



The digital home of your electricity network

Innovative Software for Electricity Network Management



Introducing Elecsys™



From Field to Control Room — Safety: Secured.

Elecsys is a purpose-built SaaS platform designed to make high voltage safety operations safer, smarter, and more scalable. Developed in close alignment with industry best practices and to accommodate client-specific safe systems of work, Elecsys™ ensures rigorous governance and compliance across every stage of high voltage operations.

At its core, Elecsys combines an intuitive geo-spatial interface with powerful tools for asset visibility, operative performance tracking, and automated training and competency management. This integrated approach not only enhances safety and operational control but also delivers significant cost benefits and flexibility for organisations managing electrical networks, from simple to complex.

Whether you're overseeing a large utility project or renewable energy infrastructure, Elecsys empowers your teams across the world with the tools they need to operate confidently, compliantly, and efficiently.

 **Increasing efficiency and reliability**

 **Enhancing Safety**

 **Tracking personnel and asset performance**



“Having worked as an electrical engineer in the energy sector for many years, I witnessed the need for a new system to support electrical safety governance, management of information, operations and assets, all in one place. The reliance on asset performance has never been greater and the need to have alignment between these three functions has never been more in demand, as high voltage networks become more complex and generation sources become more dynamic and dispersed. The future of our energy sector demands new solutions and I believe that Elecsys has a pivotal role to play.”

*- Ryan Murphy,
Co-founder & CEO of Elecsys Technologies*

A photograph of a high-voltage electrical substation at dusk or dawn. The scene is filled with tall, grey metal support structures and numerous vertical insulators with multiple disc-like segments. Power lines are strung across the frame. The sky is a clear, deep blue. The overall atmosphere is industrial and technical.

Elecsys Safeguard™

Product Overview



Network Operations

● Live North-South Interconnector
North 400kV Converter Station

17/43 completed 48% 01132 P 790 P 39

● Live Windy Hill Windfarm
T23

6/13 completed 46% 02203 P 800

● Paused Municipal Electricity District 4
City Road 275kV/132kV Substation

9/23 completed 39% 02243 P 3901

● Paused Data Centre 14
22kV Radial Circuit

7/9 completed 78% 2034 P 15 P 23

My Outages

Submitted

Approved

In Progress

Archive

What is Elecsys Safeguard?

Achieve Compliance. Embed Governance. With Elecsys Safeguard

Elecsys Safeguard represents a digital solution for electrical safety governance, ensuring that safety processes are both comprehensive and fully compliant with industry standards. Built on a foundation of legislative requirements, it offers more than just a framework for the Elecsys platform - it provides a structured, systematic approach to managing safety across electricity networks.

At its core, Elecsys Safeguard integrates critical safety rules and processes within a robust software environment, empowering organisations to effectively manage essential safety operations, including work permitting, outage management, and personnel competence tracking. With role-based user permissions, this product ensures that only authorised personnel are permitted to perform specific tasks, acting as a digital safeguard to uphold safe and compliant operational practices.

Key Features

Outage planning, management and implementation

Elecsys Safeguard streamlines the entire outage workflow, from initial planning to final implementation. Users can draft, submit and approve outage requests, with the system ensuring all necessary documentation and safety protocols are followed, creating a comprehensive work package for field teams.

Safety rule management and execution

Elecsys Safeguard creates a software-based framework that ensures consistent application of safety protocols. This allows organisations to input their specific safety rules, then automatically enforce these rules throughout all operational activities.

Safe and efficient execution of high-voltage network operations

With a structured approach to managing complex operations, network managers can ensure that every switching instruction is issued to appropriately authorised personnel. By linking operational activities directly to specific assets and their technical details, the system enhances both safety and operational efficiency.

Authorisations and competence management

With the ability to maintain a detailed register of personnel authorisations, Elecsys Safeguard directly links user permissions to individual competence and experience levels. This ensures that only qualified personnel can perform specific tasks, with the system tracking and verifying each user's capability to undertake particular network operations.



Key Benefits



Incident management

With the ability to document, track and analyse network incidents in detail, users have instant access to critical information about equipment, personnel and operational contexts, allowing for rapid response and thorough investigation.



Real-time monitoring

Live visibility into network operations allows managers to track switching instructions, work permits and operational activities as they happen, providing immediate awareness of ongoing activities and potential safety risks.



