







Hemaya Technical Specification









Technical Regulations of the Supported Security at the Facilities and Public

<u>Events</u>

<u>Vr.3</u>

Keywords

Abbreviation	Full Form
RTSP	Real Time Streaming Protocol
RTP	Real Time Protocol
PTZ	Pan-Tilt and Zoom
WDR	Wide Dynamic Range
UPS	Uninterruptible Power Supply
CCTV	Closed-circuit Television
BNC	Bayonet Neil Concelman
PAL	Phase Alternating Line
GRA	General Resources Authority
CR	Change Request
DVR	Digital Video Recorder
FPS	Frame Per Second
NVR	Network Video Recorder
VMS	Video Management System
	Video Management System





هيئة الموارد العامة NERAL RESOURCES AUTHORITY



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Technical Requirements and Specifications

General Terms and Conditions

Recorder Features & Specifications:

- 1. System must be capable of producing RTSP/RTP protocol.
- 2. All the recording devices must be password protected.
- 3. Recording should be available for not less than **90 days**.
- 4. The System must be able to record continuously as well as alarm and motion.
- 5. System should be able to record the event of motion 10 sec before (pre recoding).
- 6. Date & Time stamp must be displayed in recorded video.
- 7. System should be capable of searching by date, time, event and camera.
- 8. System must be able to resume recording in case of a restart or sudden power disconnection.
- 9. Recorder must sync with real time.
- 10. Recorder should be able to notify in case of failure or malfunctions.
- 11. The system must have digital recorders with USB port and backup types which provide time and date.
- 12. Cameras must be labeled according to the location.

Camera:

- 1. Colored cameras must be used.
- 2. PTZ cameras are prohibited in areas of privacy without permission from competent authority (RAK Police CID department).
- 3. Each facility must have a minimum of two outdoor cameras with WDR feature.
- 4. Outdoor cameras should be configured to record in motion mode with not less than 1080p at 10 FPS.
- 5. Auto Iris must be used for sites where there are changes in light conditions.
- Outdoor cameras which is used for road or parking must be able to clearly recognize car number plate during day and night.
- Outdoor cameras which is focused on the door or passage should be able to clearly identify the person even while moving and distinguish between one person from another during day and night.
- 8. Hidden cameras are prohibited without permission from competent authority (RAK Police CID department).
- 9. Outdoor cameras at the walls and roof of the building should not be used for the purpose of viewing outside the given boundary without permission from competent authority; also it should not be installed in bedrooms, changing rooms, physiotherapy rooms and similar places, as well as in private areas for women.
- 10. Cleanliness of the cameras should be ensured on a routine basis in order to get clear photographs and video.
- 11. Audio must not be enabled.



- 1. Brighter light must be used at camera sites which are used for identification.
- 2. Internal or external IR illuminators must be used in very dark situations.
- 3. When the visible light disappears, IR Cut Filter is required with the ability to self-switch to monochrome night imaging.
- 4. All the camera sites should have enough lighting to produce clear images.

Cabling, Connection, Network and Communication:

- 1. The system must have network compatibility.
- 2. The system must be isolated from all the other networks.
- 3. Network should be designed to avoid any single points of failure.
- 4. Wireless cameras are strictly prohibited.
- 5. Cabling must be done professionally, should be secured and labeled at the same time.
- 6. GI or Steel flexible hose can be used for outdoor cameras.
- 7. PVC flexible hose can be used for indoor cameras only.
- 8. Labeling should be clear, noticeable and done on both ends of each cable.
- 9. Use cable ties and clips to keep cables intact.
- 10. High quality cable, connectors must be used.
- 11. All recorders and cameras should be connected through UPS (provide the UPS duration).
- 12. The system must be protected against water (Ex. water leakage from air-conditioner) and other harmful factors.
- 13. Wireless video transmission is prohibited without permission from competent authority (RAK Police CID department).
- 14. Digital recorders and management systems must be powered from a stabilized independent electrical supply.
- 15. The main and backup power sources of the CCTV system must be independent and secured.
- 16. Crimp type connectors must be used for camera connections.
- 17. Rubber BNC boots isolation must be after crimping.
- 18. USB extension must be provided by integrators in case the recorder is difficult to access

Command and Control:

- 1. The resolution of monitors must be at least 1080p and must have PAL color system.
- 2. Each recorder must have a dedicated monitor with label.
- 3. All the recording devices must be placed in a safe and secure position.
- 4. Monitor must be kept at proper viewing distance.
- 5. Monitors must be dedicated to surveillance and not television screens.
- 6. In case of using wireless mouse and keyboard, ensure smooth control of devices.
- 7. In case of using wired mouse and keyboard it should be easily accessible.



