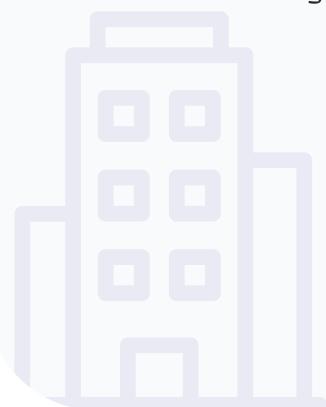


Critical Infrastructure Security Technical Guideline

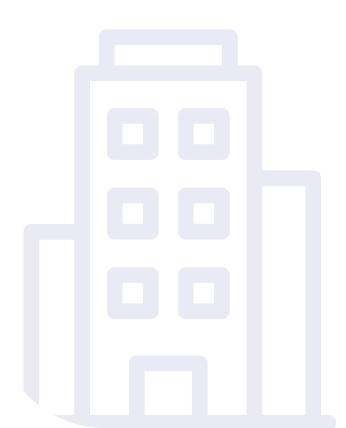
5th Edition



Updates

- Serveillance Cameas Coverage Locations

Update Note: Installment of CCTV in the elevators is not mandatory



Definitions:

- 1. ONVIF: Open Network Video Interface Forum.
- 2. WDR: Wide Dynamic Range.
- 3. IR: Infrared Radiation.
- 4. IP Rating: Ingress Protection Rating.
- 5. Raid: Redundant Array of Inexpensive Disks.
- 6. The private places: they are the places for the privacy of individuals in the facility.
- 7. Dept.: Sharjah Police ESCD.
- 8. Security systems users: Vital facilities that use the security monitoring system.
- 9. Observation Criteria:

A. Identify:

A view through with an unknown person can be identified. The person occupies $120^{\rm o}/{\rm o}$ of monitor size.

B. Recognize:

A view whereby a person can be recognized. The person occupies 50% of monitor size.

C. Monitor:

A view whereby the whole place can be monitored.

First: General Requirements and Specifications of Security Surveillance Systems

1. Surveillance cameras technical specifications and conditions of use:

- A Only fixed cameras shall be used.
- B. IR cameras shall be installed for outdoor surveillance.
- C Cameras with WDR or any other technology should be used in a two part scene with continuous unequal lighting.
- D. Cameras with Auto Iris facility shall be installed in locations with constantly changing lighting.
- E Outdoor cameras shall be suitable with different weather conditions.
- F. Outdoor cameras of a protection rating not lower than IP66 shall be used.
- G. Cameras with zoom in facility shall not be used in private locations without prior approval of concerned authority.
- H It is prohibited to use covert cameras without prior approval of concerned authority.
- I Outdoor cameras with a field of view extending beyond the limits of the facility shall not be installed on either roof or side of the building without prior approval of concerned authority.
- J. A record or a map showing locations of all cameras shall be provided.
- K Indoor and outdoor cameras shall be cleaned on a regular basis to ensure good operation.
- L Cameras with features appropriate for the following locations shall be used:

| No. | Location | Feature |
|-----|---|----------------|
| 1 | Locations with a varying lighting view | BMB - W□R- SOR |
| 2 | Locations where lighting varies according to time | Auto IRIS |
| 3 | Locations with dim or semi dim lighting. | Day and Night |
| 4 | Locations where lighting completely and rapidly changes | AES or BL[|
| S | Locations with no lighting | IR |
| 6 | Poorly - lit locations. | Low Lux |

2. Technical specifications of connections and operational capacity:

- A. Essential and backup power supply of the CCTV surveillance system shall be separate and secured.
- B. All cabling and electrical connections shall not be placed in plain sight and shall be installed in conduits so as not to be tampered with.
- High- quality cables shall be used.
- D. The protection of connections in the interior of the facility must be through plastic tubes and metal pipes specially designed for use in the outdoor environment.

3. Technical specifications of monitors:

- A. A monitor of not less than 21inch size for every recorder (16 cameras) shall be used. A larger monitor shall be used for viewing more than 16 cameras.
- B. Monitors shall be designed for continuous use.
- C. HD monitors shall be used.

4. Other requirements:

- A. User should have a surveillance system maintenance contract with any of the companies approved by concerned authority.
 - Suppliers of digital recorders shall provide both the user and management with a program for viewing and re-viewing recorded materials via intranet and computer.
- B. User shall keep record of recorded images and videos copying process. The record shall contain all required information like time, date, name and signature of the person who replaced the hard disk drive; the person's work place and the reason of copying the recorded materials.
- C. User shall maintain a register for all cleaning and maintenance operations of the surveillance system. In such register, the work done in addition to the person who carried it out as well as date and time should be recorded.
- D. A trained person from the facility shall be responsible for operating the recorder, copying and downloading images and videos when required. This person shall also follow up; ensure the proper functioning of the system and inform the installation or maintenance company of any failure.
- E. An advisory CCTV signage should be erected in the facility showing that CCTV Cameras in Operation.

