



Treviglio Hospital Trust: Taking care of compliance



"This innovative video surveillance alarm system, which meets the highest modern quality standards, will make it possible to monitor the safety of relevant infrastructure in real time."

Dr Cesare Ercole,
Director-General
Treviglio Hospital Trust

Background – ensuring that hospitals are safe

The Treviglio Hospital Trust was formed in January 1998 and comprises four hospitals in Lombardy, Italy: the Treviglio-Caravaggio hospital in Treviglio, the 'S.S. Trinità' hospital in Romano, the 'F.M. Passi' hospital in Calcinate and the 'Ospedale Civile' in San Giovanni Bianco (BG). In addition to these hospitals, all of which have an inpatient department, there are seven outpatient units that provide health care in the province of Bergamo and also in the neighbouring provinces of Milan, Cremona and Brescia. The Treviglio Hospital Trust also includes two psychiatric units and five neuro-psychiatric units for children, which have approximately 900 beds

The Challenge – balancing security and compliance

The trust was faced with the challenge of how to guarantee the safety of its patients, dependants and visitors, and protect its hospitals against theft and vandalism, whilst also complying with new Italian privacy regulations that strictly control the use of video images of sick people.

The latest regulations stipulate that images of ill people in hospitals and care centres must not be broadcast and, where it is necessary to monitor patients constantly (for example, during resuscitation), locally connected monitors must not be accessible to the public. They also dictate there must be signs indicating the presence of video cameras in all areas covered by closed circuit television, and they define the maximum period of time for keeping recordings.

The solution – IP Surveillance is the remedy

The D-Link IP Surveillance solution adopted by the Lombardy Hospital Trust comprises more than 130 IP video cameras for internal and external use (DCS-3110) and antiintrusion systems, which are managed entirely by a single control post; more than 40 PoE (Power over Ethernet) Switches, 24 ports + 2 Gigabit uplink ports (DES-1228P) that supply and centralise the management of the video cameras; and approximately 40 Network Video Recorders (NVR) (DNS-726-4) used to archive images and videos temporarily.

D-Link DES-1228P Smart Switches are integrated into the hospital's IP video surveillance system. In addition to managing network access, increasing safety and providing Ethernet connectivity, they supply D-Link DCS-3110 video cameras using PoE (Power over Ethernet) technology. The IEEE 802.3af Power over Ethernet standard permits the supply of connected devices via a network cable, thereby reducing the network cable and the number of power sockets.

D-Link DNS-726-4 NVRs (Network Video Recorders) are installed into the hospital's video surveillance system and replace the corresponding DVR (Digital Video Recorder) to enable images and films to be recorded using cameras in continuous mode, either on a scheduled or by event basis using Motion Detection.

The capacity of D-Link DNS-726-4 hard disks provides maximum flexibility for the duration of video recording, with the possibility of more than 30 days continuous recording. Using a Gigabit Ethernet port, the NVR enables inter-connection with the LAN network, providing authorised users with remote access and an automatic connection to the monitor control room. Access to the NVR is password-protected and it is possible to create different access profiles for users. The layout of remote NVR sites enables local video surveillance monitoring which reduces the impact on the network's geographical support structure. This also creates more remotely connected control points through the existing network, which are linked to a centralised control point.









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The Benefit – looking out for patients and regulation

The IP networked tele-cameras use 'progressive scanning' technology, which ensures a clear capture, even of moving objects. They use mega-pixel resolution which guarantees more detailed images and greater coverage; they provide images/film in digital format which significantly reduces the amount of space required for archiving old video tapes and also means that images can be viewed remotely, even via a mobile phone or 3G device. An anti-intrusion system applied to hospital corridors integrates effortlessly into the IP video surveillance system, and fits easily into digital exit points with a direct connection

to the video cameras. As a result and thanks to its extreme flexibility and modularity, this IP Surveillance solution enabled easy implementation and made it possible to get the maximum potential from the existing infrastructures, while minimising management, maintenance and integration costs.

The new solution comprises ten structures spread throughout the sites and a 'control room', which is linked to the Management Centre. It enables managers to maintain compliance with privacy regulations by restricting access to monitored areas, monitoring corridors, setting user rights for accessing files and recordings, screening external connections and enabling the safe recording of data.





