



ASSOCIATION  
INTERNATIONALE DES TUNNELIERS  
ET DE L'ESPACE SOUTERRAIN

ITA

AITES

INTERNATIONAL TUNNELLING  
AND UNDERGROUND SPACE  
ASSOCIATION

# Tunnelling Asia 2025

**International Conference on  
Revolutionizing Underground Infrastructure  
through Advanced Tunneling Techniques**

&

**Celebrating World Tunnel Day**

**5th Edition of TAI Excellence Awards**

**3<sup>rd</sup> - 4<sup>th</sup> December 2025 (Wed. & Thur.)**

**Scope Complex Auditorium,  
Lodhi Road, New Delhi**

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**Silver**



**Bajaj  
Reinforcements**

# Invitation



from the President,  
Tunnelling Association of India (TAI)  
Mr. R.K. Dhiman, AVSM, VSM, Former ADG, BRO

It is my privilege and pleasure to extend a warm invitation to all tunneling professionals, researchers, policy-makers, industry leaders, and stakeholders to participate in Tunnelling Asia 2025, scheduled to be held on 3<sup>rd</sup> – 4<sup>th</sup> December 2025.

This flagship event, organized by the Tunnelling Association of India (TAI) in association with CBIP, aims to bring together the best of minds from across Asia and beyond to deliberate on the latest advancements, challenges, and opportunities in the field of underground space and tunneling technologies.

As India embarks on a rapid infrastructure expansion journey, tunneling is playing a pivotal role in metro systems, highways, railways, hydropower, and water management projects. The need for sustainable and resilient underground solutions has never been greater. In this context, Tunnelling Asia 2025 offers an exceptional platform for sharing innovations, forging collaborations, and building capacity for the future.

We are proud to host this timely conference and look forward to meaningful participation from ITA member nations, particularly from the Asian region. I warmly invite all stakeholders to join us in making this event a grand success, and to collectively shape the future of tunneling in our region and beyond.

Looking forward to welcoming you to Tunnelling Asia 2025.

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# Message



from the President  
International Tunnelling and Underground Space Association (ITA)  
Mr. Andrea Pigorini

It is a pleasure to extend my warm greetings to all participants, organisers, and partners of Tunnelling Asia 2025. In today's rapidly evolving infrastructure landscape, tunneling is not merely a technical discipline but a strategic enabler of sustainable urban development, regional connectivity, and climate resilience.

The Asian region, with its dynamic economies, diverse geographies, and vast infrastructure needs, holds immense potential for collaboration, innovation, and growth in underground space development. I take this opportunity to encourage active participation from all ITA member nations, particularly our Asian counterparts, to share experiences, showcase progress, and build lasting networks through this prestigious platform.

I commend the Tunnelling Association of India and CBIP for hosting this timely initiative, and I look forward to participating to personally convey ITA's commitment to supporting MN initiatives, and to seeing Tunnelling Asia 2025 serve as a springboard for future-ready tunnelling practices and partnerships.



## INTRODUCTION & BACKGROUND

With increasing urban density, complex terrain, and rising environmental considerations, tunneling has emerged as a transformative solution for infrastructure development across Asia. Be it metro systems, hydropower tunnels, roadways, or underground utilities, tunneling offers unmatched advantages in land optimization, resilience, and sustainability.

Tunneling Asia 2025, organized by the Tunnelling Association of India (TAI), aims to unite international experts, policy influencers, engineers, and technology leaders to drive meaningful dialogue and collaboration on emerging tunneling techniques, technologies, and project delivery models shaping the future of underground infrastructure.

