25 June 2021 (Friday)

7.00pm-8.30pm (SGT) (GMT +8)
Session 1.4 – Non-revenue Water

Session Chair(s): Chau Sai Wai, Hong Kong Department of Water Supplies (Hong Kong)

Overview of Non-Revenue Water and Looking to the Future

KC. Lai. PUB, Singapore's National Water Agency (Singapore)
Presenter is an invited speaker. No executive summary is available

Leak Detection Through Mobile Acoustic Monitoring

O. Fruchtman. Aquarius-Spectrum (Israel)

Water pipe deterioration leads to constant increase in operational costs for leak repair, pipe replacement, water and energy waste. Catastrophic bursts are much more expensive to fix than scheduled fix of small leaks that are detected by monitoring system. Proactive detection of small leaks and fixing them before they burst have huge operational benefits as enormous amounts of water and energy are saved. Aquarius' mobile solution enables Water Utilities to proactively monitor their network, trace leaks and pinpoint their exact locations on a daily basis. To date, the company's technology is monitoring thousands Km of pipes, helping Water Utilities reduce their Non-Revenue-Water (NRW) and their Maintenance & Operational costs by using highly sensitive sensors, management software and a mobile application.

EchoShore® - TX Leak Monitoring System For Transmission Mains – Using An Integrated Approach Using Single Channel And Correlation Analysis

V. Burtea, R. Madhavaneswaran. Mueller Water Products (Canada)

Typically, 10-30% of the treated water introduced to a water network is not accounted for and is labelled as non-revenue water. A large share of the non-revenue water percentage is real water loss due to leakage. To further reduce water loss due to leakage utilities in North America and South East Asia have installed Mueller/Echologics' EchoShore-TX leak detection sensors to monitor over 200 kilometres of transmission water mains. These devices record and transmit acoustic data which are analysed to detect leaks. As these critical leak monitoring systems have been deployed at scale, new processes and algorithms have been developed to differentiate leak noise from ambient noise, to manage gigabytes of data daily and to ensure a high accuracy of leak classification. Additionally, by combining both single channel and correlation based leak detection, quiet leaks can be detected in various locations along the pipe segment.

Case Studies For Non-Revenue Water Reduction Technologies

R. Clarke. Xylem Inc (UK)
Presenter is an invited speaker. No executive summary is available