Case study

DUNDEE CITY COUNCIL CHOOSES SECURICOR AND THE APLICOM VEHICLE COMPUTERS TO SAVE TIME, MONEY AND PAPERWORK

A unique combination of communication hardware and application software has been developed to offer Dundee City Council not just the optimum solution for today's service support needs, but also the opportunity to be 'future-proof', as technology advances and requirements grow.

This vehicle telematics solution is based on three core elements: the power and programmability of Aplicom's C-Series professional vehicle computer; a simple to use and easily portable PDA (Palm computer); and the advanced application software and project management abilities of Securicor Information Systems. What makes this solution so special is Securicor's selection of the right tools for the job as well as a fusion of functions that offers total flexibility and future growth potential.

A tender to replace the Council's ageing, analogue, radio-based mobile voice communications system was received by Securicor, who recognised the considerable customer benefits in offering new technology and increased functionality as a solution for tomorrow, as well as today. An MPT1327 trunk radio network was selected, which provides the enhanced functionality delivered by modern digital systems coupled with the resilience and costs effectiveness of an analogue solution. To enhance the delivered functionality a powerful, vehicle-based computer was required, and the best product was from Aplicom's range of professional vehicle computers.

Not only were Securicor aware of the open platform benefits and easy programmability of Aplicom vehicle computers, but the new Aplicom C-Series was able to offer greater advantages in terms of the amount and type of data to be handled, voltage compatibility, ease of installation, and interface connections.

Increased productivity

For additional flexibility each of the nearly 100 vehicles in Dundee's 'Direct Labour Organisation' (DLO) fleet is to be fitted with a cradle, hardwired to the Aplicom C-Series vehicle computer that will hold a Palm PDA. This allows the driver/tradesman to carry and operate the Palm as an electronic notepad, and automatically communicate data-based information simply by placing it back in the cradle.

"We are not a profit and loss organisation, but it is clear that by saving time and money we can make the available budget go a lot further to the benefit of our residents," says the Council's Support Services Manager John Martin. "We had the choice of replacing the obsolete PMR voice system with another voice-based system that would become obsolete in a short time, or looking a little further into the future."

In Dundee the housing stock of some 20,000 council-owned homes creates about 100,000 repairs each year. Each repair could take three or four visits to assess and order parts and materials, and a vast amount of paperwork have to be processed before work could actually start. Cutting bureaucracy and form-filling was a priority to reduce costs and make maximum use of the trades people's skills.

Computer power handles all data

Securicor introduced GPS-based vehicle tracking, using the built-in connection on Aplicom's C-Series vehicle computer. However the powerful computer, which is discreetly hidden in each vehicle and operates without any driver involvement, is capable of handling much more than tracking.

The head office application software, which has been specially developed by Securicor and includes their own award-winning, highly detailed mapping system, enables data to be sent to the PDA using the council's own digital trunk system operated by Securicor. This can include detailed information on job number, name of resident and/or address, specifics of the tasks, and, if the resident is not in or the house unoccupied, where the key can be obtained. All this time and administration saving data is transmitted direct to the tradesman, so he not only has a list of the day's tasks available at the start, but this schedule can be changed on line to handle emergencies.

"The Aplicom C-Series is the communication server within the vehicle," says George McLean of Securicor. "It will handle much more data than it receives at the moment, but that is one of its major benefits. Vehicle telematics technology is advancing all the time and a visionary local authority such as Dundee recognises the future potential."

Phased introduction of benefits

Some elements of local authorities are not as advanced as others and the Securicor/Aplicom system is having a phased introduction in Dundee to ensure that all the trades people – plumbers, joiners, bricklayers, glaziers, electricians and others – fully understand the benefits and use the system. At the same time this allows the head office system to demonstrate its user-friendliness.

Aplicom computers have been installed in all the vehicles ready for use. The first stage is the gradual introduction of the voice & data communications system based on the MPT1327 trunk. GPS offers the manager the data on the best vehicle and tradesman – matching availability with skills and materials – who can then send the right person with the right skills, equipment and materials, and significantly reduce the need for repeat visits.

Securicor have no illusions about the future of the system. "The Aplicom vehicle computer can handle a vast amount of data, either storing it or directly transmitting the office-based computer system. In the future it will be possible to collect data from the vehicle's CANbus for advanced fleet management and we can also add driver and load security systems. Aplicom was our first choice and with the introduction of the Aplicom C-Series vehicle computer it will continue to be our preference," George McLean adds.