



CDS
Integrated
Security Systems



South Oxfordshire & Vale of White Horse

CCTV System Condition Report June 2019





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Prepared for:

South Oxfordshire and Vale of White Horse District Councils

Our Ref:

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**RE: REPORT ON PUBLIC ACCESS SPACE CCTV SYSTEMS INSTALLED AT
SOUTH OXFORDSHIRE AND VALE OF WHITE HORSE DISTRICT COUNCILS**

Introduction

Further to our recent meetings and subsequent maintenance inspection visits regarding the condition and performance of the town centre CCTV System installed throughout the South and Vale Council Districts, CDS are pleased to offer the following report of our findings on the system.

The Maintenance Inspections were carried out by directly employed CDS Technicians Matthew Fagan, Mark Sargeant and Michael (Billy) Westover, all of whom have more than 10 years experience in such systems. The most recent maintenance inspection is the ninth since CDS have undertaken the maintenance contract works on this system

General

The system was found to be generally in good working condition with a number of minor issues (as would be expected from a fully operation town centre CCTV System), with no major faults or issues identified.

The majority of the cameras were found to be a number of years old, some are possibly in excess of 15 years old, many are between 10 - 12 years old. The age of the cameras should now be considered a factor in their maintenance as spare parts are become less available – this has become the case with some cameras. The 10 obsolete Conway PTZ Cameras in Didcot were replaced in October 2014 with new 360Vision SpeedDome units and the majority of the Henley cameras were replaced in 2016. Proposals have been submitted regarding the replacement of the old obsolete PTZ Dome Cameras throughout Wallingford, with an option for HD IP Cameras.

The Control, Recording and Monitoring equipment is the Synectics Analogue Matrix, Vigilant Technology Digital Video Recording System and Vigilant Technology Monitor Wall Control Solution. Synectics released an obsolescence notice for the Analogue Matrix in 2017 and Vigilant technologies have fully withdrawn from the UK market place, with ongoing support become increasingly difficult to access.

These systems are in good working order with no current issues identified, however with the support from Microsoft ceasing for Windows 7 (and earlier versions) early in 2020, consideration must be given to a full control room upgrade. Having spoken with Vigilant Technology it was identified that the versions of Vigilant Software installed across these systems is now approx 6 years out of date. Vigilant have stated that their software is no longer supported.



If budget were available, we would strongly recommend the upgrade of the CCTV Control and Recording equipment be upgraded as a matter of urgency.

We are aware that there have been discussions ongoing for a number of years regarding implementing a common CCTV Control and Recording System across the CCTV systems installed throughout the Thames Valley Police areas which will provide opportunities for shared working / monitoring of other areas etc. the Royal Borough of Windsor and Maidenhead (RBWM) have recently installed a new Genetec CCTV Control and Recording System and we are aware that other local authorities within the TVO area are considering implementing the same solution for their CCTV control and recording systems.

Cameras

There are still a number of **Conway Domes** installed throughout the scheme – Conway (as a company) went into receivership early 2013 and ceased trading and so it is no longer possible to get these units repaired when they fail. We have a small number of these units as service replacements which we may be able to use to keep the system operational but we strongly recommend consideration be given to upgrading these units to a newer unit, especially when considering the age of the existing Conway Dome Cameras – they should be considered to be ‘end-of-life’ and have been a constant source of failure over the past three-five years. It may be worth considering replacing a small number of Mercer Domes in order to make some spares available for when others fail – We suggest replacing the 10 cameras in Didcot (fewest amount of Conway cameras) with new cameras (possibly MIC1-550 cameras or similar) to make a spares provision as providing improved image quality.

The Conway Dome Cameras are;-

Wallingford	x 15
Thame	x 16

If budget were available for improvements to the CCTV Scheme, we would strongly recommend consideration be given to replacing the Conway Dome Cameras as a matter of urgency

There are a number of Bosch (Forward Vision) ‘Metal Mickey’ type cameras (MIC1-300 and MIC1-400 models) installed throughout Abingdon and Wantage. The MIC1-300 models are likely to approaching 20 years old, whilst the MIC1-400 units appear to be approx 6 - 8 years old. These units are good operational condition, but Bosch have (Sept 2011) announced the end of support for the MIC1-300 and 400 units.

