



**ITA
AITES**



Working Group 19 – Conventional Tunnelling Report

- ❑ WG Leadership:
 - Animateur: Nasri Munfah (USA)
 - Vice Animateur: Robert Galler (Austria)
 - Tutor: Alex Gomes (Australia)
- ❑ Met on Sunday April 22, 2018 14:00 to 18:00
- ❑ No follow up meeting on Monday was needed
- ❑ Attendees: 19 representing 10 Countries
 - No representation from UAE



Agenda of the Meeting

1. Introduction of members and Invitation to other members from under-represented nations
2. Progress Report No. 12 submitted to the ITA ExCo and outcome of the meeting with ExCo members
3. **Presentations by WG members**
4. **Status of WG 19 Review of the “*Guidelines for Radially Installed Bolts in Tunneling*” report – ITAtech Representative: Gunther Volkmann**
5. **Status of the report: “*Guidelines for the Design and Implementation of Conventional Tunneling in Urban Setting*”**
6. Status of FIDIC contracting for tunnels and underground construction – “*Emerald Book*” – WG 3 representative - Hannes Ertl
7. Other business items, conclusions and action items

Member Nation Presentations

1. “Conventional Tunneling for the Gateway Program in New York” – Vojtech Gall (USA)
2. “Conventional Tunneling in Italy - Brenner Base Tunnel - Isarco Lot” - Giovanna Cassani (Italy)



Gateway Program – New York

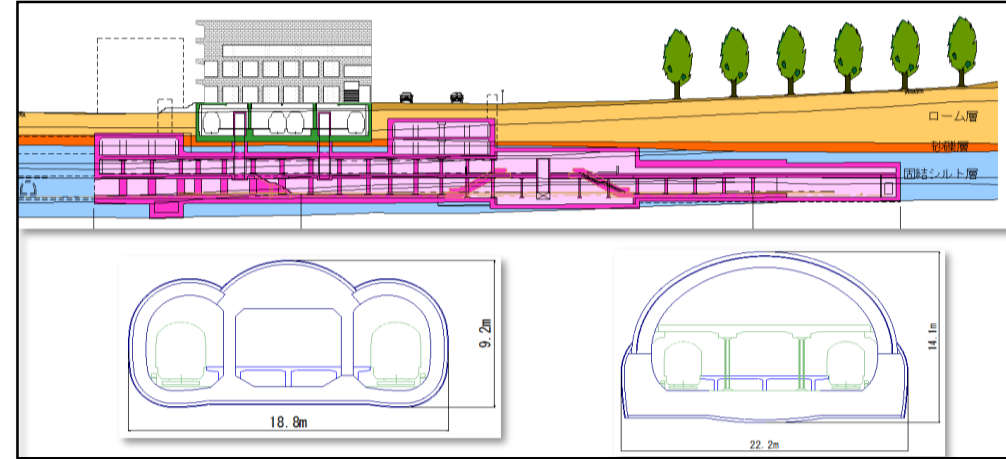


Brenner Base Tunnel - Isarco River Lot



Member Nation Presentations (Cont'd)

1. *“Case Histories of Conventional Tunneling in Japan”* - Jun Mitsuo (Japan)
2. *“Double Bonded Waterproofing in Conventional Tunneling”* – Karl-Gunner Holter and Delitta Traldi (Norway and Italy)
3. *Status Report of "ZaB - Zentrum am Berg"* - a New Underground Research Centre – Mr. Paul Gehwolf (Austria)



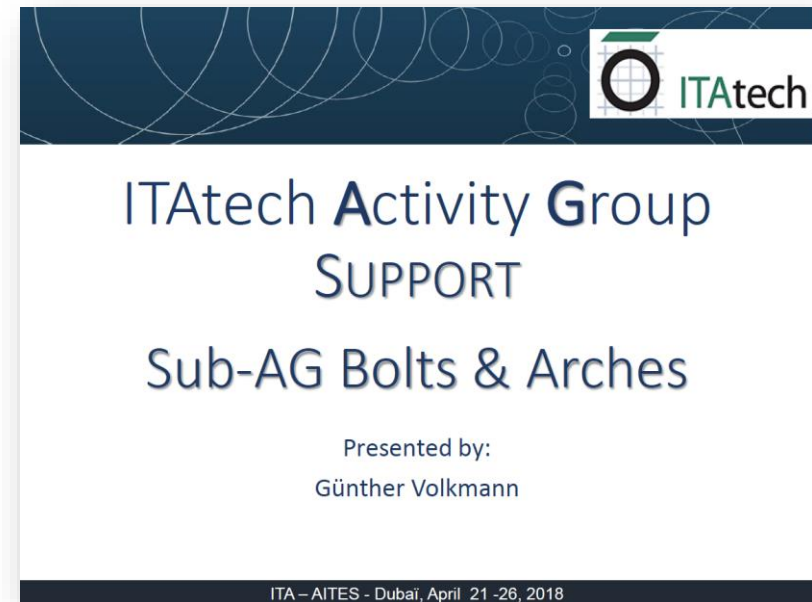
Hiyoshi Station - Yokohama subway, “Green Line”



“ZaB - Zentrum am Berg Research Center”

Status of WG 19 Review of the ITAtech report on “Guidelines for Radially Installed Bolts in Tunneling”

- In Collaboration with ITAtech, WG 19 reviewed and provided formal comments on the subject guidelines
- Meeting with ITAtech representatives in December 2017 during the STUVA conference in Stuttgart Germany to discuss our comments
- Status of the comments were discussed again during our meeting on April 22nd, 2018
- **Requested further review of the Report – ITAtech will provide another draft in one month for our review**



Status of WG 19 Report

“Guidelines for the Design and Construction of Conventional Tunnelling in Urban Setting”

Table of Content

1. Introduction
2. Specific Considerations of Geotechnical and Hydrological Investigations
3. Ground Classification and Assessment of Ground Behaviour
4. Use of Support Classes for Conventional Tunneling in Urban Areas
5. Potential Impact on Existing Facilities and Utilities/Services and the Development of Remedial and Corrective Measures
6. Overview of Ground Improvement Measures and Techniques Enabling Conventional Tunneling in Difficult Ground Conditions in Urban Areas
7. Overview of Pre-Support Measures
8. Instrumentation and Monitoring Measures and the Development of Threshold Values
9. Implementation During Construction of Excavation Support Classes and Field Collaboration and Documentation
10. Risk Management and Design Robustness
11. Recommendations for Contractual Requirements
12. Conclusions
13. Case Histories



ASSOCIATION
INTERNATIONALE DES TRAVAUX
EN SOUTERRAIN
AITES

ITA
INTERNATIONAL
TUNNELLING
ASSOCIATION

**Working Group 19
Conventional Tunnelling**

**Guidelines for the Design and
Construction of Conventional
Tunnelling in Urban Setting
(1st draft)**

April 2018



Status of WG 19 Report

1. Completion level 30%
2. The first draft was discussed on Sunday April 22nd
3. Discussions of the topics and revision of the chapters
4. The second and final draft document will be issued and discussed in June 2019 in association with the WTC2019 in Naples
5. **Bi-Monthly Teleconferencing will be held to assess progress and discuss comments**
6. Final Report is planned to be issued in December 2019

