optimising network operations and improving customer service through real-time data management infrastructure

OPERATIONAL EFFECTIVENESS

- **Global hydraulic and water guality** analysis of the network to deliver reliable operations
- Enhanced responsiveness and prioritisation of action in case of incident
- Optimised water production or water purchase policy thanks to improved network efficiency
- Support to decision making regarding investments for network renewal

NON REVENUE WATER MANAGEMENT

- **Network efficiency management** with real time performance indicators
- Detection of leaks including small and invisible leaks through advanced event management and precise localisation of incident
- Quantification of water losses to focus on critical or major leaks

HEALTH AND SAFETY

- Accurate and continuous follow up of water quality status all through the network
- Better understanding of local water quality requirements: water origin, water blending, chlorine injection,...
- Identification and assessment of the impact of an accidental or voluntary intrusion on the network



aquadvanced@suez.com



AQUADVANCED Integrated Management Software for Drinking Wate Networks Reinors

SUez

ready for the resource revolution



assists water utilities in utilising data to optimise network performance

SUEZ presents AQUADVANCED® Water Networks, a system that enables utilities to remotely and continuously monitor their drinking water networks to improve overall operational efficiency and deliver service excellence

An **innovative solution** that helps to:

- Monitor the water network in real time to ensure operation reliability
- Save water resources and track water quality
- **Reduce** operational costs
- **Provide** enhanced decision support

AQUADVANCED® Water Networks TAKE ACTION FROM COMPLEX DATA

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SCADA, sensors, GIS, data historian, smart meters, Workforce Management, CRM,... Managing drinking water networks efficiently requires massive processing of data coming from multiple sources and systems. AQUADAVANCED® Water Networks gathers and analyses all this data to turn it into valuable decision-making support through a user friendly interface

- Map-integrated display of key information
- **Real time dashboard** with collected data and calculated indicators
- **Event management** using advanced statistical models
- Dedicated views for detailed hydraulic and quality deep analyses



AQUADVANCED® Water Networks

is a modular solution that **adapts to the conditions of all types of networks**. Depending on the operational objectives and on existing management systems, the solution can be **easily enhanced with additional functions**

- The core system provides highly effective features for hydraulic and water quality monitoring including advanced event detection and detailed analysis views
- Furthers options offer a connection to existing Advanced Metering Infrastructure (smart meters), model-based functions using client's defined hydraulic model of the network, connection to customer complaints and field work systems, acoustic analysis view for acoustic data loggers,...

key features for a full performance software

- Dashboard for hydraulic and water quality performance with indicators based on NRW, flow, pressure or quality parameters
- Network map displaying position of assets/devices and real-time data computed per hydraulic zones such as District Meter Areas, sectors of consumptions or pressure zones
- Continuously updated list of process events and system events detected by statistical methods, including automatic estimation of missing or invalid data
- Selection of any variable through navigation for cross analysis in a dedicated workspace
- **Display of water consumptions** for large customers
- Acoustic analysis view with noise indicators and map display of acoustic logger statuts
- Connection to Automated Meter Reading system to improve NRW accuracy and operational efficiency
- Quality monitoring view with specific quality indicators, map display of multi-parameters probes, accurate quality event detection, sampling points with associated lab analyses data
- Geo-referencing of complaints and interventions with access to past, on-going and planned interventions and complaints displayed with detailed information
- Hydraulic and quality maps based on the use of a hydraulic model of the network: velocity, flow, pressure, headloss gradient, water source, reservoir influence area, residence time