Competence and experience tracking

A dynamic view of personnel capabilities across different equipment types and operational activities - as stored in Explorer Safeguard - supports safety compliance and enables targeted training and professional development strategies.



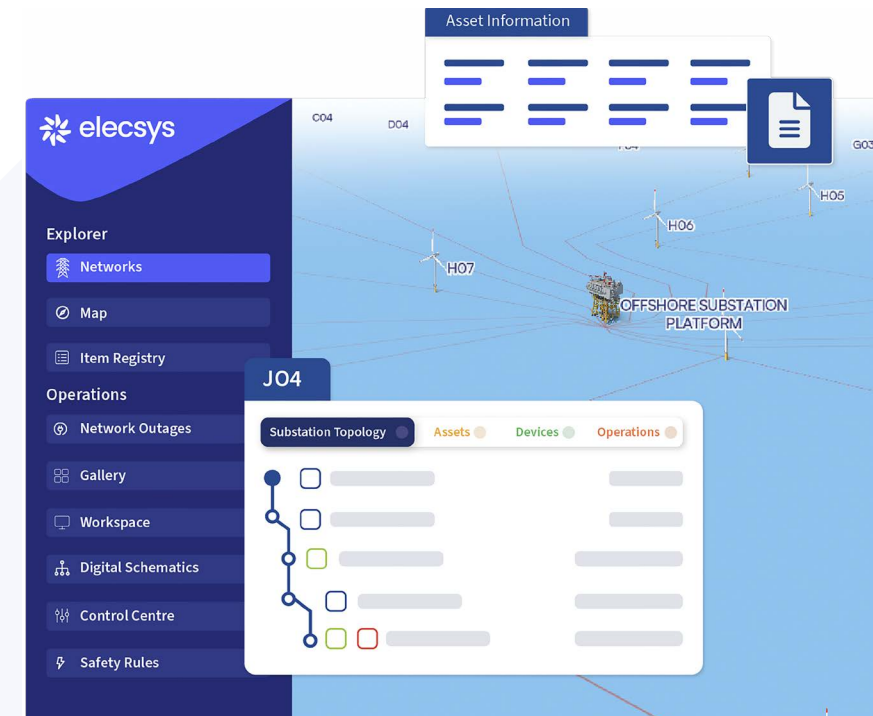
Compliance tracking

By automatically logging every action, authorisation and operational step, the software provides a full compliance documentation trail, demonstrating adherence to regulatory requirements and industry best practices.



