CPD Hours : 13 CPD Hours

Reference No: IEM16/HQ/452/T

TRAINING SESSION

RISK MANAGEMENT IN TUNNELLING

Sunday & Monday,
13 & 14 November 2016
8:00 AM – 6:00 PM

Venue

Tan Sri Prof. Chin Fung Kee Auditorium,
Wisma IEM, Jalan Selangor , 46200 Petaling Jaya

Organized by:

Tunnelling and Underground Space Technical Division
The Institution of Engineers, Malaysia.

Supported by:

Foundation for Education on Training on Tunnelling and Underground Space Use (ITACET Foundation)

Managed by:

IEM Academy Sdn Bhd
(1016575-D) / (GST ID No. 002028294144)
No. 33-1B, Jalan 52/18, P.O. Box 224 (Jalan Sultan), 46720 Petaling Jaya
Telephone No. 03-7931 5296 Fax No. 03-79582851
Email: andrita@iemasb.com Website: www.iemasb.com

Endorsed by:

SEMINAR OBJECTIVE

Introduction to the Risk Management process throughout a project cycle from planning, designing, construction and implementation of a tunnel or underground project with specific focus for Owners and Decision Makers, Consulting Engineers, Conductors and others with an interest in risk management activities

PROGRAMME

Sunday, 13 November 2016	
08.00 – 09.00	Registration
Session 1:	**Introduction and Overview**
09.00 – 09.45	Welcome and Opening: ITA and local representatives ***(T.Celestino)***
09.45 – 10.30	Introduction to Risk Management by ITA WG 2 (Time line for Risk Management, Codes and Guidelines) ***(S. Eskesen)***
10.30 – 11.00	Coffee Break
11.00 – 11.45	Reliability analysis of underground works ***(T. Celestino)***
11.45 – 12.30	Quantitative/qualitative risk assessment ***(T. Celestino)***
12.30 – 14.00	Lunch
Session 2:	**The Tools**
14.00 – 14.45	The use of Hazard Identification and Risk Registers ***(D. Kolic)***
14.45 – 15.30	Introduction to Risk Management Tools - ***(D.Kolic)***
15.30 – 16.00	Coffee Break
16.00 – 16.45	Setting the scene – examples of what has gone wrong ***(H. Wagner)***
16.45 – 17.30	Introduction to the use of policy & risk acceptance criteria ***(H. Wagner)***
17.30 – 18.00	Questions and Answers
18.00	End of Day One
Monday, 14 November 2016	
08.30 – 09.00	Registration
Session 3:	**The Parties**
09.00 – 09.45	Risk Management from a Client's perspective ***(D. Kolic)***
09.45 – 10.30	Risk Management from a contractor's perspective ***(G. Klados)***
10.30 – 11.00	Coffee Break
11.00 – 11.30	Case histories: Mega hydro scheme Alto Maipo, Chile with special RM aspects - Designer's point of view ***(D. Kolic)***
11:30 – 12:30	Round table: the boarder lines between parties – ***With the lecturers***
12.30 – 14.00	Lunch
Session 4:	**Procurement and Contractual Aspects (local organisation Er Poh, Ir. Dr. LH Ooi)**
14.00 – 14.45	How to implement Risk Management in the procurement process for selection of a Contractor based on an evaluation of the most economical advantageous bid (***Er Poh ST)***
14.45 – 15.30	Contractual requirements to implement a systematic risk management process into a tunnel contract ***(Ir. Dr. LH Ooi)***
15.30 – 16.00	Coffee Break
16.00 – 16.45	Example 1 of the full risk management process: some aspects of risks management related to underground works in Malaysia ***(Ir. Dr. LH Ooi)***
16.45 - 17.30	Example 2 of the full risk management process ***(Ir. Dr. LH Ooi) - Cancelled***
17.30 – 18.00	Summary and Closing of the Seminar
18:00	Logout & Collection of Certificate

BIODATA OF SPEAKERS

Søren Eskesen

Education. MSc in Civil Engineering, 1982 from Technical University of Denmark
Mr Eskesen holds a Master of Science in Civil Engineering from the Technical University of Denmark and has 30 years of international experience in tunnel and underground works. He further holds a BSc in International Economics and Business Administration from Copenhagen Business Scholl, 1987.
He is an effective project manager with experience from multidisciplinary projects working for public clients as well as private clients and consortia of international contractors on several high profile jobs.
Mr. Eskesen is an experienced tunnel advisor with both technical and non-technical knowledge of development of projects from feasibility studies, to tender strategies, detailed design and Construction Supervision.
Mr Eskesen was the previous ITA President of the International Tunnelling and Underground Space Association and President of the Danish Society for Tunnels and Undergrounds Works, which is the National Danish representative of ITA.
Mr Eskesen has been leading the development of the highly accredited ITA "Guidelines for Tunnelling Risk Management" issued by ITA working group 2 and has been the author of several articles and papers on the development of tunnel and underground projects. He has further given presentations at a high number of international conferences, ITA-CET training courses as well as the ITA credited Master Course in TBM Tunnelling.

