CCTV, Intruder Alarm & Alarm Monitoring

Specification Guidance Document
CCTV

UCL has an extensive Pelco Endura CCTV system comprising of in excess of 500 cameras, a number of digital recorders, encoders, decoders and viewing monitors distributed in a large number of buildings and controlled from our Security Control Room in Foster Court, which is in operation 24hrs per day and 365 days per year.

This system runs over a distributed private VLAN on our IT network, with live and standby system managers. Equipment in the buildings then communicates with the system manager’s via this VLAN.

The system has the ability to be controlled from a number of workstations which can be distributed around the main UCL campus and satellite premises to display images on individual monitors to assist security personnel in their day to day duties.

It is the security department’s intention for all CCTV to be relayed to, and monitored from, the Security Control Room in Foster Court. This system must be used to control all of our CCTV equipment.

Principles of use and Processes

The Pelco CCTV system is used primarily to provide coverage in the following applications:

Perimeter entrance and fire exit doors to primarily achieve facial recognition.

Circulation space to enable tracking of suspects / suspicious behaviour

Reception desks for the safety of staff

Areas of specific sensitivity or high value.

General view of high movement areas to assist with movement tracking.

Pedestrian and vehicle entrances

Some high security research areas.

We do not normally use the system for individual rooms, corridors, plant rooms, lecture theatres or laboratories.

Contact should be made at an early stage to discuss the project requirements and consult the Security department with regard to the use and design of the system. This should form part of the wider discussion that must take place with the Security department with regards to more general concerns related to all project work.

UCL Estates’ Security department reserves the right to make final decisions about system deployment and specification of installations.
All installation works should be completed by our nominated security systems service provider, Reach Active Ltd. (see Contacts Details section). Usually these works would be instructed by the main contractor, or electrical sub-contractor. Small works may be ordered directly by UCL, please contact the Security Control Room Manager if clarification is required (see Contacts Details section).

**Technical Specification and System Design**

The UCL Security Control Room Manager must be consulted with regard to the system architecture design, equipment locations etc., to specify how the new controls will integrate with the existing system, and to allow for future expansion.

The following specification must be observed in collaboration with UCL Security department:

Each camera must provide the view as required by the Security department and be of a quality relevant to the situation.

Adequate internal lighting must be provided and placed so as not to saturate the camera lens.

External cameras should be of the day/night type and utilising infra-red LED.

Cameras should be placed to enable an obstruction-free view and for ease of maintenance.

Camera types to be used, (please see equipment list appendix 1 for preferred cameras)

Network Storage Managers (NSM) when required must be of the type and storage capacity as specified within the equipment list section. NSM are to be situated in areas agreed with the Control Room Manager and UCL Networks group to allow system memory pooling as a backup facility.

NSM and network switches are to be backed up by a suitable UPS.

Outstation decoders where possible, should be located securely and easily accessible for maintenance purposes.

A 13A un-switched Fused Connection Unit, containment and network data point configured for the CCTV VLAN must be provided in the locations requested by the Security department’s nominated CCTV service provider. Network data points should be of the secure variety to prevent unauthorised disconnection of security equipment. CCTV signage is to be provided and placed at relevant entrance points to buildings, (please see equipment list section for wording details)

All cable should, where possible, be concealed. Where surface containment is required, this should be of PVC tube construction.
**Mains Power**

All mains power supplies for system devices and local power supplies must be on dedicated mains circuits and only shared with other elements of the system.

**Equipment Locations**

Power supplies, decoders for outstations, and all other field ancillary equipment should be located away from general view but remain easily accessible for maintenance purposes.

**Commissioning**

All aspects of the CCTV installation must be fully tested, demonstrated, recorded and signed-off as part of the commissioning process in accordance with the requirements stated above.

Site plans and schematics must be updated to show all relevant changes and additions to the system.

Checks must be made to ensure all software setup, naming conventions and event responses are programmed in to the system manager in accordance with UCL’s programming standards as required by the control room manager. Datasheets on all equipment can be supplied on request.
The Security Department is currently upgrading its alarm monitoring system to enable all alarms to be monitored by the Gallagher Access Control System.

The system has the ability to be controlled from a number of workstations which can be distributed around UCL and programmed with specific user rights.