## TOPICS & SUBTOPICS FOR DISCUSSION

### 1. Cutting-edge Tunneling Technologies

- Conventional tunneling (NATM, drill & blast)
- Robotics, remote monitoring, and automation
- Microtunneling and trenchless methods
- Advances in Tunnel Boring Machines (TBMs)

### 2. Tunnel Design, Engineering & Safety

- Geotechnical investigation and risk assessment
- Structural and lining design for long-term stability
- Waterproofing and drainage systems
- Tunnel ventilation design: fresh air supply and extraction systems
- Longitudinal vs transverse ventilation systems
- Ventilation in road tunnels, metro systems, and utility tunnels
- Fire and smoke control strategies in tunnel ventilation
- Emergency response and life safety systems

### 3. Digitalization & Smart Tunneling

- BIM integration for tunnel planning and maintenance
- IoT-enabled condition monitoring
- AI and digital twin technologies for predictive maintenance
- Data-driven decision-making in construction and operations
- Centralized control systems for real-time monitoring, coordination, and decision-making across tunnel assets and operations

### 4. Environmental & Sustainable Practices

- Eco-sensitive tunneling and green certifications
- Energy-efficient ventilation and lighting
- Waste material reuse and carbon footprint reduction
- Climate-resilient tunnel infrastructure

### 5. Policy, Financing & Project Delivery

- Evolving regulatory frameworks & policy alignment
- PPP models and innovative financing mechanisms
- Contractual risk management and dispute resolution
- Capacity building, training and skill development

### 6. Case Studies & Global Best Practices

- Urban metro tunnels and underground highways
- Hydropower headrace tunnels in Himalayan regions
- Tunneling in mixed ground and challenging geologies
- International collaborative projects and innovations

## KEY TAKEAWAYS

- Learn about the latest tunneling methods and digital innovations
- Explore ventilation design principles and safety strategies
- Understand sustainability trends and green infrastructure solutions
- Gain insights from case studies of major Asian and global projects
- Connect with experts shaping the future of underground infrastructure
- Discover business opportunities, new partnerships, and technological trends

## WHO SHOULD PARTICIPATE?

- Tunnel engineers, ventilation & fire safety specialists
- Metro rail, highway and hydropower developers
- Civil contractors, consultants, and EPC firms
- Equipment manufacturers and technology providers
- Government officials and policy planners
- Academicians, researchers and young professionals
- Environmental engineers and sustainability experts

## CALL FOR PAPERS/CASE STUDIES

The papers/case studies on the subject are invited. Intending authors may send Synopsis of paper(s)/ case study(ies) as per the guidelines/instructions so as to reach the Conference Secretariat by **15th October 2025**. The papers/case studies accepted for presentation will be notified immediately thereafter. Only original contributions that have not been published or presented at any other conference/symposium/ seminar are acceptable, otherwise the paper will not be considered. The full length paper will be reviewed by the Technical Committee for oral and poster during the conference presentations.

## GUIDELINES FOR PREPARATION OF PAPERS/CASE STUDIES

Please refer Website : [http:// www.tai.org.in](http://www.tai.org.in)



## TIME LINE

- Receipt of Synopsis of paper(s)/case study(ies) – **15th October 2025**
- Notification for acceptance of Synopsis – **25th October 2025**
- Submission of Full Text of Papers – **15th November 2025**

## OFFICIAL LANGUAGE

The official language of the Conference is English.

## DATE & VENUE

The conference is proposed to be held in 3-4 December 2025, Scope Complex Auditorium, Scope Complex, Lodhi Road, New Delhi

## TANTATIVE SCHEDULE

3-12-2025 – Day 1	
09:00 – 10:00	Registration
10:00 – 11:00	Inaugural
11:00 – 11:30	Tea Break
11:30 – 18:00	Technical Session (with lunch and Evening Tea Break)
4-12-2025 – Day 2	
11:00 – 14:00	Technical Session
14:00 – 15:00	Lunch
15:00 – 19:00	World Tunnel Day - Celebratiion Awards, Followed by Dinner (Tentative)

## REGISTRATION

The registration fee payable by the delegates, including authors of papers, for participation in the conference is as follows:

Delegates	Delegate/Author	Research Student
<b>SAARC Countries in (INR)</b>	Rs. 20,000*	Rs. 10,000*
<b>Other Countries in (USD)</b>	USD 400*	USD 250*

\*18% GST extra on registration fees mentioned above. GST No. : 07AAAAA8324J2ZT

10% discount will be given to Members of CBIP, TAI, ISRM (India) and IGS.

