

# WINGS activities on Water

From ARTEMIS-water to diTTo

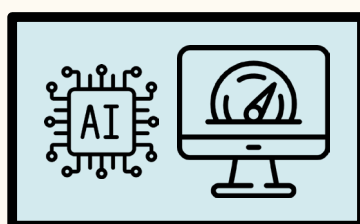


A cutting-edge solution that leverages IoT, 5G & AI



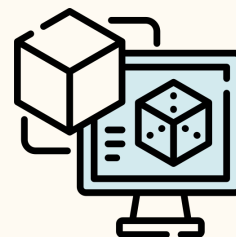
## 1. Monitoring / Metering

- End Systems: Meters
- Infrastructure: Pipes, Pumping Stations, Reservoirs, Sources
- Parameters: Consumption, Flow, Levels, Energy, Vibration, Noise, Quality aspects (9+ parameters), Wastewater aspects



## 2. AI-powered optimization

- Monitoring – Metering +
- Water data Management
  - Faulty Meter Identification
  - Leakage Localization
  - Water Quality Prediction
  - Waste-Water Analysis
  - Flood Prediction
  - Irrigation Optimization
  - Revenue Water & Water Use Optimization



## 3. Digital Twinning

- AI-powered optimizations +
- Simulation Capabilities
  - Advanced Capabilities. Strain Analysis, Predictive Maintenance
  - Construction

### Pumping station management

- Monitoring pumps / pipes / tanks
- Manage faults, reduced flows, overflows
- Performance optimization
- Security

### Faulty meters

- Analysis of water-meter and consumption data
- Identification of faulty water meters, sorting with respect to defectiveness.
- Make predictions on unknown meters

### Floods

- Monitoring water level and flow, weather conditions
- AI mechanisms for forecasting and early warnings
- Geospatial data visualization and alerting

### Irrigation

- Electronic remote monitoring of sensor/meter/irrigation/prepayment system in real time and at the desired measurement/data transmission frequency.
- Remote control and programming of watering.
- Recommendations according to the weather conditions, soil conditions, and seasonality

### Water quality

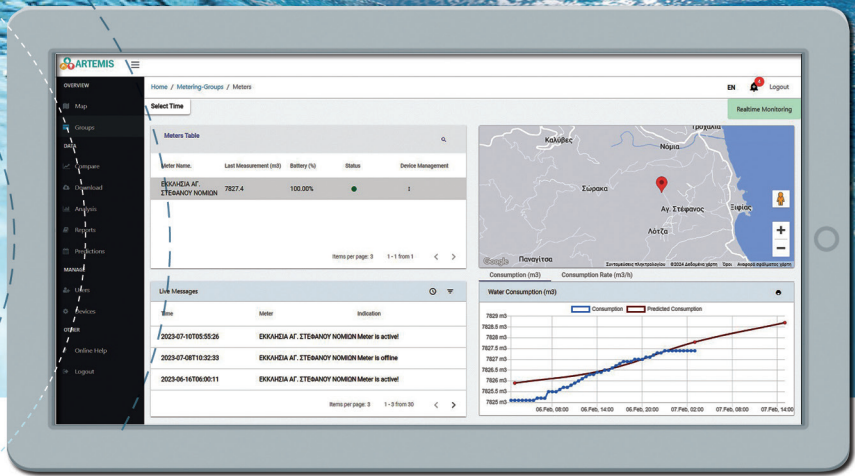
- Remote and real-time measurement of water quality parameters.
- Analytics of measurements on water quality
- Detection of contamination events
- Localization of incidents
- Identification of type and cause of pollution with data correlation

### Revenue water maximization

- Discrepancies between supply and billed quantity
- Cause analysis
- Allocation per use of appropriate / sufficient water quality / quantity, associated charging



## WINGS WATER PACKAGE



diTto Digital Twin for sewage water treatment plant



diTto Digital Twin for the Maeslant barrier



diTto B.V.: Collaboration between AvecoDeBondt, WINGS, Dareius. diTto delivers products and services for Digital Twins of Water Infrastructures. <https://ditto-engineering.com>

## CERTIFICATIONS & REGULATIONS

- CE
- RED (2014/53/EU)
- RoHS (2011/65/EU)
- IP68
- ISO 9001:2015

## ABOUT WINGS

WINGS ICT Solutions is an SME that delivers solutions for various application sectors (air quality / environment protection, energy / water, transportation, aquaculture, agriculture, industry / logistics, health), based on IoT, AI advanced networks and visualization.



Contact / Follow us

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