

07.30 - Onwards	Registration							
08.15 - 08.45	Press Conference							
08.45 - 08.55	Opening Ceremony - all to be seated, door closed by 08.55							
08.55	National Anthem & Quran recitation							
09.00	Introduction by Conferencier							
09.10	Welcome Speech to Dubai - Eng. Dawoud Al Hajri (SOE President)							
09.15	Welcome to WTC 2018 & ITA General Assembly - Tarcisio Celestino (ITA President)							
09.25	Cultural Performance							
09.35	Muir Wood Lecture							
10.20	ITACET Foundation Awards to Alfred Haack and CTES - given by HE Al Mogbel, President of ITACET Foundation							
10.25	Keynote - Eng. Sulaiman Al Hajri (Director RTA Sharjah for Roads Affairs)							
10.45	Heritage Lecture: Prof. Stefano De Caro							
11.15 - 13.00	Opening of Exhibition - Coffee Available							
13.00 - 14.00	Lunch							
SHEIKH MAKTOUM A		SHEIKH MAKTOUM B		SHEIKH RASHID C		SHEIKH RASHID D		
Technical Session 1: Projects in MENA and abroad		Technical Session 2: Advances in Materials		Technical Session 3: Safety in Design & Construction		Technical Session 4: TBM Case Studies 1		
Session Chair: Eng. Sulaiman AlHajri Session Co-Chair: Ashraf A.M.Abu-Krisha		Session Chair: Ed Taylor Session Co-Chair: Roberto Gonzalez		Session Chair: Mark Johnson Session Co-Chair: Marco Bettelini		Session Chair: Verya Nasri Session Co-Chair: Michael Belenkyi		
14:00 - 14:30	Hong Kong-zhuhai-macao bridge project - semi-rigid element of Immersed Tunnel Lin Wei & Peng Li	14:00 - 14:20	Bearing capacity of fiber reinforced concrete segments: a full-scale experimental study Qihao Sun	14:00 - 14:20	International best practice in the prevention of illness and disease in tunnel construction workers Kate Cole	14:00 - 14:20	Proposed methodology for clogging evaluation in EPB machines Daniela Oliveira	
		14:20 - 14:40	From laboratory to big scale – results of experimental and numerical investigations on tubing support Paul Gehwolf	14:20 - 14:40	Structural noise and third parties when TBM-tunnelling in urban areas Gro Haldis Elden	14:20 - 14:40	Excavating Turkey's hardest rock at the bahce-nurdag railway tunnel Doug Harding	
14:30 - 14:55	Project R2020 - tunnelling in Dubai Abdulredha Abu Alhassan	14:40 - 15:00	Enhancing the ductility of fibre reinforced concrete for tunnel linings Stefan Bernard	14:40 - 15:00	Study on the behavior dynamic at the earthquake of the crossing direction of the tunnel sections with non-uniform heights Tsutomu Otsuka	14:40 - 15:00	Crack formation and damage evolution during consolidation in TBM driven tunnel linings in fine-grained soils Salvatore Miliziano	
		15:00 - 15:20	Design aspects of fibre reinforced shotcrete linings based on experimental test results Karoly Peter Juhasz	15:00 - 15:20	Study on numerical simulation of seismic response for underground tunnel across fault Guoqing Liu	15:00 - 15:20	Severe rockburst event – TBM recovery-a case study Gary Peach	
15:20 - 15:40	Coffee Break	15:20 - 15:40	Coffee Break	15:20 - 15:40	Coffee Break	15:20 - 15:40	Coffee Break	
15:40 - 16:05	STEP - Approach and achievements Jonathan Churchward	15:40 - 16:00	Graphene oxide/cement composites for sprayed concrete tunnel linings Ioanna Papanikolaou	15:40 - 16:00	Different effects analysis of adjacent construction to existing tunnel in soft clay Xiongyao Xie	15:40 - 16:00	Back analysis of monitoring data for underground stations of the jakarta MRT phase 1 project Narentorn Yinyongrattanakul	
