



Eliminate Water Losses & Maximize Revenue with Intelligent Analytics

IOTDC Revenue Enhancement
Solution for Water Utilities

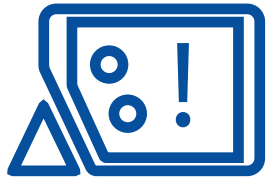
Water utilities are under immense pressure.

Ageing infrastructure, climate change, and growing water scarcity are making it harder than ever to ensure a reliable supply. On top of that, metering inefficiencies and revenue losses from leaks, faulty meters, and unauthorised usage only add to the frustration.

One of the biggest challenges is non-revenue water (NRW)—water that is lost before it ever reaches paying customers. Whether through physical losses like leaks and burst pipes, or apparent losses from inaccurate metering and billing errors, these inefficiencies impact both financial stability and service reliability. The result? Wasted resources, mounting operational costs, and increasing regulatory scrutiny; all while customer expectations continue to rise.

At IOTDC, we understand these struggles. That's why our AI-powered analytics leverage your existing metering infrastructure, billing systems, and supply and consumption data to help you take back control. With real-time insights and automated detection, we empower utilities to optimise water management, recover lost revenue, and build a more sustainable future.

Why Water Utilities Are Facing Unprecedented Challenges



Obsolete Data Infrastructure

Manual data collection and fragmented protocols lead to inefficiencies.



Climate Change & Water Scarcity

Rising demand and limited resources require smarter conservation and distribution strategies.



Non-Revenue Water (NRW) Losses

- **Physical Losses:** Leaks and pipe bursts cause significant water loss.
- **Apparent Losses:** Metering inaccuracies, billing errors, and unauthorized usage reduce revenue.



Underutilization of Data

Billing records, supply data, and consumption analytics are often siloed, preventing utilities from detecting anomalies that contribute to losses.

The IOTDC Advantage: Smart Metering & AI-Powered Water Management

Traditional approaches to water management are no longer enough. Manual data collection, outdated metering systems, and fragmented protocols create blind spots, making it difficult to detect inefficiencies before they escalate. Meanwhile, rising demand, dwindling resources, and the mounting pressure to reduce water losses leave utilities struggling to keep up.

The frustration of dealing with leaks, billing discrepancies, and revenue losses is compounded by the challenge of working with siloed data that fails to provide a clear picture of where water is going—and where it's being lost.

At IOTDC, we recognise these challenges and the real-world impact they have. Our AI-powered analytics and smart metering solutions bring clarity to complexity, helping utilities **detect leaks faster, improve billing accuracy, and recover lost revenue.**

By integrating supply, billing, and consumption data into one seamless system, we empower you to take proactive control, reduce waste, and ensure a more reliable and sustainable water network.

Key Components



Smart Water Meters

Ultrasonic technology ensures high accuracy, long battery life, and maintenance-free operation. Our solution seamlessly integrates to a utility's existing metering infrastructure.



Advanced Leak Detection

AI-powered acoustic noise analysis and machine learning algorithms detect and prioritize leaks for rapid response.



Automated Data Collection

Wireless connectivity (NB-IoT, LoRaWAN, Sigfox) ensures continuous, accurate meter reporting.



Billing & Consumption Data Integration

AI-driven analysis compares billed consumption vs. actual flow to detect discrepancies, helping address both physical and apparent losses.

Eliminating Non-Revenue Water (NRW) Losses Using Data & AI

1



Physical Losses (Leaks & Pipe Bursts) through Supply & Flow Data:

- **Supply vs. Distribution Data Analysis:** Identifies water loss zones by comparing total supply against metered consumption.
- **Real-Time Leak Detection:** AI analyzes pressure fluctuations, noise signals, and flow anomalies to pinpoint leaks before they escalate.
- **Predictive Maintenance:** Machine learning identifies high-risk areas, preventing pipe bursts and reducing infrastructure damage.

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Apparent Losses (Billing & Consumption Data Discrepancies):

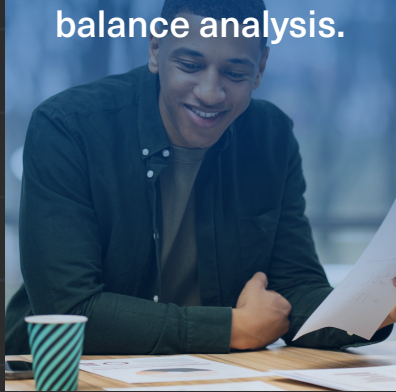
- **Billing Accuracy Validation:** AI cross-references billed consumption vs. metered usage to detect misreadings, faulty meters, and data entry errors.
- **Theft & Unauthorized Usage Detection:** Consumption trends are analyzed to flag irregular patterns such as meter bypasses, tampering, or unauthorized connections.
- **Transparent, Automated Billing:** Real-time data collection eliminates human errors, estimated billing issues, and delayed meter readings, ensuring fair and accurate charges.

How Your Utility Gains from AI-Powered Water Management

Reduce NRW by up to **23%** by addressing both physical and apparent losses with AI-powered insights.



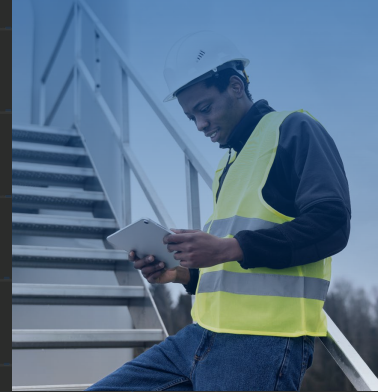
Enhance **operational efficiency** by integrating billing, supply, and consumption data for a complete water balance analysis.



Increase **revenue** by eliminating billing errors, detecting fraud, and preventing unbilled consumption.



Improve **sustainability** by minimizing leaks and optimizing distribution.



Strengthen **reliability** with real-time monitoring, predictive maintenance, and automated system management.



By leveraging existing infrastructure, metering data, and AI-driven analytics, IOTDC helps utilities turn data into actionable intelligence, reduce losses, and enhance revenue protection.

Success Stories: Smarter Water Management in Action



Achieved a **23%** reduction in NRW within three months of installing smart meters and utilising our data analytics engine.



Detected 88 leaks using the AI-powered Leak Detector, with a **50%** accuracy rate.



TØNDER KOMMUNE

Reduced leak localization time by 48 days per year, saving **€13,400** annually.



IOTDC

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