



CASE STUDY

# NVT Hybrid Video secures Hanham town centre

**The town centre of Hanham, Bristol in the local authority area of South Gloucestershire, combines a busy high street lined with a unique mix of retail outlets and historical landmarks, such as one of the oldest public houses in Britain. As more and more towns throughout the UK enlist the benefits of effective CCTV system deployment, Hanham has joined the ranks, recently deploying a comprehensive network of public surveillance cameras, connected using Network Video Technologies' (NVT) Unshielded Twisted Pair (UTP) Hybrid Video transmission technology.**

Initiated in early 2008, the project outline from the council included the installation of a network of PTZ cameras throughout the town, concentrated along the main high street, to cover the shops and roadway during the day, and night time leisure spots during the evening. Rhodri Briggs, CCTV technician for South Gloucestershire Council explains: "Our aim was to secure the best performing and best value system over the long-term. To this end, we approached Derek Maltby, Director of consultants Global MSC Security, for help to obtain independent guidance as to the ultimate specification for the installation.

## Fibre like quality

Derek Maltby continues: “Hanham already had a multi-use duct installed by the forward thinking council whilst they were upgrading the footpaths in the area. This ran along the High Street and past the library- where the CCTV control and recording equipment was planned to be located. Initially, the council had intended to connect the new CCTV cameras to a new fibre optic cabling system. However, this proved to be prohibitively expensive, and the cost threatened to compromise ideal camera locations and even the installation itself. We needed a lower cost video transmission solution that would provide a similar image quality to fibre, but at a much reduced cost. To achieve this, we recommended the use of NVT’s UTP Hybrid Video technology, to connect each camera in the system.”

Installers Select Electrics hadn’t used UTP transmission before, but with technical guidance from NVT they were able to fully realise the multiple benefits of NVT’s UTP Hybrid Video solution. Paul Roberts, Select Electrics’ Senior CCTV and Datacomms Engineer explains: “Initially, I was sceptical about the quality of UTP transmission, having only seen the performance of competitor balun products. However, a comprehensive onsite demonstration of NVT’s products instantly convinced me that this was the way forward for the Hanham installation. It clearly demonstrated the NVT technology to be on a different level in both image quality and overall product performance, and especially when compared to other balun-based transmission products we had seen previously.”

Paul’s confidence in the NVT product was repaid with a trouble-free 6-week installation. High quality-video signals from the Hanham camera network are transmitted over Cat5e UTP cable via an NVT NV-214A-M Video Transceiver, located in the cabinet at the base of each camera column, to a centrally located NVT NV-3262 32-channel Active Receiver Hub, located in a street-side cabinet. From here, the camera video signals are encoded onto the fibre network and transmitted back to the Hanham library, where the images are controlled and recorded.

The use of NVT UTP in this truly Hybrid Video transmission application provides fibre-like image quality but at a fraction of the amount an ‘end-to-end’, totally fibre system would have cost - whilst still taking advantage of the existing council owned fibre optic ring. The inherent interference rejection capabilities built-in to NVT products also means that the Cat5e UTP cable used for the video transmission runs can coexist in the under-street ducting, alongside other council services such as power for street appliances. Derek Maltby continues: “It is also testament to the NVT product and the quality of the installation that we haven’t needed one single piece of maintenance or adjustment, in the system’s twelve months of operation, yielding truly ‘fit and forget’ functionality.

## Benchmark solution

Now South Gloucestershire Council can monitor Hanham’s public space 24 hours a day, monitoring the busy shopping and residential areas, as well as traffic movements throughout the day. During the evening periods, focus changes to the high street with its many traditional pubs offering varied late night leisure activities.

CCTV is seen as a keystone of the council’s effort to stop anti-social behaviour. Councillor Heather Goddard explains: “We are delighted with the performance of the high-quality CCTV system in Hanham. This is one of many that will be implemented across South Gloucestershire as a result of significant financial investment from South Gloucestershire Council. It has proved to be a powerful and effective tool in counteracting criminal and anti-social behaviour, whilst providing reassurance and enhancing the safety and security of the local community.”



Rhodri Briggs adds: "Since the system went live, South Gloucestershire Council and Avon and Somerset Constabulary have worked in partnership to provide members of the public with a CCTV system that makes them feel safe. The system is a benchmark that we want to achieve in all areas of South Gloucestershire where CCTV is employed."

The success of the Hanham system has prompted a rolling program of CCTV installations across the region, led by 'Safer South Gloucestershire'. The expansions will see many towns across the county, similar in size to Hanham, equipped with a comparable system.

Ray Murphy, Director of installers Select Electrics, concludes: "Using NVT UTP Hybrid Video transmission technology in Hanham has also provided an easily expandable system, should additional camera locations be needed in the future. This can be achieved by simply connecting a camera to the multiple 'spare' UTP pairs included in the cable network. After this very successful project, NVT UTP's inherent expandability, interference protection and superior quality of image transmission means that the technology will become our natural choice for any such future projects. After this installation, we won't hesitate to use NVT Hybrid Video solutions elsewhere."



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