

COPILOT[®] LIVE[™]

Mobile Navigation

Severn Trent Metering Services

- Mobile efficiency with the environment in mind

“Mobilising your field workforce is not a new concept, but we have taken things to the next level with TBS and ALK. To survive, businesses need to be adaptable to change and they have helped us achieve this”

Andy Herus, operational director for Severn Trent Metering Services.”

Severn Trent Services is a leading supplier of water and wastewater treatment solutions. The company's broad range of products and services is concentrated around disinfection, instrumentation and filtration technologies, contract operating services and state-of-the-art residential metering products and services. In recent years, its specialist Metering Services division (STMS) has manufactured and installed over a million water meters.

The STMS division consists of a field workforce of around 200 engineers who deliver, install and service water meters in new and existing homes and businesses. Since 1989 the government made it compulsory that all new homes are fitted with water meters and STMS has been central to the delivery of this.

When Severn Trent Metering Services looked to increase the efficiency of its meter installation arm, they turned to TBS for a solution which would not only help manage their engineers' workloads more effectively, but would also deliver some important environmental and sustainable business benefits.



Customer profile

Severn Trent Services is a leading supplier of water and wastewater treatment solutions.

The STMS division consists of a field workforce of 200 engineers who deliver, install and service water meters in new and existing homes and businesses.

As a division, they have installed over a million water meters.

Situation

STST had a requirement to increase field engineer efficiency while improving customer service levels.

Solution

200 field engineers have been issued with an O2 XDA 2i mobile device. This has TaskMaster Field Service software and CoPilot Live sat nav on board.

Engineers now have an automated process to complete their jobs without paper and sat nav to guide them to their next appointment.

Engineer movements are monitored through FleetCenter mobile tracking and new appointments allocated to engineers based on the job requirements and current location.

Benefits

- Automated scheduling process
- Improved environmental performance through fewer vehicle journeys.
- Reduced driver mileage by 6,000 miles per week.
- Annual fuel savings of £80,000.
- Better customer service with additional time spent at customer sites.
- Increase in daily customer visits from five to six, representing a 15 percent improvement in productivity.

“Our staff out in the field have always been hard working and productive, but this approach enables them to spend time with customers, improving customer service, which is what we’re all looking to achieve.”

Andy Herus, Operational Director for Severn Trent Metering Services.

The situation

STMS wanted to improve the way it managed job scheduling, general communication and overall productivity of its team of 200 mobile engineering workers.

The challenge arose as the existing method of allocating work was simply inefficient. Every morning the engineers not only needed to drive to their depot to pick up their job cards, but at the end of the working day they also had to complete the accompanying paperwork. This seriously affected the speed and efficiency with which a job was completed, and also meant that workers were spending time each day travelling between their homes and the depot, when ideally they could be with customers for a larger part of the working day.

STMS therefore needed a solution which would successfully integrate powerful and effective job scheduling capabilities and satellite navigation with a robust mobile device – all of which must operate effectively in the field environment. The technology package as a whole also needed to be a user-friendly solution which could be adopted easily by STMS engineers, who previously were familiar with their paper-based procedure. Both the hardware and software needed to be intuitive to use, with a carefully designed interface to enable STMS to transmit exactly the kind of information required to each engineer.

Technically, the solution needed to integrate with STMS centrally in order to create and distribute job schedule information at one end of the process, while feeding engineer reports back to central servers as jobs progressed and were completed.

It was important to provide GPS satellite navigation as part of the final solution to help engineers travel more effectively between jobs, and to track the location of vehicles for health and safety reasons.

“We have an excellent all round package which will quickly pay for itself”

Andy Herus

Solution

STMS turned to TBS to assess and develop a mobile solution that would achieve the desired efficiencies. TBS have been mobilising enterprises for over 14 years and have un-paralleled industry expertise.

The TBS product is called TaskMaster, a proven and award winning mobile technology suite.

TaskMaster has been designed to enable companies such as STMS to radically improve the efficiency of their field workers, reduce the cost of processing information and improve customer satisfaction. It does so by providing a mobile XDA 2i handheld computer using the O2 network which utilises intuitive, easy-to-use electronic forms and menu driven selection lists; resulting in detailed, quality information being quickly entered in the field environment and critically delivered back securely to within the enterprise.

Job despatch and monitoring is enabled with TBS Synchro, a web-based application which provides a 'holding area' for jobs after they are created in the STMS database. STMS supervisors use Synchro to allocate jobs to each XDA PDA in the field, based on the location of the engineers - as indicated by the integrated GPS satellite navigation system - and the requirements of each job. In turn, Synchro allows status and report data from the field to be returned to the central STMS database. So, as engineers report back via their handheld computer, Synchro completes the integration between the mobile technology at one end of the communications network and the central database at the other.

