

Summary of the Requirement

Seeking a **Senior SCADA Software Engineer** to join a team responsible for a business-critical **24/7 SCADA platform** supporting real-time power balancing activities across multiple European countries. The role focuses on the development, maintenance, and evolution of industrial real-time systems used for power generation monitoring, grid balancing, and flexibility asset integration. The ideal candidate combines strong software engineering capabilities with an industrial mindset, understands operational constraints of critical systems, and is comfortable working in a high-availability environment requiring stability, resilience, and occasional operational support.

Missions

- Develop and maintain a real-time industrial SCADA platform used for power balancing operations.
- Contribute to both backend and frontend development activities.
- Build scalable, robust, and maintainable software solutions.
- Support integration of flexibility assets and real-time operational requirements.
- Participate in Agile/SAFe delivery activities alongside analysts, dispatchers, architects, and technical teams.
- Ensure system reliability, availability, and operational continuity for business-critical applications.
- Contribute to on-call support after onboarding.
- Support industrial cybersecurity compliance requirements within ICS/OT environments.
- Contribute to the continuous improvement of development practices, architecture, and operational processes.

Activities

- Develop and maintain applications based on **MicroSCADA X SYS600**.
- Perform backend development using **SCIL (Supervisory Control Implementation Language)**.
- Perform frontend development using **HTML5, CSS3, JavaScript, and TypeScript**.
- Implement architectural design principles for scalable and resilient systems.
- Apply software craftsmanship principles including **SOLID, DRY, KISS, and YAGNI**.
- Develop functionalities supporting:
 - Monitoring of production assets and available capacities.
 - Information exchanges between TSOs and SCADA systems.
 - Real-time calculation and transmission of operational setpoints.
 - Power balancing mechanisms and reserve services integration.
- Work with version control and CI/CD processes using **GitHub**.
- Troubleshoot incidents and provide rapid corrective actions when required.
- Deliver sustainable long-term fixes following temporary workarounds.

- Participate in operational support activities for systems running 24/7.
- Collaborate with business representatives, analysts, architects, dispatchers, and technical teams.
- Follow training on **SYS600 SCIL Programming Basics** at the start of the assignment.
- Apply cybersecurity best practices within industrial environments and support compliance with **NIS2** requirements.
- Participate in occasional site visits and short business trips when required.

Key Skills

Education & Experience

- Master's degree in IT, Software Engineering, Electronics, Electrical Engineering, Electromechanics, or related fields.
- Minimum **3 years of relevant professional experience**.

SCADA & Industrial Systems

- SCADA systems development and maintenance.
- Understanding of industrial control systems.
- Knowledge of electricity production and power grid transmission fundamentals.
- Understanding of critical 24/7 operational environments.

Software Development

- SCIL programming (or willingness to be trained rapidly).
- HTML5.
- CSS3.
- JavaScript.
- TypeScript.
- Backend and frontend development.
- Software architecture and design patterns.
- Version control using GitHub.
- CI/CD implementation.

Software Engineering Practices

- SOLID principles.
- DRY principle.
- KISS principle.
- YAGNI principle.
- Clean code.
- Maintainable code.
- Resilient software design.
- Scalable solution design.

Cybersecurity

- Awareness of cybersecurity principles in ICS environments.
- Awareness of cybersecurity principles in OT environments.
- Understanding of NIS2-related requirements.

Methodologies

- Agile.
- SAFe®.

Soft Skills

- Proactive and structured approach.
- Strong sense of ownership and responsibility.
- Solution-oriented mindset.
- Ability to work under pressure in critical operational environments.
- Rapid problem-solving capabilities.
- Continuous learning mindset.
- Initiative-taking attitude.
- Team-player attitude.
- Excellent verbal and written communication skills.
- Ability to communicate with both technical and non-technical stakeholders.
- Ability to collaborate in complex project organizations.

Additional Requirements

- Willingness to participate in on-call support.
- Availability for occasional business travel.
- Driving licence and access to a car.
- Hybrid working model with minimum 3 days/week onsite.