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CASE STUDY

# Electricity North West

Proving street works compliance  
with ABB Fieldreach

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## The client

Electricity North West owns, operates and maintains the electricity distribution network in north west England, connecting 2.4 million properties and more than 5 million people to the national grid. Power is delivered through a network of around 13,000 km of overhead lines, over 44,000 km of underground cables, almost 86,000 items of switchgear, and more than 34,000 transformers. The network covers a diverse range of terrain, from isolated farms in rural areas to areas of heavy industry and urban populations.




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## The challenge

As part of its ongoing investment in its network, Electricity North West must frequently undertake essential street works in order to access, repair and install new equipment. However, in recent years, new legislation, such as updates to the Traffic Management Act, has placed increasing pressure on utilities companies to reduce the disruption caused by street works.

Each year, Electricity North West undertakes approximately 67,000 works that require the company to excavate in the public highway. With such a huge number of works to be carried out, Electricity North West wanted to find a better way to demonstrate full compliance with the Act, not only to reduce the risk of financial penalties, but also to protect its reputation for good practice.

According to Steven Bradwell, Operations Change Manager at Electricity North West, “We wanted to provide our teams with an easy way of documenting proper procedure when street works are taking place, and that sites are left in good condition once these works have been completed. This would allow us to ensure that sites are kept safe, prove compliance with regulatory guidelines and reduce the amount we have to pay out in fines or goodwill payments.”

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## The solution

Electricity North West saw an opportunity to extend its existing asset management landscape, based on the ABB Ability™ Ellipse Enterprise Asset Management (EAM) solution and Fieldreach technology from AMT-SYBEX.

“We were already using ABB Fieldreach for a small subset of our asset management activity – specifically, capturing the condition data of our aboveground assets, and were very pleased with the improvements it delivered,” comments Bradwell. “Based on this success, we wanted to go a step further and use Fieldreach as the basis for a broader mobile working solution to capture photographic evidence of conditions.”

Using ruggedized iPhones and ABB Fieldreach software, Electricity North West developed a new mobile working solution that allows operational teams to take photos and capture information from project sites, and prove that street works are safe, efficient, and undertaken in full compliance with the Act.

Steven Bradwell  
Operations Change Manager  
Electricity North West

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## The results

With photographic evidence of job site conditions, Electricity North West can now provide irrefutable proof that proper procedure is followed, reducing the risk of legal challenge, penalties or damage to the company's reputation.

ABB Fieldreach has helped Electricity North West:

- Document the conditions of a job site before, during and after works
- Provide photographic proof that proper procedure is followed
- Mitigate the risk of legal penalties, reducing the amount paid out as goodwill payments
- Enable front-line teams and contact center workers to communicate more efficiently
- Improve responsiveness to customers by providing real-time status of maintenance and repair

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## The benefits

### Recording the lifecycle of a project

"Having photographic evidence of the condition of a job site before, during and after works will be a huge benefit for our business," notes Bradwell. "In the past, a customer or local authority could make a claim against us for damage or code violations, saying, for example, that one of our teams damaged a wall and failed to repair it. We would usually pay out as a gesture of goodwill because we had no way of proving otherwise."

Bradwell adds, "Now, with a full record of job site conditions, we will have a fail-safe way of verifying whether such claims are justified. We anticipate that this will save us a huge amount in fines, penalty and goodwill payments, and will go a long way to helping us protect our reputation."

### Capturing the context with images and data

Electricity North West has used the Intelligent Scripting capabilities within ABB Fieldreach to help guide teams through the process of taking site photos, and ensure that the right images are captured at every stage of a project. All photos are stored on a central file server and can be accessed from a web browser.

"If we receive a complaint or claim of a Traffic Management Act violation, it is quick and easy to search for the relevant photos and information," explains Bradwell. "We just enter the specific job

number and the system will bring up all the photos associated with that particular job. This will save time and effort, and enable the business to act much faster on requests, helping us maintain a good relationship with customers and local authorities."

### Better communication and customer service

As use of the mobile working solution takes off, Electricity North West anticipates that it will be much quicker and easier for field teams to communicate with staff in the company's contact center. The ability to rapidly deliver feedback from job sites on the status of maintenance and repair works will ultimately help Electricity North West to deliver a more responsive service to customers.

Steven Bradwell summed up the benefits: "Not only does the solution mitigate the risk of costly permit non-conformance, it allows us to provide customers with real-time information about when their lights will be back on. It's a quick and easy way for our people on the front line to communicate with the contact center – all of which will help us achieve our target of 85% customer satisfaction."

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Steven Bradwell  
Operations Change Manager  
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