



# Improving Field Reporting With Zebra Technologies' ES400

## ABOUT SQS

SQS has over 300 employees providing reinstatement services to major utility and construction firms including Three Valleys Water, Veolia, Lafarge, SKANSKA, National Grid, Balfour Beatty, and Amey. The business invests heavily in technology, plant and vehicles and infrastructure to continuously improve its service to customers. For instance, it has a fleet of over 150 vehicles and has established a spoil recycling plant at Scratchwood Quarry to minimize all waste going to landfill sites and deliver against its commitment to enhance its green credentials.

## Challenge

SQS uses a combined TAAP Field Force and Ontrack system to deliver real-time information to its customers on the progress of road and footpath re-instatement works. Previously, teams used consumer mobile phones to send information through to the Ontrack system. The devices were liable to breakdown as they were not tough enough for use in all weathers. Also, they were not easy to use and hindered further development of 'Ontrack' as they lacked features such as GPS. SQS therefore initiated a project to deploy more rugged, reliable and intuitive EDAs to its field teams.

## SUMMARY



**Customer**  
SQS, UK

**TAAP**

**Partner**  
TAAP

**Industry**  
Utilities / construction

## Challenge

SQS wanted to improve data capture and transmission for its field teams who often work in tough environments

## Solution

- Zebra ES400 Enterprise Digital Assistant

## Results

- SQS can now trace and analyze the work of each team at all times – invaluable for quality control and training purposes
- The use of standard, clear forms ensures teams capture the right information first-time
- SQS can proactively warn customers if jobs are running behind schedule to help reduce incidents of fines
- The system can be developed in line with customer and internal requirements (HR functions and health and safety assessments are being added)



## Solution

SQS opted to work with TAAP to assist in the project. The decision was based on a recognition of TAAP’s deep expertise in enhancing the productivity and performance of field teams through mobile computers. TAAP also very early on demonstrated a clear understanding of the requirements, strongly recommending that SQS looked closely at the Zebra ES400, which SQS ultimately deployed.

The EDA provides the key features required by SQS including a durable design, camera, voice calling, GPS, a flexible operating system (Windows Mobile 6.5) and a large bright touchscreen – capabilities that allowed SQS to enhance the data that was sent to the Ontrack system using TAAP Field Force mobile software. As part of the upgrade, large buttons are now displayed on the touchscreen to allow teams to access key features – particularly useful as users are often wearing bulky gloves. The software also populates key fields on standard forms (e.g. with a GPS location stamp) and prompts the user for all mandatory information – such as contract numbers – to support teams in quickly, easily and accurately capturing the critical data required within the Ontrack system.

TAAP assisted SQS in setting up the mobile devices with its Field Force software. As part of this process, it configured the ES400s with SOTI software, which allows the devices to be controlled from a central management console. The console includes the facility to upload software enhancements and lockdown misplaced EDAs, which makes the system more secure and easy to manage remotely.

## Results

### SQS CAPITALIZES ON A KEY DIFFERENTIATOR

SQS’s combined Field Force software from TAAP and its Ontrack system is recognized as the de facto application for the highly effective management of reinstatement works. The system enables SQS to provide a high-level of services to its customers and, with the roll out of the ES400, it has extended the software’s features and applications.

With the user-friendly interface, it’s simple for teams to capture all key stages of their work by taking photographs. The images ensure crucial information is recorded – such as width and depth of holes and materials used to make these good – and are sent wirelessly to Ontrack from the field. The pictures and supporting information are accessed by customers through a login protected web portal to view the progress of their reinstatement project in real-time. The timely flow of information helps SQS inform customers of any unforeseen problems to help reduce incidents of fines where works run over their scheduled time. SQS can also monitor the performance of teams and their quality of work to continuously improve its service.

The simple touchscreen interface used to operate TAAP Field Force on the ES400 is helping to enhance the accuracy of data collated. As is the automated filling in of fields on forms (such as the geo-location) and clear prompts on the device. The latest iteration of Field Force/ Ontrack is also modular by design, so SQS can add capabilities requested by its customers. One existing customer-orientated facility enables members of the public to send in pictures of unfinished work that are displayed in the relevant job file within Ontrack.

SQS also continues to advance the scope of the Field Force/Ontrack system. New functionality being introduced in the next 12 months include Human Resource reporting, which will allow teams to report if they are ill and manage their timesheets remotely. Furthermore, health and safety assessments will be managed on the device from the field. This is a particularly

“Our remote work management system combines TAAP’s Field Force mobile software, Zebra’s ES400 mobile devices, and our well-established ‘Ontrack’ back-office software. The system differentiates our business by enabling field teams to report in real-time whilst they are working on road or footpath repairs, following completion of utility or highways maintenance.”

**Tim Lawson**  
General Manager,  
SQS

important feature as tenders for construction and highway works increasingly require both the delivery company and their suppliers to conduct on-site health and safety audits.

When it comes to managing the fleet of EDAs, the SOTI software helps reduce management costs by enabling the remote control of devices. Moreover, unlike consumer mobile phones that change constantly, the ES400 provides the surety of a long-term product, backed by Zebra. This ensures that SQS has a clear and predictable view over the management costs for its EDA estate.

Concluding with his views on the deployment of the ES400 and enhancements to the combined Field Force/Ontrack system, Tim Lawson says: “We are delighted with the knowledge and support provided by TAAP which has resulted in the painless roll out of the ES400s. The EDAs enable our teams to easily, quickly and accurately capture data about the progress of jobs that is viewable by customers. This insight is incredibly valuable, allowing customers to proactively address problems and have a transparent view of the quality of the work delivered by our teams. We are a business that embraces new technology to enhance our performance and the new capabilities we have planned for Field Force/Ontrack will continue to differentiate our business by service quality and drive on-going efficiency and performance benefits.”

## **REAL-TIME OR CLOSE TO REAL-TIME COMMUNICATIONS**

Where a wireless or GPRS connection is available, there is constant communication between the handheld devices, the application server and ERP system. However, in remote depots, wireless connections may not be available. In this scenario, the device works in off-line mode. Transactions are stored on the device and uploaded when an internet connection can be established – e.g. using a cradle in an office with a satellite or wired connection. In the off-line mode, the customer database is available on the device (to enable validation) with the customer records and transactions updated whenever connectivity is re-established. The technology is delivering a range of advantages.

## **EFFICIENT PERFORMANCE AND ENHANCED CUSTOMER SERVICE**

Commenting on the overall performance of the technology Karsten Radon says: “We are very pleased with the performance of the technology. The scope for fraud is reduced as we can validate customers’ identities quickly and accurately. We have cut the amount of paperwork our teams need to manage. We are able to invoice customers much faster and with greater accuracy to improve customer service. And we can update our teams remotely on new accounts, and any changes to customer status.”



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