Others:

- 1. CCTV System must have a yearly maintenance contract to ensure the security of the operating system.
- 2. The assigned officer must be properly trained for the operation of CCTV systems in terms of retrieving, saving, uploading photos and videos or other types of digital media.
- 3. The shop owner must be well trained by the integrator and must be aware of his\her account privileges.
- 4. Facility owners must ensure that the system is working properly and report any malfunction to the maintenance contract company.
- 5. Integrator shall respond quickly to any system problem reported by the facility owner.
- 6. In Layout: List and map of all the camera locations should be provided and maintained at all camera sites and facilities. The details included should be as follows:
- Provide all the required information in the right margin/legend (as shown on the GRA website) and additional information can be provided if required
- Facility dimensions in meter scale
- GPS coordinates should be accurate and in numbers only
- The drawing should be of A4 size
- Uploaded drawing should be clear (not scanned).
- File format should be in xxx.jpg
- Facility surrounding information such as: housing, shop, open area, street and lane
- Shops and integrator stamp should be placed at the bottom of the page
- It should be clearly mentioned in the drawing if the facility is inside a building or a mall
- Drawings should be uploaded in landscape layout and for multiple floors or licenses it should be uploaded in one after the other
- All information filled in the website for final, renewal or CR transactions must be as the information on the layout's legend (EX. cameras resolution).







Recorder Features & Specifications:

- 1. Only Digital DVR must be used.
- 2. The Recorder must be able to provide media copies via USB in various formats.
- 3. The system must be able to record 6 FPS at D1 on each channel with over 50% of image quality (excluding outdoor full HD cameras).

Camera Features & Specifications:

- 1. The resolution must not be less than 1080p
- 2. WDR cameras must be used in extreme light conditions.
- 3. Day/Night or night vision cameras must be used in low light conditions.
- 4. Fixed or vary focal cameras can be used depending on the field of view as per required.

Command and Control:

- 1. The system must be capable of live viewing at 25 FPS.
- 2. The ratio of camera view must be considered according to the number of cameras and screen size (Ex: display should not exceed 16 numbers of cameras for 21" monitor).





Advance Category

Recorder Features & Specifications:

- 1. The system must be digital (NVR, VMS).
- 2. The recorder must be able to provide media copies via USB in various formats.
- 3. The system must be able to record 15 FPS at 1080p on each channel with over 50% of image quality.

Recorder Storage:

1. NAS, SAS, SAN or DAS can be used.

Camera Features & Specifications:

A. VEHICLE ENTRANCE/EXIT:

- 1. 1080p or higher
- 2. Recorder resolution must not be less than 1080p Full HD.
- 3. H.264 or H.265 compression compatible.
- 4. Outdoor cameras should be IP66 compatible.
- 5. ANPR must be installed and camera vision should focus to capture the vehicle and plate clearly
- 6. True Day/night and IR reflective.
- 7. Memory module can be enabled (SD) for backup during disconnection of network.
- 8. ONVIF compatible

B. Outdoor General Viewing:

- 1. 1080p or higher
- 2. H.264 or H.265 compression compatible
- 3. Vandal proof housing with IP66 rated
- 4. IR enabled
- 5. True Day/night
- 6. ONVIF compatible

C. Indoor General Viewing:

- 1. 1080p or higher
- 2. H.264 or H.265 compression compatible
- 3. Vandal proof housing
- 4. IR enabled
- 5. True Day/night
- 6. ONVIF compatible

D. Public Entrance & Exits:





- 1. 4 Megapixel
- 2. H.264 or H.265 compression compatible
- 3. Vandal proof housing
- 4. True Day/night
- 5. Should focus on the door to get clear identification of personalities
- 6. Camera should not reach more than 2.5m from ground level when mounting
- 7. WDR enabled
- 8. ONVIF compatible
- E. <u>Customer Service Counters:</u>
 - 1. 1080p or higher
 - 2. H.264 or H.265 compression compatible
 - 3. Focusing on customer as well as the attending staff
 - 4. Audio must be enabled
 - 5. ONVIF compatible

Cabling, Connection, Network and Communication:

- 1. Cabling must be done professionally and should be secured and labeled at the same time.
- 2. Dedicated and secured CCTV network access to be facilitated along with a 13A electric point at the facility roof top for police use.
- 3. The main connection of the network must have a secondary backup line in case of failure.
- 4. If the network supporting 200 or more devices must be equipped with a network management system NMS. This system must include all means of monitoring the network, identifying the interruptions and self-reporting them.
- 5. protected (default password must be changed) and it has to be kept with the integrator securely.
- 6. The camera streams which are not under use must be blocked or disabled.
- 7. CAT 6 weatherproof cable and high-quality network cables must be used for outdoor cameras.

Command and controlling:

- 1. The system must be capable of live viewing at high resolution.
- 2. Control room must be equipped with camera and access control.
- 3. Operator's attendance logs should be maintained.
- 4. Hardware maintenance logs should be maintained.
- 5. An alarm (beep) must be enabled for notifying any malfunction of equipment.











