REQUEST FOR QUOTATIONS

SERVICES FOR

Supply, Delivery and Installation of Security Camera Systems and Numerator

IOM Turkey

IOM International Organization for Migration
IOM Uluslararası Göç Örgütü

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25 November 2021

IOM International Organization for Migration
OIM Organisation Internationale pour les Migrations
OIM Organización Internacional para las Migraciones

IOM Mission in Turkey, Ankara Head Office
Birlik Mahallesi, Şehit Kurbani Akboğa Sokak No: 24 Ankara, Turkey

REQUEST FOR QUOTATIONS (RFQ)
AND
GENERAL INSTRUCTION TO SUPPLIERS (GIS)

The International Organization for Migration **(IOM)** is an intergovernmental organization, a part of the United Nations system, established in 1951 and is committed to the principle that humane and orderly migration benefits both migrants and society.

In the framework of IOM Turkey's programs, the IOM invites interested eligible Suppliers to submit Quotations for the for the supply and delivery of the Promotional Materials as per this RFQ.

This RFQ includes Instructions to Suppliers, Technical Specifications and Administrative Requirements that Suppliers will need to follow in order to prepare and submit their quotations for consideration by IOM.

The Quotations must be submitted by e-mail to Procurement Ankara at iomturkeytenders@iom.int with a subject of TD-ANK-2021-0332 no later than 3:00 PM on Thursday the 9th of December 2021. No late Quotation shall be accepted.

Quotations submitted after the above deadline will not be considered. IOM reserves the right to accept or reject the whole or part of any or all the Quotations based on the fulfilment of the provisions as described in the General Instruction to Suppliers.

Suppliers which do not receive notification before the 16th of December 2021 can consider their Quotations unsuccessful.

IOM reserves the right to cancel the procurement process and reject all Quotations at any time prior to award of a Purchase Order or Contract, without thereby incurring any liability to the affected Suppliers or any obligation to inform the affected Suppliers of the ground for IOM's action.

Please contact Mr Tayfun GENC at procsupportank@iom.int for any technical inquiries.

Very truly yours,

Procurement & Logistics Unit
IOM Ankara

IOM is encouraging companies to use recycled materials or materials coming from sustainable resources or produced using a technology that has lower ecological footprints.

GENERAL INSTRUCTION TO SUPPLIERS (GIS)

1. Description of Goods

1.1 See more details as described in the Terms of Reference (Annex B) for the required goods and services. IOM requests prospective Service Providers to submit Technical and Financial Proposals for this Service.

1.2 Only eligible and accredited Suppliers may submit quotations. The quotation shall be the basis for contract negotiations and ultimately for a signed contract with the successful Supplier.

1.3 Suppliers shall not be hired for any assignment that would be in conflict with their prior or current obligations to other procuring entities, or that may place them in a position of not being able to carry out the assignment in the best interest of the IOM.

1.4 IOM is not bound to accept any quotation and reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Supplier.

2. Corrupt, Fraudulent, and Coercive Practices

2.1 IOM requires that all IOM Staff, manufacturers, suppliers or distributors, observe the highest standard of ethics during the procurement and execution of all contracts. IOM shall reject any quotation put forward by Suppliers, or where applicable, terminate their contract, if it is determined that they have engaged in corrupt, fraudulent, collusive or coercive practices. In pursuance of this policy, IOM defines for purposes of this paragraph the terms set forth below as follows:

2.1.1 Corrupt practice means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of the Procuring/Contracting Entity in the procurement process or in contract execution.

2.1.2 Fraudulent practice is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, the Procuring/Contracting Entity in the procurement process or the execution of a contract, to obtain a financial gain or other benefit to avoid an obligation.

2.1.3 Collusive practice is an undisclosed arrangement between two or more Suppliers designed to artificially alter the results of the tender procedure to obtain a financial gain or other benefit.

