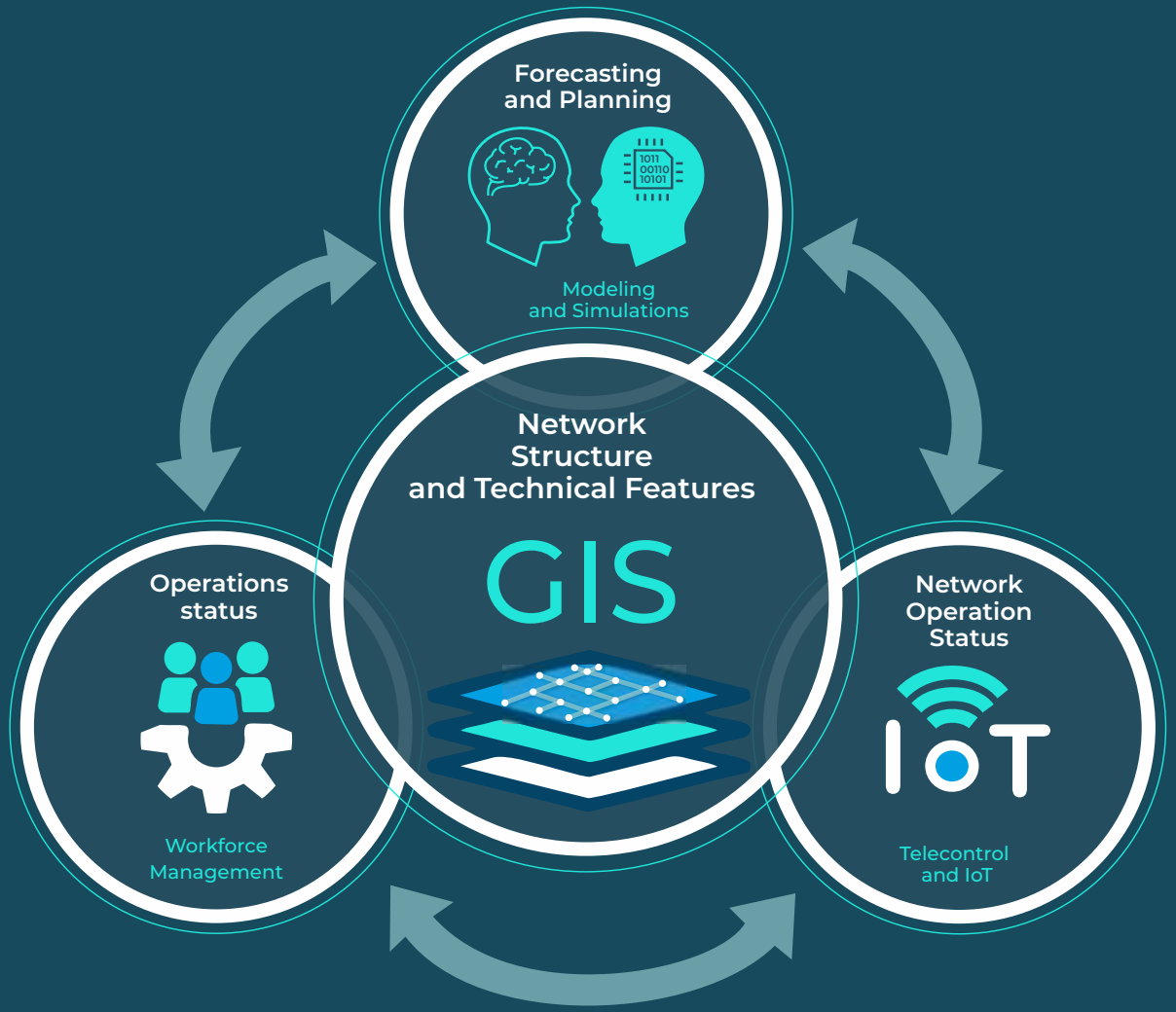

SWMS
Smart Water
Management System
sister
ALMAWAVE
GROUP

SMART MANAGEMENT OF UTILITY NETWORKS



To ensure sustainable water access for citizens, Integrated Water Service (IWS) providers must adopt effective tools to reduce losses, eliminate waste, continuously monitor networks, prevent critical issues, and respond promptly to emergencies.