16:05 - 16:30	Innovative Ideas in Tunnels Ahmed AlHamadi	16:00 - 16:20	A new mineral-based soil conditioning agent for tunnelling with TBM-EPB Mike Greenhill-Hooper	16:00 - 16:20	Smart Tunnel and Risk Analysis Giacomo Greco	16:00 - 16:20	An empirical design tool to predict ground surface response to tunneling with TBM Evangelia Ieronymaki	
16:30 - 16:55	The eiganestunnel project – suburban drill and blast tunneling Jens Classen	16:20 - 16:40	Effect of chemicals in clogging risk reduction for TBM-EPB application Anita Di Giulio	16:20 - 16:40	Shaking table test of the tunnel-shaft junction of a utility shield tunnel Jinghua Zhang	16:20 - 16:40	A risk assessment method of groundwater in rock tbm project using dynamic bayesian networks: a case study Feng Zhao	
16:55 - 17:00	Q&A	16:40 - 17:00	Nobilitation of clay waste from tunneling as building material Vincenzo Perugini	16:40 - 17:00	Flood measure of the underground station of Tokyo Metro Daiki Ogawa	16:40 - 17:00	The effects of TBM operational parameters on excavation performances in complex geology when driving twin tunnels in istanbul Nuh Bilgin	
19:00 - 23:00	ITAtch Industry Reception (by invitation only)							

07.30 - Onwards	Oral Presenters Meeting Session							
08.30 - 09.40	<p style="text-align: center;">Open Session Presentation of results from WG & committees WG 5 - guidelines for good working practice in high pressure compressed air WG5 - guidelines for the provision of refuge chambers in tunnels under construction ITAtech – AG support - guideline for good practice of fiber reinforced precast segment - vol. 2 : production aspects ITAtech – AG investigation - geophysical ahead investigation methods</p>							
09.40 - 10.00	Presentation by ITACUS Co Chairs Han Admiraal and Antonia Cornaro : Underground spaces unveiled							
10.00 - 10.30	Coffee Break							
10.30 - 13.00	Round Tables – Contractual Practices for the 21st Century – Presentation of the ITA/FIDIC Emerald Book							
13.00 - 14.00	Lunch							
SHEIKH MAKTOUM A		SHEIKH MAKTOUM B		SHEIKH RASHID C		SHEIKH RASHID D		
Technical Session 5: Smart Cities and Sustainability (ITACUS)		Technical Session 6: Contract Risks		Technical Session 7: Repair and Maintenance		Technical Session 8: Innovative technologies - 1 (ITATECH)		
Session Chair: Han Admiraal Antonia Cornaro Session Co-Chair: Stuart Coventry		Session Chair: Arnold Dix Session Co-Chair: Zaw Zaw Aye		Session Chair: Henry Russel Session Co-Chair: Martin Knights		Session Chair: Pauli Arenram Nick Chittenden Session Co-Chair: Christoph Eberle		
14:00 - 14:20	Opening of session • Introduction of session chairs and co-chair Stuart Coventry • Introduction of ITACUS and the session program ITACUS I: Young Professional Think Deep Program (YPTDP) • Video YPTDP • Report Petr Salak on Wroclaw and on WUF9 • Report Rosanne Verloop on setting up YM NL • Interview with Petr Salak, Rosanne Verloop and Nicolas Ziv on YPTDP • Slide show book Underground Spaces Unveiled Antonia Cornaro Han Admiraal	14:00 - 14:20	Risk Management in Tunnelling – A Joint Approach of all Involved Michael Proprenter	14:00 - 14:20	A study of estimation method for cause of tunnel lining deformation Koki Maeda	14:00 - 14:20	Mechanized Cross-Passage Construction In Soft Soil Under High Pressure: The Tuen Mun Chek Lap Kok Link Subsea Tunnel Project, Hong-Kong Thibaut Lockhart	