2.1.4 Coercive practice is impairing or harming, or threatening to impair or harm, directly or indirectly, any participant in the tender process to influence improperly its activities in a procurement process or affect the execution of a contract.

3. Conflict of Interest

3.1 All Suppliers found to have conflicting interests shall be disqualified to participate in the procurement at hand. A Supplier may be considered to have conflicting interest under any of the circumstances set forth below:

3.1.1 A Supplier has controlling shareholders in common with another Supplier.

3.1.2 A Supplier receives or has received any direct or indirect subsidy from another Supplier.

3.1.3 A Supplier has the same representative as that of another Supplier for purposes of this Quotation.

3.1.4 A Supplier has a relationship, directly or through third parties, that puts them in a position to have access to information about or influence on the Quotation of another or influence the decisions of the Mission/Procuring Entity regarding this Quotation process.

3.1.5 A Supplier submits more than one Quotation in this Quotation process.

3.1.6 A Supplier who participated as a consultant in the preparation, or the design, of the technical specifications of the Goods, or the Terms of Reference of the Works, that are linked or subject to this Quotation process.

4. Eligible Suppliers

4.1 Only Suppliers that are determined to be qualified shall be considered for award. In order to establish their eligibility, together with the Quotation, the Supplier shall submit the documents as specified below in para 9.1.2.1.

5. Clarifications and Amendments to RFQ Documents

5.1 At any time before the submission of the quotations, IOM may amend the RFQ. Any amendment made will be made available in writing to all Suppliers.

5.2 Suppliers may request for clarification(s) on any part of the RFQ. The request must be sent in writing to IOM at the following email address:

Attn: Mr Tayfun GENC
Email: Procurement Ankara procsupportank@iom.int
Mob: +90 531 723 25 83

5.3 IOM will respond to any request for clarification received on or before the 07th of December 2021 by 5:00 PM Copies of the response including description of the clarification will be given to all the Suppliers who received this General Instruction, without identifying the source of the inquiry.

6. Errors, omissions, inaccuracies and clarifications

6.1 The documents and forms requested for the purpose of soliciting Quotations shall form part of the Contract; hence care should be taken in completing these documents.

6.2 Suppliers shall not be entitled to base any claims on errors, omissions, or inaccuracies made in the Quotation Documents.

7. Confidentiality and Non-Disclosure

7.1 All information given in writing to or verbally shared with the Supplier in connection with this General Instruction is to be treated as strictly confidential. The Supplier shall not share or invoke such information to any third party without the prior written approval of IOM. This obligation shall continue after the procurement process has been completed whether or not the Supplier is successful.

8. IOM's Right to accept any Quotation and to reject any and all Quotations

8.1 IOM reserves the right to accept or reject any Quotation, and to cancel the procurement process and reject all Quotations, at any time prior to award of a Purchase Order or Contract, without thereby incurring any liability to the affected Suppliers or any obligation to inform the affected Suppliers of the ground for IOM's action.

9. Requirements

9.1 Quotation Documents

The following shall constitute the Quotation Documents to be submitted by the Supplier:

9.1.1 Quotation Form (see Annex A).

9.1.2 Technical Quotation:

The Technical Quotation shall be in a separate document, provides the following information using the Supplier's preferred template:

9.1.2.1 Administrative Documents:

i. Registration documents.
ii. Taxation cards.
iii. Any other valid legal documents.

9.1.2.2 A brief description of the Supplier's profile and past performance/experience of the same type of the requested activity.

i. Company Information:
    a. Corporate Information:
        i. Company mission statement *(including profit or not for profit status)*
        ii. Service commitment to customers and measurements used.
        iii. Accreditation.
        iv. Organization structure.
        v. Geographical presence.
        vi. Declared financial statements for the past (3) three years.
    b. Legal Information:
        i. History of Bankruptcy. (if any)
        ii. Pending major lawsuits and litigations. (if any)
        iii. Pending Criminal/Civil lawsuits. (if any)
ii. Experience and Reference Contact Information (project names, description, status, reason for relevance, roles and responsibilities):
    a. Relevant Contractual projects (UN Agencies).
    b. Relevant Contractual projects (EU Agencies).
    c. Relevant Contractual projects (Others).

