

**Objective:** Information for Tunnellers on the main principles of Conventional Tunnelling, including necessary site investigation, design, construction, monitoring and contractual aspects.

## Tentative Programme

### Day 1

#### Session 1: Introduction and Site investigation

09.00 – 09.45: Welcome and Opening: ITA and concerned country representatives

09.45 – 10.30: Principles of Conventional Tunnelling

10.30 – 11.00: Coffee break

11.00 – 11.45: Site investigation

11.45 – 12.30: Design Parameters

12.30 – 14.00: Lunch

#### Session 2: Design aspects

14.00 – 14.45: Layout Conception

14.45 – 15.30: Design Stages

15.30 – 16.00: Coffee Break

16.00 – 16.45: Geotechnical and Structural Design steps

16.45 – 17.30: Possible Hazards and Counter actions

17.30 – 18.00: Questions and Answers

### Day 2

#### Session 3: Construction and Monitoring

09.00 – 09.45: Monitoring Schemes

09.45 – 10.30: Construction Methods and necessary Equipments

10.30 – 11.00: Coffee break

11.00 – 11.45: Tunnel Site Organization

11.45 – 12.30: Example 1 (including auxiliary methods)

12.30 – 14.00: Lunch

#### Session 4: Management and

14.00 – 14.45: Contractual Aspects

14.45 – 15.30: Risk and Safety Management

15.30 – 16.00: Coffee Break

16.00 – 16.45: Advantages/Disadvantages of Conventional Tunnelling

16.45 – 17.30: State of the art by ITA WG 19 (Conventional Tunnelling)

17.30 – 18.00: Questions and Closing Remarks