

Case Study



Scottish & Southern
Electricity Networks

Making Complex Asset Data Collection Reliable and Scalable for SSEN Distribution with CHiME

CHiME enables SSEN Distribution to capture complex asset data at scale, streamline inspections, and enhance workforce efficiency

SSEN Distribution needed a more reliable and flexible way to capture complex asset data across its network. Existing tools were challenged with offline stability, large data volumes, and complex inspection demands. SSEN Distribution also needed to keep workflows running smoothly during system upgrades and avoid costly system replacements.

Project Overview

As one of the UK's Distribution Network Operators, SSEN Distribution required a solution that could deliver stable, verifiable data collection at scale without degrading productivity or relying on specialist hardware and disruptive system changes. Their existing systems faced limitations around offline performance, data volume handling, and data collection changes - making it increasingly difficult to support large inspection programmes efficiently.

After exploring alternative solutions, SSEN Distribution ultimately chose to commission the development of CHiME, a field-friendly application designed to enhance, rather than replace, existing work management workflows while easily integrating securely and at scale with current systems.

CHiME provided the flexibility to manage complex inspection requirements, adapt question sets rapidly through Chimelets, and operate reliably even with low mobile network connectivity. Crucially, it could be deployed quickly, used on standard devices, and required no costly upgrades or IT intervention.

This approach enabled SSEN Distribution to stabilise and streamline its inspection processes, maintain continuity during system changes, and expand asset coverage across substations, link boxes, LV pillars, subsea cable shore sites, and urban battery replacements - all while keeping total cost of ownership low.

The result: 8 years of reliable performance, resilient offline data capture, and a proven low-cost, low-burden solution for SSEN Distribution – delivering exceptional data that has helped secure essential network investment

Key Challenges

Before implementing CHiME, SSEN Distribution faced several operational hurdles.

- Existing tools struggled with offline stability and large data volumes
- System upgrades disrupted workflows, creating a need for a reliable fallback
- Large inspection programmes required flexible tools for complex question sets and contractor input
- SSEN Distribution needed seamless workflows that integrated with existing systems without full replacement

The CHiME Solution

Across SSEN Distribution and other customers, CHiME has delivered significant value by enabling more advanced and complex data-collection routines to be embedded directly into everyday field workflows. To achieve this, CHiME provides a suite of adaptable, scalable capabilities, including:



Integrated with Existing Systems

Enhancing workflows without disruption.



Offline Resilience

Ensured continuity during upgrades and low-connectivity environments.



Flexible Workflows

Rapid modification of inspection questions and tailored user access.



Expanded Coverage

Substations, link boxes, LV pillars, subsea cables, and urban batteries.



Chimelets

Simplified complex data collection for workforce efficiency.



Rapid and Low Cost Deployment

Operable on standard devices with no costly upgrades or specialist hardware.

Results and Strategic Impact

Core Function Proven

For more than eight years, CHiME has been SSEN Distribution's trusted tool for inspection and maintenance of primary grid substations, delivering consistent performance where other systems struggled.

Continuity During Upgrades

CHiME ensured stable workflows during system upgrades, providing SSEN Distribution with uninterrupted asset inspections and reliable data capture.

Workforce Adoption

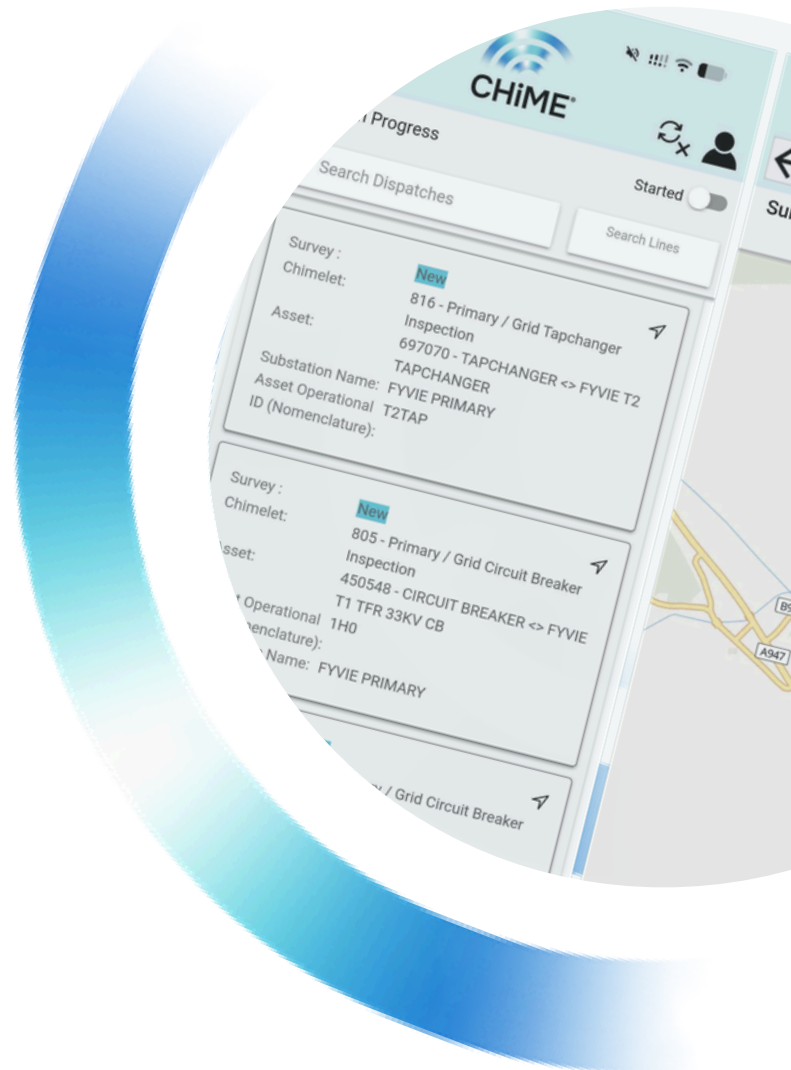
SSEN Distribution teams have embraced CHiME for its practicality and ease of use. The introduction of Chimelets has simplified complex data collection, making workflows easier and more efficient for the workforce.

Expanded Asset Coverage

Beyond substations, CHiME now supports inspections of link boxes, LV pillars, subsea cable shore sites, and urban battery replacements, broadening SSEN Distribution's asset visibility.

Proven Growth and Low TCO

Since its introduction in 2018, CHiME has grown steadily, proving reliable and valued in delivering benefits at low total cost of ownership. It has required no expensive upgrades or IT intervention and has outlived other solutions at SSEN Distribution, reinforcing its long-term resilience and value.



**Complex inspections made simple
- giving SSEN Distribution teams
faster, easier, more efficient data
capture across the network**



CHiME gives us the flexibility to capture asset data in greater depth while working seamlessly, even offline, alongside our existing systems. Our teams value its practicality and ease of use, particularly the Chimelets that simplify complex data collection and make workflows more efficient across the workforce.”

Gillian Thomson | Asset Systems Analyst, SSEN Distribution