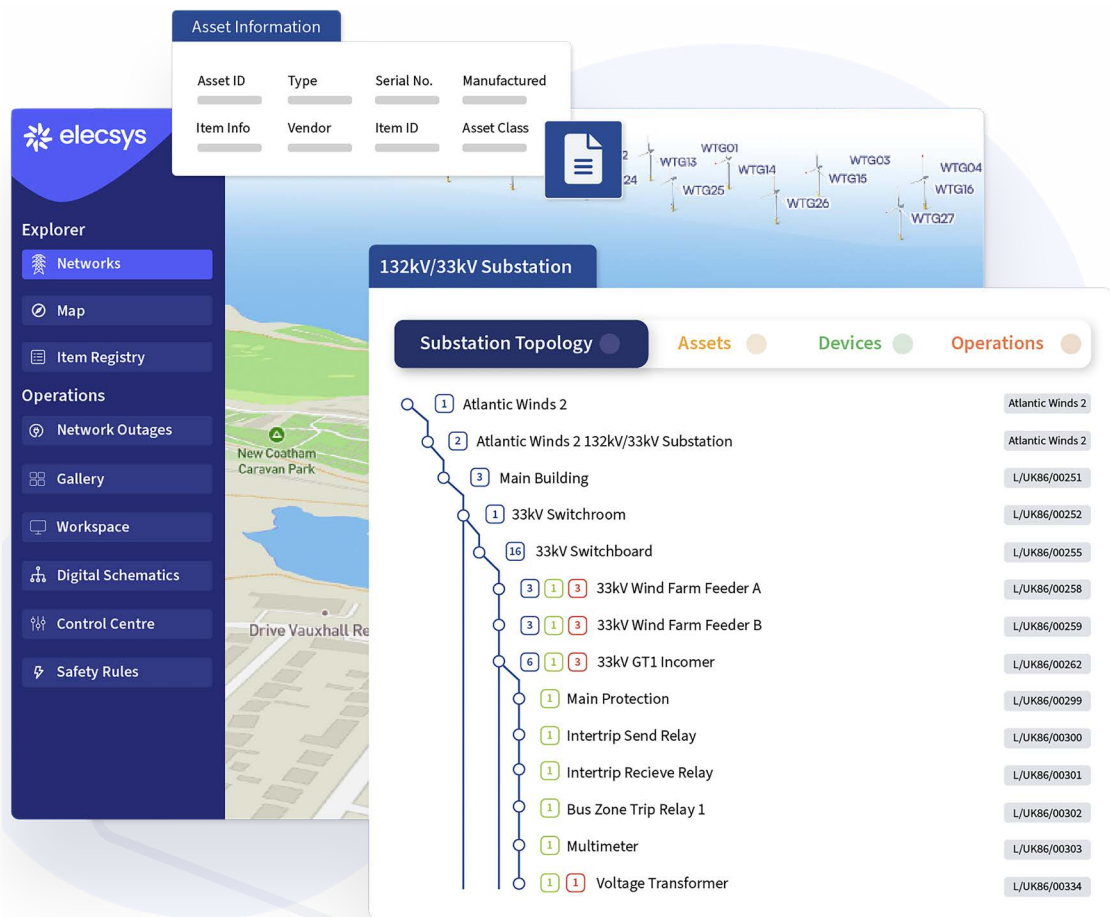
Resource allocation

Detailed records of personnel competencies and authorisations enables intelligent and strategic resource deployment, as organisations can quickly identify the most qualified personnel for specific network operations.



Elecsys Explorer™

Product Overview



What is Elecsys Explorer?

See your electricity network like never before

Elecsys Explorer provides users with quick and easy access to critical information about the high voltage electrical network, by combining GIS, document management and topological asset registration functionality in one easy-to-use platform.

By centralising network information, asset details and associated documentation, it empowers users to access the data they need, when they need it. As a result, this unlocks a superior level of efficiency for vital activities, such as inspections, maintenance, testing and operational switching.

From service technicians and operations personnel, to asset and network managers, Elecsys Explorer is designed for anyone who needs to interact with or manage a high voltage network.

Key Features

Visualise and manage electricity networks with geospatial data

Elecsys Explorer provides advanced geospatial capabilities, allowing users to visualise and navigate the electricity network infrastructure with ease. Its intuitive mapping interface equips users with a comprehensive view of the network topology, asset locations and other relevant spatial data.