It is the security department’s intention for all security alarms to be relayed to and responded to from the Security Control Room in Foster Court.

The security department installs security systems to a UCL standard relevant to the risk and any specific insurance requirement, areas of extremely high risk or value can be fitted with an NSI graded and certified system if deemed necessary, clarification should be sought from the control room manager if this is a requirement.

The Gallagher system must be used for all Intruder Alarm to enable alarm monitoring through our network.

If you require more information on this system or alarms installing, please contact Mike Dawe on ext 37735.

Principles of Use and Processes

The Gallagher System will be used primarily to provide alarm response in the following applications:

Full building intruder alarms.

Panic/distress alarms.

Areas of specific sensitivity or high value.

Reporting of building Fire alarms

Some high security research areas.

We do not normally use the system for:

Individual rooms, corridors, lift alarms, maintenance or general equipment failure alarms, these should be monitored by the UCL Trend, BMS system or emergency 222 system in the case of lift alarms.

Contact should be made at an early stage to discuss the project requirements and consult the Security Department with regard to the use and design of the system. This should form part of the wider discussion that must take place with Security with regards to more general concerns related to all project work. UCL Estates, Security Department reserves the right to make the final decision about how the system will be deployed, and the specification of installations.

Works should be completed by our nominated security systems service provider (see Contacts Details section). Usually these works would be contracted by the main

<table>
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<th>Author</th>
<th>Paul Hayden – Control Room Manager</th>
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<tbody>
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<td>June 2015</td>
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contractor, or electrical sub-contractor. Small works may be ordered directly by UCL, please contact the Security Control Room Manager if clarification is required (see Contacts Details section).

**Technical Specification and System Design**

The UCL Security Control Room Manager must be consulted with regard to the system architecture design, equipment locations etc., to specify how the new controls will integrate with the existing system, and to allow for future expansion.

The following specification must be observed in collaboration with the security department:

Each system must provide the amount of coverage as specified by the security department and its nominated service provider

UCL standard systems will be fitted unless there is a specific insurance requirement for an NSI certified system

Alarm systems to be used, (please see equipment list appendix 2 for systems to be used)

Panic / distress alarms will be of the double push type and adequate signs will be displayed to indicate their location and use.

All fire exit doors will be installed as a 24hr circuit

A 13amp un-switched electrical spur, containment and network data point configured for the Alarm system VLAN must be provided in the locations requested by the security department’s nominated Alarm System service provider.

Network data points should be of the secure variety to prevent unauthorised disconnection of security equipment.

Door alarmed signage is to be provided and placed according to the requirement of the security department

All cable works must be contained within tube work and not plastic mini trunking.

**Mains Power**

All mains power supplies for system devices and local power supplies must be on dedicated mains circuits and only shared with other elements of the system.

**Equipment Locations**

Power supplies & control units will be located away from general view within the protected area but remain easily accessible for maintenance purposes.

**Commissioning**

All aspects of the alarm system installation must be fully tested, demonstrated, recorded and signed-off as part of the commissioning process in accordance with the requirements stated above.

Site plans and schematics must be updated to show all relevant changes and additions to the system.

Checks must be made to ensure all software setup, naming conventions and event responses are programmed in to the system in accordance with UCL’s programming standards as required by the control room manager.
Data sheets on all equipment can be supplied on request.
Contact Details

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Gallagher Access Control And Alarm Systems

(Contact Mike Dawe For Further Information)

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020 7679 7826
rgibson@reachactive.com (Richard Gibson - UCL Contract Manager)
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Appendix 1 – CCTV - Equipment List

<table>
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<tr>
<th>PELCO Endura CCTV – System Components</th>
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<tr>
<td><strong>Recording &amp; Control Equipment</strong></td>
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| Author | Paul Hayden – Control Room Manager |
| Date   | June 2015 |
| Revision | Version 2 |
Pelco Endura System Manager 2.x                  SM5200-03-UK
24Tb Pelco Network Storage Manager (NSM)         NSM5200-24-UK

Cameras

Contact Paul Hayden For further Information.

Note: Specification of lenses and mounting solutions should be in consultation with UCL Security Control Room Manager and approved supplier.


Appendix 2 – Intruder Alarm System - Equipment List

Contact Mike Dawe For Further Information.