Tarcisio Celestino

Professor Celestino is currently the ITA President and President of the Brazilian Tunnelling Committee. He was the Animateur of the ITA Working Group 12 on Sprayed Concrete Use (2005-10). He earned his doctorate degree in Civil Engineering (Rock Mechanics) from the University of California, Berkeley (1981).
He is currently Professor at the University of São Paulo and employed by the Themag Engenharia Ltda., São Paulo (Brazil), where he leads the Geotechnical Engineering, Engineering Geology &Transportation Engineering Design Groups. He is also responsible for the geotechnical designs of several hydroelectric power plants, subways, highways etc., including major underground works (since 1990).
Professor Celestino continues to contribute his valuable knowledge for the graduate courses & research areas on Rock Mechanics & Underground Works, at the São Carlos Engineering School, University of São Paulo & for ITACET Foundation.

Harald Wagner

Civil Engineer, M.Sc., Ph.D. (Dr.Techn.Science, Suma cum Laude), Licensed Masterbuilder, Government Counsellor, appointed by President of Austrian Republic, Chartered Expert at Court, Consultant to the World Bank. An international well-recognized Consultant for Underground Infrastructures with more than 40 years of Professional Experience in Tunnel Design, Construction and Consultancy. Consultant to the World Bank for more than 15 years. A former Assistant Professor at Technical University Graz in Austria on Soil Mechanics & Foundation Engineering for Architects, a Vice President of ITA (International Tunnelling and Underground Space Association). An Expert member of ITA's Executive Council, who has worked throughout his career as a designer & consultant in more than 35 countries around the world.

Davorin Kolic

Born in Zagreb in 1961, earned PhD level from Faculty for Civil Engineering, University Zagreb with the core methodology using and developing risk analysis techniques. Won 3 times Rector's Price of the University of Zagreb. In 2000 was awarded first price for the best international consultant of Austria as a member of a team for the Wanjiazhai Yellow River Diversion Project in China. Since 1990 active in underground projects with special expertise in risk analysis and risk management. Risk analyses were performed on different projects in Singapore, Hungary, Puerto Rico, Austria, Denmark, Germany, Hong

Kong, Russia, Turkey, Croatia and Slovenia since 1996. Co-author of the Austrian guidelines on "Cost Estimation for Transport Infrastructure Projects Considering Project Relevant Risks". Author of more than 100 scientific and technical papers, co-author of 1 book, 3 guidelines on design and construction of underground structures in Austria and EU. Editor of 6 further proceedings on tunnelling, lecturer on master studies in Torino (TBM Tunnelling) and Salzburg (International competence in management), president of Croatian association for tunnels and underground structures ITA Croatia, member of Executive Council of ITA-AITES.

Recently project manager on project preparation and risk analysis of a new mostly underground railway line Divaca-Koper, Slovenia.

Seng Tiok Poh

Seng Tiok Poh has more than 20 years' experience in large scale mass transit, railway design and construction projects in Singapore, Hong Kong, Malaysia and other parts of Asia. Currently, he is the Planning and Design Director for Mass Rapid Transit Corporation (MRTC) in Malaysia, implementing the MRT projects in Kuala Lumpur. He manages the MRTC design group covering disciplines such as Architectural, Civil & Structural, Geotechnical & Tunnels, Interface Coordination, Programme & Planning, Development Building Control and Transport Planning. He leads the team in supporting the implementation of the KVMRT Line 1 of 51km railway as well as Line 2 with 53km of railway. Concurrently, he also provides technical leadership on the Engineering Feasibility Study for Line 3, which is a circle line connecting all the radial lines with other forms of public transport. Prior to joining MRTC, he was an Associate Director with Arup Singapore Private Ltd. Besides being the Project Manager on Architectural and Engineering detailed design contracts, he also led Singapore Arup's infrastructure group's Tunnelling, Railway Engineering, Rail Civil & Structural and Alignment team. Seng Tiok's design management experience for major regional railway projects includes his current projects in Kuala Lumpur, Singapore Thomson Line Package A, Eastern Region Line Contract E1002. He is also the Professional Engineer and technical lead for the Singapore Downtown Stage 3 Contract C933 consisting of underground Bendemeer station and Singapore's first steel fibre reinforced concrete bored tunnels. In 2010, he was also part of the project management team overseeing the Technical Advisory and Review contract assisting the MRT Company in Jakarta in reviewing the design and proposals from the Basic Designer for the country's first metro line together with a team of multi-disciplinary specialists. From 2008 to 2010, Seng Tiok worked in Hong Kong with Aecom HK on design and feasibility studies for few railway projects in Hong Kong and Mainland China. Before 2008, Seng Tiok worked in the Singapore Land Transport Authority (LTA) and was involved in major railway projects such as the North East Line, Circle Line stage 1 to 5 and Down Town Line Stage 1 (DTL1). For DTL1, he was the LTA Design Manager leading the Authority's design team. After the Nicoll Highway collapse, Seng Tiok was selected into a core team set up within the LTA to work with the expert witnesses and lawyers engaged by the Singapore LTA to investigate the causes of the collapse.

