TECHNICAL VISITS

For further information, please contact the Organizing Secretariat at wtc2019@aimgroup.eu

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World Tunnel Congress

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TUNNELS AND UNDERGROUND CITIES: ENGINEERING AND INNOVATION MEET ARCHAEOLOGY, ARCHITECTURE AND ART

Archeology, Architecture and Art

Società Italiana Gallerie
Italian Tunnelling Society

ITA AITES
Thanks to its morphologic structure and its long experience in building tunnels and underground works, Italy is able to offer a wide variety of A.A.A. — Archaeology, Architecture and Art — technical visits, along with more traditional technical visits.

A.A.A. ON SITE TECHNICAL SESSIONS — THE BOURBON TUNNEL AND THE MIRRORS HALL

The Bourbon Tunnel (“Sottopassaggio” of the Bourbon Monarchy) is one of the most fascinating underground routes of the city. It is an ancient underground passage, commissioned by the Bourbon monarchs mainly for military purposes to connect the Royal Palace of Naples to military barracks in Via Morelli.

The A.A.A. on site Technical Sessions of the Congress Scientific Programme will be held at the Bourbon Tunnel on May 27, 28, 2019. At the Mirrors Hall (“Sala dei Specchi”) by the Serrano Palace (just on top of the Tunnel), Keynote Lectures presented by International Experts will bring the participants in the fascinating world of the underground discoveries dealing with archaeology, architecture and art. After the speeches, guests will jump into the past, through the deep stairs carved in the tuff rock that link the basement of the Serrano Palace to the Bourbon Tunnel, accompanied by the narration of local guides.

TECHNICAL VISIT — METRO LINES 1 & 6 IN NAPLES. A MODERN UNDERGROUND INFRASTRUCTURE BORNE THROUGH THE HISTORY

The Naples Metro Lines 1 and 6 are part of an integrated metro system serving the whole city that today embodies six underground railway lines and four funiculars. For these underground lines, participants will have the chance to attend two technical visits: the Naples underground station and the Kareno Direzione per Capodichino stretch. Designed by Amauri Sca and Edoardo Storti de Mura, Municipo is located in the quarter Capodimonte in the Port of Naples and represents one of the largest archaeological excavations in Europe. Some parts of the station are still to be completed; once completed, the archaeological treasures found during its construction will be part of the station. Centro Direzione per Capodichino represents an extension of Line 1 of Naples underground from the centre to the airport. The project includes works in tunnel excavated through TBM, as well as the construction of two relevant stations designed by Benedetta Tagliabue and Richard Rogers.

TECHNICAL VISIT — TUNNELING THROUGH THE APENNINE MOUNTAIN CHAIN FOR THE CONSTRUCTION OF NAPLES-BARI HIGH SPEED RAILWAY LINE (NAPLES)

The new Naples-Bari high-speed railway line is part of the TEN-T European network, as it constitutes a diversion within the Scandinavia-Mediterranean corridor. The project will enable the integration of the southern railway network with the existing Italian high-speed network and will provide better intermodal transport facilities. With a total length of about 150 km, the alignment in the central stretch will underpass the Apennine mountain chain with deep tunnels (up to 400m overburden) in difficult geological conditions (squeezing ground and explosive gas are present). The alignment has been divided in 8 stretches and eight design and construction contracts have been awarded. Recently, the first two stretches closer to Naples have been awarded by AR to main Italian Contractors; in May 2019, the jobsites will be fully in progress. The participants will have the opportunity to visit the Castelnuovo and the Monte Algola tunnels, excavated using compressed air to control the water pressure (Compressed Air) and conventional full section excavation (Monte Algola).

TECHNICAL VISIT — THE MONSECCHIO BASE TUNNEL: TUNNEL EUROPEAN LYON-TURIN (TURIN)

The new railway link Lyon-Turin, including the 57.5 km Mont Cenis base tunnel, is the main project of the Mediterranean corridor in the European TEN-T network. The Mont Cenis base tunnel includes two 57.5 km long tubes (45km on the French side and 12km on the Italian side), four intermediate accesses and three underground security areas. Comprehensive works are currently in progress for the achievement of the infrastructure. Three access tunnels have been completed in France, for an overall length of 16 km. In Italy, the Maddalena survey tunnel, in Osimo, Sasia Valley, was completed in February 2017. Another survey tunnel is currently being built down the San Martino-Aosta access tunnel, which is 18 km long, and another is underway on the Mont Cenis-Machetto access tunnel. The machine will excavate 8m in order to study the geology of one of the most complex sections of the Mont Cenis base tunnel, but already at the diameter and on the axis of the base tunnels. These are the first steps... In May 2019, works will be in full activities and the participants will experience the visit "at its best!"