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14:00 - 14:25	<p>Opening Ceremony Chair: Hong Du (Shenzhen Water Group)</p>
14:00 - 14:05	<p>Opening Video "Welcome to Shenzhen"</p>
14:05 - 14:10	<p>Speech - Mayor of Shenzhen City</p>
14:10 - 14:15	<p>Welcome Speech - Chairman of Shenzhen Water Group</p>
14:15 - 14:20	<p>Opening Speech - Stuart Hamilton</p>
14:20 - 14:25	<p>Video of IWA WLSG & IWA WLSG-China Region</p>
14:25 - 16:55	<p>Plenary Session Chair: Stuart Hamilton</p>
14:25 - 14:55	<p>Practice of NRW control in Shen Water Group Binhong Ji (VP of Shenzhen Water Group)</p>
14:55 - 15:25	<p>Highway to Hell Troubles and Headache of Reaching Consensus on Internationally Applicable Water Loss Terminology Dave Pearson (WLSG)</p>
15:25 - 15:55	<p>Water Losses - IWA Perspectives Kala Vairavamoorthy (IWA CEO)</p>
15:55 - 16:25	<p>The development and practice of the WLSG-China Region in China Junwei JIN (Co-Chair of WLSG-China Region)</p>
16:25 - 16:55	<p>Digitalization and Water Loss Management Dragan Savic (KWR CEO)</p>

Tuesday November 10, 2020 - Morning Sessions (GMT+08:00)

Track A		Track B		Track C	
08:10-10:00		DMA Establishment and Management <i>Chair: Stuart Stapely</i>		New Research (1) <i>Chair: Cristiano Gouveia</i>	
08:10-08:30		1 An Efficient Management on Water Loss Control Based on Water Meter Management and DMA Youfei Liu China		19 Integrating Data Analytics and Hydraulic Modelling for Water Loss Management Zheng Wu U.S.A.	
08:30-08:50		2 Methodology for the Design of DMAs Shifting from Intermittent to Continuous Water Supply Carmen Navarro Mexico		20 Leakage Characterisation of Bulk Water Pipes Based on their Pressure-Leakage Response Jakobus Van Zyl New Zealand	
08:50-09:10		3 Zero Pressure Test: Deceptively Simple Ryan Baculinao Philippines		21 A Growth Function On The Development Process Of Leakage On Water Supply Pipelines Guancheng Guo China	
09:10-09:30		4 Managing 1600 District Metered Areas (DMA) Through Automation Romalyn Uy Philippines		22 Pressure-based Pipe Condition Characterisation for Background Leakage Assessment and Pipe Rehabilitation Strategies Laura Lopez New Zealand	
09:30-09:50		5 Data Quality Assessment for District Metered Areas Jiaxin Zhang China		23 CRLI - The advantages of the new Combined Real Loss Indicator Alan Wyatt U.S.A.	
09:50-10:00		Q&A		Q&A	
Coffee Break					
10:50-12:00		Managing Non-Revenue Water <i>Chair: Jacky Lei</i>		New Research (2) <i>Chair: Shuming Liu</i>	
10:50-11:10		7 Based on the Project Management Thinking to Control the Leakage Wenti Zhang China		24 Application of Pressure Elasticity Test in Leakage Separation and Quantification Xiaodong Jing China	
11:10-11:30		8 Smart Ways to Manage Non-Revenue Water Richard Taylor New Zealand		25 Monte Carlo-based Leakage Analysis Andrew Chastain-Howley U.S.A.	
