

Limiting NRW to 10% with AQUADVANCED® Water Networks



Versailles Case Study

SMGSEVESC (Syndicat Mixte pour la Gestion du Service des Eaux de Versailles et Saint Cloud) supplies 400,000 people with drinking water.



Client issue

The utility company, SMGSEVESC, had already an impressive network efficiency rate with 11% Non Revenue Water (NRW) for the 24 million m³ of water delivered each year, but wanted to do even better. Their aim was to make further gains on an already highly optimised water network system by using advanced technologies and data science to systematise leak detection, monitor water quality continuously, and to improve water service efficiency.

data daily in order to be able to react swiftly and precisely to any problem.

The benefits for our clients are immediate:

- Water loss reduction
- Time saved for leak detection
- Improvements in network efficiency.

The client's staff were trained and can access the software remotely from their own desks or workstations.



Solution implemented

The municipality chose to partner with SUEZ and created a customised program for the entire network based on AQUADVANCED® Water Networks solution.

One of the AQUADVANCED® Water Network product suite's key attributes is the relevance of the data mined, as well as its ergonomics. The tool is used by the network head and operations team, who analyse the

Results

- 200,000 m³ of water saved in 2 years, the equivalent water consumption of a town with 4,000 inhabitants
- NRW at less than 10%. The 10% ceiling objective was not only met, but surpassed
- Detection of the bacteria growth and chlorine decrease that accompanies a change in water source.

The operators have also observed conductivity variations on two separate occasions, which correspond to the deployment and a

subsequent change in decarbonation settings carried out across the territory.

After a year of operation, 80% of events detected have been confirmed by the operator. 95% of these events are related to hydraulic dysfunctions, while 5% have been data related.

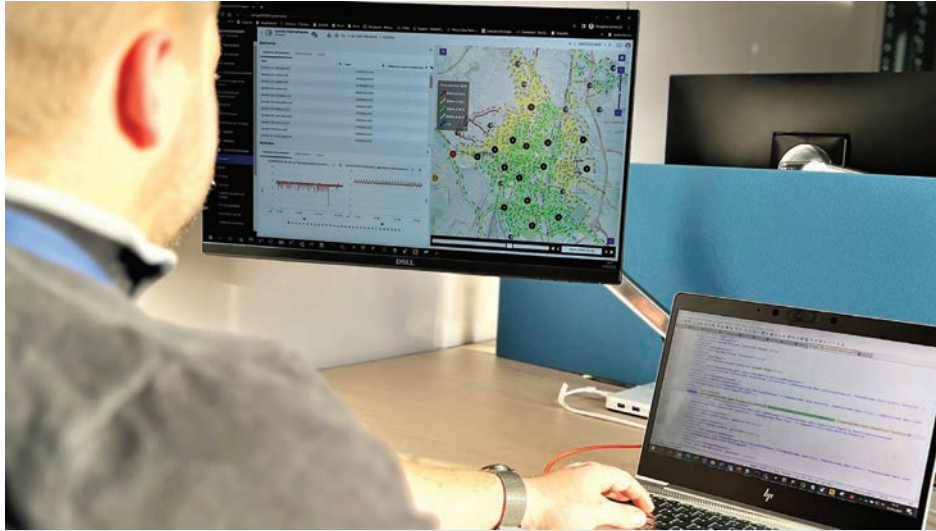
NRW is now less than

10%



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How it works

AQUADVANCED® Water Networks is a solution that gathers and processes massive amounts of data coming from multiple sources and systems commonly used to manage drinking water networks such as SCADA, sensors, GIS, data historian, smart meters, Workforce management or CRM. The software proposes simple interfaces with maps and dashboards, as well as intelligent event detection methods using advanced statistical methods and machine learning.

Differentiating factors

AQUADVANCED® Water Networks offers the following unique features:

- **Real-time solution:** Thanks to real-time supervision of the entire network, the software can analyse its performance and immediately detect problems (leaks, quality issues, events, etc) and their locations. It is a major help for fixing leaks, reducing water losses and improving water quality.
- **Modular solution:** It can be customised to meet the specific needs of each utility,

making it a more cost-effective solution than other, more generic solutions.

- **Cloud-based solution:** It can be accessed from anywhere with an internet connection. This makes it a more flexible and scalable solution compared to on-premise solutions.
- **Team expertise:** It is backed by the SUEZ team of experts, a team with a proven track record in the water industry. This ensures that utilities can get the most out of AQUADVANCED® Water Networks and achieve their water management goals.

About SMGSEVESC

The mixed-commune water utility serving the Versailles and Saint-Cloud area (SMGSEVESC) operates in 22 French municipalities in the western suburbs of Paris, supplying 400,000 inhabitants with drinking water. The utility runs 11 hydraulic sectors over 1000 km of network pipes. Since 2014, SMGSEVESC has been using AQUADVANCED® Water Networks, a software that supports network operators in automatic event detection and related decision-making by consistently gathering data and providing a precise analysis of said event, as well as other situations.

About SUEZ

Since the end of the 19th century, SUEZ has built expertise aimed at helping people to constantly improve their quality of life by protecting their health and supporting economic growth. With an active presence on five continents, SUEZ and its 90,000 employees strive to preserve our environment's natural capital: water, soil, and air. SUEZ provides innovative and resilient solutions in water management, waste recovery, site remediation and air treatment, optimising municipalities' and industries' resource management through "smart" cities and improving their environmental and economic performance. The Group delivers sanitation services to 64 million people and produces 7.1 billion m³ of drinking water. SUEZ is also a contributor to economic growth, with more than 200,000 jobs created directly and indirectly on an annual basis, and a provider of new resources, with 4.2 million tons of secondary raw materials produced. By 2030, the Group is targeting 100% sustainable solutions, with a positive impact on our environment, health and climate.

“ This allows us to have direct visibility on the network day-to-day as well as on actions undertaken by the operators and the subsequent results.

– Sophie Brinster, Water & Sanitation Engineer, SMGSEVESC