Lean Hock Ooi

Ir. Dr Ooi Lean Hock graduated with PhD from the University of Sydney, Australia. In the past he has worked as a geotechnical consultant and as a specialist contractor. He is currently the Lead Geotechnical Engineer in the Design & Technical Department of MMC GAMUDA KVMRT (T) SON BHD for the second line of Klang Valley Mass Rapid Transit from Sg Bulah - Serdang - Putrajaya (SSP) Line. He has extensive experience in ground treatment works, more recently in deep excavation and tunneling works. He also has a keen interest in geotechnical instrumentation and testing. He has been involved in many interesting infrastructural projects such as railways, runways, highways, tunnels and hydropower both locally and abroad.

Gus Klados

Gus Klados is the Director, Tunnels for the Underground Works Package Contractor MMC Gamuda KVMRT (T) Sdn. Bhd. for the Sungai Buloh – Serdang – Putrajaya (SSP) Line and has been the Project Manager for the Sungai Buloh – Kajang (SBK) Line in Kuala Lumpur.

Gus has forty plus years' experience in tunnelling and related construction worldwide on major infrastructure projects out of which twenty two years in South- and South-East Asia. He started in Budapest on the M2 and M3 metro lines, worked in Belgrade, than in Yugoslavia on the Vračar rail tunnel, in India on the Calcutta- and Delhi metros, in England on the Channel Tunnel, in South Africa on the Lesotho Highlands Water Project, in Greece on the Athens Metro Lines 2 & 3, in Singapore on the Deep Tunnel Sewer System, in Malaysia on the SMART project, in Hungary - again in his native country after 28 years of absence - as project director of the Client on the Budapest Metro M4 Line. He returned to Kuala Lumpur in March 2011 to assist MMC and Gamuda to win and construct the underground works contract for the SBK Line and to win the tender and build the tunnels for the SSP Line, the first and second MRTs or heavy metro lines in the Klang Valley in Malaysia.

TRAINING SESSION

RISK MANAGEMENT IN TUNNELLING

Sunday & Monday,
13 & 14 November 2016
8:00 AM – 6:00 PM

Registration fees inclusive 6% GST

IEM / ITA Member	**: RM1,060.00**
Non-member	**: RM1,590.00**

Venue:
Tan Sri Prof. Chin Fung Kee Auditorium
3rd Floor, Wisma IEM
No. 21, Jalan Selangor
46200 Petaling Jaya, Selangor

PAYMENT METHOD

You can make your registration payment as follows:

1. Local cheque or Bankers cheque made payable to **"IEM ACADEMY SDN BHD"**
2. Directly bank in or online transfer (Please forward soft copy of payment advice)

Account Name : **IEM ACADEMY SDN BHD**
Account Number : **21403500139397**
Bank Name : **RHB Bank Berhad**
Bank Address : **No. 5 Jalan 52/18, PJ Newtown 46050 Petaling Jaya**
Swift Code : **RHBBMYKL**

TERMS & CONDITIONS

- **If a place is reserved and the intended participants fail to attend the course, the fee is to be settled in full.**
- **Fee paid is not refundable. The Organizing Committee reserves the right to cancel, alter, or change the program due to unforeseen circumstances.**
- **CANCELLATION POLICY: The Organizing Committee reserves the right to postpone, reschedule, allocate or cancel the Course. No cancellation of registration will be accepted 1 day prior to the date of the event or during the event day. Replacement or substitute name and additional fees however, can be made at least 3 days prior to the event date.**

>> In view of the limited places available, intending participants are advised to send their registrations as early as possible so as to avoid disappointment <<

REGISTRATION FORM

TRAINING SESSION
RISK MANAGEMENT IN TUNNELLING

Sunday & Monday,
13 & 14 November 2016
8:00 AM – 6:00 PM

Registration fees inclusive 6% GST

IEM / ITA Member : RM1,060.00
Non-member : RM1,590.00

Venue:
Tan Sri Prof. Chin Fung Kee Auditorium
3rd Floor, Wisma IEM
No. 21, Jalan Selangor
46200 Petaling Jaya, Selangor

*****IMPORTANT NOTICE*****

All registration fees must be FULLY paid before commencement of the course. IEM Academy Sdn. Bhd. reserves the right to refuse entry for participant(s) who have not paid their registration fees to attend the course. THIS REQUIREMENT WILL BE STRICTLY ENFORCED.

****

I/We understand that the fee is not refundable if I/we withdraw after my/our registration is accepted but substitution of participants will be allowed. If I/we fail to attend the course, the fee paid will not be refunded.

No.	Name(s) in CAPITALS	IEM No.	P.Eng No.	Fee
1.				
2.				
3.				
4.				
			Total	

Name of Organisation:____________________________________

Address:____________________________________

____

____

Telephone no. (Off)__________________ Fax no.:__________________

Cellphone no. __________________ Contact person:__________________

Designation:__________________

E-mail:________________________

(Please print clearly for confirmation of registration purposes)

Signature:________________________ Date:________________