11:30-11:50		9 NRW Reduction Through Metering Installation in Socially Challenged Areas (SCAs) in Kingston, Jamaica Katherine Paleracio Philippines		26 Experimental and Numerical Investigation of the Effect of Pressure on Strain Around Leaks in Water Distribution Systems Jianxun Chen China	
11:50-12:00		Q&A		Q&A	
Lunch					
12:40-14:30		Flow Metering <i>Chair: Junwei Jin</i>		New Technologies and Strategies <i>Chair: Jurica Kovac</i>	
12:40-13:00		10 The Power of Data Analytics to Reduce Apparent Losses Delph Mak Singapore		28 Pipeline Integrity: Understanding Today and Predicting the Future Ian Rodgers United Arab Emirates	
13:00-13:20		11 Small Scale In-Situ Evaluation of Smart Metering for Residential Consumers Mthokozisi Ncube South Africa		29 Tackling the NRW Problem: A Multi-faceted Approach. Canal De Isabel II's Case Study F. Javier Fernández Spain	
13:20-13:40		12 Analysing Customer Meter Performance Under Intermittency and Continuous Conditions Taha Al-Washali Netherlands		30 New Connectivity Technologies Making Large-Scale Permanent Sensor Deployments Efficient and Economically Viable Uri Gutermann Switzerland	
13:40-14:00		13 Study on Static Residential Water Meters' Accuracy When Measuring Short Consumption Events Francisco Arregui Spain		31 Design Optimization of Secondary Water Supply Systems for Leakage Control Sheng Da China	
14:00-14:20		14 Assessing and Selecting Technologies to Create an Optimal Static C&I Meter David Nicklin United Kingdom		32 Healthy Lifestyle Is not Just for Humans: Water Infrastructure Needs It too! Aurélie Chazerain France	
14:20-14:30		Q&A		Q&A	
Coffee Break					
15:00-16:30		Involving the Private Sector <i>Chair: Alexandru Aldea</i>		Understanding Leakage and Choosing the Right Approach <i>Chair: Stuart Trow</i>	
15:00-15:20		15 PBC In Developing Countries -- A Realistic Approach Dewi Rogers Italy		33 Understanding Leakage: An Overview Ronnie McKenzie South Africa	
15:20-15:40		16 Non-Revenue Water Reduction Programmes Funded by the Private Sector to Solve Under Staffing at Kwa-Zulu Natal's Vishal Poona South Africa		34 Leakage detection -- Are you using the right approach? Stuart Hamilton United Kingdom	
15:40-16:00		17 Public Private Partnership On Water Loss Reduction Between City Of Tshwane And South African Breweries Niel Meyer South Africa		35 Introduction To A New Discipline: Leakology™ Philippe Mappa France	
16:00-16:20		18 How To Design A Performance Based Non-Revenue Water Management Contract Roland Liemberger Austria		36 Combining Most Appropriate Methodology and Technology for Your System Yields Best Results Tomislav Vitovski Croatia	
16:20-16:30		Q&A		Q&A	
Case Studies from around the World (1) <i>Chair: Mary Ann Dickinson</i>					
08:10-08:30					
08:30-08:50					
08:50-09:10					
09:10-09:30					
09:30-09:50					
09:50-10:00					
Coffee Break					
Case Studies from around the World (2) <i>Chair: Gary Wyeth</i>					
10:50-11:10					
11:10-11:30					
11:30-11:50					
11:50-12:00					
Lunch					
Performance Indicators and Targets <i>Chair: Roland Liemberger</i>					
12:40-13:00					
13:00-13:20					
13:20-13:40					
13:40-14:00					
14:00-14:20					
14:20-14:30					
Coffee Break					
Case Studies from around the World (3) <i>Chair: Jo Parker</i>					
15:00-15:20					
15:20-15:40					
15:40-16:00					
16:00-16:20					
16:20-16:30					

Wednesday November 11, 2020 - Morning Sessions (GMT+08:00)

Track A		Track B		Track C	
08:30-10:00		Learning from North America <i>Chair: Will Jernigan</i>		Case Studies from around the World (4) <i>Chair: Stuart Stapely</i>	
08:30-08:50	54 The Development of a New AWWA Position on Non-Revenue Water Performance Indicators Steve Cavanaugh U.S.A. 	70 A Tale of Two Cities Milene Aguiar Brazil 	A special session where specific problems of water utilities of the Guangdong-Hongkong-Macao Greater Bay Area will be discussed Host: Thurston Lou Special guests will include representatives from Hongkong, Macao, Shenzhen and Zhuhai . The discussion will be around the general NRW situation of these four cities. In an open discussion topics like main challenges, human resource development, new technologies, future management strategy, synergies and cooperation amongst the cities.		