Capture and manage information in the field

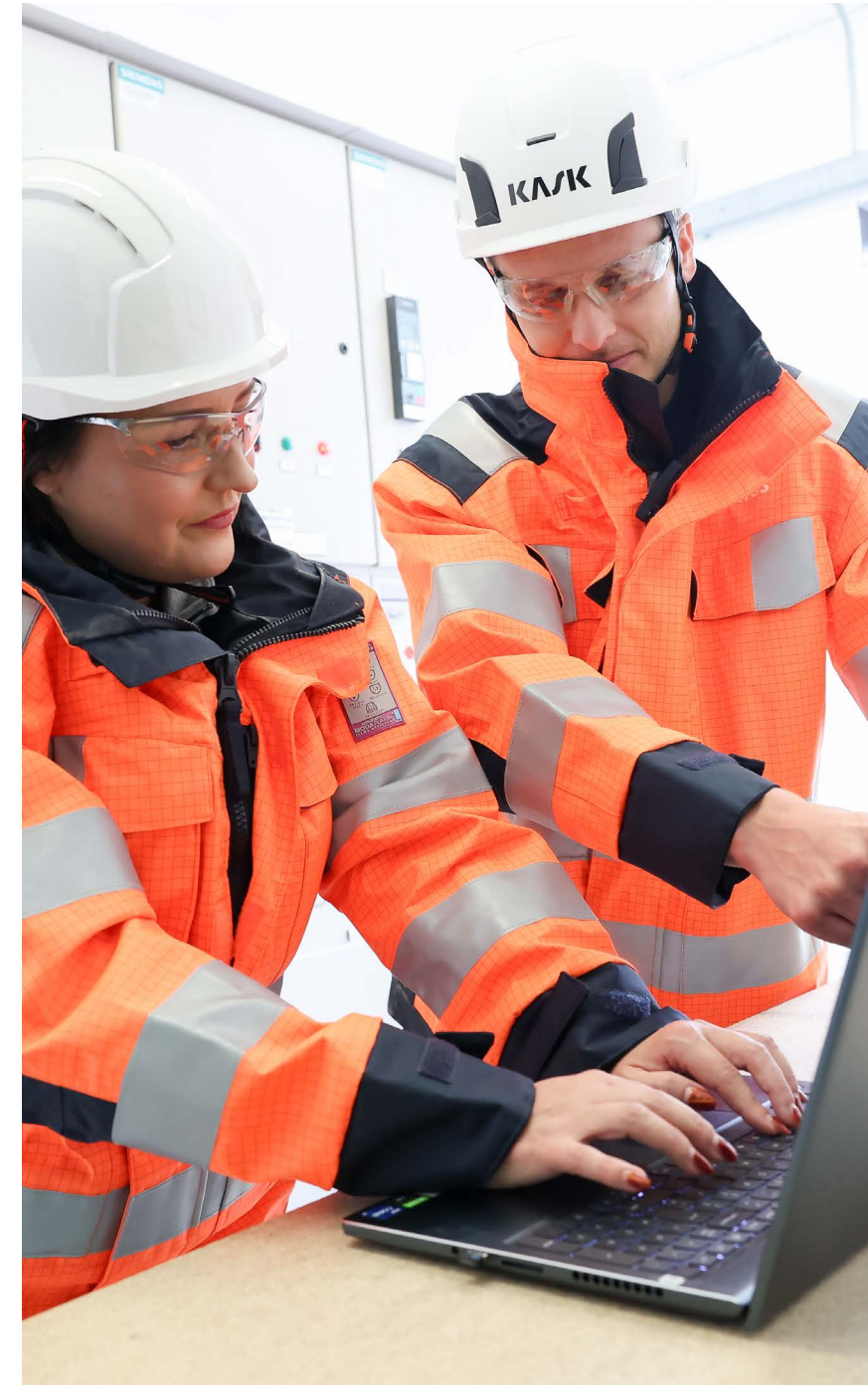
Complementing the desktop functionality, Elecsys Explorer's mobile app further enhances accessibility, enabling users to access information and capture data directly while on-site. This ensures data is updated in real-time, which improves the overall integrity of the system.

Improve lifecycle management with an extensive asset register

At the heart of Elecsys Explorer is a robust asset registration system. This maintains detailed, end-to-end lifecycle information on all equipment within the network, creating a structured database of critical data which can be retrieved in an instant.

Leverage information for other features of the software

Beyond simply storing network data, Elecsys Explorer leverages this information to streamline key operational processes. Users can seamlessly plan and execute outage management, fault repairs and other critical maintenance activities, saving time and improving efficiency.





ELECSYS EXPLORER™

Key Benefits



Enhanced decision-making

With real-time insights and a comprehensive view of the network, Elecsys Explorer empowers users to make more informed decisions when it comes to operational planning and problem-solving.



Improved operational efficiency

Thanks to its streamlined workflows, Elecsys Explorer eliminates the need to navigate multiple systems, saving valuable time and reducing the risk of errors or duplicated work.



Reduced downtime and costs

The software's ability to quickly locate relevant data, such as equipment manuals and maintenance history, helps minimise downtime during faults and failures.



Regulatory compliance and risk mitigation

A structured approach to data management easily ensures legal requirements for regular asset inspection and maintenance, with a centralised, auditable record to demonstrate compliance.



Data integrity and scalability

Elecsys Explorer's robust data model and organisation principles unlock a high degree of data consistency, integrity and scalability, which further enhances operational resilience and responsiveness.



Knowledge centralisation

Instead of relying on individuals' knowledge, Elecsys Explorer facilitates the transfer and preservation of critical information, ensuring everyone has access to a fully up-to-date view of the assets and their history.

Client Success Stories





Case Studies



Vattenfall UK



Standardising HV safety operations across a national wind portfolio

 Project Vattenfall UK Wind Portfolio	 Size 5 Offshore & 6 Onshore Wind Farms	 Capacity 1.2 GW	 Location United Kingdom
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Vattenfall operates a network of 11 wind farms across the UK, comprising 375 wind turbines and 42 electricity substations. Governed under a single electrical safe system of work, the portfolio required a standardised, scalable solution to coordinate all high-voltage electrical safety operations and maintain regulatory compliance across both onshore and offshore environments.

