



ACROSS the new SCADA technology

ABOUT MAS



Automation & Control

Machine control systems

Power & Energy Management Systems

Compressor Station Controls



Supervision & Control

Local HMI Systems

Station / Plant Supervision & Control

GMS / AGS / EMS Solutions

www.maseurope.com

We belong to a niche group of companies that specialize in the **design, development** and deployment of **latest technology, Automation, Control and Supervisory Systems** for the Energy and Utility sectors.

- ▶ 45 years of **Experience** and **Technological Innovation**
- ▶ **Proven** by hundreds of large scale projects in a wide geographical area
- ▶ Recognized by **multiple International awards**
- ▶ **100% Greek company**

ABOUT MAS



Plant upgrades

38

> 250 engines & 26 Turbines



Hybrid Control & Monitoring system

2



Large Wind Farm Control & Monitoring systems

18



Local control & Monitoring systems

> 150

(< 1,500 IOs / site)



Plant Supervisory and control systems

34

(< 32,000 IOs / site)



Wide Area GMS & EMS Systems

2

(> 500,000 IOs / Site)

OUR CHALLENGE



True OT & IT Convergence

In 2015, MAS forms a team of leading OT engineers & IT Developers who were given the task to **develop an OT platform** using latest tools and architectural concepts providing a real **solution for tomorrow's operational challenges.**

- ▶ 2015 - 2017: **Development**
- ▶ 2018: **Testing & proof of concept**
- ▶ 2019: **Projects under execution**
- ▶ No patchworks and **no shortcuts!**
- ▶ Design and **develop from scratch**
- ▶ **Question** existing principles
- ▶ Use **latest technology** tools and methodologies
- ▶ **One tool** for Engineers & end-users



ACROSS

An OT SOLUTION from an IT PERSPECTIVE

ACROSS[®] is designed **to cover all of today's operational and technical requirements** while providing the foundations **to embrace future technological and operational evolutions.**

- Latest standards on security.
- Microservices architecture
- Cloud based capabilities
- Big Data & AI capabilities
- Native UI for all devices



- Mission Critical Concepts.
- True Real Time Processing.
- Industrial control Best Practices.
- Native IIOT support
- Industrial protocol support.



The Next Generation SCADA

► Beyond Reliability & Availability

- Automatic system recovery & Performance Tuning
- Live (No Downtime) updates and upgrades.

► Beyond Cybersecurity

- Behavior heuristics & latest web security
- Build in strict user credential access system.

► Beyond Speed & Size

- Designed to meet the large scale data processing requirements
- Build for speed with true real-time processing engine.