14:20 - 14:40	Long-term vision and working program on tunnels in the Netherlands Karin de Haas	14:20 - 14:40	Crossrail Farringdon Station – lessons learned, added value and innovation Petr Salak	14:20 - 14:40	The Role of Numerical Modelling in Tunnels Rehabilitation Mostafa Zaki Abd Elrehim	14:20 - 14:40	Choice of TBM type for mountain tunneling under very poor geological conditions: Hybrid, Slurry, Epb, Dsu, Convertible Tbm Remo Grandori	
14:40 - 15:00	A VR model of hard rock wastewater tunnel excavation with a sustainable focus in Stockholm Rebecca Karlsson	14:40 - 15:00	Working Towards a Zero-Energy Tunnel: Technical, Contractual and Process Solutions Paul Janssen	14:40 - 15:00	Thermal analyses of passive infrared thermography application in the tunnel lining with defects Alireza Afshani	14:40 - 15:00	Key performance parameters of single-component grouting mortars in mechanized tunnelling - systematic laboratory investigations on the properties Zdenek Zizka	
15:00 - 15:20	"ITACUS II: National Actions Think Deep Programme (NATDP) • NATDP video • Interview with Abidemi Agwor, Nigerian Tunneling Association and Petr Salak, Think Deep UK" Han Admiraal Antonia Cornaro Abidemi Agwor Petr Salak	15:00 - 15:20	The Midra Shale / Rus Formation unconformity and the potential for groundwater inflow into deep excavations, Doha, Qatar. Sallie Vest	15:00 - 15:20	Chloride Attack Countermeasure Construction Of Subway Caisson Tunnel Under The River Ryuta Tsunoda	15:00 - 15:20	Panel Discussion Session All	
15:20 - 15:40	Coffee Break	15:20 - 15:40	Coffee Break	15:20 - 15:40	Coffee Break	15:20 - 15:40	Coffee Break	
15:40 - 16:00	ITACUS III: A return to Edouard Utudjian's work: A key for understanding future use of Paris underground space? Youssef Diab Manon Rodier	15:40 - 16:00	Risk-Based Integrated Cost and Schedule Analysis for Major Infrastructure Projects Markus Spiegl	15:40 - 16:00	Resilient materials in tunnelling - historic perspective and modern insights Bart Hendrix	15:40 - 16:00	Considerations for the long-term performance of fastenings in tunnels Panos Spyridis	
16:00 - 16:20	ITACUS IV: Doctoral thesis Lyon metro Nicolas Ziv	16:00 - 16:20	Underground Projects: Insurance coverage, Insurance market trends and risk cost reduction through proactive risk management Thomas Konstantis	16:00 - 16:20	Properties of Acrylate Grouts and their Use in Tunnel for Waterproofing and Repair Jobs. Diochon Brice	16:00 - 16:20	Innovative Geopolymer Coating for Road Tunnels Frank Clement	
16:20 - 16:40	Assessing Resilience Impacts from Integrated Above- and Below-ground Urban Infrastructure Priscilla Nelson	16:20 - 16:40	Handling the Unexpected": How to Allocate Risks Arising from Ground Conditions in Tunnelling Contracts Ulrich Helm	16:20 - 16:40	Design and construction challenges of the refurbishment of the 110-year-old Bosruck rail tunnel, Austria. Bernhard Kohlboeck	16:20 - 16:40	Consultants view of durable and sustainable constructions in the Middle East Carola Edvardsen	
16:40 - 17:00	ITACUS V: New SCAUT Initiative (Swiss Center of Applied Underground Technologies): Panel discussion on urban food security and the role of underground space Han Admiraal Panellists	16:40 - 17:00	Comparison of Two Possible Alternatives for the Development of Subsurface of Historical Buildings: A Case Study in Shanghai Xiao Zhang	16:40 - 17:00	Spraying UHPFRC opens new application field for underground works Catherine Larive	16:40 - 17:00	Panel Discussion Session All	
17.00 - 18.30	Prime Sponsors Meeting (by invitation only)							