Elecsys was adopted as the central platform for managing electrical safety processes across all sites. With Elecsys Safeguard, Vattenfall now oversees all outage planning, electrical switching, work permitting and authorisation management from a centralised environment—ensuring consistent application of their safety rules across all sites. Explorer was also deployed to structure network information, enabling real-time access to asset data and supporting operational visibility.

Key results achieved

This digital foundation has enabled Vattenfall to maintain consistency, improve oversight, and ensure safe operations across a geographically dispersed renewable energy portfolio.

“Elecsys has significantly improved our safety, processes and operational capability in a short space of time. The ability to track authorisations, monitor live operations and access critical documentation in the field has transformed the way we manage high-voltage networks. It’s already a mature, capable tool—and one that continues to evolve with our needs.”

- Graham Smith, UK High Voltage
Systems Manager at Vattenfall



GE Vernova



Unifying HV safety operations across a UK and Ireland wind portfolio



Project

GE Vernova Wind Portfolio



Size

26 Onshore & 1 Offshore - 216 Wind Turbines



Capacity

640 MW



Location

United Kingdom & Ireland

GE Vernova is responsible for the management and coordination of high-voltage electrical safety operations across 27 wind farms—comprising 26 onshore sites and one offshore site in Ireland. With operational responsibility spanning turbine control, electrical safety, and HV coordination, the team required a scalable platform to apply and manage their standardised safe system of work across this geographically distributed portfolio.

Elecsys was deployed to unify electrical safety governance across all sites. Through Elecsys Safeguard, GE Vernova manages switching operations, outage planning, and electrical safety authorisations in a controlled and compliant digital environment. Elecsys Explorer enhances this by structuring network and asset data, giving teams immediate access to the information they need, when they need it most.

Key results achieved

By adopting Elecsys, GE Vernova has implemented a consistent, jurisdiction-spanning approach to HV operations—supporting safe, efficient, and compliant delivery across their UK and Ireland fleet.

“Since adopting Elecsys, we’ve seen a step change in how we manage safety and operations. The digitisation of approvals, asset records, and switching schedules has streamlined our workflows and made critical information instantly accessible. It’s significantly improved compliance, accountability, and confidence across our HV teams.”





- Gary Smith, Senior Operations Staff Manager, at Wind Services, GE Vernova



Ocean Winds UK



Digitising HV operations for an offshore wind farm

 Project Moray East Offshore Wind Farm	 Size 100 WTGs, 3 Offshore Substations	 Capacity 950 MW	 Location Moray Firth, Scotland
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With the scale and complexity of its Moray East wind farm, Ocean Winds recognised an opportunity to further enhance the coordination of its HV operations and strengthen visibility across both onshore and offshore teams. To support continued compliance with stringent electrical safety regulations and enable informed, real-time decision-making, the team sought a solution that could provide centralised oversight and operational clarity.

“Elecsys is a true innovation for HV asset management. The digitisation of our HV operations and asset management through Elecsys is already delivering significant improvements in efficiency, compliance and coordination.”

- Jonathan Lakey, Senior Electrical Engineer at Ocean Winds

Key results achieved

The Elecsys platform has revolutionised Ocean Winds’ operations, delivering a structured, auditable system for managing electrical safety compliance and authorisation workflows with ease. Through integrated outage planning, the team is now able to streamline scheduling and coordination of various activities in real time. This has enabled onshore and offshore teams to operate more collaboratively with the support of up-to-date operational data - driving efficiency across all high-voltage operations.



