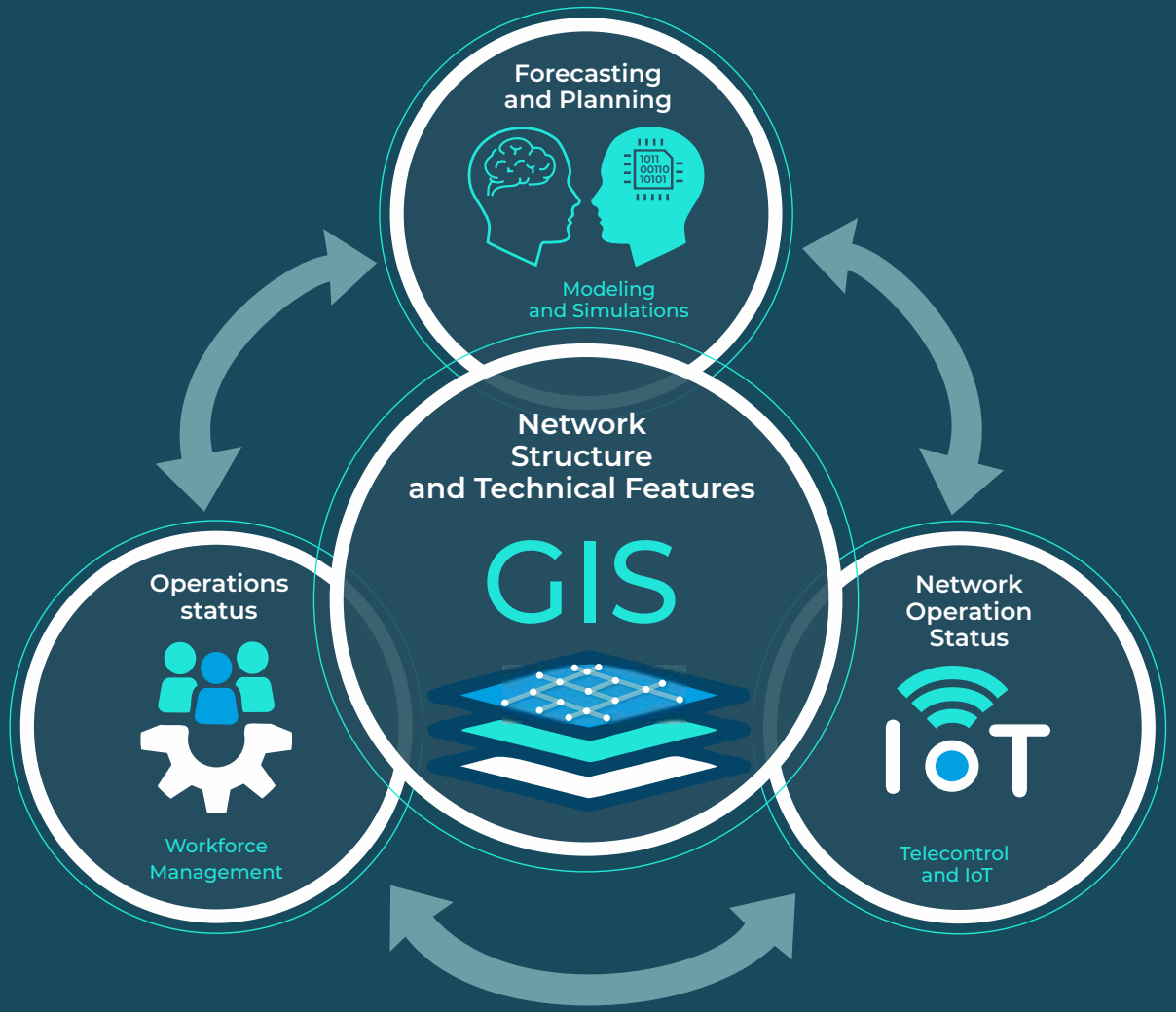

SWMS
Smart Water
Management System
sister
ALMAWAVE
GROUP

SMART MANAGEMENT OF TENOLOGICAL NETWORKS



To ensure citizens' sustainable access to water, Integrated Water Service (IWS) operators must adopt effective tools to reduce leakage, eliminate waste, constantly monitor networks, prevent critical issues and respond promptly to emergencies.

SWMS is the most comprehensive solution developed by SisTer to provide efficient and environmentally mindful IWS management. By integrating disparate application services into a single system, SWMS collects and processes data from multiple sources and derives comprehensive analysis models and decision support tools.

Managers will have a true "digital twin" of the IWS, capable of providing insight, highlighting trends and problems in advance, and directing preventive maintenance and corrective action.

SWMS consists of an advanced, robust, and scalable architecture, which allows for a complete digital reproduction of the physical system and all key processes. A valuable support to ensure the correct functioning and continuous improvement of assets, infrastructures, and related services.

AT THE CENTER ARE GIS TECHNOLOGIES

- Maps, queryable tables, and thematic layers
- Natively provided or externally integrable
- Network tracing and asset consultation

PHYSICAL-MATHEMATICAL MODELS FOR WHAT-IF ANALYSIS

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

INTEGRATION WITH IOT AND WORKFORCE MANAGEMENT

- Management of huge volumes of data on measurements and interventions
- Real-time calculation of balances, alarms, and derived measures
- Scheduling, emergency response, and activity tracking

INTERACTIVE AND MULTICHANNEL VISUALIZATION

- GIS-based maps, as well as charts, reports, tables, and dashboards
- Modeling and automatic extraction of network diagrams
- Dynamic accessibility from desktop and mobile

A HIGHLY MODULAR AND CONFIGURABLE SYSTEM

SWMS CORE BASE

Basic WebGIS functionality, Network Monitoring, Network Analysis, and Visual Analytics, for the acquisition, visualization, querying, and statistical analysis of data on location, operation, and consumption.

SWMS CORE ADVANCED

Basic Asset Manager, for the management of fundamental network infrastructures, and WFM Monitoring regarding field activities and maintenance.

OUTAGE RISK AND PREVENTIVE MAINTENANCE

To plan replacements and investments thanks to predictive algorithms based on the network status, received reports, and past interventions.

HYDRAULIC MODELING

For the management, editing, and visualization of calculation models, automatically derived from GIS, with variants and scenarios.

LEAK DETECTION

For the identification and mapping of search areas, planning and tracking of activities, reporting, and associated reporting and accountability.

PLANT LAYOUT

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

ENTERPRISE ASSET MANAGEMENT & AUGMENTED REALITY

Asset Management Evoluto, per la gestione del ciclo di vita completo delle apparecchiature dall'acquisto alla dismissione, anche con strumenti di Realtà Aumentata.

GIS UPDATE MANAGEMENT

Workflow for registry information, activity tracking, and role definition constantly aligned with the real situation.

NUMBERS

+15
CLIENTS

+70.000
KM OF NETWORK

+75.000
SENSORS

THE ADVANTAGES

- GIS-centric, based on ArcGIS Enterprise
- Entirely usable via the Web
- Interfacing with various enterprise systems In order to collect and integrate information and application services
- Advanced analysis and decision support tools
- Modular and flexible to adapt to different needs and usage 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 theof
Management and
Coordinationof AlmavivA S.p.A.

sister.it