

Facilities Ancillary Services Best Practice

Audio/Visual Security Systems Operational/Implementation Guidelines

INTRODUCTION (Purpose and Importance)

This document should be considered a reference document in support of the existing Vancouver Island University Policy 44.17 and Procedure 44.17.001. It is intended to provide a set of scalable and sustainable guidelines for the implementation and maintenance of audio and video security (AVS) systems for all facilities and grounds within Vancouver Island University. It is expected that upgrades and maintenance will be completed within the annual Facilities budget process. Faculties and Administrative areas will be directly responsible only for costs relating to “fast-tracking” installation or enhancement to AVS system beyond the guidelines presented in this document.

AVS systems at VIU are intended to provide the following functional outcomes:

Investigative: The ability for authorized personnel to list to audio recordings and/or view recorded images to conduct an internal investigation or provide sound and/or images to an external agency (police). An investigation occurs after-the-fact and has no impact on preventing the incident. Authorized personnel have the ability to review video and sound files to assist with determining facts relating to security and property management incidents.

Monitor: The ability for authorized personnel to utilize video cameras and audio equipment to monitor a specific event prior to an incident occurring to enable the appropriate response. Generally speaking, VIU does not have the resources or technical capability to monitor cameras other than on an ad hoc basis.

Deterrence: A strategy intended to dissuade an adversary from undertaking an action not yet started. Ensuring that signage is posted and that the public is educated on the presence of AVS systems will provide a level of deterrence.

Protection: AVS systems are used as an aid for improved safety of students, staff and visitors as well as the protection of stakeholders’ assets (equipment, buildings, vehicles, property, etc.).

Identification: AVS cameras are located at higher risk access point locations to enable the identification/recognition of individuals entering and in some cases leaving those areas.

1. Personal Information

These guidelines shall not contravene VIU AVS Policy 44.17, AVS Procedure 44.17.001 nor the Freedom of Information and Protection of Privacy Act.

1.1 Collection of Information

All AVS system cameras are to be recorded and the recorded images retained for thirty-one (31) days.

1.2 Authority to Retain Images

Any person with authority to retain recorded images as identified in Procedure XXX.001, must complete a *Retention And/Or Release of AVS Recordings* form for each incident over 31 days and forward these documents to Facility Services. This will maintain documentation of

all AVS recordings including the date of recording, responsible person for the recording, and final disposition of recording.

- 1.3 Any AVS recorded images and/or sounds taken from the AVS system must be retained on a VIU approved media storage device and must contain applicable encryption and password security protection.
- 1.4 Metadata (text information) should be recorded alongside the video images. All AVS systems should include the time and date information, firstly to add evidential weight to the pictures and sounds, and secondly to allow the user to search through the recordings and retrieve the relevant material efficiently.
- 1.5 All AVS systems shall identify the camera and or microphone locations using the same or similar terminology to assist authorized personnel when searching for data. For consistency, standard building or site identified labels should be adopted. For example:
 - Main Entrance B 305
 - Parking Lot C
 - Office Reception R272
 - Hallway (5th floor) B180
 - North perimeter
 - Walkway Student Residence west
- 1.6 Any AVS camera that captures private property in its view (ability to use camera to view into a private residence etc.) that would contravene the Freedom of Information and Protection of Privacy Act must be programmed to ensure that the applicable area is shaded from view.

2. New Development/Construction

This document is to be resourced as a basis for the design of an AVS system for any new VIU development or significant construction renovation. Dependent on the environment, these guidelines may be enhanced to meet the specific requirements of the asset.

3. AVS Equipment





AVS technology is steadily developing and its capabilities improving. The objective of these guidelines is not to catalogue specific equipment that should be purchased, but to identify the outcome to be achieved with the equipment.

- 3.1 To ensure that future expansion of AVS systems are compatible to existing systems and support a corporate growth model, all procurement of AVS equipment must be approved through the Executive Director of Facilities and Ancillary Services' office.
- 3.2 Where possible, the AVS system should have an Uninterrupted Power Supply (UPS) backup source that will enable system function for a minimum of 30 minutes. Where possible, the AVS system should be fed from an emergency generator.

- 3.3 It is recommended that all AVS systems have the capability to record at no less than 25 frames per second.
- 3.4 The AVS system equipment located onsite (excluding cameras) must be situated within a secure environment that is only accessible by authorized personnel.
- 3.5 All AVS equipment must be mounted in tamperproof housings for the protection of the equipment or protected through distance.
- 3.6 Only authorized personnel will have the capacity to view the AVS system from their workstation and in some cases from an offsite location, a portable computer or phone.
- 3.7 Only the AVS system administrator, as designated by the Executive Director of Facilities and Ancillary Services, will have the capability to program the AVS software and assign access authorities.
- 3.8 Any inoperable AVS system, or portion thereof, must be reported through the work order system to Facility Services.

4. Needs Assessment

There are four general observation categories that have been defined, which are based on the relative size that a person appears on a monitor. The categories vary in resolution, camera type, lens selection and camera location. The desired category will be dependent on the specific needs assessment of the area (type of activity being observed) and the type of activities in the area.

| | | | |
|---|---|---|---|
|  |  |  |  |
| Monitor 5% | Detect 10% | Recognise 50% | Identify 120% |

The purpose of these categories is to suggest appropriate image sizes to aim towards when specifying a system to meet a particular requirement, rather than to define a minimum standard. It does not necessarily follow that it will be impossible to recognize or identify an individual if the image size is smaller than the 50% or 120% figures suggested. Equally, there is no guarantee that individuals will be identifiable simply because they occupy >120% of the screen. Other factors, such as lighting and angle of view will also have an influence.