SWMS is the most comprehensive solution developed by SisTer to ensure efficient and environmentally conscious IWS management. By integrating different application services into a single system, SWMS collects and processes data from multiple sources to produce comprehensive analytical models and decision support tools.

Providers gain access to a true "digital twin" of the water service infrastructure—capable of offering a complete overview, identifying trends and issues in advance, and guiding preventive maintenance and corrective actions.

SWMS is built on a robust, scalable, and advanced architecture, enabling the full digital replication of the physical system and all its key processes. It provides strong support for ensuring correct functioning and the continuous improvement of assets, infrastructure, and related services.

GIS AT THE CORE

- Queryable maps, tables, and thematic layers
- Natively available or externally integrable
- Network tracing and asset visualization

PHYSICAL-MATHEMATICAL MODELS FOR WHAT-IF ANALYSIS

- Geostatistical indicators and multifactor analytics
- Advanced forecasting and scenario simulation tools
- Accurate planning and problem prevention

IOT AND WORKFORCE MANAGEMENT INTEGRATION

- Management of large volumes of data on measurements and field operations
- Real-time calculation of balances, alerts, and derived metrics
- Scheduling, emergency response, and activity tracking

INTERACTIVE, MULTI-CHANNEL VISUALIZATION

- GIS-based maps, as well as graphs, reports, tables, and dashboards
- Automatic modeling and extraction of network diagrams
- Dynamic access via desktop and mobile devices

A HIGHLY MODULAR AND CONFIGURABLE SYSTEM

SWMS CORE - BASE

Includes Base WebGIS functions, Network Monitoring, Network Analytics, and Visual Analytics for acquiring, displaying, querying, and statistically analyzing data related to location, performance, and consumption.

SWMS CORE - ADVANCED

Includes a Basic Asset Manager for managing core network infrastructure and Workforce Management (WFM) Monitoring for field operations and maintenance activities.

FAILURE RISK & PREVENTIVE MAINTENANCE

Tools for risk modeling and proactive maintenance strategies.

HYDRAULIC MODELING

For managing, editing, and visualizing calculation models automatically derived from GIS, with scenario and variant simulations.

LEAK DETECTION

For identifying and defining search zones, planning and tracking activities, and producing reports and documentation.

SYSTEM SCHEMATICS

For interactive and visual representation of networks using graphs and ontologies, directly extracted from GIS.

ENTERPRISE ASSET MANAGEMENT & AUGMENTED REALITY

Advanced Asset Management for the full life cycle of equipment - from procurement to decommissioning - including support with Augmented Reality tools.

GIS UPDATE MANAGEMENT

Workflows for registry information, activity tracking, and role definition, constantly aligned with the actual network status.

NUMBERS

+30
CLIENTS

~110.000
KM OF MANAGED NETWORK

~100.000
MANAGED SENSORS
AND REAL-TIME MEASUREMENTS

KEY ADVANTAGES

- GIS-centric architecture based on ArcGIS Enterprise
- Fully web-accessible
- Interfaces with enterprise systems for data collection and integration of services and applications.
- Advanced analytics and decision support tools
- Modular and flexible, adaptable to various needs and user profiles
- Advanced, robust and scalable architecture

sister
ALMAWAVE
GROUP

We create value through innovation

Sistemi Territoriali S.r.l.
Via di Lupo Parra Sud n. 144,
Cascina (PI) – 56021
+39 (0)50 76.8711

Company subject to the
Management and Coordination
of AlmavivA S.p.A.

sister.it