

THAMES VALLEY POLICE

Thames Valley Police track down assets with RFID

Thames Valley was the first Police Force in the UK to adopt an RFID asset management system. They use WORKABOUT PRO handheld computers from Psion Teklogix to track equipment used at investigation scenes. By implementing a RFID (Radio Frequency identification) asset tracking system in November 2006, Thames Valley Police have revolutionized the visibility, tracking and stock rotation of its equipment used for investigations at crime scenes.

"You cannot compare our old system to the RFID system. The new solution not only gives me the information I need to manage our equipment efficiently, it lets me know where items are on a day to day basis and when they are due for servicing or electrical testing. This means we know the kit we send out will function properly. Furthermore, by improving the management of maintenance health & safety is enhanced by ensuring assets that may be unfit for purposes are not issued, therefore avoiding risk of accident to both the police and members of public." – Keith Henderson, Thames Valley Police

The Challenge

Thames Valley Police required an effective way to track their equipment at the scene of a crime or an accident. When an investigation is conducted, a vast array of equipment may be utilized, including multiple spot lamps with stands, generators, tents and shelters. Under the old system, the full range of equipment was taken out of a van and any items that remained at the scene were entered on a paper register. Items were signed back into the book when returned to the central storage, which could be several days later.

While this system told administrators that the equipment had been sent to a crime scene, it provided no idea what items had actually been used at the scene. Therefore, there was no clear view of asset locations or their state of maintenance. To provide this information with the paper-based system would require an officer standing at the back of the van logging the equipment as it was removed. This is not practical given that investigations often take place in the middle of the night in all kinds of weather and the priority is to ensure the scene is both safe and secure.

The Solution

Thames Valley Police deployed a new RFID system that has revolutionized the process. A low frequency RFID tag is embedded in each crime scene equipment item. Various tag sizes are utilized depending on the item – as large as 25 mm diameter or as small as a grain of rice for small items. A Psion Teklogix WORKABOUT PRO handheld computer is equipped with a Trovan RFID reader to log equipment going into the call out van.

Once the equipment is set up, a staff member reads each item with another WORKABOUT PRO kept in the van to log items specifically used at the scene. Unlike a bar code, the RFID tag is very durable and does not have to be seen to be read. This makes the system easy to use and long-lasting in rugged environments where a bar code would have to be replaced several times due to wear and tear.

One key success factor is that Ascendant Technologies adapted its Tooltagz tool tracking software to address the Thames Valley Police requirements and Trovan was able to provide the right RFID hardware.

"Thames Valley Police required a unique code that couldn't be altered, cloned or deleted. Trovan's patented design provides this with an industrial grade product that can withstand the harsh environments in which the police typically find themselves during investigations. They also required a hermetically sealed product because some of the equipment is used in very wet conditions." – Douglas McCartney, of Trovan

The Benefits

Details of who the equipment is being booked out to, the incident type and location are all entered directly into the WORKABOUT PRO to instantly provide asset trail. Given that police investigations can often take place in the middle of the night, perhaps in a field or woods, it is easy for equipment to be misplaced. As equipment is put back on the van, the system instantly indicates if anything has been left behind.

Finally, as items are returned from the van to the store, they are scanned again to see if they are fit for use. If not, the reason is recorded on the system, e.g., a battery needs charging or a new bulb is required, etc. The RFID system also manages the mechanical and PAT equipment testing by providing an automated

maintenance schedule and the system can run and print reports for jobs that are imminent. With this system, Thames Valley Police have eliminated the paperwork previously required for this process.

As Thames Valley Police get used to their RFID system they are already beginning to see other areas where the technology can provide benefits – including registering valued items for the public. Indeed, when it comes to tracking assets, RFID is a compelling solution for all sectors.

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“I think the biggest breakthrough in RFID has been with the mobile handheld com-

puter; it’s now a truly mobile application and with Psion Teklogix’ WORKABOUT PRO we can do pretty much anything we want in the field plus we can incorporate RFID and bar-coding, as well as scanning, within the same unit. Together, RFID and the WORKABOUT PRO offer a very powerful solution.” – Simon Heath, Trovan



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