Railways in India.

The company publishes South East Asia Infrastructure and Indian Infrastructure magazines.

South East Asia Infrastructure (www.southeastasiainfra.com) is a leading source of information on infrastructure development in Southeast Asia. It tracks key developments, analyses emerging trends, features industry players and perspectives, highlights key initiatives, and profiles exemplary projects.

Indian Infrastructure (<https://indianinfrastructure.com>) is targeted at the very top decision-makers and financial managers in the infrastructure sectors. The sectors covered include power, telecom, roads and bridges, construction, oil and gas, ports and shipping, aviation, railways, urban infrastructure and infrastructure finance. The magazine provides news, information and analysis of the latest developments related to policy, projects and investments in these sectors in India. It is published monthly.

SPONSORSHIP

Dinner & Drinks Sponsor – USD 15, 000

- Branding as Dinner and Drinks sponsor
- Corporate film to be played during breaks (tea/coffee/lunch breaks)
- Branding on all marketing collaterals/ materials
- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Verbal recognition at the sponsored event
- Social media posts
- 8 delegate registrations

Option 1 – USD 10,000

- Speaking slot/ Presentation of 15-20 mins
- Moderating a panel discussion
- Branding on all marketing collaterals/ materials
- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Verbal recognition at the sponsored event
- Social media posts
- Table space at the venue
- 5 delegate registrations (excluding the speaker)

Exclusive Wi-Fi sponsor – USD 10,000

- Named Wi-Fi Sponsor
- Tent cards with branding (to be placed on tables for the conference)
- Branding on all marketing collaterals/ materials
- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Social media posts
- 2 delegate registrations

Option 2 – USD 5,000

- Speaking slot/ presentation of 15-20 mins
- Branding on all marketing collaterals/ materials

- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Verbal recognition at the sponsored event
- Social media posts
- 4 delegate registrations (excluding the speaker)

Lanyard sponsor – USD 4, 500

- Named Lanyard Sponsor
- Branding on all marketing collaterals/ materials
- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Verbal recognition at the sponsored event
- Social media posts
- 2 delegate registrations
- Lanyards to be provided by company

Coffee sponsor – USD 3,500

- Named Coffee Sponsor
- Branding on all marketing collaterals/ materials
- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Verbal recognition at the sponsored event
- Social media posts
- 2 delegate registrations

Exhibitor – USD 3,000

- Branding on all marketing collaterals/ materials
- Branding on all communication of the conference
- Branding on all event paid promotional campaigns
- Verbal recognition at the sponsored event
- Social media posts
- Table space at the venue
- 2 delegate registrations

Cover pic courtesy: shutterstock images

TERMS AND CONDITIONS

Payment Policy

- ❖ Full payment must be received prior to the conference. For discounted rates, the payment must be received on or before the discount expires.
- ❖ Substitution and name changes are welcome at no extra charge.

Cancellations

- ❖ Cancellations received in writing 30 days before the date of the conference will receive a full refund, minus a service charge/administration fee of USD 30.
- ❖ Substitutions/name changes are welcome at no extra charge. Please send these in writing at least two days prior to the conference.
- ❖ Powerline shall assume no liability whatsoever in case the event is postponed or cancelled due to a fortuitous event or unforeseen occurrence that renders the performance of this conference impracticable, illegal or impossible. For purpose of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency. India Infrastructure's responsibility is limited to return of the registration fee only and is not liable for any cost in relation to travel and accommodation.
- ❖ Please note that it may become necessary for reasons beyond the control of the organisers to make alterations to the content and timing of the programme or speakers.

CONTACT US

For registration and sponsorship opportunities:

Mansi Taneja

Email: mansi.taneja@southeastasiainfra.com

Mobile: +91-9910032924

To register, email us to:

mansi.taneja@southeastasiainfra.com