08:50-09:10	55 Quebec Water Efficiency Strategy: International Comparison of Actions and Results on Water Losses Yannis Kachani Canada 	71 Digital Applications For Water Losses Control Implemented In Shenzhen Jiao Guo China 			
09:10-09:30	56 The New Validation Standard for AWWA Water Auditing Will Jernigan U.S.A. 	72 Emerging Trends Of Research On Leakage In Water Distribution Systems: A Bibliometrics Review Chenwan Wang China 			
09:30-09:50	57 Comprehensive Water Loss Control Programs In the US: An Assessment of Laws and Policies Mary Ann Dickinson U.S.A. 	73 Creating a Better Life for Sydney - New Integrated and Proactive Approaches by Sydney Water Aravinda Stanley Australia 			
09:50-10:00	Q&A	Q&A			
10:00-10:30 Coffee Break					
10:30-12:00		Data Driven Methods (1) <i>Chair: Cristiano Gouveia</i>		New Technologies and Strategies (2) <i>Chair: Gary Wyeth</i>	
10:30-10:50	58 Solving Water Challenges with Decision Intelligence Henry Yuan China 	74 Leak Detection From Basics to Satellites Eddy Segal Israel 	Asian Development Bank (ADB) Initiatives in NRW Management <i>Chair: Hisaka Kimura</i>		
10:50-11:10	59 Continuous Burst Detection In District Metering Areas Using Data-driven Method Xiaoting Wang China 	75 Smart Water Technologies for Remote Leak Location Thomas Cheong Malaysia 			
11:10-11:30	60 Getting The Consumption Data Right! Ariel Dayanghirang Philippines 	76 Application of CCTV Technology to Leakage Detection Yi Dai China 			
11:30-11:50	61 Application of Real Time Hydraulic Modle on NRW Management: Case Study of Fuzhou City Liang Yu China 	77 Advanced NRW Management Strategy and Visual Analysis Technology of Water Supply Dongmei Qin China 			
11:50-12:00	Q&A	Q&A			
12:00-13:00 Lunch					
13:00-14:30		Asset Management and Data Analysis <i>Chair: Jacky Lei</i>		Intermittent Water Supply <i>Chair: Ashok Natarajan</i>	
13:00-13:20	62 Real Time Water Loss Monitoring of Critical Pipelines - Air Selangor Case Study Matthew Kennedy United Kingdom 	78 A Holistic Stepped Approach for Transitioning from Intermittent to Continuous Water Supply Bambos Charalambous Cyprus 	Young Water Loss Reduction Professionals - IWA WLSG - China Region A special session where Young Water Loss Reduction Professionals from China will share their experiences, challenges and ideas for the future. Host: Qiang Xu There will be four presentations: 1. Daran Huang : DMA Application in Kunming City 2. Yuxi Wang : Leakage Detection on Trunk-Main Pipes using Insertion-Type Sensor System 3. Hui Hu : Whole Lifecycle Management for NRW Reduction Project 4. Ruoxi Wu : The Calculation of Water Loss in Pressure-dependent Demand Model Besides the four presenters, several other young professionals will attend the discussion.		
13:20-13:40	63 SUEZ Global Performance Approach: Water Network Life Enhancement David Duccini France 	79 Risk-Based Analysis of an Urban Water Distribution Network: A Case Study of Kumasi North District, Ghana Gloria Davies-Ocloo Ghana 			
13:40-14:00	64 Optimal Implementation of NRW Assessment, Strategy Design and Implementation of NRW Technologies Marco Fantozzi Italy 	80 A Paradigm Shift in Intermittent Water Supply: The Downstream Control Concept Bambos Charalambous Cyprus 			
14:00-14:20	65 The Impact of Leakage Levels on Reported and Detected Leak Repair Frequencies Jo Parker United Kingdom 	81 Transitioning to a Continuous Supply in a Peri-urban Area of Lusaka: Results of a Demonstration Project in George Compound Rosemary Campbell United Kingdom 			
14:20-14:30	Q&A	Q&A			
14:30-15:00 Coffee Break					
15:00-16:30		Trunk Mains and Pressure Management <i>Chair: Aravinda Stanley</i>		Data Driven Methods (2) <i>Chair: Stuart Trow</i>	
15:00-15:20	66 Lessons Learned from Advanced Pressure Management Stuart Stapely Sophie Wang Australia 	82 Real Time Demand Monitoringto Optimise Pressure In Water Distribution Network Debidutta Mishra India 	Human Resources, Management, Training <i>Chair: Mary Ann Dickinson</i>		
15:20-15:40	67 Leak Detection with Hydrophone Loggers on Big Diameter Pipelines Edmund Riehle Germany 	83 Big Data Revolution for The Water Sector Mudasser Iqbal Singapore 			
15:40-16:00	68 Refocusing on the Water Balance - Trunk Main Leakage and Optimal Customer Meter Replacement Andrew Donnelly Portugal 	84 Development And Conceptual Validation Of Model-Based Leakage Detection Algorithm Using Particle Swarm Optimization Asala Mahajna Netherlands 			
16:00-16:20	69 Large Diameter Metering: Some Guiding Principles Mikal Willmott United Kingdom 	85 The Convergence of Smart Metering, Hydraulic Modeling and Artificial Intelligence in Smart Water Networks Raul Navas Spain 			
16:20-16:30	Q&A	Q&A			
16:30-17:30	Closing Ceremony <i>Chair: Junwei Jin</i>				