Welcome and Opening

08.15 – 08.45: H.E. Eng. Abdullah Al-Mogbel Deputy Minister For Roads and ITACET Foundation President and ITA representative.

Session 1: General Overview

08.45 – 09.25: Introduction to safety management and state of regulations
09.25 – 10.00: Coffee break

Session 2: Specific Aspects of Safety of Railway Systems

10.00 – 10.40: Models for probabilistic safety analysis and deterministic scenario analysis
10.40 – 11.20: Technology and technical measures for railway tunnels and rolling stock
11.20 – 12.00: Structure, management and operation of safety and emergency forces
12.00 – 12.30: Duhr prayer
12.30 – 13.10: Contingency plans for railway systems, Permanent education and training of emergency forces and operators

Session 3: Research and Development

13.10 – 13.30: Results of recent R&D projects, tests and their relevance for safety operation
13.30 – 13.50: R&D topics of the future
13.50 – 14.30: Questions and Answers (to all sessions)
14.30 Lunch

Session 4: Specific Aspects of Safety of Road Tunnels

08.15 – 09.00: Integrated safety analysis for road tunnels, human behaviour and self rescue
09.00 – 09.40: Models for probabilistic safety analysis and deterministic scenario analysis
09.40 – 10.00: Coffee break
10.00 – 10.40: Technology and technical measures for road tunnels, integration and use of advanced supporting technology
10.40 – 11.20: Structure, management and operation of safety and emergency forces, contingency plans

Session 5: Fire control

11.20 – 12.00: Ventilation systems
12.00 – 12.30: Duhr Prayer
12.30 – 13.10: Fire detection systems, passive/active fire fighting, fixed fire fighting systems

Session 6: Q&A, Closing remarks

13.10 – 13.50: Questions and Answers
13.50 – 14.10: Closing Remarks
14.10 Lunch

Registration: Ministry of Transport - Registration fee is 1000 € / person
Contact: Mr. Ahmad AbdulAziz AlGhannam, T.: 0096618745522, Mob.: 00966560304000

Payment to: ITACET Foundation 1010 Lausanne - Switzerland
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Welcome to Saudi, welcome to Riyadh

I am very pleased, as Deputy Minister for Roads of the Kingdom of Saudi Arabia and President of the ITACET Foundation for Education and Training, to announce the organization of a Seminar for Continuous Professional Education on Safe Operation of Underground Transportation Infrastructure.

This event will take place on Sunday 25 – Monday 26 March 2012 in Riyadh. The construction of Railway and Road Tunnels in the Kingdom of Saudi Arabia and in the Gulf countries makes it necessary for all professionals to be well informed and up to date in all safety aspects of the operation of such infrastructures in order to run the operation safely and to be well prepare for any risks occurring during the operation. Although hazards in tunnels are less frequent than in open air, the consequences can be much more disastrous as some examples abroad have shown in the past years.

Owners and operators as well as concerned professionals in the Kingdom of Saudi Arabia and the Gulf Nations are invited to participate in this event and to share the knowledge on the latest developments in this field with internationally known experts, to whom I extend a heartily welcome to Saudi Arabia and to Riyadh.

Eng. Abdullah Al-Mogbel
ITACET Foundation President
Objective of the seminar

The main objective of the seminar is to provide an introduction to the state of the art for a safe use of underground transportation infrastructures with an emphasis on railway and road tunnels systems.

The seminar will provide a general overview to be followed by in-depth sessions on operation (management structures and organization for emergency situations), monitoring technology, fire control (detection, passive and active fire fighting and mitigation) and research (recent research results about safety in operation).

Who should attend?

The targeted participants are public and private owners, operators, university researchers and teachers, designers, consultants and contractors.

Benefits for the participants

- Receive the latest state of the art information from internationally well known expert presentations and discussions
- Be informed on the different aspects of safety, such as safety technology and technical measures, operational aspects, etc…
- Be prepared to organize management and operation of safety organizations
- Receiving Certificate of attendance
- Course and references material. A notepad illustrated with all the slides to be used during the seminar, abstracts of the lectures and a short bio of the lecturers. A digital copy (CD-ROM) of all slides used during the lectures.
- Extend your social and professional network.

Organization

This event is co-organized by the Ministry of Transport of the Kingdom of Saudi Arabia and the ITACET Foundation.

The ITACET Foundation is to be developed into a center of Excellence for Education and training on Tunneling and underground Space Use and fulfills its mission by notably organise specialised Training Sessions.

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Lecturers of the seminar

**Felix AMBERG** >> President of the Amberg Group Amberg Engineering Ltd. Amberg Measuring Technique Ltd. Hagerbach Test Gallery Ltd. President of the Swiss Tunneling Society. Project-related experience: L-SURF (Design Study for a Large Scale Underground Research Facility on Safety and Security). Coordination of an EU-research project. 2000 to date Tunnel TESLA (TeV Energy Superconducting Linear Accelerator), DESY (German Electron Synchrotron), Germany. 1990 to date Gotthard Base Tunnel.


**Peter REINKE** >> 15 years as engineer for tunnel ventilation, safety, aerodynamics, climate and mechanical equipment. Major project involvements include Alpine base tunnels and other high-speed rail tunnels. Major projects include several metro projects. Design and analysis experience in excess of 35 rail, metro and road tunnel projects. Major involvement in development of concepts, technical specifications, numerical simulation tools, measurements and tests. Member of ITA-COSUF (Regulations and best practice)

**Louis RUZZI (IRF)** >> District Bridge Engineer, Pennsylvania Department of Transportation. Worked for PennDOT for the last 26 years as a Bridge Designer, Bridge Inspection Squad Leader, Assistant Bridge Engineer, and District Bridge Engineer (last 11 years). Currently Chairman of T20 Tunnels (AASHTO –SCOBS) since 2010. AASHTO Member since 2006.

**Pierre SCHMITZ (PIARC)>>** Previously technical adviser at the Belgian Co-operation in Morocco, Rwanda and Ivory Coast; then consultant near the Government of Ivory Coast for energy matters, mainly for World Bank projects. Since 1993 Engineer in the Administration of Equipment and Transport of the Brussels Region. Head of the European and International relations department in the General directorate of Brussels Mobility and is in charge of the European R&D projects related to road tunnels safety and telemetric applied to urban transport.