19.00 - 22.00	Young Members Party (by invitation only)							

SHEIKH MAKTOUM A		SHEIKH MAKTOUM B		SHEIKH RASHID C		SHEIKH RASHID D	
Technical Session 9: TBM Case Studies - 2		Technical Session 10: Planning and Design - 1		Technical Session 11: Construction Methods -1		Technical Session 12: Innovative technologies - 2	
Session Chair: Detlef Jordan Session Co-Chair: Dr. Abdussammie Himoni		Session Chair: Amanda Elioff Session Co-Chair: Nasri Munfah		Session Chair: Jon Hurt Session Co-Chair: Gerard Seingre		Session Chair: Michael Rispin Session Co-Chair: Ernesto Schuemperli	
09:00 - 09:20	Line C in Rome: The downtown section and the safeguard of the Unesco World heritage area Eliano Romani	09:00 - 09:20	AFTES guideline related to the design and dimensioning of radial bolting support systems in tunnels François Laigle	09:00 - 09:20	About non-cut and cover tunnel method (rectangular shield and underground open cut method) in hanshin expressway yamatogawa route Takahisa Fukushima	09:00 - 09:20	Innovative management of geological data as a tool for save tunnelling Giorgio Höfer-Öllinger
09:20 - 09:40	In the scope of uskudar umraniye cekmekoy metro project, construction of the tbm tunnels under historical uskudar square Serdar Şavk	09:20 - 09:40	Nonlinear analyses of underground powerhouse affected by potential seepage from the pressurized power tunnel Mehdi Yousefi	09:20 - 09:40	Design and construction of escalator shafts and an inclined access passage at the new Elizabeth line Liverpool Street station (The Crossrail Project) Eleanor Sillerico	09:20 - 09:40	Optimization of tunnel seismic operations for fast and continuous investigations ahead of the face Thomas Dickmann
09:40 - 10:00	Excavating Turkey's most challenging project - The Gereade Water transmission tunnel Brad Grothen	09:40 - 10:00	Integration of yielding elements in various computational methods for calculations in different planning and construction phases Anna-lena Hammer	09:40 - 10:00	Design of primary lining (Diaphragm wall) at Kirtling Street Shaft for Thames Tideway Tunnel, Central Contract Anna Simic	09:40 - 10:00	Pressure distribution in EPB pressure chambers: New insights from computational flow simulations Günther Meschke
10:00 - 10:20	The Brenner Base Tunnel, project overview and TBM Specifications at the Austrian side Michael Rehbock-Sander	10:00 - 10:20	Assessment of tunnel construction possibilities in deep high squeezing permo-carboniferous ground Andrej Likar	10:00 - 10:20	Engineering geological evaluation of rock mass of the transformer cavern – A case study from lift irrigation project, India Devendra Rawat	10:00 - 10:20	Substantive double cutterhead TBM experiments realize electricity conservation Kenji Yamashita
10:20 - 10:40	Oslo Follo Line/ Norway – Project Challenges and TBM Solutions Karin Baeppler	10:20 - 10:40	Developing a simple spring interface modelling technique for a composite lining bond interface Hyuk-il Jung	10:20 - 10:40	Measure for heaving of roadbed in squeezing ground - Kyushu Shin-kansen Nishikyushu line Tawarazaka tunnel - Makoto Toyama	10:20 - 10:40	On-Site Visualization as a new monitoring scheme for tunnelling engineering Shinichi Akutagawa
10:40 - 10:45	Q&A	10:40 - 10:45	Q&A	10:40 - 10:45	Q&A	10:40 - 10:45	Q&A
10:45 - 11:15	Coffee Break						
