

SONIM TECHNOLOGIES CASE STUDY

INDUSTRY: UTILITIES



THE SONIM XP3 SENTINEL THE ULTIMATE LONE WORKER SOLUTION KEEPS ENGINEERS SAFE WITHOUT COMPROMISE

Removing nuisance and unwanted water the underground systems of metropolitan areas like London, Athens, and Tokyo is not only tough, but can also be dangerous. The safety of the staff working in these environments is of paramount importance, and no one takes this more seriously than ITT Water & Wastewater.

THE COMPANY

As a world leader in its industry, ITT WWW offers fully integrated solutions for moving, mixing and treating water and wastewater, and is present in 140 countries around the world employing over 6000 people.

ITT WWW employees operate in very demanding environments. In the past the hardware that had been available to them simply could not outlast the conditions or treatment it got while installing and maintaining pumps below city levels where it is not only dark, but also very wet and loud.

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THE CHALLENGE

However, ITT WWW's biggest challenge is competition in the market place. “As a responsible employer we take health and safety very seriously, and there is a cost for that,” said Paul Wood, Health & Safety Manager at ITT Water & Wastewater. “To be competitive we have to lone work without compromising safety.”

ITT WWW employs 100 engineers in the UK alone and half of them lone work on a regular basis. While workers install and maintain pumps, it is critical for ITT WWW to have safety control measures; first and foremost ones that cannot fail the safety of their employees, but also for the safety of the business.

“We used Benefon Cybertrak handsets for about 8 years because at the time it was probably the best lone worker solution on the market. But it was a little too fragile for the conditions we are working in,” noted Wood. Repeatedly replacing the broken Benefon devices caused ITT WWW to have excessive downtime with a high impact on customer responsiveness and cost. “Our employees must be confident in the equipment they use. That confidence was lost on the Benefon equipment, but has been restored with Sonim.”

OVERVIEW

COUNTRY

United Kingdom

CUSTOMER PROFILE

ITT Water & Wastewater is a global provider of water handling and treatment solutions for municipal and industrial customers in more than 140 countries. ITT designs and delivers energy-efficient solutions and related services for water and wastewater transport, biological treatment, filtration and disinfection. The company provides a complete offering to municipal and industrial wastewater transport and treatment customers including a full range of products including wastewater and drainage pumps, secondary biologic treatment, disinfection, media and membrane filtration.

BUSINESS SITUATION

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SOLUTION

The Sonim XP3 Sentinel because it's the ultimate safety phone for lone workers. The ultra rugged phone is equipped with high performance GPS, outstanding battery life, a LED torch, a 2MP camera and a state of the art accelerometer. The handset now enables ITT WWW engineers to be protected and connected at all times due to its key safety functions and dedicated alert buttons.

BENEFITS

- improved productivity
- improved safety
- cost savings
- less defects

ITT WATER & WASTEWATER IS A GLOBAL PROVIDER OF WATER HANDLING AND TREATMENT SOLUTIONS FOR MUNICIPAL AND INDUSTRIAL CUSTOMERS IN MORE THAN 140 COUNTRIES. ITT DESIGNS AND DELIVERS ENERGY-EFFICIENT SOLUTIONS AND RELATED SERVICES FOR WATER AND WASTEWATER TRANSPORT, BIOLOGICAL TREATMENT, FILTRATION AND DISINFECTION. THE COMPANY EMPLOYS A GLOBAL SALES NETWORK, MANUFACTURING SITES IN EUROPE, ASIA AND THE AMERICAS, AND IS BASED IN STOCKHOLM, SWEDEN.

THE SOLUTION

ITT WWW ordered 50 Sonim XP3 Sentinels shortly after the phone was launched in June 2010. The handset met the company's need for a waterproof and crush/drop resistant device, and also provided a loud ringtone and high speaker volume, which allows usage even when pumps are operating. Submersibility in up to 1 meter of water, drop resistance to 2 meters onto concrete, and resistance to 1000 kg of pressure are all key components of Sonim's Rugged Performance Standards.

However, most importantly, the Sonim XP3 Sentinel in combination with a fully hosted TrackaPhone monitoring server and Professional Witnesses Ltd.'s 24/7 emergency response centre running on Vodafone's Track-and-Assist finally gives ITT the functionality and confidence they needed for their lone worker system.

The Sonim XP3 Sentinel additionally contains a 3-axis accelerometer for increased worker security. Used as a man-down sensor, the alarm is raised automatically if an engineer falls into manhole, which is where the wastewater pumps are often located. During testing of the first dozen units deployed in the field, TrackaPhone worked closely with ITT to carefully tune the accelerometer g-force and duration thresholds to detect the precise kind of freefall accidents that their lone workers were at risk of.

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TrackaPhone designed a custom phone configuration for ITT WWW including other parameters like the

GPS tracking interval and the specific functionality for the amber and green buttons to fulfill all their security and health needs.



When the Sonim XP3 Sentinel is unpacked from its box, its SIM card inserted and turned on, the complete ITT WWW configuration for the phone is downloaded through the GSM network and the service is fully operational in just a few minutes, making it simplicity itself to roll out the service to new users. TrackaPhone also conducts end user training on the use of the phone and monitoring service.

The Sentinel's user friendliness and specialized features provide employers with the peace of mind in knowing that workers are protected at all times. Additionally, it complies with the British Standard (BS) 8484 Code of Practice, which was developed in response to increasing demand from industry and government to promote best practice in the critical area of health and safety for lone working employees. The compliant was toughened in 2007 with the passage of the Corporate Manslaughter Act. "For the first time, companies and organizations can be found guilty of corporate manslaughter as a result of serious management failures resulting in a gross breach of a duty of care," states the Health & Safety Executive in the UK.