If budget were available for improvements to the CCTV Scheme, we recommend consideration be given to replacing the MIC1-300 Dome Cameras as a lower priority than

the Conway Dome Camera (we have experienced very few difficulties in obtaining repairs on these units so far).

There are a small number of Platform (shoe box) style cameras (4), consisting of mainly Shawley Pan/tilt units, High Quality JVC 1/2" CCD Cameras and Pentax 15~1 AI Zoom Lenses – these units (whilst a few years old) are perfectly serviceable – they are made up of several component parts, if any component fails, it will normally be straight forward to replace it with a new equivalent component. These units are likely to be perfectly serviceable for another 2-3 years.

As CCTV Technology is progressing, there have been large steps forward in camera technology with High Definition (HD) cameras now being 'mainstream' as production of replacement analogue cameras is reducing drastically – there are very few manufacturers who still manufacture replacement analogue cameras with production of analogue equipment likely to cease within the next 2-3 years, with this in mind, consideration should be given to replacing not only the analogue CCTV cameras, but also their transmission networks (current transmission networks are designed for analogue CCTV transmission) in order to be able to accommodate IP technology cameras in the future (HD, 4K etc).

CCTV Transmission

Images from the CCTV Cameras are transmitted back to the CCTV Control Room at the Abingdon Police Station mostly over BT Fibre Optic Circuits, with some local 'in-town' cabling wholes owned by the Vale and South Councils. This arrangement works well, with no known issues, however this transmission network is limited to analogue CCTV Technologies and can not support the inevitable move to IP (Internet Protocol) cameras (HD / 4K etc). also, many local authorities are looking at an alternative the BT fibre optic circuits in a bid to save costs going forward.

Control Room Equipment

Within the CCTV Control Room, the system is monitored, controlled and recoded using the following equipment;-

Synectics Analogue Matrix x2,

Vigilant RAID 5 Storage devices x 4, (New 32 channel unit due to be installed)

Vigilant 7100 Series Encoders x (96 channels),

Vigilant Review Station x 2

Vigilant NetView Monitor Wall Controller

Monitor Wall consisting of 2 x 40" JVC TFT Monitors and 2 x LG 40" TFT Monitors

Operators Spot Monitor – 4 x 17" AW monitors,

System keyboards – 2 x Synectics Joystick Command Keyboards,

Vigilant as a company have withdrawn from the UK and support is diminishing with support likely to cease within the next 9 – 12 months.

Therefore, with this in mind it would be wise to consider an alternative control and recording system for the control room in the near future. A new control and recording system would allow new technology HD / 4K / Panoramic cameras to be utilised across the system in the future. Some local authorities within the TV P area are currently either using Genetec as a new expandable CCTV Control and recording system or considering implementing it as a replacement to their old analogue systems.

The existing system is currently stable and operating to a satisfactory level

Recommendations

As stated above, the system is in good working order and generally good condition, however we can make some suggestions that may be considered to improve the system in the future;-

- 1) Consider the future migration path of the existing analogue system to new IP based equipment – the Vigilant Recording Equipment installed in the control room is rapidly approaching ‘end-of-life’ - consideration could be given during the next round of camera upgrades to move towards the newer, higher quality IP HD Cameras, but investment will be required for the network infrastructure required to manage the newer technology cameras.
- 2) Consider upgrading the current control and recording system to one which can accommodate the existing analogue cameras as well as the newer technology HD CCTV Cameras
- 3) Consider replacement of at least a further proportion of the Conway Dome cameras – possibly with IP HD Cameras.
- 4) Consider replacement of the older MIC1-300 Bosch (Metal Mickey) cameras due to age and obsolescence.
- 5) The Synectic matrix equipment is now in excess of 15 years old and no longer formally supported by Synectics and Vigilant Technology have pulled out of the UK and so consideration should be given to the sourcing a new Graphic User Interface Control System and recording system, to extending the system functionality and provide ‘future proofing’ of the system.