Zebra technology earns stripes in Red Zone

Getting into the earthquake-damaged Red Zone in Christchurch happens with the help of a small herd of Zebras. That's because high-performance Zebra P330i card printers are a central component of an access control system which ensures that only authorised persons are permitted entry to areas which are damaged, unstable and potentially dangerous.

Supplied to the Christchurch City Council by OfficeMax, Zebra card printers are used to produce a variety of outputs, such as employee, student and faculty ID cards, access control cards, membership and loyalty cards.

However, agrees Manu Rangimoekau, Sales Manager at OfficeMax, the context of the Red Zone is somewhat unique. "It's a highly volatile and very dangerous environment. For this reason, anyone entering has to be checked in and out, creating records of all who are in there should any evacuation or rescue become necessary," he explains.

The challenge: Getting to the point of intervention

Rangimoekau says OfficeMax worked with the Christchurch City Council and Civil Defence to come up with an access control solution, at the sharp edge of which is the Zebra printers. "After the initial response to the earthquakes, there was an urgent need to put an identity management system in place. There were so many people who needed to get into the Red Zone, which at the time was ten times bigger than it is now."

At any given time, he continues, up to 3000 people could be within the cordon. "Before the Zebra ID system, getting in was a major headache which could require passing five checkpoints and different response agencies to get to the point where assistance, expertise or products for recovery activities are needed."

A solution for easy identification

Today, he says from a single point, all accreditation is quickly handled, with the Zebra printers rapidly producing colour-coded ID cards which allow fast and easy access for authorised personnel. "The system is now operated by the Canterbury Earthquake Recovery Authority and to date, more than 25,000 ID cards have been printed by just four Zebra machines," Rangimoekau notes.

Each ID card provides a raft of details which indicate where every individual is permitted to go within the zone. "That's why the Zebra P330i is ideal for this task: as a compact colour card printer, it enables easy identification of the 9 categories of personnel approved for access to the Red Zone and the respective limits of access granted to each category."

For example, safety personnel such as firemen or rescue crews receive a black ID card; this provides around the clock access to all areas within the Red Zone. Contractors receive a different colour which limits where and when they can be inside the cordon, while other services and visitors are similarly issued with an appropriately coded tag.

He adds that once set up, the access control system is very simple to manage: data is entered on a laptop, a photo taken, and the card is printed and issued. "It's linked to a comprehensive database which provides full reporting and which records all visitors; if any person returns, their details are in the system for the rapid reissue of a new ID card."

Proven in the most demanding environment

Paul Francois, product manager, says the Zebra P330i is designed and built for demanding environments. "The Red Zone is probably one of the most testing environments of all, but over 12 months of continuous operation have shown that it is up to the task."

He adds that reliability of the printers is critical as they are an indispensable component in the access control system. "With thousands of Zebra printers employed around the world for access control, on paper they were the ideal solution. However, this being such an unusual setting meant somewhat uncharted territory; however, the P330i's haven't missed a beat," he concludes.