

SWAM – Smart Water Monitoring

Consortium

Seacon Europe (Hungary)

Wellness Telecom Group (Spain)

Beia Consult International (Romania)

SWAM OBJECTIVE AND IMPACT

SWAM wants to support Sustainable Development Goals (SDGs) and the implementation of EU initiatives (IEP Water) by providing a robust, smart, effective and tailored water management system. SWAM addresses the need to develop the market of digital services for water management stakeholders with those expected impacts:

- IMPROVE the decision making and performance of water infrastructures,
- ENHANCE interoperability and real-time data accuracy,
- REDUCE COsts for water utilities and monitoring.

SWAM is a novel product for better environmental sustainability addressing a new market featured by emerging technologies. SWAM will offer an innovative end-to-end solution from SMART PROBE TO SMART DATA VISUALIZATION and by considering ground-breaking aspects:

- MULTI-PROTOCOL for IoT connectivity,
- CYBERSECURITY AND TRACEABILITY by design to provide a valuable tool for water management encompassing quality monitoring,
- SAFE AND SECURITY aspects,
- DECISION SUPPORT and cost-efficiency management (converting the data into useful information)

SWAM DIGITAL SERVICES FOR BETTER WATER MANAGEMENT

Based on an integrated approach of the all value chain of water network, SWAM will deliver an end-to-end solution, including probes and services allowing the client to operate and monitoring the principal actuators of a Water Distribution Network (including valves, pumps, dosing system, purges) and improve the performance network.

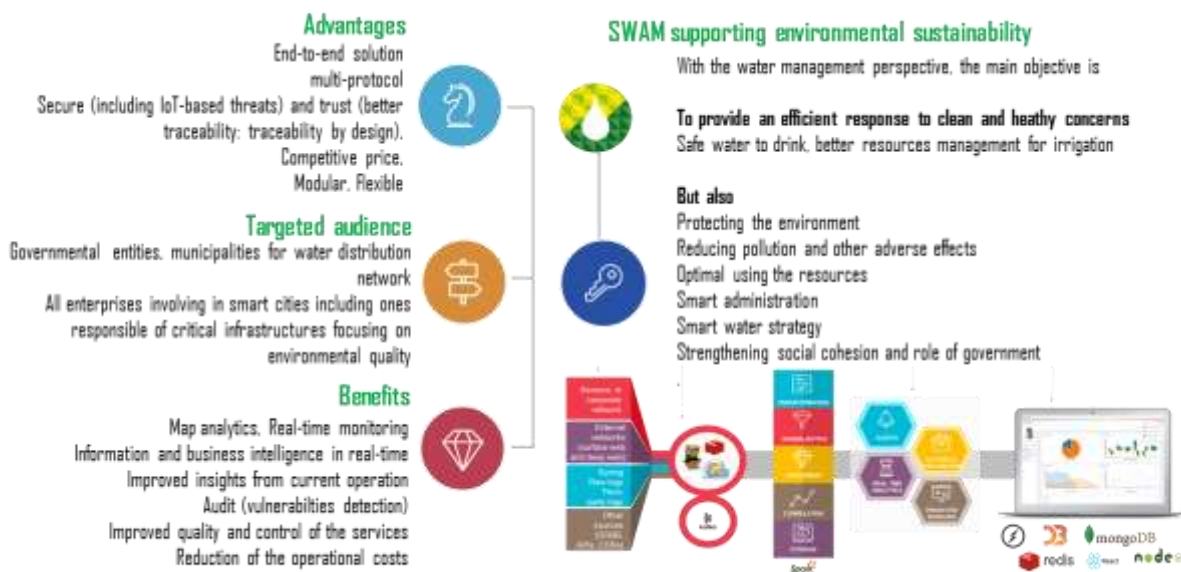
Main SWAM DIGITAL SERVICES AREAS:

- ADVANCED DASHBOARD supporting decision-making where all useful information will be displayed in real time and composed of map-based business analytics, alarms e.g. for any interruption of the water supply or leak detection,
- REAL-TIME MONITORING of the network for quality, consumptions, vulnerabilities detection or water losses prevention and solution,
- GENERATION of traceability report,
- CHECK AND MONITORING: analytical view of the water composition controller and others parameters depending on the necessary of the clients: pressure, conductivity,
- ASSESSMENT of environmental impact.

At hardware level, SWAM has this INNOVATIVE OBJECTIVE:

- To powerful an existing probe prototype into a new multi-parametric probe to measure the service quality of the Drinking Water Network covering the water quality (Free chlorine concentration, pH, temperature) and the quality of distribution vs. water leak (water losses, pressure, Redox potential).

SWAM added value



SWAM BENEFITS

The solution is modular and scalable for basic to premium digital services digital services focusing on water management in Smart Cities (drinking water) and Smart Agriculture (irrigation). The main beneficiaries or the target clients are the wide range of operators of Water Distribution Networks. They can be private or public enterprises with the common aim at optimizing the operation of their networks.

The installation of this solution will generate several BENEFITS:

- *Real-time network monitoring*
- *Cost-efficient water distribution*
- *Energy-efficiency irrigation*
- *Better resources management and water quality control*
- *Improvement of the quality of the service and the client's experience (QoS and QoE)*
 - *Reduction of the operational costs*
- *Reduction and optimization of the consumption (power, chemicals and other consumables),*
- *Development of a better preventive maintenance, by means of audit services detecting vulnerabilities*
- *Better adaptability, Incremental adoption and easier expansion of the system by a modular design of the system*

EXPECTED INTERNATIONAL OUTCOMES of the project:

- **SCALABLE on-premise PRODUCT or SaaS SERVICE in the market segment of water management: Smart Cities (drinking water) and Smart Agriculture (irrigation)**
 - *Open and integrable platform*