Ventus Energy



Digitising HV operations for a growing control room network



Project

HV control room expansion



Size

33 wind farms under active management



Capacity

4.2 GW
(increased by 1 GW)



Location

Belfast, Northern Ireland

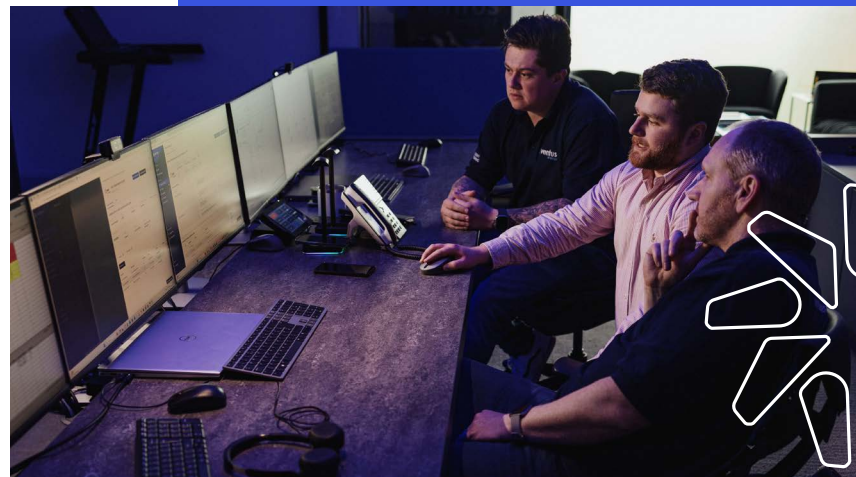
Ventus Energy was looking to expand the capacity of its Belfast-based control room to support a growing number of onshore and offshore wind, battery storage, solar and floating energy projects. As the company's portfolio quickly scaled, the need for more advanced operational visibility, automation and risk mitigation also increased. Ventus needed a solution that could seamlessly support 24/7 surveillance, electrical safety coordination and asset performance across a complex network.

Key results achieved

Within the first year of operations, the team increased control room capacity by 1 GW to 4.2 GW—without the need for additional personnel. By integrating Elecsys, Ventus gained real-time insights and automated control over asset management, enhancing operational efficiency and reliability across its portfolio of 33 sites. Since the rollout, the team has safely delivered more than 28,000 switching instructions and managed close to 2,000 network outage programmes across nearly 400 substations.

“Elecsys has provided us with deeper operational insights and governance over our networks, ensuring we can proactively manage complexity and mitigate risks. It has enabled us to remain focused on delivering smarter, safer and more resilient high-voltage operations for our clients.”

- Colin Bowman, Head of Control Centre Operations at Ventus Energy



Industries We Support

Enabling Electricity Operators



One Platform, Any Network

Elecsys' innovative software solutions are designed to address the unique challenges faced by a diverse range of energy and infrastructure stakeholders. From onshore and offshore wind, to data centres, battery storage and solar, the Elecsys platform empowers organisations across the entire electricity value chain. Built with flexibility at its core, Elecsys has been engineered for use across multiple jurisdictions worldwide—enabling clients to apply a consistent, compliant, and standardised approach to safe systems of work across their entire asset portfolio, wherever they operate.

Electricity generation

For electricity generators of all kinds — from renewables to conventional thermal generation — Elecsys provides the tools to maximise asset performance and commercial viability. By centralising critical data across wind, solar, battery storage, and thermal assets, the platform supports seamless project management and optimised operations throughout the entire asset lifecycle.

Transmission & distribution

Elecsys enables utility providers and network operators to manage high-voltage power grids with confidence. Its scalable asset management tools and embedded safety governance support regulatory compliance, while ensuring safe, consistent operations across expansive transmission and distribution networks.



Across these diverse sectors and stages of the supply chain, the Elecsys platform delivers tangible benefits in the form of operational efficiencies and cost savings, empowering stakeholders to optimise their energy infrastructure while ensuring the highest standards of safety and reliability.

Industrial electricity consumers

For data centres, manufacturing plants and other large-scale industrial facilities, Elecsys offers the ability to easily manage complex, high-voltage in-house networks. The platform's streamlined workflows and data integrity support critical power requirements for high voltage networks.

Independent network operators

Independent Network Operators are responsible for ensuring safe, reliable, and compliant operations across privately managed electrical networks. With Elecsys' robust governance and compliance capabilities, INOs can demonstrate full alignment with regulatory frameworks and industry best practices, while maintaining operational consistency across diverse asset portfolios.

Why Choose Elecsys?



Engineered by Experts Who Understand

Built by professionals who have directly experienced the challenges of network management, our software is grounded in real-world understanding rather than theoretical assumptions. We've lived the pain points of utility and energy professionals, which has allowed us to develop a solution that truly addresses the complex operational pressures faced by network managers.

What sets Elecsys apart is its ability to integrate advanced technology with ease. The platform has been carefully engineered to work with your existing systems - not against them. Onboarding is swift and seamless, and unlike other software that demands you change your processes, Elecsys flexes to fit your organisation's unique workflows, requiring minimal configuration to get up and running.

At the heart of Elecsys is a commitment to continual improvement. We invest in ongoing development and actively collaborate with industry bodies like SafetyOn to ensure our platform evolves alongside industry standards and emerging challenges. By prioritising robust design and customer needs, Elecsys delivers a scalable, future-focused solution that supports not just your current operations, but your long-term network growth and innovation goals.