9.1.2.3 Organization and Methodology:

i. Rationale:
    a. Background Information.
    b. Project Objectives and Expected Results.
    c. Comments on the Terms of Reference.
    d. Opinions on Key Issues.
    e. Assumptions and Risks.
    f. Logistics and Timing.
    g. Monitoring and Evaluation.
    h. Publicity and Visibility.
ii. Strategy:
    a. Project Management Approach.
    b. Detailed Methodology on how to develop software and how to meet requirements.
    c. Project Implementation Strategy.
iii. Project Team, Roles and Responsibilities, CVs, Backstopping, Single Contact Point, Contingency plans etc.

9.1.2.4 Schedule of Requirements: A detailed delivery timetable (delivery lead-time) for the entire Works.

9.1.3 Financial Quotation:

The Financial Quotation shall be in a separate document, provides the following information using the Supplier's preferred template:

9.1.3.1 The cost breakdown with as much details as possible, including the quantities and unit costs.

9.1.3.2 All costs associated with the provision of these Works, including (i) remuneration for the experts and manpower (ii) expenses such as for the designing, producing, installing, constructing, and implementing, and operational cost, such as travel and transportation, etc, and (iii) all applicable taxes. (Activities and items included in the Technical Quotation not priced shall be assumed to be included in the prices of other activities or items).

9.1.3.3 Terms of payment and payment method shall be clearly specified in the Financial Quotation and further discussed during the negotiations.

9.2 Quotation Forms

9.2.1 The Quotation Forms (9.1.1, 9.1.2, and 9.1.3) and any other required documents shall be duly accomplished, typewritten or written in indelible ink, signed and stamped, before submitting to IOM. Any correction made to the prices, rates or to any other information shall be rewritten in indelible ink and initialed by the authorized person signing the Quotation Form.

9.2.2 The language of the Quotation shall be in English and prices shall be in USD, exclusive of Sales Tax.

9.2.3 Prices quoted by the Supplier shall be fixed during the performance of the contract and not subject to price escalation and variation on any account, unless otherwise approved by IOM. A submitted Quotation with an adjustable price will be treated as non-responsive and will be rejected.

9.3 Validity of Quotation Price

9.3.1 The submitted prices shall remain valid for 90 days, after the deadline for submission.

9.3.2 In exceptional circumstances, prior to expiry of the period of validity of quotations, IOM may request that the Suppliers extend the period of validity for a specified additional period. The request and the response there shall be made in writing. A Supplier agreeing to the request will not be required or permitted to modify its quotation.

10. Submission of Quotation Documents

10.1 Quotations must be submitted to the following e-mail address:

Email address: iomturkeytenders@iom.int
Email subject: TD-ANK-2021-0332
Attn: Mr Tayfun GENC
Mob: +90 531 305 76 70

10.2 It is important to keep the above tender ID unchanged in the e-mail subject, as highlighted above in red.

10.3 Quotations shall be submitted on or before 3:00 PM on the 09th of December 2021. Late[1] Quotations will not be accepted.

11. Acceptance of Quotations.

11.1 IOM is not bound to take an immediate decision on the acceptability or unacceptability of Quotations at the time of their opening.

12. Rejection of Quotations

12.1 Quotations can be rejected for the following reasons:

12.1.1 The Quotation is not presented in accordance with this General Instruction.

[1] Quotations delivered beyond the prescribed closing date and time shall be considered late and will be automatically disqualified by the system.

12.1.2 The Quotation Form or any document which is part of it is not signed/stamped.
12.1.3 Incompleteness of the Quotation Documents.
12.1.4 The Supplier is not registered, nor licensed, nor paying taxes.
12.1.5 The Supplier is currently under list of blacklisted Suppliers.
12.1.6 The Quotation imposes certain basic conditions unacceptable to IOM.
12.1.7 Sudden internal operational and administrative changes within IOM.
12.1.8 The Supplier does not pass the government security checks.