Security Requirements and Specifications

General Terms and Conditions

1. Areas to be covered by CCTV:

- All public entrance and exit (indoor and outdoor)
- Vehicle entry and exit (indoor and outdoor)
- Waiting areas and lobbies (indoor and outdoor)
- Customer Service Counters
- Parking space and boundaries
- Elevator and staircase
- Emergency exit (indoor and outdoor)
- Safe, store, archiving and control rooms

- Reception and counters
- Water Tanks
- Electrical rooms
- Gas Cylinder areas
- Kitchens

Sr. No	ADVANCED
1	Malls
2	Hotels, Resorts and Hotel Apartments
3	Banks
4	Exchanges Shops
5	Petrol Stations
6	Gold Shops
7	Ports (Airports, ect)
8	Clubs
9	Money and Finance Institutions
10	Manufacture and Selling of precious stones
11	Shooting Clubs
12	Military Equipments shops
13	Valuable Items Store
14	Dangerous Items Store
15	Trading shops for precious goods
16	Aviation Clubs
17	Federal and Local Ministries and Authorities
18	All Corporative Society
19	Factories
20	Hospitals
21	Religious Buildings
22	Schools
23	Universities

Advanced Facilities

Note: Supermarkets with (6) shops or doors and above are considered as advance

*Facilities which are not included in the above table are considered as Basic facilities.



- 2. In case of recorder failure, the following procedure should be undertaken:
 - Request on the website using CR Request
 - If the new recorder is not the same as the previous recorder, in such case the previous HDD must be kept with the facility owner for 90 days (submit a pledge in HDD Change Request)
 - If the new recorder is the same as previous recorder, in such case the previous HD can be reused without formatting (make sure that it will not be formatted before changing)
- 3. It's prohibited to deal with Hard drives (except checking the storage). In case of HDD failure, the following procedure should be undertaken:
 - Request on the website using CR Request
 - In case of replacing the HDD for increasing the storage: previous HDD must be kept with the facility owner for 90 days (submit a pledge in HDD Change Request)
 - Integrator should mention this in the logbook
- 4. Multiple Commercial licenses for one owner and one place:
 - Inspect the place and make sure that all the companies are in one place
 - Submit the agreement form (available in the website) and upload it in CR Request
 - Chose the main license and Install one recorder
 - All licenses stamp should be added in the uploaded layout
 - only one payment for all the licenses
- 5. In case of multiple commercial licenses in one place (malls, fish market, expo, ect):
 - Building authority should cover all the entrances, exits, corridors and parking
 - Shops inside the building should install CCTV system individually
 - In case of any kiosk: It should be covered with cameras
- 6. In case of any recorder failure (changing, troubleshooting, ect) integrator should make a request by using CR Request.

7. Mosques

Recorder must be safely and securely placed inside Imam's room and coordinates with General Authority of Islamic Affairs and Endowment for the same.

8. Stores

Medicine stores, dangerous items store and valuable items stores (worth one million or more) are considered under advance category

9. Medical clinics

- Polyclinics are considered as advance
- Specialized clinics are considered as basic









- 10. Ladies Beauty Salons, spa and shops with only female staff (where no male is allowed to enter) should be covered from counter side and outside only.
- 11. Outside coverage for Ladies Beauty Saloons inside malls are not required.
- 12. Inside Malls and buildings: Ladies Beauty Salons, ladies GYM, Spa and shops with only female staff should be covered (outdoor) by the mall or building authority. Also, a formal letter should be made and revised with the CID section.

13. Labors accommodations

- Accommodations which does not have any corridor needs to be covered in the room itself (camera placed in the room)
- Accommodations having corridors should be covered with a camera placed in the corridor

14. Factories and Buildings

- In factories/buildings where the departments are located far from each other and wired connection is not possible in such case each building should have separate recorder
- The inside and outside premises should be covered with cameras
- 15. For companies registered under free zone and have their stores not connected to the main building (wired connection is not possible), each building should have separate recorder.

16. Institutions and Offices

- For private or personal offices corridor should be covered
- Offices and institutions shared by more than one stuff should be covered

17. Monitors for Hemaya System

As long as the system is functioning the monitor can be kept on sleep mode or off as preferred.

18. Facilities without electricity connections

Official letter should be submitted to RAK Police CID Department.









Backup privilege is strictly prohibited for all accounts except Admin account.

- 1. Admin Account:
- User Name: Admin
- Password: 6 to 8 digits (numeric and letter)
- Easy passwords should be avoided.
- Integrators should not use the same password for multiple shops.

Privilege:

- Full access

Note: Not to be shared.

2. Manager Account (Exclusive for VMS and CMS users):

- User Name: Manager
- Password: 6 to 8 digits (numeric)

Privilege:

All the features (live viewing, recorder playback, Controlling PTZ, adding users, adjusting time, date and resolution, etc) **except** recorder backup and access to system configuration.

Security Instructions for Creating User Accounts

3. Guest Account:

- Can be given to the facility owner
- User Name: Guest
- Password: 6 to 8 digits (numeric)

Privilege:

- Live view
- Recording playback
- System information page