11:15 - 11:35	Tunnelling Studies for CERN's Future Circular Collider Werner Dallpiazza John Osborne	11:15 - 11:35	Designing a two-floor Urban Traffic Tunnel by using NATM Tunneling Method in Tehran Alluvium with shallow overburden under Modares Highway Aliakbar Golshani	11:15 - 11:35	ADECO & NATM comparison: the case of Višnové Tunnel Giuseppe Lunardi	11:15 - 11:35	Precast Concrete Design And Construction Of New York's Grand Central Terminal Main Station Cavern Of The East Side Access Project William Cao
11:35 - 11:55	Ultra-long subsea tunnel under the Gulf of Finland Klaus Wachter	11:35 - 11:55	Tunneling in the Modern Dubai for Flood Control Now and for the Next Century Steven Fradkin	11:35 - 11:55	Design and Construction of South Hartford Conveyance and Storage Tunnel and Pump Station Vera Nasri	11:35 - 11:55	Qualification, construction and analysis of a precasted compressible Arch Segments drift test in the Andra Meuse/Haute-Marne Underground Research Laboratory (URL) Jad Zghondi
11:55 - 12:15	TBM Tunnelling below the Suez Canal in Challenging Ground Conditions containing Methane Gas Derek Williams	11:55 - 12:15	Design of Shaft Secondary Lining and Internal Structures for Tideway Central Contract Enrica Vardaro	11:55 - 12:15	Collapsible Soils Settlement Control by Grouting - Preliminary Results for the Expansion of Brasilia's Subway System Max Barbosa	11:55 - 12:15	Use of two-component mortar in the precast lining backfilling of mechanized tunnels in rock formations Rolando Justa Cámara
12:15 - 12:35	Excavating Mexico City's Mega-Tunnel in Mixed Ground at 150 Meters Deep: Emisor Oriente Wastewater Tunnel Lot 5 Roberto Gonzalez	12:15 - 12:35	A Comparison of Estimated and Measured Precast Segment Liner Loads Developed During Construction of twin EPB Tunnels in Seattle Tamir Epel	12:15 - 12:35	Seismic Behavior of Shallow NATM Tunnels Excavated in Improved Ground Yuki Yahagi	12:15 - 12:35	Failure modes of the steel lining of underground reservoirs for compressed air energy storage (CAES) Paolo Perazzelli
12:35 - 12:55	The Frejus's Safety Tunnel: the Italian side Giovanna Cassani	12:35 - 12:55	The Art Stations: architectural interactions between engineering and construction process Flavia Brenci	12:35 - 12:55	Optimized tunnel size and well-matched equipment Johannes Hansson	12:35 - 12:55	Drone Based Deformation Monitoring at the Tunnel Project Zentrum am Berg Alexander Radinger
12:55 - 13:00	Q&A	12:55 - 13:00	Q&A	12:55 - 13:00	Q&A	12:55 - 13:00	Q&A
13:00 - 14:00	Lunch						

WEDNESDAY 25 APRIL

SHEIKH MAKTOUM A		SHEIKH MAKTOUM B		SHEIKH RASHID C		SHEIKH RASHID D	
Technical Session 13: Construction Methods -2		Technical Session 14: Construction Risks		Technical Session 15: Fire Life Safety		Technical Session 16: Planning and Design - 2	
Session Chair: Klaus Rieker Session Co-Chair: Anthony Harding		Session Chair: Stefan Medel Session Co-Chair: Paul Groves		Session Chair: Adrian Brown Session Co-Chair: Eric Premat		Session Chair: Tim Babendererde Session Co-Chair: Mohammed Maghazy	
14:00 - 14:20	Design and Construction of Bored Tunnels for Mumbai Metro Line 3 Makarand Khare	14:00 - 14:20	The 'Do Nothing' Solution for two Heritage-Listed Brick Lined Tunnels Impacted by Motorway Construction Above Andrew Noble	14:00 - 14:20	Dubai Bluewaters Island Tunnel - Overcoming Structural Fire Safety Challenges. Sabu Thomas Mampilly	14:00 - 14:20	GBR delivery exclusively as a BIM Level 2 ½ model: Lessons learned from the new Stockholm metro design Paul Evins