12.2 IOM is not bound to accept any quotation received and reserves the right to waive any minor defect in a quotation, provided, however, that such minor defect (i) does not modify the substance of the quotation and (ii) does not change the relative ranking of the Suppliers.

13. Evaluation of Quotations

13.1 IOM shall evaluate and compare the Quotations on the basis of the following:

13.1.1 Completeness and responsiveness of the Quotation documents.
13.1.2 Registration, experience and past performance of the Supplier relevant to the requested Goods.
13.1.3 Compliance with the RFQ description as listed in above and the technical description of Annex B.
13.1.4 Prices.
13.1.5 Quality (inspection visits and samples examining will be requested accordingly).
13.1.6 The Quotation contents of all information specified in above articles. If any of the requested information is missing or is incorrect, the Quotation may be rejected on that sole basis and the Quotation will not be evaluated further.

13.2 Arithmetical errors will be corrected on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected accordingly. If the Supplier does not accept the correction of the errors as per this method, its Quotation will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.

13.3 The Quotations that pass the first administrative check will be evaluated on the relevance and design of the proposed action.

14. Delivery Site and Period of Delivery

14.1 Please refer to the Terms of Reference (TOR) document – Annex B.

15. Negotiations

15.1 Contract negotiation is expected to take place no more than one week after notification of the successful Supplier.

15.2 Negotiation will include discussion and finalization of a) documents submitted; b) Design and Technical Requirements; d) Financial Aspects; e) Payment Terms; and f) Contractual Terms.

15.3 All agreements coming out of the negotiations will be incorporated into the contract.

16. Liquidated Damages

16.1 If the Supplier fails to deliver any or all of the goods within the period specified in the Purchase Order (PO), a penalty payment of 0.1% of the price of the undelivered goods for every day of breach of the delivery schedule by the Supplier will be imposed.

17. Payment

17.1 Full payment shall be made within two weeks upon IOM's inspection and acceptance of the goods, and upon IOM's receipt of the valid original invoice describing the delivered goods.

18. Award of Contract

18.1 Following the negotiations, the contract will be awarded to the selected Supplier.

18.2 Suppliers which do not receive notification before the 16th of December 2021 can consider their quotations unsuccessful.

19. Settlement of Dispute

19.1 The United Nations Commission on International Trade Law (UNCITRAL) arbitration rules will apply for any dispute, controversy or claim that will arise in relation to the procurement process.

20. Confidentiality

20.1 Information relating to the evaluation of the Quotations and recommendations concerning awards shall not be disclosed to the Suppliers who submitted the quotations or to other persons not officially concerned with the process.

20.2 The Supplier shall not disclose any information in the Quotations to any third party. This obligation shall continue after the procurement process has been completed whether or not the Supplier is successful. IOM will however archive all Quotations for auditing purposes.

Annex A

QUOTATION FORM

Date : _____

To : IOM ANKARA
_____

Having examined the General Instruction for the Supply and Delivery of the requested Materials, the receipt of which is hereby duly acknowledge, I, representing *[……..]* offer to supply and deliver the requested goods in conformity with the General Instruction in accordance with the Technical Specifications (Annex B) which is herewith attached and form part of this Quotation.

I undertake if my Quotation is accepted, to deliver the goods in accordance with the delivery schedule set out in the Price Table Form.

I agree to abide by this Quotation for the Validity Period specified in the General Instruction which may be accepted at any time before the expiration of that period.

I hereby certify that this Quotation complies with the requirements stipulated in the General Instruction.

Dated this_____day of _____.

_____ _____
[signature over printed name] *[in the capacity of]*

Duly authorized to sign Quotation for and on behalf of

_____ [*name of company*]

Annex B

Terms of Reference (ToR)

Closed-Circuit Television (CCTV) and Queue Management System (QMS)

Ankara
November 2021

Contents

1. Introduction

In working towards a stronger labour migration management strategy, Turkey ratified the "Law on International Labour Force" in 2016. The law resulted in the establishment of the Directorate General on International Labour Force (DGIL) under the Ministry of Labour and Social Services (MoLSS) as the central authority aiming to identify, implement, and monitor policies on the international labour force as well as regulate foreigners' work permit applications and labour market integration. The law promotes means to attract highly qualified foreign labour, facilitates employment for foreign university students and counters irregular labour migration and exploitation of migrant workers.

Currently, ALO 170, the MoLSS communication phone line, provides both Turkish citizens and migrants with support regarding issues related to employment under the purview of the Ministry. Given the fact that foreigners often require more specialized advisory support, a separate Public Relations Unit was established under the DGIL in 2018 to inform applicants about their work permit application process.

Public Relations Unit of DGIL responds the questions and provides support to problems faced during the work permit application process. Due to the number of foreigners in Turkey, number of work permit applications demand on the phone line increases day-by-day. Within this scope, enhancing the institutional service delivery capacity of the Public Relations Unit under DGIL arises as one of the priorities of DGIL.

Building on these developments, the DGIL has requested support from IOM to provide technical assistance in enhancing the available service delivery capacity of Public Relations Unit via setting up an "International Labour Force Helpline" to answer queries from migrants and refugees in relation to the work permit process and Turkish labour market regulations for foreigners. The initial step for provision of the mentioned technical assistance will be installing camera systems and activating the numerator.

2. General Requirements

2.1. Project Objectives

2.1.1. The Contractor shall provide enhanced CCTV systems and a QMS to Directorate General on International Labor Force (DGIL) Public Relations Unit (PRU), located in Ankara.

2.1.2. There are several key stakeholders who will be involved in the oversight, management and execution of this SOW, the stakeholders and their roles are as follows:

- **a)** The International Organization for Migration (IOM): The Contracting Authority.
- **b)** Directorate General on International Labor Force (DGIL): The End-User and the recipient of the products and services provided, as stated in this ToR.
- **c)** The Contractor: Supplier, integrator and/or configurator of products and services provided, as stated in this ToR.

2.1.3. The Contractor shall provide all necessary resources including services, personnel, utilities, materials, components, supplies, and documentation needed accomplish all the tasks described in this Terms of Reference. In particular the supply and installation of additional power cable and/or network cable necessary for the operation of the systems is clearly the Contractor's responsibility.

2.1.4. The current CCTV surveillance system installed ad DGIL does not cover the area used by the PRU, as that area was previously occupied by a bank branch office. The Contractor shall design and provide a system that can work as standalone, and at the same time has video streams or other standards-based integration points to the current CCTV surveillance system.

2.1.5. The Contractor shall be responsible to implement verification, testing and acceptance of all delivered systems and parts. Test results shall be reviewed and approved by IOM and DGIL.

2.1.6. The Contractor shall deliver trainings on the use of CCTV and QMS systems.

2.1.6. The Contractor shall be responsible for meeting all the regulatory, security, health and safety, environmental and any other regulations or laws which must be met to establish and operate the systems.

2.1.7. The Contractor shall conduct operations within the confines of the areas authorized/approved by IOM and DGIL.

2.2. Design Approach

2.2.1. IOM has completed rough site surveys. These surveys provide a minimal configuration, in particular number of cameras to be installed.

2.2.2. The Contractor, prior to Proposal submission shall be given permission to complete a short exploratory survey at DGIL to assess the configuration necessary for proposal preparation. However, the Contractor shall also provide separate prices for additional cameras. These prices shall be inclusive of all installation operations.