Monitor: From this level of detail, an observer should be able to monitor the number, direction and speed of movement of people, providing their presence is known to them; i.e. they do not have to be searched for. Figure occupies at least 5% of the screen height and the scene portrayed is not unduly cluttered.

Detect: After an alert, an observer would be able to search the display screens and ascertain with a high degree of certainty whether or not a person is present. The figure now occupies at least 10% of the available screen height. Detection does not allow for the ability of identification (human or vehicle).

Recognize: Enables an observer to ascertain with a high degree of certainty whether or not an individual observed on a display screen is the same as someone they have seen before. Figure occupies at least 50% of screen height. Used for hallway applications, secondary entry points, and parking lots.

Identify: Picture quality and detail should be sufficient to establish the identity of an individual beyond reasonable doubt. Figure now occupying at least 120% of the screen height. Used at main access points and high risk areas.

The following table provides an overview of the minimum category requirements and camera locations as defined by the needs assessment for each unique area.

| Needs Requirement | Camera Location | Area Type | Category |
|--------------------------|--|-----------|-----------|
| Investigative (Exterior) | Parking Lots ¹ | | Recognize |
| | High Risk Areas ² | | Recognize |
| | Exterior Building Façade ³ | | Recognize |
| | Public walkways | | Recognize |
| | | | |
| Investigative (Interior) | Main Building Access Points ⁴ | | Identify |
| | Main Hallways ⁵ | | Recognize |
| | High Risk Areas | | Identify |
| | Public Cafeteria | | Recognize |
| | Office – Front Desk/Reception | | Identify |
| | Secondary Entrance Points | | Recognize |
| | | | |

5. Signage

Only VIU Facilities approved signs may be permanently posted on VIU property. Signage indicating AVS in use should be posted in all areas and at main vehicular and pedestrian access points in and

¹ Includes parking areas for all vehicles including bicycles
² High Risk Areas are defined through the CPTED assessment as well as by the past history of occurrences
³ Unless specific exemptions are identified, the entire ground level building façade requires camera coverage
⁴ Buildings may have multiple main access points
⁵ Asset for emergency response

onto the property (excluding pedestrian pathways that are isolated). Signs may not be posted in areas where AVS camera coverage is not provided. Signage should state

VIDEO RECORDING IN THIS AREA. This area is being recorded for the purposes of safety and security. The university collects personal information through audio video security systems authorized under the Audio Video Security policy and procedure. Further information may be obtained from the Director of Facilities Services and Campus Development at 250-740-6500.

6. Training

It is the responsibility of the Executive Director of Facilities and Ancillary Services to develop and provide training for all authorized personnel that will access the AVS system. The operating system for the AVS system shall be standardized across all areas.

7. Maintenance

The Facility Services Department is responsible to ensure the ongoing maintenance of all AVS systems inclusive of:

- Cleaning the equipment (in particular cleaning the camera housings)
- Repairing or replacing faulty equipment
- Maintaining camera positions and focus
- Upgrading the system (The expected working life of the equipment should be known, and upgrades planned for.)
- Equipment warranties
- Maintenance Contracts (software, etc.)

8. Lighting

It is a standard requirement, prior to any camera installation, to ensure that the available lighting at the identified camera location will support the camera. All exterior cameras must be able to support both day and night operation.

9. Record Drawings

As each area is brought up to standards, CAD record drawings will be created to record name, location, type, and range of each installed camera.

Please contact the Executive Director of Facilities and Ancillary Services with any questions.

Relevant VIU Policy: 44.17 AVS Systems

Developed by: Alan Cumbers

Date Agreed: February 2016

Date Amended: May 2017 – Form Adjusted

Related Documents:

Retention and/or Release of AVS Recordings Form

(Copy to be forwarded to Office of Executive Director Facilities and
Ancillary Services)

| | | |
|--|--|-----------------------|
| | | Responsibility |
| Date and Time of Incident | | Requestor |
| Incident Description (Attach Incident Report if applicable) | | Requestor |
| Reason for making a copy of a recording and securely delivering to the EDFAS | | Requestor |
| Submitted by | | Requestor |
| Forward to the Office of the Executive Director of Facilities and Ancillary Services | | |
| Person responsible for controlling this copy of recording | | EDFAS |
| Approval to release information for law enforcement purposes | | |
| Justification for release of recording | | |
| Detailed contact information of all who receive a copy | | EDFAS |
| Approval Signature | | EDFAS |
| Final Disposal date of all known recordings | | EDFAS |

Definitions: **EDFAS** - Executive Director, Facilities and Ancillary Services

Requestor – Person recommending the retention of security recordings longer than the 31 days. (usually the VIU assigned investigator)

Audio Video Security System Request Form

(To be completed by Requesting Department)

| | | |
|--|--------------|-----------|
| Date of Application | | |
| Requestor's Name and Job Title | | |
| Type of System requested (Audio, Video, or both) | | |
| Area of Coverage | | |
| Identified Risks that cameras are intended to mitigate | | |
| Recent security/safety Incidents (attach incident reports if applicable) | | |
| Other options considered | | |
| Faculty or Department | | |
| Dean or Senior Administrator | Printed Name | Signature |

Forward to Facilities Services

| | |
|--|--|
| Risk Assessment (to be completed by Facility Services) | |
| Completed by: | |
| Comments: | |
| Date: | |

Forward to AVS Committee

| | |
|---------------------------|--|
| AVS Committee Review Date | |
| Recommendation | |

| | |
|--|--|
| | |
|--|--|

Forward to the Executive Director of Facilities and Ancillary Services

Recommended Date: _____ EDFAS: _____

Forward to the University Secretary

Supported Date: _____ University Secretary: _____