

## 22 June 2021 (Tuesday)

7.00pm-8.30pm (SGT) (GMT +8)

### Session 1.1 – Network Planning for Resilience

**Session Chair(s): Ridzuan Ismail, PUB, Singapore's National Water Agency (Singapore)**

#### Creating Resilient Systems

P. Plowman. Sydney Water (Australia)

*Presenter is an invited speaker. No executive summary is available*

#### Streamlining Delivery Of A 24X7 Water Supply Scheme In India

A. Askar, N. Bockhoff, J. Cantone. SUEZ India (India)

SUEZ is currently working with municipalities in Coimbatore and Davanagere, India, to design, construct and maintain distribution networks that can provide continuous, 24X7 potable water supply. There was limited asset data available for the existing systems in these communities. To combat this, SUEZ developed a systematic approach to fill in data gaps, involving base mapping using satellite imagery, utilization of in-house digital platforms such as Real-time Operation Performance System (ROPeS), and management of extensive field surveying. The condition of existing mains in the networks were analyzed using non-destructive acoustic sensors, and an innovative machine learning based approach was utilized to help select suitable sections of pipe to scan to provide a representative sample of the entire network. The Optimatics' software platform Optimizer™, which employs evolutionary algorithm optimization, was used to analyze a broad range of design options and determine the optimal solution to maximize service level while minimizing CAPEX.

#### Network Resilience – Asset And Operational Point Of View

J. Lei. Macao Water (Macao (China))

*Presenter is an invited speaker. No executive summary is available*

#### Planning for a Drought Resilient City

K. Sorensen. Kyl Center for Water Policy at Morrison Institute, Arizona State University (United States)

*Presenter is an invited speaker. No executive summary is available*