



## Dedicated Micros has Right Station Solution for Southern

- Vertical Market: Transportation
- Country: UK
- End User: Southern Rail

### The Challenge

CCTV specialist Dedicated Micros – part of AD Group – has supplied rail operator Southern with the very latest version of its NetVu Connected Digital Sprite 2 DVR (Digital Video Recorder) and its powerful NetVu ObserVer video management software to form the lynchpin of an ambitious networked CCTV solution, monitored from a Control Room in Hove, East Sussex, England.

The ongoing project is designed to deliver enhanced station security and safety for passengers on the train operator's South West coast line, stretching from Bognor Regis to Brighton.

### The Solution

The roll out of the innovative project to upgrade Southern's Outer Area CCTV capabilities began in May 2005 and to date has involved the installation of 40 DS2s, with many more in the pipeline. The new state-of-the-art solution supports live monitoring and the remote management of recorded images at a central location, whilst simultaneously allowing station managers and the British Transport Police (BTP) to utilise the DS2 DVRs locally at the station and to take evidence away vital on CD/DVD.

Said Tim Biddulph, a member of the Strategic Business Development Team at Dedicated Micros, who worked closely with Southern on the project: "This extremely capable and cost effective solution called for between one and three DS2s to be installed at each station – depending on the station size. Crucially, Southern's existing IT infrastructure was utilized, so there was no need to lay expensive additional fibre

In operation, high detail images are stored locally to each station on the DS2s and then, through DM's unique transcoding capability, optimised images are viewed on demand, over ADSL and WAN (Wide Area Network) at an efficient frame rate for live monitoring and also later review at Southern's Hove Control Room.

"The DS2s Video Motion Detection (VMD) helps to narrow down the search for specific events e.g. if a van is broken into in a station car park. At the Control Room in Hove, operators are now able to apply our user-friendly NetVu ObserVer GUI (Graphic User Interface) at four viewing stations to view images – which are also displayed on large 42" plasma screens – and manage live video and play back. In addition, NetVu ObserVer's embedded map facility helps operators to readily manage incidents through site plans for each station and they can even use the public address system to communicate with people at the station and warn offenders that they are being monitored."

Southern was keen to move away from the limitations of its previous CCTV solution according to Mike Blaquiere, Senior Project Manager at Southern Railways: "The impetus for change was that the control system we were using to manage our CCTV was simply not delivering what was needed to actually manage the stations the way we wanted to.

"Making sure passengers feel safe at our stations is an important element of our franchise commitments. With the DS2s from Dedicated Micros we can achieve much more, for example the frame rate that we are getting through our network which comprises a basic 2MBit link is far greater than before. Operators can read situations better - the reality is that they need to see at least 70% of what is going on to make informed decisions. The incidents of interest to us tend to be fast moving e.g. people running or fighting. Before it was very much time lapse playback - one minute the person was there and then they were gone - when you are not picking up the detail you really can't tell what is going on. Now we are able to see more frames of a specific event and we haven't had to change the transmission link."

The project has effectively enabled Southern to group a number of stations together – 20 to date – and has had a valuable impact in terms of the overall atmosphere at stations.

Said Mike: "We have found that CCTV has really changed people's behaviour, once they know monitoring is there, and, significantly, that there are certain things now they are simply not going to get away. Added to this is the interactive element which comes through our Customer Information (CI) system allowing operators at the Control Room to intervene over the public address system and if necessary to single out specific offenders e.g. 'you in the red jumper'."

The Control Room at Hove is situated in a listed building adjacent to the Railway Station which had become derelict but which Southern was able to bring back into use. A refurbishment that was so successful it was accorded the prestigious Railway Heritage Trust Conservation Award.

As well as the Control Room for Southern's Outer Area CCTV – outside the M25 – situated on the main floor, the project features a Data Profiling Room as a private area where images can be saved onto CD and supplied as part of profile packages to the British Transport Police so they have everything they need to deal with offenders.

Added Mike: "To date the new project has proved to be extremely successful. For the future we will continue to roll out the NetVu Connected DS2s across the rail network and in addition are working with Dedicated Micros to add even more intelligent video analysis functions such as a 'left object' capability and recent trials have proved to be very encouraging.

"The upshot is that you could have 1000 cameras coming back to the Control Centre and with the best will in the world you can't have a football field full of operators. In reality 98% of all CCTV is not of interest so we want to concentrate on the 2% where something is actually happening. We are already someway along in this process and would hope eventually to have even more footage filtered through software to rapidly alert operators regarding specific events e.g. if someone is lying on a platform." new".

Case Study