

Fuelling energy innovation with fibre transformation

Introduction

Fingrid Oyj, Finland's national transmission system operator, is responsible for ensuring the reliable flow of electricity throughout the country. From its base in Helsinki, Fingrid manages the main grid, transmitting electricity from production facilities to industrial and electricity distribution companies.

The company plays a vital role in Finland's energy system. As a majority state-owned enterprise, its mission is not only to maintain disturbance-free access to electricity but also to safeguard the delicate balance between production and consumption in real time.

The challenge

To maintain and control its extensive electricity transmission network, Fingrid owns and operates a fibre optic network providing essential connectivity to substations and other infrastructure, enabling real-time monitoring and operational control. However, as needs evolved, the limitations of its existing physical network inventory (PNI) system became apparent.

The problem

Fingrid needed a system that could offer flexibility and detailed fibre network management, within a highly secure, closed IT environment requiring a 100% on-premises deployment.

As a result, Fingrid began the process of procuring a new documentation and planning solution for its fibre optic network. The new system had to integrate with Fingrid's existing network information system, based on Esri's ArcGIS Pro platform. The solution also needed to be supported by Accenture, Fingrid's existing support service provider, to ensure smooth integration and ongoing maintenance.

Why 3-GIS as the solution?

- > On-premises hosting
- > Data security
- > Esri-based
- > Dynamic diagramming

The solution

Working alongside Esri Finland, Fingrid chose 3-GIS | Web, enabling improved documentation, planning, and reporting capabilities. Migrating existing fibre data ensures the continued support of its existing fibre infrastructure with precision, reliability, and resilience, supporting the broader mission of fulfilling its energy requirements into the future. Hosted entirely within Fingrid's infrastructure, the system operates in compliance with strict security policies.

The Esri integration provides a unified environment for managing both electricity and fibre networks. While the ArcGIS Utility Network continues to support Fingrid's core mission of maintaining the national grid, 3-GIS now underpins the management of the fibre optic infrastructure that enables secure and reliable operation of that grid.

“When your network underpins a critical national service, there's no room for uncertainty. 3-GIS equips us with the confidence that our fibre data is accurate, secure, and ready to support real-time decision-making across the grid.”

- Aki Raitanen, Specialist at Fingrid Oyj

About 3-GIS

3-GIS empowers telecom and utility companies to achieve better operating efficiencies and to meet the challenges of building increasingly complex networks. 3-GIS uses a data driven approach based on geospatial reference, rules-based calculations, mobility, and web-based services to revolutionise the potential and realise the market opportunities of network assets. With products purpose built for telecom and utility operations, we provide the visibility and confidence teams need to make better decisions, reduce costs, and move faster.

Our fully-configurable solutions allow users to plan, design, and manage networks; provide real-time data that is used enterprise-wide; and enable automation for faster service activation, in one seamless system. The company has development, design services, product support, and operational staff in five countries challenging the status quo every day to improve the economic visibility of the networks we depend on; creating a more connected and informed world.



Discover how 3-GIS can support your projects.

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