RPS CERTIFIED



EXTRA-LONG BATTERY LIFE
1180mAh with 18hrs talk and 1500 hrs standby time



ACCESSIBLE KEYPAD
Widely spaced keys for ease of use with gloved hands



EXTRA-LOUD SPEAKER
Capable of producing up to 110 db of noise



PROTECTION FROM DUST
Non-porous casing blocks entry of microparticles



PROTECTION FROM WATER
Water submersible to 1 Meter for 30 minutes



PROTECTION FROM DROPS
Withstands 2 Meter drops on concrete



RESISTANT TO SHOCKS & VIBRATIONS
Built to withstand random vibrations up to 4G



RESISTANT TO EXTREME TEMPERATURES
Works in environments ranging from -20°C to +55°C



RESISTANT TO EXTREME PRESSURE
Withstands up to 1 ton of pressure



PUNCTURE PROOF
Withstands up to 5J of impact energy



RESISTANT TO PETROLEUM OILS
Tested against 500 chemicals



3-YEAR COMPREHENSIVE WARRANTY



"The pressure on employers to demonstrate duty of care for their field employees is ever increasing and they are looking to technology to provide a solution," said Martin Worth, Director at TrackaPhone Ltd. "However, coupled with our leading monitoring capabilities, offered through global GSM networks and our emergency response centre partners, the XP3 Sentinel forms a comprehensive approach to meeting and actually exceeding the duty-of-care requirements under UK Law."

Therefore, in an emergency, whether triggered by pressing the dedicated red alert button on the side of the phone, or by a man-down freefall event, the phone automatically sends the GPS position to Professional Witnesses' response center in Atherton, near Manchester, and the phone automatically makes a speaker-phone call to the emergency number without further user intervention. A highly trained operator will see the engineer's location on a map and the type of emergency that was triggered, as well as the most recent location track of that user's phone. In fact the GPS location will be updated every three minutes.

The ITT WWW engineer's pre-stored specific information and identity will then come up on the screen and the operator can talk to the engineer, or listen if there is no response - determine the nature and seriousness of the incident and dispatch help.



Once the incident is resolved, the operator is able to remotely reset the phone from alarm mode back to its monitoring mode.

In addition to the specialized alerts, the IP-67 rating as well as the industry leading 3-year comprehensive warranty were the deciding factor for ITT in making the switch.

"When we saw the videos on YouTube of people trying to break the phone and read about all its additional functions, it ticked all our boxes and some," said Wood.

THE BENEFITS

The Sonim XP3 Sentinel offers ITT WWW a robust handset capable of withstanding the rigorous every day work life, while maintaining the level of functionality required as a lone worker device. "It allows our people's safety to be monitored without being intrusive," said Wood. "It also gives them the confidence that there is always someone on the other end of the phone if they find themselves in trouble, with a prescribed escalation process."

As a result of the successful deployment of the end-to-end safety solution incorporating the Sonim XP3 Sentinel, Wood has recommended the solution for deployment by his peers responsible for Health and Safety in over 300 locations in countries around the world.

KEY SAFETY FUNCTIONS: THE THREE DEDICATED BUTTONS



RED EMERGENCY BUTTON

In emergencies, the user presses the dedicated red button on the side of the phone, even if the phone keypad is locked. This causes the user's GPS location to be sent to the monitoring centre, where the position appears on a map with other relevant data. This button is further customizable by the lone worker monitoring provider. For example - a speaker-phone call can be automatically placed to the emergency monitoring center to summon assistance. After the call, the GPS tracking will continue until the incident is resolved and the phone is remotely reset. For maximum reliability, Sonim has implemented red button capabilities natively in the phone's firmware.



AMBER ALERT BUTTON

With the amber key, the lone worker can request enhanced monitoring and tracking if they are going into a risky situation. The monitoring service may track the worker on a map and remind the user to use the phone keypad to acknowledge their safety every ten minutes until they cancel the amber alert.



GREEN BUTTON

The green key may be used to indicate that the user has started or ended their working shift.

ABOUT SONIM TECHNOLOGIES

SONIM TECHNOLOGIES (WWW.SONIMTECH.COM) IS THE PROVIDER OF THE WORLD'S MOST RUGGED, WATER-SUBMERSIBLE MOBILE PHONES DESIGNED SPECIFICALLY FOR WORKERS IN CHALLENGING OUTDOOR AND INDUSTRIAL ENVIRONMENTS. SONIM'S XP FAMILY OF RUGGED PHONES FEATURE OUTSTANDING ENGINEERING TO MEET SONIM'S RUGGED PERFORMANCE STANDARDS (FOR EXAMPLE: IMPERVIOUS TO WATER, 2 METER DROPS, DUST AND EXTREME TEMPERATURES). SONIM'S INDUSTRY-LEADING 3-YEAR COMPREHENSIVE WARRANTY HAS REDEFINED CUSTOMER EXPECTATIONS OF RUGGED TECHNOLOGY. SONIM PROVIDES A SUITE OF HIGH-PERFORMANCE WORKFORCE MANAGEMENT APPLICATIONS INCLUDING PUSH-TO-TALK AND LONE WORKER SAFETY SERVICES ON CELLULAR NETWORKS. THE COMPANY IS HEADQUARTERED IN SAN MATEO, CALIFORNIA AND OFFERS ITS PRODUCTS IN OVER 50 COUNTRIES.