Second: Requirements and Specifications of Security Surveillance Systems

Surveillance cameras technical specifications and conditions of use:

- 1. IP Cameras only shall be used.
- 2. Cameras shall support ONVIF technology.
- 3. Cameras shall, at least, support dual streaming feature.
- 4. Cameras resolution shall not be lower than 2 mega pixels (1080p).
- 5. Installation of wireless cameras is prohibited.

Third: Technical specifications of recording systems and conditions of use:

- Recording system shall be capable of live display of events at a speed of 25 images per second, and with a resolution of 2 mega pixels for each camera.
- 2. Recording capacity of each camera should not be lower than 15 images per second with a resolution of 2 mega pixels.
- 3. Video storage period should be 60 days at a minimum.
- 4. Recording system shall support all linked cameras, and shall not affect required coverage level of both live video display and video display for recording purpose (It will be determined by Sharjah Police).
- 5. Recording system shall be equipped with a backup power supply of at least 30 minutes.
- 6. There shall be a dedicated intranet for the CCTV surveillance system.

- Storage system shall be Raids at a minimum (For Banks, Many Exchanges, Gold Shops, Goldsmiths).
- B. Recorders Must be kept in dedicated control room or in a rack in secured environment so as not to be tampered with.
- 9. Recording system shall allow copying of images and videos.
- Recording system shall be capable of viewing camera number, date and time
 on both live display and recorded videos.
- 11. Recording system shall support recorded videos search based on camera number, time and date.
- 12. Date and time set on recording system shall be real time and date.
- 13. All cameras shall be labeled and numbered on the recorder as per their respective locations.
- 14. Recording system shall support at least the video compression standard H.264.
- 15. Recording system shall support continuous motion and alarm based recording.
- 16. In case of motion, recording system shall be set to record for l□seconds pre and post recording.
- 17. Recording system shall restart automatically in case of auto-restart or power restoration or any other reason.

Fourth: Surveillance Cameras Coverage Locations:

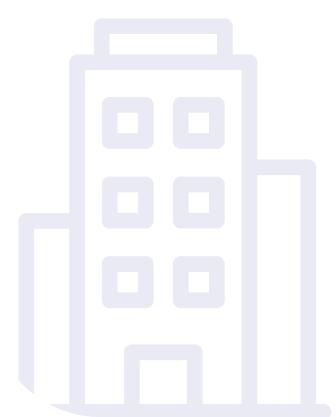
| No. | Location | Observation |
|-----|---|---------------------------------------|
| | | Criteria |
| 1 | All entrances and emergency exits | Identify |
| 2 | All teller counters and points of sale and purchase | Recognize |
| 3 | Display and sale counters | Recognize |
| 4 | Cash tills or register and safes | Recognize |
| 5 | Pathways | Recognize |
| 6 | All access points to service rooms (electrical room, lift motor room, mechanical and communication rooms) | Recognize |
| 7 | Passenger entrances at boat quay | Identify |
| 8 | Main tanks refueling points | Identify |
| 9 | Visual surveillance system control and equipment rooms | Identify |
| 10 | Customer service areas | Recognize |
| 11 | Customer waiting and reception areas and lobbies | Monitor |
| 12 | Passenger drop off – pick up | Recognize |
| 13 | Baggage and depository rooms | Recognize |
| 14 | Business centers entrances and meeting rooms | Recognize |
| 15 | Showrooms inside and outside the facility | Recognize |
| 16 | All main kitchens and restaurant areas | Recognize |
| 17 | Chemical and medical laboratories | Recognize |
| 18 | Box offices areas | Recognize |
| 19 | Goods loading / unloading area | Recognize |
| 20 | Training, entertainment, swimming pools in public places | Monitor |
| 21 | Public toilets entrances | Monitor |
| 22 | Landscape areas | Monitor |
| 23 | Fences area of the facility | Monitor |
| 24 | Sport halls, play areas, swimming pool and indoor sport halls | Monitor |
| 25 | Boat quays | Monitor |
| 26 | Parking lots | Monitor |
| 27 | The area surrounding and opposite the facility monitor. | Monitor |
| 28 | Entrances and exits of vehicles leading to and from the facility. | Automatic Number Plate Recognition |

Fifth: Terms and Conditions

- 1. The certificate should be placed in prominent and clear place at the entrance to the internal facility.
- 2. The certificate must be renewed annually.

The reference number for the application of inspection request is mentioned as shown in the page 9, where the last page file is used

Type The reference number of Inspection request on the poster and printed on the poster size A4, the poster should be pasted horizontally to the facade of the shops, facilities and buildings from the inside so as not to be affected by weather factors before inspecting them





An illustrative picture of the poster approved by the Sharjah Police General Command for the Critical infrastructure protection service



WARNING





Sharjan Police Headquarters

المكان يخضع لأنظمة المراقبة الأمنية على مدار الساعة

This Area is Under 24 HourCCTV Surveillance

RFN: