

REFERENCE NUMBER:

PG/IT 73/26



**TITLE: SUPPLY AND INSTALLATION OF POE CCTV CAMERAS IN SAN KLEMENT FAMILY PARK, HAŽ-ŽABBAR FOR THE BEECON PILOT PROJECT**

Date Published:

19<sup>th</sup> February 2026

Site Visit:

N/A

N/A

Deadline for Submission of Offers:

25<sup>th</sup> February 2026

at 23:45 hrs CEST

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## Project Green

Avenue 77, Triq Negozju, Zone 3  
Central Business District, Birkirkara CBD3010  
<https://projectgreen.mt>

### **Section 1: Instructions to Economic Operators**

- 1.1 Response to this RfQ is to be submitted by email on the following email address:  
[Procurement.pg@projectgreen.mt](mailto:Procurement.pg@projectgreen.mt)
- 1.2 All submissions will be dealt with in strictest confidence.
- 1.3 Participation Fee is Free.

**Note: The Contracting Authority shall reserve the right to accept or reject offers exceeding €5,000 exclusive of VAT.**

### **Section 2: General Information**

#### **2.1 Purpose**

The purpose of this RfQ is **the supply and installation of PoE CCTV Camera in San Klement Family Park Ħaż-Żabbar for the Beecon Pilot Project.**

#### **2.2 Scope and Terms & Conditions**

Supplies shall be installed at San Klement Family Park, Ħaż-Żabbar, by the second (2<sup>nd</sup>) week of April. The items are to be in accordance with the technical specifications compiling this RFQ.

The Contractor shall be subject to a penalty for delay of €50 per day inclusive of Saturdays, Sundays and Public Holidays for any delays over the period of performance stated above. The Contracting Authority reserves the right to terminate the contract without notice when the penalties reach a value amounting to 30% of the contract price.

#### **2.3 Specifications**

- 2.3.1 **Quantity** required: two (2)
- 2.3.2 **Park location:** San Klement Family Park, Ħaż-Żabbar
- 2.3.3 **Installation Deadline:** 2<sup>nd</sup> week of April
- 2.3.4 **Literature required:** Camera data sheet, NVR data sheet, cabling documentation and certification, SSD Hard Drive Datasheet
- 2.3.5 The PoE IP Cameras shall be of the bullet type and are to be placed outdoors (affixed to the top of poles in areas of importance)
- 2.3.6 The cameras shall monitor the site where the Beecon pilot project will be setup.
- 2.3.7 Apart from being available for monitoring via browser, desktop and mobile applications, the cameras must be available to stream live feeds to the public via link which will be provided by the Contracting Authority.

2.3.8 Contractor will assist in the setup of the live streaming for users and testing of the service.

2.3.9 The following technical specifications are being requested:

- Resolution: 4MP or better (2560 x 1440 or higher)
- Ingress: IP66 or higher
- Day / Night capability: Integrated IR illumination with minimum 30m range
- Lens: Motorised, variable focus (2.8 - 12mm), wide view
- Horizontal Field of View: 90° or higher
- Wide Dynamic Range (WDR): Minimum 120 dB
- Compression: H.264 and H.265 standards
- Audio: Integrated microphone with recording capability, sampling rate up to 48 kHz
- Noise reduction: Supported
- Focus: Smart Focus and Auto focusing during / night transitions
- Motion Detection with support alarm triggering for humans and vehicles
- Housing: Metal, vandal-proof
- Operating Temperature: -20°C to 50°C
- Signal-to-noise ratio (SNR): 52 dB or higher
- Configuration: Addressable and configurable via secure client software (wired or wireless)
- Connectivity: Power over Ethernet (PoE) support for simplified installation and reduced cabling requirements using RJ45 ethernet interface
- Power Supply: PoE IEEE 802.3at
- Security: Password protection, 802.1x, HTTPS authentication, IP address filtering, ONVIF-M/S/T/G support
- Certification: CE marking, RoHS compliant
- Dual Encoding: Continuous low-res recording; high-res on event detection
- Video Management: Digital zoom, auto tracking, simultaneous full scene and magnified view
- Mounting: Pole and wall mountings
- Seamless integration with CCTV system(s) software or other 3<sup>rd</sup> party software for remote surveillance where all license fees, if applicable, should be included in the final price
- All relevant PoE switches, PoE-powered cameras (outdoor), appropriate channel NVR(s) suitable for the number of requested cameras, will be included
- Mobile Access: Live and recording viewing via iOS / Android applications
- Certified connection for each camera
- Active Switches: Supplied as part of system

#### 2.3.10 **Network Video Recorder (NVR)**

The network video recorder (NVR) shall meet the following minimum specifications (and is to be housed within a lockable enclosure):

- Mounting: Rackmount
- Channels: 4 IP video channel inputs
- Outputs: 2 discrete ports (including HDMI at 4K resolution)
- Embedded processor
- Supports up to 10MP resolution recording, real-time
- Compression: H.264+ / H.265 dual stream
- Storage: RAID Controller compatible with SATA II, JBOD and RAID 5, with hot swappable disks having eSATA port. Internal storage of at least 7 days and with built in DVD-R writer and / or USB ports for external hard disk backups

- Storage Type and Capacity: SSD Surveillance Grade Type Storage of 8TB of data for 28 days usable storage (with all cameras recording at their highest resolution, H.265 high quality video, 12 fps, 40% of the time recording due to motion, 1fps without motion, in RAID 5 configuration. The system shall be appropriate to receive and store all the data from all the cameras attached).
- Network: 1Gbps ethernet
- Recording and playback: Real-time recording capabilities for each camera with adjustable recording settings to optimize storage usage. Simultaneous playback of multiple channels for reviewing recorded footage.
- Motion detection for all video inputs
- Compatibility with video management software (VMS) including mobile apps (iOS, Android) and common web browsers such as Google Chrome and Microsoft Edge for remote viewing and management.
- Gate access control and secure remote access through encrypted connections (SSL/TLS 1.2 or better) and authentication protocols (HTTPS, SSH) for data protection
- ONVIF compliance for interoperability with a wide range of IP cameras and other surveillance equipment.
- NVR shall support RTSP streaming per channel using standard RTSP URLs and support simultaneous RTSP clients per channel without interrupting recording or live view

The NVR will support the POE+ standard, so that only a Shielded Cat6A STP cable is required for connection purposes. If required, a dedicated PC will be connected to the device, for viewing and recording purposes.

NVR will be setup in an existing network cabinet on-site.

### 2.3.11 Software

The system shall be supplied complete with license free (or license paid) software (free of any on-going yearly subscription fees). The software for the main monitoring station, and for other remote stations shall be supplied with the system. The software (single and not multiple copies of the software installed on one system) shall be suitable to handle all the cameras at once.

The system & the software shall have the following minimum features:

- Use English as main language.
- Monitoring and recoding all cameras simultaneously.
- Allow playback whilst still background recording.
- Passwords with min 3 hierarchy levels, allowing certain users limited rights (e.g. No deletions allowed, no settings editing, no recording of recorded images, no recorded images playback, some camera masking, access to some cameras only etc.)
- Make log files of events made, alarms raised etc.
- Setting up of motion detection areas for each camera using a screen grid
- Allow recordings to be saved on external devices.
- Display 1, 4, 8, & 16 cameras on display with auto scrolling to display all cameras at adjustable time periods.
- Indicate camera is recording.
- Trigger alarm in case camera is tapered with or signal is lost.
- Allow soft-PTZ of all cameras (if applicable).
- Allow full control of PTZ cameras including manual PTZ, touring mode by timetable.
- Allow camera labelling using alphanumeric characters.

- Recording in the following modes: Snapshot, event (with pre and post alarm recording, continuous, history recording (continuous recording at a low frame rate whilst in motion detection recording at high frame rate)
- Image search using date and time.
- Allow minimum of 5 pre-set scenes
- Monitoring at local control rooms may be restricted to operation of certain cameras only & system administrator should be able to configure the system, accordingly. More than one local control rooms may be required in the proposed system with individual configuration.
- The system shall have a feature which gives priority viewing to cameras with motion being detected. Any faults etc must be reported on the viewing monitors.
- The software should be able to control all cameras i.e., PTZ control, Iris control, auto / manual focus, and colour balance of camera, Selection of pre-sets, Video tour selection etc.
- The software is required to generate reports of stored device configuration. The control software is required to provide alarm and alarm log. The log shall be able to be achieved, printed, and displayed using a device filter, a device group filter and/or a time window.
- The system shall provide User activity log (audit trail) with user id, time stamp, and action performed, etc.
- The administrator should be able to add, edit & delete users with rights. It shall be possible to view ability / rights of each user or the cameras which can be viewed & controlled as per the permission assigned by the administrator.
- It should provide programmable motion detection and recording, to be defined area wise. System must be able to support video motion detection algorithms to detect and track objects, Learn the scene, adapt to a changing outdoor environment, ignore environmental changes including rain, hail, wind, swaying trees, and gradual light changes.
- Data erasure functionality is required for GDPR compliance.
- The Contractor needs to sign a Data Processing Agreement and provide it as part of the documents once contract is signed.

The Contracting Authority has a right to ask for use and setting up of all software and system capabilities even if these exceed the above minimum requirements. This will be at no extra charge to the Contracting Authority.

Further to the above, the system shall support an android or OS app to allow full live and playback remotely on a mobile device.

### 2.3.12 **Cabling and Testing**

#### **Shielded and Waterproof CAT6A Cable**

##### 1. General Description Type: Shielded Cat6A STP Cable

- Standards Compliance: Meets or exceeds ANSI/TIA-568-C.2, ISO/IEC 11801, and EN 50173-1 specifications.
- Applications: Suitable for high-speed data transmission in networking environments, including Ethernet (10/100/1000Base-T), ATM, and video.

## 2. Cable Construction

- Conductors
  - Material: Solid or stranded bare copper.
  - Gauge: Typically, 24 AWG (American Wire Gauge).
- Insulations
  - Material: High-density polyethylene (HDPE) or equivalent.
  - Thickness: Uniform, complying with Cat6a standards.
- Twisted Pairs
  - Number: 4 pairs, color-coded for easy identification (commonly blue, orange, green, brown).
  - Lay Length: Consistent, following Cat6a specifications for crosstalk reduction.
- Shielding
  - Type: Overall shield, usually aluminium foil.
  - Coverage: 100% coverage to ensure maximum protection from EMI/RFI interference.
- Drain Wire
  - Material: Tinned copper or equivalent.
  - Purpose: To provide grounding for the shield.

## 3. Outer Jacket

- Material
  - PVC (Polyvinyl Chloride), LSZH (Low Smoke Zero Halogen), or other suitable materials – UV resistant suitable for external environments.
  - Thickness: Compliant with Cat6a standards.
  - Colour: Various options available.
  - Markings: Cable should be marked with type, category, length, and manufacturer information.
- Performance
  - Frequency: Up to 100 MHz
  - Data Rate: Capable of transmitting up to 1 Gbps.
  - Attenuation: Compliant with Cat6a standards for signal loss per length.
  - NEXT (Near-End Crosstalk): Compliant with Cat6a standards for minimizing interference.
- Environmental and Safety Compliance
  - Flame Retardant: Should meet UL 1581 or equivalent standards.
  - Temperature Range: Operating temperatures typically between -20°C and +60°C.
  - RoHS Compliant: Free from hazardous substances in accordance with RoHS Directive.

- Packaging Labelling
  - Length: Commonly available in various lengths, typically ranging from 1m to 300m.
  - Packaging: Reels, pull-boxes, or as specified by the customer.
  - Labelling: Labels indicating type, length, test results, and manufacturer details.
  
- Warranty and Certification
  - Warranty: Manufacturer's warranty for defects in material and workmanship.
  - Certifications: Fluke certification as follows:
    - a. Introduction
      - Objective: Provide a comprehensive Fluke certification service for a network cable system, ensuring that the system meets or exceeds industry standards and performance criteria for specified cable categories (Cat6A).
  
    - b. Scope of Service
      - Cable Types: Includes testing of copper cabling systems such as twisted pair (STP, UTP), coaxial.
      - Standard Compliance: Testing to be conducted in accordance with ANSI/TIA, ISO/IEC, and other relevant standards as applicable to the cable category.
  
    - c. Equipment
      - Primary Testing Device: Fluke Networks Versiv CableAnalyzer™ Series or equivalent high-precision testing equipment.
      - Calibration: Equipment must be calibrated and up-to-date with the latest software and firmware versions.
  
