



# Powering the Move to the Distribution Network of the Future



## SUMMARY

### Customer



Scottish and Southern Electricity Networks

### Industry

Utilities

### Challenge

Deploy rugged tablet computers to work in the harshest terrain

### Solution

- Zebra L10 rugged tablet
- Accessories including handle, shoulder strap and kickstand
- Zebra Mobility DNA™ suite of software and tools to optimise device deployments and management

### Results

- A powerful, rugged tablet to enhance data capture and remote working for engineers, in all weathers
- Improved user experience of key apps
- Accelerating the move to paperless workflows for the management of SSE's network assets
- A predictable cost over the five-year life cycle
- A reduced cost of ownership compared to ruggedised consumer devices

Scottish and Southern Electricity Networks (SSEN) forms part of the FTSE-50 energy company, SSE. Its networks carry electricity to over 3.8 million homes and businesses across the north of Scotland and central southern England. It has over 4,000 staff and manages a growing estate of assets, including 130,000 km of overhead lines and underground cables, 106,000 substations and over 100 subsea cables, powering island communities.

## Challenge

SSEN's digital strategy is focused on enhancing social and economic value, improving customer service and attaining net zero carbon emissions. As part of this drive, SSEN wanted to equip 1,000 of its mobile engineers with tablet PCs to optimise data access, capture and reporting. Improving real-time data visibility is increasingly important as power systems become more localised and distributed energy generator assets such as solar panels, heat pumps and battery storage facilities become more prolific. And, with the regulator, Ofgem, commencing new Revenue=Incentives+Innovation+Outputs (RIIO) price control negotiations in 2023, SSEN's digital strategy will help it meet Ofgem's industry goals of lowering costs and delivering a low-carbon economy.

## Solution

SSEN looked at a number of tablet options. The devices would need to cope with a tough working environment, including weather extremes, being carried cross country and up pylons and poles. Twenty engineers took part in a pilot to test devices against a range of criteria.

The Zebra L10 rugged tablet was the stand out choice. Engineers said the device felt like a proper work tool that was designed for the arduous nature of their roles. Usability, battery performance, screen legibility (anti-glare in sunlight), camera performance for asset condition checks and processing power were all highly rated. And the dual-SIM provided more assurance of connectivity in remote areas. Users were also asked to review accessories, with SSEN selecting a shoulder strap, carry handle and kickstand to tailor the devices to users' roles.

Alongside the device, SSEN's project team was impressed with the enterprise nature of Zebra's devices. Notably, the life cycle of the L10 rugged tablet is five years as standard, and which can be extended too. The L10 also has Zebra's Mobility DNA™ inside – a wide range of on-board tools, and supporting software that make Android a robust, enterprise-ready OS, and ensure it's easier to deploy, secure, maintain and optimise devices.

## SUCCESS STORY

SCOTTISH AND SOUTHERN ELECTRICITY NETWORKS



## Results

The rugged tablets were rolled out during a period of stormy weather where they excelled. Engineers also love the fact that jobs can be sent to them at home and the device has everything on it that they need to carry out their tasks. As they can go straight to site without calling in at the depot, mileage and the risk of road traffic accidents are reduced while SSEN can resolve faults faster to restore power to customers.

Key apps on the tablet include asset management inspection and maintenance and GIS mapping tools. The 10-inch screen size means that the team can view network designs and, due to the device's processing power and storage, a full copy of GIS map data is accessible even when offline. The tablet is also improving discussions with landowners who have SSEN assets on their land. Teams are able to review maps and agree access. The experience of using these apps has improved thanks to the large screen, intuitive interface and the use of a stylus for data entry.

While the L10 is performing as expected, the project team is confident that it's deployed the best tablet from a commercial perspective too. The five-year life cycle provides stability and confidence in SSEN's software strategy, and reduces the need to re-test apps on new devices – as there would be if they chose a ruggedised consumer tablet that's refreshed every 18 months or so. SSEN also appreciates the partnership with Zebra that ensures its devices will have long-term security patches and Operating System (OS) support.

This is guaranteed by LifeGuard™, a key component of Zebra Mobility DNA. LifeGuard extends the length of OS updates beyond 36 months to cover the life of the L10 devices. It will also enable the IT team to control updates so they can ensure that all apps have been tested to avoid downtime. SSEN will also use the PowerPrecision Console, a feature of Mobility DNA, to remotely check on battery usage and health. SSEN has purchased a battery replacement service, too, together with a Zebra OneCare support contract. These measures mean that SSEN has predictable cost of ownership over its tablet deployment. In total, this is substantially less than a comparative cost for consumer devices over the same time period.

With the outbreak of Covid-19, SSEN was able to use the tablets to quickly use Office 365® and SharePoint to help teams report from the field, without handling physical documents. Looking forward, SSEN plans to add more apps to complete the transition to paperless working and is considering options such as scanning barcodes to help engineers locate and access asset data information.

“We set high standards. But nothing was too much trouble for Zebra and I really appreciate the partnership approach we continue to have. It was clear, too, that Zebra's devices are rugged and built to last, and are backed with smart enterprise tools that make them easy to manage throughout the life cycle. The certainty of having a mobile asset for five or more years means we can better plan our app strategy without having to continually test software on a new device, and tools like LifeGuard give us greater control to schedule OS upgrades when we're ready.”

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