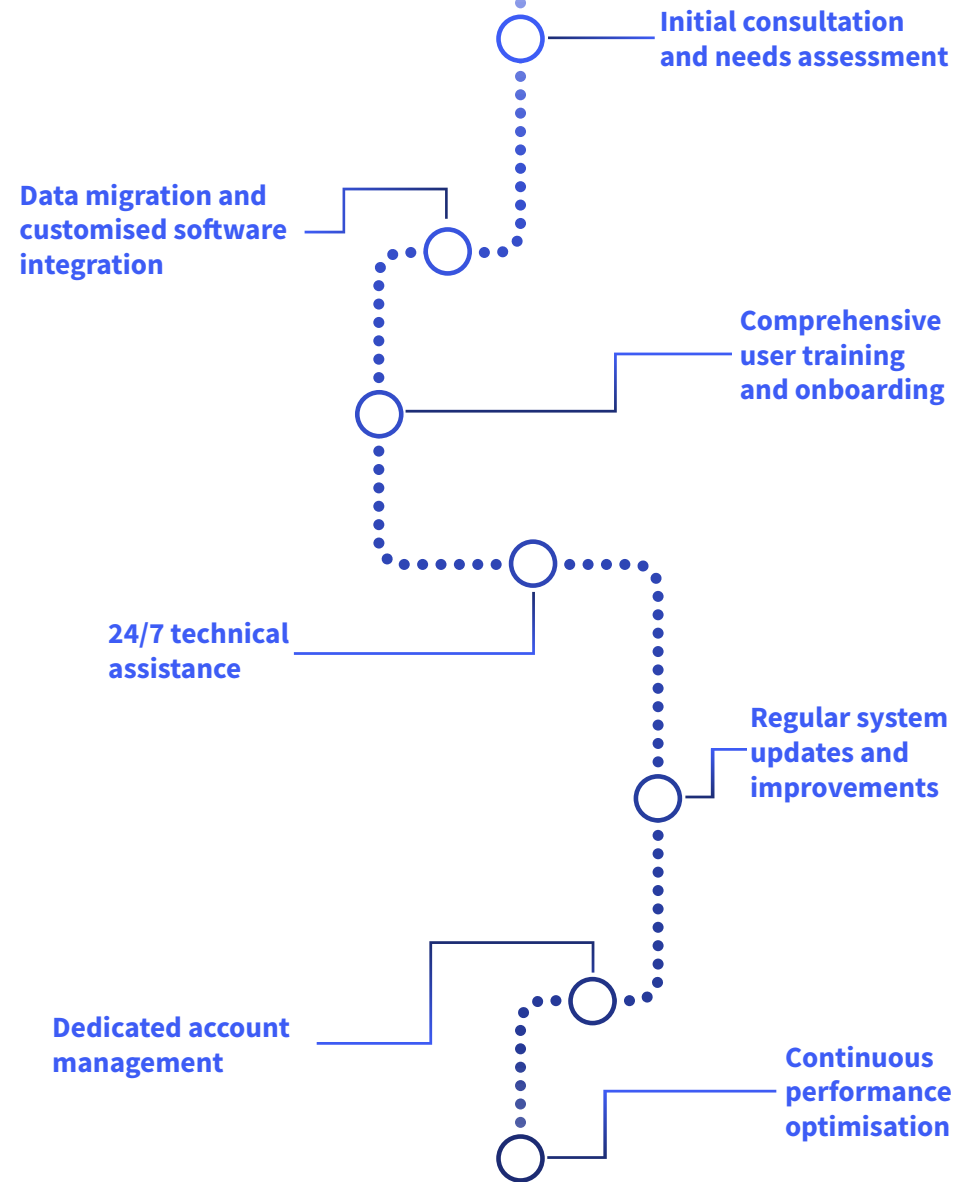


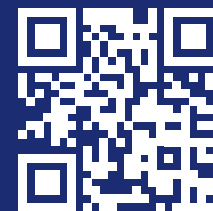
Implementation and Support

With You At Every Stage

Our implementation steps and ongoing customer support will include:

Implementing Elecsys is a collaborative journey designed to ensure seamless deployment and maximum value for your organisation. Our dedicated team works closely with you to understand your specific requirements, configure the platform to your specific needs and provide comprehensive support to your entire team throughout the onboarding process and beyond.





Ready to optimise your electricity network?
Contact us today...