    - d. Testing Parameters
      - Performance Tests: include but not limited to Wiremap
      - Length
      - Propagation Delay
      - Delay Skew
      - DC Loop Resistance
      - Pair-to-Pair and Power Sum Near-End Crosstalk (NEXT, PS NEXT)
      - Attenuation
      - Attenuation-to-Crosstalk Ration (ACR, ACR-F)
      - Return Loss
      - Alien Crosstalk (if applicable)
      - Environmental Conditions: Testing to be conducted under appropriate environmental conditions as per the cable specifications

#### e. Certification Process

- Site Preparation: Ensure that the installation is complete and the environment is conducive for testing.
- Visual Inspection: Preliminary inspection of cable runs, terminations, and labelling.
- Physical Testing: Use of Fluke testing equipment to conduct physical tests on each cable run.
- Data Recording: Collection and recording of test data for each cable.
- Troubleshooting: Identification and rectification of any faults or failures in the cabling system.

#### f. Reporting and Documentation

- Test Reports: Generation of detailed test reports using Fluke's LinkWare™ software or equivalent,
- Documentation: Provide comprehensive documentation covering all aspects of the testing process, results, and any recommendations for improvement.
- Including pass/fail results for each cable

#### g. Compliance and Quality Assurance

- Standards Compliance: Ensure all tests and procedures comply with relevant standards and best practices.
- Quality Assurance: Adherence to stringent quality control measures throughout the testing process.

#### h. Technician Qualifications

- Certification: Technicians must be certified to use Fluke testing equipment and interpret results accurately.
- Experience: Demonstrated experience in network cabling and Fluke testing procedures.

#### i. Service Completion

- Certification Labelling: Affixing certification labels/stickers to the tested cable runs upon successful testing.
- Client Handover: Formal handover of test reports and documentation to the client.

#### j. Post-Service Support

- Technical Support: Availability of technical support for any queries or follow-up actions post-testing.
- Warranty on Testing: Provide a warranty period for the accuracy of test results.

#### k. Safety and Standards

- Safety Compliance: Adherence to all safety standards and practices during the testing process.
- Liability Insurance: Adequate insurance coverage for equipment and personnel.

### 2.3.13 Surge Protection

To protect the IP cameras from power surges associated with indirect lightning strikes, inline surge arresters are to be placed onto lamp posts or supporting elements, close to the IP cameras.

The arrestors will have an RJ45 input port at one end and an output RJ45 port at another.

Two such arrestors must be used for each discrete IP PoE camera, one at each end of the network (CAT 6a S/FTP) cable.

The arrestors must support power over Ethernet (802.3af and 802.3at), have a surge protection attack time of less than 10ns, have an insertion loss of no more than 0.2dB, be able to withstand a surge voltage of at least 4kV and have a band pass frequency range of 1GHz.

### 2.3.14 N.B. Poles and Internet Connectivity with Static IP shall be provided by the contracting authority.

### 2.3.15 Below find drawing of camera locations:



## 2.4 Execution Period

- 2.4.1 The time-limit for the execution of the contract shall be four (4) weeks from the date of the Purchase Order.

## Section 3 Financial Offer

### 3.1 Financial Offer

The Economic Operator shall fill-in and submit their offer by filling the Form marked as '[Financial Bid Form](#)'. The Contracting Authority reserves the right to disqualify bidders who fail to submit or provide all the requested information requested in the '[Financial Bid Form](#)'.

Economic Operators must quote all components of the price inclusive of taxes/charges, customs and import duties and any discounts BUT excluding VAT. VAT shall be paid in accordance with the current VAT regulations.

### 3.2 **Criteria for Award**

- 3.2.1 The sole award criterion will be the price. The contract will be awarded to the bidder submitting the cheapest priced offer satisfying the requested administrative and technical criteria.

The Contracting Authority reserves the right to accept or reject financial offers exceeding the estimated procurement value based on the current market rates.

The Contracting Authority reserves the right to disqualify offers received late even though they might be technically and financially compliant (please refer to the cover page of this RfQ for the respective deadlines).

Furthermore, the Contracting Authority reserves the right to refuse or cancel this RfQ, in part or in full, at its discretion without any obligation.

### 3.3 **Clarification meeting / Site-visit**

- 3.3.1 No Clarification meeting/site visit will be held.

***\* END OF DOCUMENT\****