



Wireless CCTV Infrastructure: London Borough of Hackney

Requirement

The need to run CCTV images from a number of high rise buildings and relay these back to a central monitoring facility with no or minimal civil engineering lead to a decision to deploy wireless technology.

The Solution

The decision to use Wavesight WaveMAX technology was made principally on the basis of the Wavesight products ability to handle high data rates of previously compressed video packets. The complete system was installed by the DSSL Group - Basildon, Essex based specialists in closed circuit television, access control and integrated systems.

Central Accommodation Monitoring

Hackney council have invested in a large number of CCTV cameras that monitor all aspects of the borough. There are many high rise accommodation buildings which have a full time concierge employed, usually in the accommodation entrance hall.

The concierge is responsible for all aspects of security for that building and requires all visitors to be identified for the protection of residents.

A central monitoring facility is also in place, enabling a complete area view of daily life to be monitored and recorded.

Accelerated data rate up to 2km

The normal data rate for IEEE 802.11 compressed data is in the region of 6Mbps. This is part of the 802.11 data handling mechanism.

WaveMAX has accelerators built into its software specifically for handling compressed data and in a direct comparison will handle up to 21Mbps; A class leading increase of raw throughput capability for the purposes of analogue CCTV transmission! If the system is deployed in Turbo mode, which bonds two sub-channels together, this can be further increased to 42Mbps. At this data rate, an operating range of up to 2km can be achieved. This specification and capability is inherent within the Hackney project requirement.

Multiple cameras on a single link

On some buildings there are as many as ten cameras operating over a single link. Although the need for high resolution images results in a high bandwidth requirement, the Borough of Hackney has been able to achieve its goal with WaveMAX.

Designed with expansion in mind

Considerable expansion of the system is planned, involving the addition of internal access point Hot-Spots linked to the existing WaveMAX backbone. This will enable council employees to remain on site and accomplish a range of tasks without the need to return to their central office or depot.

Wi-Fi handheld PCs will be deployed with special software enabling on-screen access to maintenance records and job tasks. The handheld PCs will connect to the access points for real time connectivity.