



ASSOCIATION  
INTERNATIONALE DES TUNNELS  
ET DE L'ESPACE SOUTERRAIN  
**ITA**  
INTERNATIONAL TUNNELLING  
AND UNDERGROUND SPACE  
ASSOCIATION

## Special Seminar on Tunnelling and Underground Space Utilization

*Organized by*

**Myanmar Engineering Society (MES), Myanmar Geoscience Society (MGS) &  
International Tunnelling and Underground Space Association (ITA)**

**23<sup>rd</sup> October 2013 (Wednesday)**

**9:00 am – 11:30 am**

*Venue:*

**Myanmar Engineering Society  
Yangon, Myanmar**

**International Tunnelling and Underground Space Association** (ITA-AITES or ITA) is an international technical-based organization having Special Consultative Status with United Nations since 1987. ITA is actively working in cooperation with United Nations International Strategic Disaster Reduction (UN-ISDR) and UN Habitat. Founded in 1974 by nineteen nations, ITA now consists of 68 Member Nations and over 300 Corporate or Individual Affiliate Members. Cambodia, Indonesia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam are ITA Member Nations in Southeast Asia. Bhutan, China, India, Japan, South Korea and Nepal are also Member Nations of ITA.

The key missions of ITA are ;

- to encourage the use of the subsurface for the benefit of public, environment, health, safety, and sustainable development
- to promote advances in planning, design, construction, maintenance and safety of tunnels and underground space

This special seminar is organized for the occasion of ITA President's visit to Nation Members in Southeast Asia.

Three topics will be presented by ITA's representatives in this half-day seminar. Lecture on "**Underground Spaces and the 3<sup>rd</sup> Millennium Goals**" will focus on how underground space can play a crucial role to cope with major issues many nations are facing. "**Risk management in Urban Tunnelling**" will cover the process involved in managing risk in construction of underground structures – demonstrating Copenhagen Metro as an example. "**Climate Change and Impact on Underground Structures**" will present how underground space can be affected from the climate change and how it can be effectively utilized in ongoing challenges such as rapid urbanisation and city resilience to natural disaster. Severe flooding in 2011 in Thailand and impact on Bangkok Subway and other underground structures will be focused in this lecture.



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**PROGRAMME**

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09.00	–	09:30 am	Registration
09.30	–	09.45 am	<b>Welcome Speech by Organizing Chairman</b> <b>Introductory Speech by Mr. Søren Degn. Eskesen, President,</b> <b>International Tunnelling and Underground Space Association (ITA)</b>
09.45	–	10.15 am	<b>Underground Spaces and the 3<sup>rd</sup> Millennium Goals</b>  Mr. Olivier Vion, Executive Director, International Tunnelling and Underground Space Association (ITA)
10.15	–	10.30 am	Coffee break
10.30	–	11.00 am	<b>Risk management in Urban Tunnelling - Copenhagen Metro</b>  Mr. Søren Degn. Eskesen, President, International Tunnelling and Underground Space Association (ITA)
11.00	–	11.30 am	<b>Climate Change and Impact on Underground Structures – Severe Flooding and Preparing for Better and Resilient Cities</b>  Mr. Zaw Zaw Aye, Executive Vice President, Seafco Public Co., Ltd., Vice President, Thailand Underground and Tunnelling Group
11.30	–	11.50 am	<b>Question and Answers</b>

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## **Speakers Profile**

### **Søren Degn. Eskesen**

**President, International Tunnelling and Underground Space Association (ITA)  
Chairman of the Danish Society for Tunnels and Underground Works**

Mr. Eskesen obtained a Master of Science in Civil Engineering from the Technical University of Denmark in 1982 and a B. Comm. in International Economics and Management from the Copenhagen School of Economics and Business Administration in 1987.

Mr Eskesen is a Research and Development Manager in COWI's Tunnel and Underground Structures department who has more than 25 years of international experience in design and construction of tunnel and underground works. He is an experienced tunnel advisor with both technical and managerial knowledge of development of projects from feasibility studies, to tender strategies, detailed design and construction issues.

Mr Eskesen is the chairman of the Danish Society for Tunnels and Underground Works and the president the International Tunnelling and Underground Space Association ITA-AITES. He has been leading the development of the highly accredited ITA-AITES "Guidelines for Tunnelling Risk Management". Mr Eskesen authored several articles and papers on Risk Management and the development of tunnel and underground projects. He lectured in various international conferences as well as the ITA-AITES credited Master Course in TBM Tunnelling and ITA-CET training courses.

### **Olivier Vion**

**Executive Director, International Tunnelling and Underground Space Association**

Olivier Vion is the Executive Director of the International Tunnelling and Underground Space Association since January 2009. He was before in charge of the communication of the Association (in charge of development of the use of underground space and share of knowledge in tunnelling techniques). Previously he has been in charge by Lafarge Group of special cements for underground works (Channel Tunnel, HSL Tunnels), then Deputy sales manager by DTP Terrassement (Bouygues Subsidiary). In 1994, he started his own company of consultancy in marketing in underground works sector worldwide. He is a chartered civil engineer , specialized as structural engineer and former auditor of College for High Study in Sustainable Development.



## **Zaw Zaw Aye**

**Executive Vice President, Seafco Public Co., Ltd., Bangkok, Thailand**  
**Vice President, Thailand Underground and Tunnelling Group (TUTG)**

Mr. Zaw Zaw Aye is an Executive Vice President and the Director of the Board of SEAFSCO PUBLIC COMPANY LIMITED. He has over 24 years of extensive experience in design and construction of deep excavations, foundations and tunneling projects. He is a member of American Society of Civil Engineers and a Fellow of the Geological Society of London.

Mr. Zaw Zaw Aye obtained his Master's Degree in Geotechnical and Transportation Engineering in 1991. Apart from his role as a practitioner in geotechnical engineering, construction management and foundation engineering, he is active in academic as well as in professional societies. Mr. Zaw Zaw Aye authored over 40 publications for which he has presented in various international conferences and seminars in North America, Europe and Asia. He regularly lectures to Master's Program students in the Asian Institute of Technology on deep foundations, deep excavations and geotechnical instrumentation. He also serves as an external committee member for Master's Degree Thesis in geotechnical and environmental engineering program.

Mr. Zaw Zaw Aye is serving as a Vice President of the Thailand Underground and Tunnelling Group of the Engineering Institute of Thailand under his Majesty the King's Patronage. He is also an appointed Expert (Southeast Asia) to Executive Council of International Tunneling and Underground Space Association (ITA).