

The 9<sup>th</sup>  
**WaterLoss Asia 2022**  
1st Announcement

**08-10** NOV 2022  
Virtual Event

Controlling  
Non-Revenue Water  
through Digital Technology  
& Artificial Intelligence



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# Welcome to the 9<sup>th</sup> Virtual Edition of Water Loss Asia

The bi-annual Water Loss Asia (WLA) 2022 conference returns in a virtual format this year on 8-10 November. Supported by International Water Association (IWA) Water Loss Specialist Group, WLA 2022 brings together experts and leaders in the Non-Revenue Water (NRW) industry to bring you an exciting 3-day event on controlling non-revenue water through a deep exploration of digital technology and artificial intelligence available on the market today.

The COVID-19 pandemic has had a negative impact on global economies. The water industry was adversely affected, with unprecedented slowdowns and changes in working methods. On the other hand, it has accelerated positive digital transformation.

The resumption of commercial and social activities is both an opportunity and a challenge for water service providers. If properly managed, this can lead to improved economic and public health outcomes. In contrast, careless execution can expose more people to COVID-19 and force a return to response or emergency mode.

The water sector can rebuild a more sustainable and resilient water sector by addressing future health crises, accelerating universal access to water and sanitation, adopting appropriate digital technologies, and increasing irrigation system resilience for long-term water and food security. The 9<sup>th</sup> edition of Water Loss Asia will focus on controlling non-revenue water through adoption of appropriate digital technology and artificial intelligence.





# Digital Technological Tools to Reduce NRW

Digital technologies received a lot of attention during the pandemic because digitally prepared service providers were better able to cope. Further exacerbated by growing global concern about rising water scarcity levels. To cope with, and even anticipate, this trend, an increasing number of water service organisations are feeling the need to take a technological leap.

Some digital applications prevalent in high-income countries, may not be suited to the needs of emerging markets and developing economies. Factors such as high levels of unauthorised consumption and low water tariffs are particularly important in terms of mitigating commercial losses. They are also important in reducing physical losses and increasing energy efficiency.

## The Identified Fields of Digital Opportunities are Considered in Three Categories:



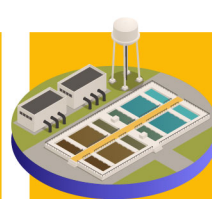
### Reduction of Commercial Losses

- Data mining for identification of illegal consumption and meter inaccuracies
- Customer applications
- Localization of illegal connections with ground-penetrating radar
- Detection of illegal bypasses analyzing hydraulic transient
- Smart metering for principal customers
- Apps for commercial field staff



### Reduction of Physical Losses

- Multipurpose geographic information systems
- Drone technology
- Data analysis for prioritization of leak control and asset management
- Leak monitoring in large-diameter water main
- Smart pressure management valves
- Optimized flushing strategy for drinking water networks



### Increase in Energy Efficiency

- Smart energy management systems
- Smart pumps for maximum energy efficiency
- Pump load profile monitoring for energy efficient optimization
- Early or real-time detection of pump malfunction
- Pump maintenance with digital applications
- Analytics of biogas to improve energy efficiency

**Source:** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH 2021

([https://www.researchgate.net/publication/347472857\\_Smart\\_Water\\_Management\\_-\\_Digital\\_applications\\_to\\_reduce\\_non-revenue\\_water\\_and\\_increase\\_the\\_energy\\_efficiency\\_of\\_water\\_utilities\\_in\\_countries\\_with\\_emerging\\_markets\\_and\\_developing\\_economies](https://www.researchgate.net/publication/347472857_Smart_Water_Management_-_Digital_applications_to_reduce_non-revenue_water_and_increase_the_energy_efficiency_of_water_utilities_in_countries_with_emerging_markets_and_developing_economies))

The rapid pace of innovation will drive down costs, allowing more service providers to adopt new technologies. Consider which digital technologies have the greatest impact on service providers' ability to meet their service obligations. Consider the applicability of technology solutions to the operating context. Already, many start-ups based in emerging economies are developing digital solutions that are not only cheaper but potentially more appropriate for the local context.



## Role of AI in NRW

According to the World Bank, water utilities lose approximately EUR 14 billion per year due to various water losses. Smart data-driven methods for detecting water losses in public networks are rapidly gaining popularity. These solutions are based on the use of the Internet of Things and Artificial Intelligence (AI) techniques using large real-time flow and pressure datasets collected via smart meters. The term "machine learning" is then used to extract information, validate hydraulic models, detect patterns, and highlight anomalies.

Water utilities can leverage knowledge and data available to make better decisions while improving service delivery and lowering costs by leveraging the power of artificial intelligence algorithms and big data analytics. The majority of water utilities begin their digital transformation with a SCADA connected to a network control centre, and then figure out how to leverage these ICT investments into tangible benefits. As a result, many water utilities' digital capabilities, particularly in developing nations, are not particularly effective for day-to-day operations and do not provide a clear advantage to customers.