## EXHIBITION OPPORTUNITY

Tunneling Asia 2025 will host a dedicated exhibition zone, offering companies and organizations the opportunity to:

- Showcase equipment, tools, and technologies
- Present ventilation, monitoring, and safety systems
- Engage directly with tunnel developers and authorities
- Build brand recognition and explore new business leads

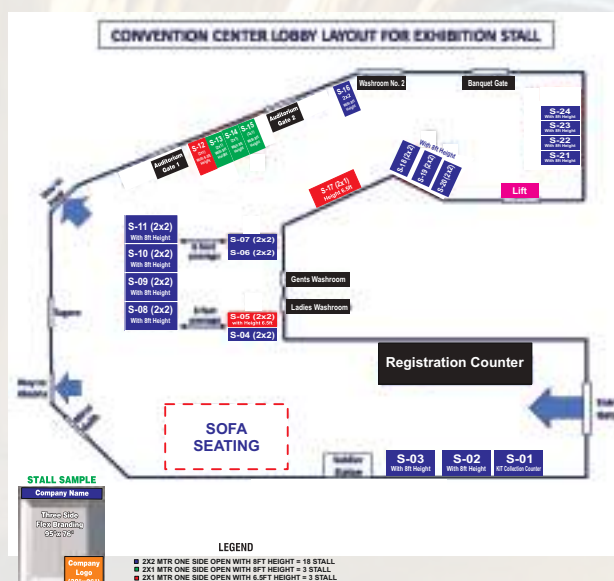
Custom exhibition packages and sponsorship options are available. Limited slots, book early to secure your space.

The Charges for one stall will be Rs. 2.00 lacs + GST.

GST@18%. GST No. : 07AAAAA8324J2ZT

## DELIVERABLE

One Built-in Booth; Table and Chair (one each); Electric Point; Free Delegate ( to manage the booth / attend the conference (2 no.) per booth.





The exhibition will provide a scope to present the new technologies, materials and mechanisms including software. Participants will enjoy sufficient time and opportunity to visit the exhibition and exhibitors will have an excellent opportunity of accessing a large number of potential buyers/decision makers each day. This exhibition stalls will be allotted on first-cum-first served basis.

## SPONSORSHIP OPPORTUNITY

Enhance your brand visibility and connect with key decision-makers by partnering with Tunneling Asia 2025.

The Conference will provide an excellent opportunity to national and international organizations; central / state government organizations, public sector undertakings, industrial organizations, equipment manufacturers, entrepreneurs, financial and funding institutions, consulting and construction organizations to publicize themselves by being Platinum / Golden / Silver sponsors or Supporter of the Conference. The sponsorship fees payable and benefits are mentioned below. Interested organizations may communicate their willingness to the Conference Secretariat.

## SPONSORSHIP OPPORTUNITIES

Entitlement	Levels						
	<i>Platinum</i>	<i>Golden</i>	<i>Silver</i>	<i>Supporter</i>	<i>Kit Sponsor</i>	<i>Lunch Sponsor</i>	<i>Dinner Sponsor</i>
	INR 10.00 lacs	INR 5.00 lacs	INR 3.00 lacs	INR 2.00 lacs	INR 3.00 lacs	INR 3.00 lacs	INR 5.00 lacs
Logo on the Backdrop	✓	✓	✓	✓	✓	✓	✓
Complimentary Delegates	15	6	4	2	2	4	6
Presentation Slot	✓	✓	–	–	–	–	–
Distribution of catalogues	✓	✓	✓	✓	✓	✓	–
Exhibition Stall	1	–	–	–	–	–	–
Advertisements (in page/s)	Two	Two	One	Half	Half	One	Two
Display of name during lunch hours	–	–	–	–	–	✓	–
Display of name during Dinner hours	–	–	–	–	–	–	✓
Name & Logo in the inner flap of the Kit	–	–	–	–	✓	–	–

## PAYMENT

All payments are to be made by the following methods:

The fee can be paid by cheque to be drawn in favour of "Adhering Committee of International Tunnelling Association (India)" or by bank transfer to the following account:

### Beneficiary Details

- Name of Bank: Canara Bank, Delhi Diplomatic Enclave, 7/48, Malcha Marg, Chanakyapuri, New Delhi 110021
- Account Holder Name: "ADHERING COMM OF ITA" • Account No. 0157101031496
- MICR Code No. 110015007 • IFSC Code: CNRB0000157 • Swift Code: CNRBINBBDFS

Bank charges if any, must be borne by the organisation/participants and should not be deducted from the amount remitted to the Conference Secretariat.