Powerful partners

The TBS solution allows field engineers to receive extensive job information via a GPRS mobile data network direct to their handheld computer out in the field, negating the need to visit their depot for a job schedule. The engineer selects their first job, which automatically starts the integrated CoPilot® Live™ GPS satellite navigation system, directing them to that job using the most efficient route.



The CoPilot Live element of the solution was provided and installed by TBS partner ALK, who are a leading provider of travel and transportation technologies, with a range of products designed to help businesses and individuals get to where they need to be. As Dan Popkin, Sales Director at ALK Europe explains, together the systems integrate very effectively, “As TaskMaster and CoPilot Live operate via the same handheld, there is no need for workers to carry around multiple pieces of technology, or manually enter location details into a separate GPS satellite navigation system.”

In addition, the solution also utilises ALK’s CoPilot Live FleetCenter™, a web-based fleet management application allowing STMS to see the location of each engineer plotted on a map of the UK in real-time. As engineers travel between jobs, STMS can monitor and measure travel statistics and journey times – they can then use this data for process compliance and health & safety requirements. It also gives them a dynamic method of allocating engineers to new jobs as they arise in the most efficient way, so if a customer needs an engineer on site urgently, FleetCenter is used to find the location of the nearest STMS engineer. The tracking technology is linked to each handheld computer rather than individual vehicles, so reporting data is highly accurate.

This approach means exact locations and estimated times of arrival can be made, improving reliability and minimising disruption to customers. The engineer is then guided by live job information sent to the handheld. This can range from technical and operational details through to health & safety compliance controls.

“Mobilising your field workforce is not a new concept, but we have taken things to the next level with TBS. To survive, businesses need to be adaptable to change and TBS has helped us achieve this,” explained Andy Herus, operational director for Severn Trent Metering Services.

Benefits

STMS has observed a wide range of varied benefits, from business and service gains, to a reduction in the environmental impact 200 mobile engineers creates.

Adopting an automated scheduling process has saved STMS £80,000 in costs and by enabling the engineers to be more focused on customers, each engineer can actually fit an additional 250 water meters every year - an increase of 15% over the old system. The daily trips to the depot to collect each job schedule have been reduced to just one per week for each engineer to collect spare parts or other essential equipment.

This reduction in travel between their respective homes and the depots mean that between them the STMS engineers are travelling some 6,000 miles per week less than before the TaskMaster solution was installed. This equates to a reduction in carbon emissions of some 100 metric tonnes per year. This benefit has been accompanied by an equally impressive reduction in the amount of paper which the mobile system has cut out of the process entirely to the tune of over 150,000 sheets per year.

Technology

Software:

- CoPilot Live 6 satellite navigation
- TBS TaskMaster Field Service
- TBS Syncro
- Microsoft Windows Mobile 5.0

Hardware:

- O2 Xda2i mobile phone

Services:

- FleetCenter web-based mobile tracking
- TBS Syncro

“Our staff out in the field have always been hard working and productive, but this approach enables them to spend time with customers, improving customer service, which is what we’re all looking to achieve.

“Put these benefits alongside the improvements in customer service and we have an excellent all round package which will quickly pay for itself and has received good feedback from its new users,” explained Herus. It also fits well with our productivity-based bonus scheme, meaning our engineers are spending more time on aspects of their job which can help them boost their earnings.”

About ALK Technologies

ALK Technologies is at the forefront of mobile navigation technology with over 28 years expertise developing solutions for corporate and consumer customers globally ALK's CoPilot® mobile GPS navigation solutions are available in Europe, North America and Australia as retail-branded products and as the basis for leading OEM navigation systems, while the Company's PC*MILER® routing, mapping and fleet management solutions are used by over 23,000 transportation, logistics and manufacturing companies Worldwide.

CoPilot® Live transforms mobile phones and other portable devices into powerful satellite navigation systems with the additional benefit of integrated real-time location-tracking, messaging, and information services. The software is rapidly becoming the satellite navigation software of choice for Mobile Operators, OEM's and handset manufacturers.

Commercial partners include Acer, T-Mobile, O2, Motorola, Sony Ericsson, Intermec, HP, Panasonic, HTC, Scania, Ford and BMW.

Technology partners include NAVTEQ, Microsoft, Symbian, Sirf, Marvel and NXP. Corporate customers include Tesco.com, Drive Assist, Severn Trent Water and McNicholas Plc.

ALK is a Microsoft Certified Gold Partner and received the 2005 Microsoft Partner of the Year award for Mobility Solutions Sales and Marketing. The Company's innovative FleetCenter™ integrated navigation, location-tracking and fleet management application won the 2006 Global LBS Challenge.

About TBS

TBS is dedicated to helping enterprises build competitive advantage using the latest mobile technology. Our proven track record and depth of experience in the development, implementation and deployment of mobility solutions allows us to understand your business challenges and opportunities, and provide the infrastructure you need to address them. Following this premise, TBS offers an array of professional services to ensure the effective and rapid deployment of your organisation's mobility solution