The Next Generation SCADA

► Beyond Design

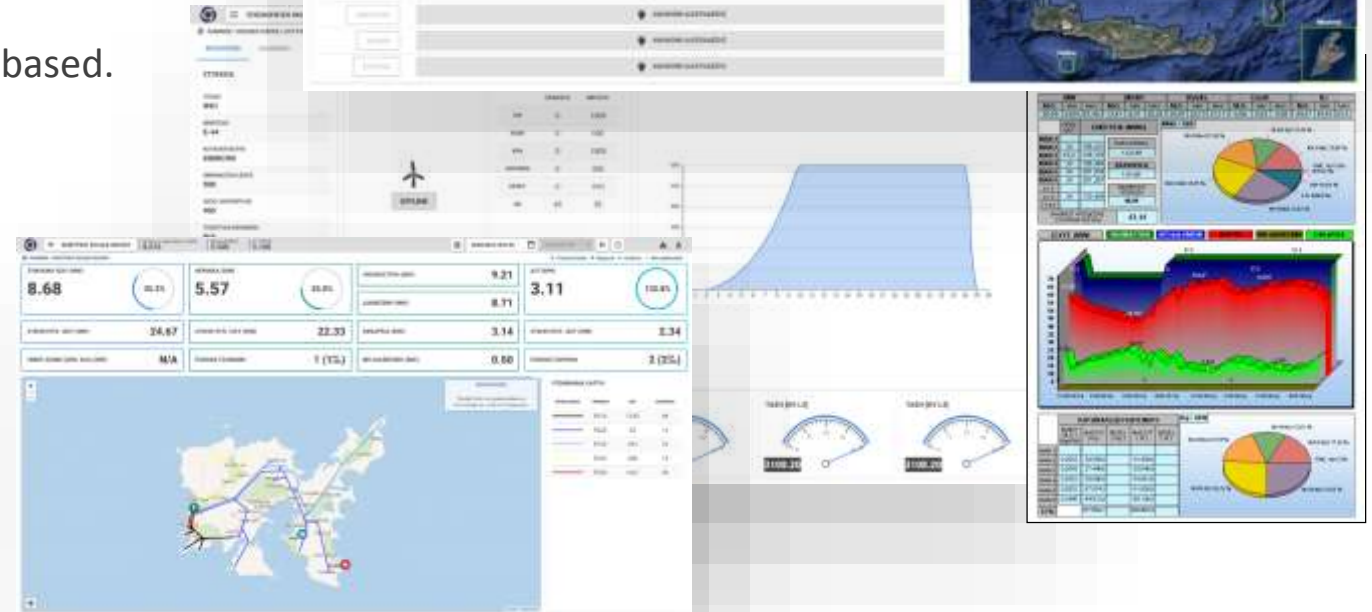
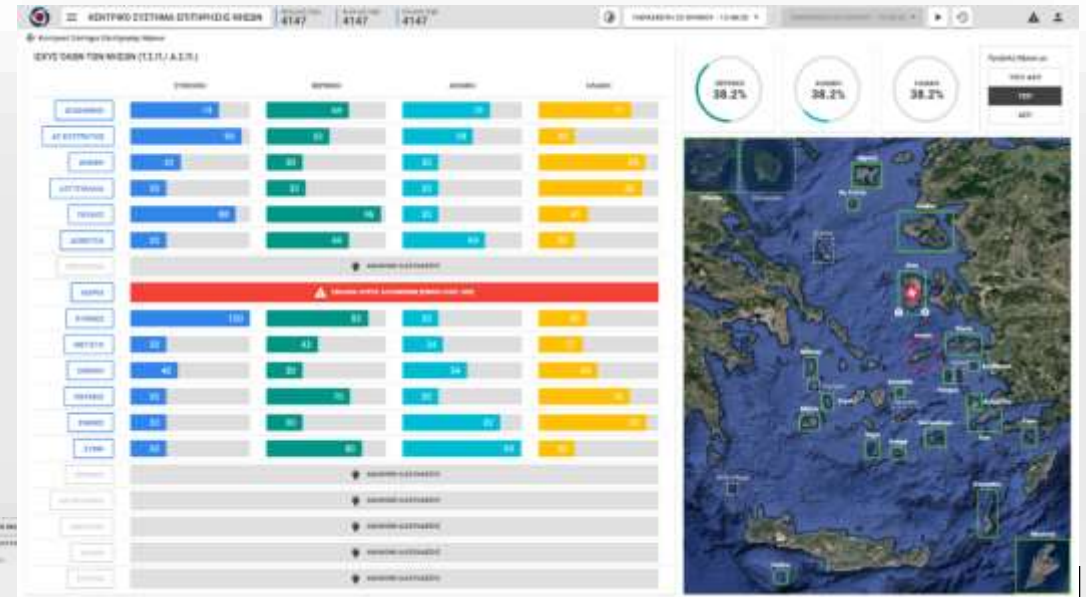
- Pages build automatic from entity modeling data
- Special UI design to cover both engineers and simple users.

► Beyond connectivity

- Auto-discovery of know devices as they enter the network
- Object based data manipulation and not signal based.

► Beyond OT Functionality

- Fault prediction models
- Real time operational forecasts & projections.
- Time lapse & root cause analysis tools.



▶ Current Modules

- Generic Industrial SCADA system
- Power Management Solutions (Thermal, Renewables & Hybrid)
- Energy Management Solutions (Production & demand management).

▶ Nearly Here

- Water Management Solutions

▶ Coming Soon

- Augmented Reality Tools.
- Building Energy Management Solutions.





Thank you!