2.2.3. The Contractor's design shall ensure uninterrupted operation of all systems in the case of power failure. In this aspect the Contractor shall consider reliability and high availability conditions, and also shall provide UPS's (Uninterrupted Power Supply) that can supply a minimum of 30 minutes of backup power to all systems.

2.2.4. The Contractor's design shall mitigate any incompatibility between already installed lighting and surveillance systems ensuring that current luminance levels does not degrade video quality.

2.2.5. The Contractor's design shall include all disassembly and disposal of old systems, cables, and other elements as required. The Contractor shall bear all costs related to disassembly as well.

2.2.5. After Contract signing, the Contractor shall complete a comprehensive site engineering survey and finalize the locations of camera equipment, and if necessary, update their numbers. Necessary power-over-ethernet network and other power interconnections to the contractor's equipment shall also be finalized during the survey. After the site engineering surveys are complete, the Contractor shall adjust, if required, the project equipment quantities to reflect the site conditions as agreed.

2.2.6. Based on the site engineering surveys, the Contractor shall issue an engineering design document set detailing all the locations, camera mounting arrangements, camera viewing angles/ranges and Power/Interface cabinet requirement, etc. This set shall be subject to approval, and upon approval shall be used as the baseline design for the project.

2.2.7. If additional components are required and approved, their prices shall be as proposed in the Proposal.

2.3. Main Equipment Deliverables

2.3.1. The following list details the main equipment deliverables:

a) Indoor Dome Camera (6 or more)
b) Indoor Box Camera (2 or more)
c) Video Management System (VMS) Software (with life-time license for 8 or more cameras)
d) Queue Management System (QMS)
e) Servers and Storage System

2.4. Product Testing

2.4.1. The Contractor shall supply test results provided by manufacturer to validate product compliance.

2.4.2. If not otherwise specified, all tests shall be performed according to commonly used practices for material test methods or standards published by organizations such as ISO, IEEE, ITU, CEN/CENELEC, etc.

2.4.3. For any norm, regulation, standard and so forth, the applicable version shall be the latest version at the date of the Proposal.

2.5. Applicable Standards

2.5.1. The following standards shall be used where applicable:

a) Emission: EN 55032:2012 /AC2013 class B, EN 50121-4:2016, FCC: 47CFR15, class B (2015-10-1)
b) Immunity: EN 50130-4:2011 /A12014, EN 50121-4:2016
c) Environmental: EN 50130-5:2011 Class IV
d) Safety: EN 62368-1:2014/AC:2015, EN 60950-1:2006 /A11:2009 /A1:2010 / A12:2011 /A2:2013, UL 62368-1, Ed. 2: 2014
e) Color representation ITU-R BT.709-6
f) ONVIF conformance EN 50132-5-2:2011/AC:2012, EN 62676-2-3:2014

2.6. Quality of Manufacturing and Materials

2.6.1. Only new material shall be used to fulfil this contract.

2.6.2. The equipment shall be based on the latest model of the manufacturer's standard commercial product.

2.6.3. All items provided shall be Commercial off the Shelf (COTS) products, produced from a fully monitored industrial process ensuring a continuous high level of quality. The Contractor shall not provide purpose-built equipment.

2.6.4. The equipment provided shall have a lifespan of up to 10 years. During this timeframe, the End-User or a third party shall not encounter any restrictions such as licensing for maintaining, upgrading and integrating new components to the delivered products.

2.6.5. Interoperability with other manufacturers' equipment that might be acquired over time is crucial. All equipment interfaces including both hardware and software interfaces will be based on open standards. Openness in this aspect is defined as the use of published and freely available standards to define software and hardware interfaces, in order to allow a common approach to be taken.

2.7. Language

2.7.1. Languages used for the project acquisition shall be English and Turkish.

2.7.2. Any documentation, data plate, marking, software and so forth shall be provided in either English or Turkish language if not otherwise stated or required for a specific purpose.

2.7.3. All technical documentation and similar material provided for training purpose shall be in Turkish language, or in English language with summary translations in Turkish language.

