

# **Program**

# **Tunnelling in Limestone**

**Two-day training session 23 - 24 June 2013**  
**Toaque palace – Diplomatic quarter – Riyadh**

## **Sunday 23.06**

### **Registration, check in and distribution of the documents**

08.00 - 09.00 Training session reception desk

### **Welcome and Opening**

09.00 – 09.15: H.E. Eng. Abdullah Al-Mogbel, ITA-AITES and ITACET Foundation representatives

### **General Tunnelling**

09.15 – 10.00: Principles of Tunnelling – Specificities of Tunnelling in Limestone

10.00 – 10.30: Ground Investigation for Tunnelling in karstic ground, before, during and after completion of excavation

10.30 – 11.00: *Coffee Break*

11.00 – 11.30: Choice of the Construction Method in Rock – Design Criteria for Conventional & Mechanized Methods

11.30 – 12.15: Monitoring & Risk Management

12.15 – 12.45: *Prayer*

### **Case Histories - Innovations – Lesson learned**

12.45 – 13.30: Manufacturers

13.30 – 14.00: General Discussion - Round Table Style

14.00 *Lunch*

## **Monday 24.06**

### **Conventional Tunnelling**

09.00 - 09.30 : Conventional Methods

09.30 – 10.00: Design & Durability

10.00 – 10.30: *Coffee break*

10.30 – 11.15: Alternatives for Ground Improvement in Karst Areas

### **Mechanized Tunnelling**

11.15 – 12.00: Types of machines for Rock and mode of selection

12.00 – 12.30: *Prayer*

12.30 – 13.00: Segment lining

13.00 – 13.30: Alternatives for karst areas

13.30 – 14.00: General Discussion and Closing remarks

14.00 *Lunch*

From 14.00 Distribution of the course certificates & collection of the evaluation form