## Conference Secretariat

Mr. A.K. Dinkar, Secretary, CBIP and Secretary General, TAI - Email : [secretary@cbip.org](mailto:secretary@cbip.org)

Mr. K.K. Singh, Director (WR), CBIP and Treasurer, TAI - E-mail: [kksingh@cbip.org](mailto:kksingh@cbip.org)

C/o CBIP, Plot No. 4, Institutional Area, Malcha Marg, Chanakyapuri, New Delhi-110 021

Malcha Marg, Chanakyapuri, New Delhi - 110 021, India Phone : 91-11-2611 5984 / 2611 6567

**Contact Person** : Mr. Vishan Dutt, Advisor, M: 9811431554, E-mail: [vishandutt@cbip.org](mailto:vishandutt@cbip.org) ;

Mr. Puneet Khairal, TAI Secretariat, M: 9953976775, E-mail: [contact@tai.org.in](mailto:contact@tai.org.in)

[www.tai.org.in](http://www.tai.org.in)



# World Tunnel Day Celebration

&

*5th Edition*

## TAI TUNNELLING AWARDS 2025

**4th December 2025**

### 5th EDITION OF THE TAI TUNNELLING AWARDS

Organised by the Tunnelling Association of India, this event will take place at New Delhi, India at the occasion of the Tunnelling Asia Conference 2025.

Since 2017, this competition seeks and rewards remarkable achievements in tunnelling and the underground industry.

The event both showcases the most ambitious underground projects in India as well as the latest innovations, techniques, and methods in tunnelling.

Call for entries : The Entries can be submitted in 6 categories by TAI Members only (Individual / Organisation)

- Life Time Achivement Award
- Tunnelling Project of the Year
- Technical Innovation in Tunnelling
- Safety Initiatives in Tunnelling and Underground projects
- Environmental Initiatives in Tunnelling
- Young Tunneller of the Year

Registration for application till 15th November 2025. Criteria and format for submission of Award entires are given in [www.tai.org.in/tai-awards/](http://www.tai.org.in/tai-awards/)



# Tunneling Asia 2025

## Revolutionizing Underground Infrastructure through Advanced Tunneling Techniques

**3<sup>rd</sup> - 4<sup>th</sup> December 2025 (Wednesday & Thursday)**

**Scope Complex Auditorium,  
Lodhi Road, New Delhi**

### REGISTRATION FORM

(to be sent to [contact@tai.org.in](mailto:contact@tai.org.in))

1. Name \_\_\_\_\_  
(First Name) (Middle Name) (Surname)

2. Position \_\_\_\_\_

3. Organization \_\_\_\_\_

Address \_\_\_\_\_

5. City \_\_\_\_\_ PIN \_\_\_\_\_

6. Mobile No. \_\_\_\_\_ E-mail ID \_\_\_\_\_

7. Country \_\_\_\_\_ Passport No. \_\_\_\_\_

8. Bank Draft No./ Online Bank Transaction ID \_\_\_\_\_ dated  
\_\_\_\_\_ for Rs. \_\_\_\_\_ is enclosed.

9. I intend to participate in the deliberations of the event.

\_\_\_\_\_  
(Signature)

Place: \_\_\_\_\_

Date : \_\_\_\_\_

#### SECRETARIAT

#### Tunnelling Association of India

C/o CBIP, Plot No. 4, Institutional Area, Malcha Marg, Chanakyapuri, New Delhi-110 021

Phone: 91-11-26115984 / 26116567