

1- Cameras' System Requirements

- The solution shall include all requirements for the completion of the project including but not limited to: installation, cabling and configuration inside MIC1 offices (wireless connections and VPN accesses are not allowed).
- NVRs shall have the high-definition specs to support AI and 8 MP cameras, as well as the possibility to be integrated with a security unified platform for future purposes.
- Users with multiple levels of permissions shall be available.
- Real time monitoring and reports, data recording and history logs, remote operation, setting up SMTP, support motion detection, pattern to display multi-cam, system shall support different types of notifications (Popup instant playback, Beep, Trigger, Send email, Upload FTP for typical critical cases, network / video loss, network / video recovery, motion, failure of any device, hard disk failure, rotating or blocking a camera "scene change")
- Flexibility to record: Pre-Event Buffer / Post-Event Buffer / Recording Schedule / Full-Time Recording / Event Recording / Motion Recording
- The solution shall be one-time purchase-no monthly or yearly fees including the auto updates of the installed licenses.
- Possibility to Search by Time, Date, Event, Camera...it is mandatory to playback the recordings continuously for the same event (the recording should not be saved in different files as long as there is motion in the same event /unlimited time.It shall be possible to specify the time of the recordings needed to be exported (from hh:mm:ss to hh:mm:ss).
- Possibility to Adjust: frame rate, resolution pixels/image, motion sensitivity to save bandwidth and storage.
- Retention period of 1 month for the footage at FPS; H.265+ shall be supported.
- Redundancy in case of failover (convenient RAID should be considered)
- Minimum specs for the IP cameras 5MP, IR motion detector, compression H.265+, WDR, BLC, auto iris, ONVIF.
- The system shall have the ability to record audio if needed. system shall have the ability to record audio if needed.
- Shall include supply and installation including all cabling requirements for complete system operation

Specs of the cameras (minimum resolution 5MP)

Number of Indoor bullet cameras 2.8 mm lens	Number of Outdoor Bullet cameras varifocal lens (IP6'X')
31	12

2- Access Control Requirements

The Access Control System should be an extension for the current system existing in all MIC1 premises. Biometric readers are required to be integrated with Genetec and shall have the option to detect biometric or access card.

Shall include supply and installation including all cabling requirements for complete system operation

the supplier shall be responsible to install and include all the requirements for the installation / integration of the access readers, magnetic and strike locks, push buttons, break glass....(mentioned on the drawing) Each controller should only control 2 readers.

Current System	Quantities
Vertex controllers / Morpho readers running on Genetec platform	11 readers

3- Time Management (Attendance System) Requirements

2 attendance machines are required to be installed and connected to the current system (the current Time Management System provided and developed by Chip). Current readers Morpho configured through SAGEM software.

Shall include supply and installation including all cabling requirements for complete system operation.