



Training session : Underground space use and tunnel project management

7 December 2018

Kenya - Nairobi

Objective: Introduction for engineers, architects, planners and public administrators to the use of underground space to increase liveability and sustainability in urban areas and in other key public resource regions. The seminar will identify key issues that need to be considered when using underground space and how to manage efficiently an underground project.

Session 1: Introduction and overview of the main issues

09.00-09.15: Welcome and Opening: ITA and concerned country representatives

09.15-10.00: Advantages and disadvantages of underground solutions (T. Celestino)

10.00-10.45: How underground space can help cities meet the challenges now and in the future (H. Admiraal)

10.45-11.15: Coffee Break

11.15-12.00: Human aspects and risk in underground space (H. Admiraal)

12.00-12.45: Regulatory, contractual, and financial aspects (T. Celestino/O. Vion)

12.45-13.00: Questions and answers

13.00-14.00: Lunch

Session 2: Organisation and management of projects

14.00-14.45: The main stages in the planning, design and construction of an underground project including considerations about risk management (O. Vion)

14.45-15.30: The main tunnelling methods (T. Celestino)

15.30-16.00: Coffee Break

16.00-16.30: Case study 1: Example of an urban tunnel management (T. Celestino)

16.30-17.00: Case study 2: Microtunnelling and underground service network (O. Vion)

17.00-17.30: Discussion and closing Remarks