14:20 - 14:40	The Ceneri Base Tunnel: The construction experience of the southern portion of the flat railway line crossing the Swiss Alps. Daive Merlini	14:20 - 14:40	Cases of tunnel instability and cave in - lessons learnt and measures for prevention Bjorn Nilsen	14:20 - 14:40	Protection against fire for the UK Crossrail tunnel structures Mike King	14:20 - 14:40	Waterview Connection Project Cross Passage Tunnels: Safety in Design and Construction Wataru Okada
14:40 - 15:00	Shatin Central Link – First Variable Density Tunnel Boring Machine in Hong Kong for a Shallow Tunnel Drive James Reilly	14:40 - 15:00	Mutual interaction between parallel tunnels inside a weak rock mass under high overburden: The Brenner Base Tunnel experience Stefano Fuoco	14:40 - 15:00	The Fehmarnbelt crossing: Safety aspects and risk based approach Susanne Kalmar Pedersen	14:40 - 15:00	Numerical analyses for the design of fiber reinforced precast concrete lining segments for ram thrust forces Paolo Cucino
15:00 - 15:20	Using Tunnel Boring Machine Penetration Tests to Quantify Performance in Hard Rock Marlène Villeneuve	15:00 - 15:20	Mechanical Behavior of Mountain Tunnel during Earthquake Based on Dynamic Measurement in an Actual Tunnel Atsushi Kusaka	15:00 - 15:20	Quantitative methodologies for the fire risk assessment of road tunnels Giordana Gai	15:00 - 15:20	Design of Junctions between the Main Tunnel and Connection Tunnels for Tideway Central Contract Jiang Su
15:20 - 15:40	Coffee Break						
15:40 - 16:00	Dewatering or pre-grouting, that is question Vahid Shariati	15:40 - 16:00	Monitoring the San Mamés tunnel, a NATM tunnel in an urban area: lessons learned Josep Raventos	15:40 - 16:00	An Experimental Study on the Performance Characteristics of Automatic Monitor System in Double-Deck Tunnel Jin-ouk Park	15:40 - 16:00	Advanced numerical analyses of EPB tunneling using critical state plasticity Dimitris Litsas
16:00 - 16:20	Impact of the rock mass quality on the cost of the conventional excavation: The experience acquired during the execution of the Brenner Base Tunnel Raffaele Zurlo	16:00 - 16:20	Using bayesian network for estimating the jamming risk in shielded TBM tunneling through adverse ground Jamal Rostami	16:00 - 16:20	Transient effects in ventilation design for rail tunnels Marco Bettelini	16:00 - 16:20	Reinforced concrete tunnel junctions: design and construction guidelines Bruce Ashcroft
16:20 - 16:40	An innovative design concept for the Immersed Tunnel of the Hong Kong Zhuhai Macao Bridge Project Hans De Wit	16:20 - 16:40	Deployment of the building and its interface with NATM tunnels of existing structures of the São Paulo Metro Bruno M.G. Scodeler	16:20 - 16:40	Intelligent Longitudinal Ventilation Control of Long Road Tunnels Yuxin Zhang	16:20 - 16:40	BIM-to-FEM: incorporating numerical simulations into BIM concepts with application to the Wehrhahn-Line Metro in Düsseldorf Abdullah Alshahly
16:40 - 17:00	Proceedings of the transport and immersion operations of the N31 aqueduct in harlingen, The Netherlands Gina de Rooij	16:40 - 17:00	Radar interferometry as an innovative solution for monitoring the construction of the Grand Paris Express metro network – First results Fifamè Koudogbo	16:40 - 17:00	Numerical study on water jet fire extinguishing system for performance verification Yangkyun Kim	16:40 - 17:00	Modelling of surface subsidence induced by tunnelling using Artificial Neural Network Alireza Iravani
17:00 - 17:30	Closing Ceremony						
19:00 - 21:00	Gala Dinner						