Water utilities should make a gradual, pragmatic, and goal-oriented shift to digital. For water utilities to begin their digital transformation into smart water, physical-based methods are the way to go. Through data-driven approaches, the integration of SCADA data with advanced hydraulic modelling tools-including AI in water supply-complements physically based methodologies with powerful optimization and decision support tools, business intelligence, and knowledge management. Water utilities can analyse their technology capabilities and develop a realistic ICT road map by launching low-risk, low-scale pilot projects to test the potential benefits of AI approaches.



## CALL FOR PAPER

The Water Loss Asia 2022 (WLA 2022) Conference organising committee is looking to hear from thought leaders and gather new insights, market intelligence on solutions and case studies for controlling NRW through Digital Technology & Artificial Intelligence.

As we move into the new normal, utilities are now finding their workforce keen to continue working remotely, avoiding unnecessary trips to the office. This means that utilities need to look again at the digital system they rapidly put in place, whether they are the best & most efficient and whether they can be improved through the implementation of Artificial Intelligence to assist in analysing the big data faster and more effectively.

### Important Dates



### Water Loss Asia 2022 Topics

Leak detection/Leakage management	Trunk main condition assessment methodologies
Leakage detection in large diameter pipes	Digital transformation in the management of NRW
Acoustic leakage monitoring	Country case studies
Trenchless rehabilitation of water mains	Apparent/Commercial losses
Utilising big data for NRW reduction	NRW water balance
Smart water distribution network management	Practical NRW management
Water meter management	Pressure management
Trunk main analysis and investigation	Managing NRW using DMAs

### Open for Registration

Join WLA2022 to play your part in rebuilding a more sustainable and resilient water sector by adopting appropriate digital & AI technologies, for long-term water security.

	2-Day Conference		1-Day Workshop	
	RM/pax	USD/pax	RM	USD
Member of IWA/MWA	675	180	540	145
Normal Rate	750	200	600	160
Group of 3 and above	675	180	540	145
Students	400	105	300	80

Online Registration  
(in RM)

Online Registration  
(in USD)

Registration Form  
(Downloadable PDF form)

\*Above fees are subject to 6% Sales and Service Tax (SST). Payment can be made through local cheque, telegraphic transfer and online payment, contact our staff for assistance.

# Sponsorship Opportunities

Connect your business with contacts in this close gathering of all the NRW professionals in one place. Boost your company's brand visibility before or during the virtual event by taking full advantage of our sponsorship and advertising opportunities.

Sponsorship Packages		Platinum	Gold	Sliver
<b>Digital Promotion &amp; Publicity</b>				
<b>Marketing Materials</b>	Logo display	√	√	√
<b>Event Website</b>	Home Page Logo display with hyperlink	√	√	√
	Home Page Middle Rotating Banner Ad	√	-	-
	Inner page Middle Rotating Banner Ad	-	√	√
	Sponsors Page with logo, company write-up and hyperlink	300 words	200 words	150 words
<b>Virtual Platform</b>	Registration Page Logo display with hyperlink	√	√	√
	Registration Page Carousel Banner Ad	√	-	-
<b>Social Media Channel</b>	Sponsor's promotional post on WLA Facebook page	2	1	-
<b>EDMs</b>	Logo display with hyperlink	√	√	√
	One Banner Ad with hyperlink	√	√	-
	Product Spotlight	1	-	-
<b>Virtual Conference &amp; Workshop</b>				
<b>Auditorium</b>	Sponsors wall banner Logo display	√	√	√
<b>Conference</b>	Speaking opportunity – one slot	√	-	-
	2-day Conference Pass	4	2	1
<b>Workshop</b>	1-day Workshop Pass	4	2	1
<b>Virtual Exhibition</b>				
<b>Virtual Booths</b>	Platinum Booth (value RM 5,000/USD 1,500)	√	-	-
	Business Booth (value RM 4,500/USD 1,300)	-	√	-
	Standard Booth (value RM 3,500/USD 1,000)	-	-	√
<b>Main Lobby</b>	Sponsor's banner	1	-	-
	Sponsor Wall banner Logo display	√	√	√
<b>Exhibitors Page</b>	Banner (Slider Banner Format)	1	1	1
<b>Programme</b>	Advertisement (A4 size)	√	√	√
<b>E-book</b>	Sponsor's Page with logo and write-up	√	√	√
<b>Appreciation</b>	Sponsor's Appreciation certificate & Plaque	√	√	√
<b>Sponsorship Amount (before 6% SST)</b>		RM 15,000 USD 4,300	RM 10,000 USD 3,000	RM 5,000 USD 1,500

NOTE:

- Advertising Period: 01 May 2022 – 10 November 2022
- Inclusion of sponsor's logo in advertising & promotion materials is subject to the date of sponsorship confirmation
- Logo and artwork are to be provided by the advertiser and be of high resolution. Placement, sizes and format will be provided in detail in the Sponsorship Brochure. Artwork not meeting minimum requirements may be resized or rejected by the Organiser.
- All rates are exclusive of 6% Service tax and bank charges which are borne by your company.

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+603 6140 6666

[www.waterlossasia.com](http://www.waterlossasia.com)

+6012 3217 345

[info@protempgroup.com](mailto:info@protempgroup.com)

+603 6140 8833

@WaterLossAsia