2.8. Ergonomics and Health and Safety

2.8.1. Ergonomics and health and safety shall be considered for all phases of the equipment life cycle.

2.8.2. The system shall not have any inherent safety hazards associated with, but not limited to, its storage, transportation, assembly/disassembly, installation, start-up, operation, packing/unpacking, maintenance, or repair.

2.9. Environmental Protection

2.9.1. The Contractor shall take all reasonable and practical measures to protect the public and DGIL against accidents, to safeguard the environment and apply the best practices available in that field.

2.9.2. The Contractor shall maintain and make available an ISO 14001 compliant environmental management system policy.

2.9.3. The Contractor shall supply "Environmental Protection Declaration of Conformity" documents from all equipment suppliers.

2.9.4. The Contractor shall consider the environmental impact of the supplied equipment during their life cycle including disposal and provide a plan for disposal.

2.9.5. During installation of equipment use of hazardous material shall be avoided when there is a non-hazardous alternative.

2.9.6. All material and components shall be free of ozone depleting substances in accordance with Regulation (EC) 1005/2009.

2.9.7. All electronic equipment will be ROHS and WEEE compliant.

3. Camera/Technical Requirements

3.1. General

3.1.1. All Camera Types shall have the following common features:

a) Color representation compliant to ITU-R BT.709-6.

b) EN 50132-5-2:2011/AC:2012 and EN 62676-2-3:2014 (ONVIF) compliancy, including but not necessarily limited to Profile S.

c) Multiple HD resolution compliancy, including but not necessarily limited to SMPTE 296M-2001 (Resolution: 1280x720) and SMPTE 274M-2008 (Resolution: 1920x1080).

d) CE (European Union) and/or UL (US/Canada) compliance for quality.

e) Ability to power from IEEE 802.3af/802.3at Type 1, Class 3 Power-over-Ethernet (POE, 48 VDC nominal) and/or +12 VDC ±10% (auxiliary) power source.

f) Support for fail-over configuration for power supply, being simultaneously connected to both PoE and +12 VDC supplies and switching from one to the other without the need for a reboot.

g) Maximum power consumption of less than 10W and maximum current consumption of 600 mA, irrespective of type of power source.

h) CMOS type sensor.

i) High Dynamic Range (HDR) capability, measured at 110 dB WDR according to IEC 62676 Part 5.

j) Multiple configurable streams using H.264 and M-JPEG

k) Camera processing latency less than 100 ms.

l) Adjustable contrast, saturation, and brightness settings.

m) Automatic white balance between 2500 to 10000K, based on presets of common lighting sources

n) Automatic Electronic Shutter (AES)

o) Automatic day/night switch

p) Intelligent Auto Exposure (IAE) backlight compensation

q) Signal to Noise Ration (SNR) of at least 55 dB.

r) Intelligent Dynamic Noise Reduction

s) Automatic defogging capability for high moist environments

t) Automatic video content analysis capability based on simple motion including but not limited to line crossing, entering/leaving field, loitering, and people counting.

u) Support for multiple, scheduled scene modes.

v) Basic privacy masking capability.

w) Video authentication based on watermarking or cryptographic digests (MD5, SHA-1 or SHA-256).

x) Display stamping options including name, logo, time, and alarm message.

y) SD memory card based local storage supporting up to 32 GB microSDHC or 2 TB microSDXC card.

z) Ability to use an external iSCSI target without the need for any additional Video Management System (VMS) software.

aa) Time-based or alarm-based JPEG posting towards an FTP server.

bb) Ability to export locally supported video and image files towards an FTP server.

cc) Multiple recording modes including continuous, alarm/event, and schedule recording.

dd) Analog (BNC, 75 Ohm) video output

ee) Analog audio line-in and line-out (3.5mm jack, 1 Vrms maximum).

ff) Digital outputs including ethernet (RJ-45, 10/100 Base-T, auto-sensing, half/full duplex) and RS-232/485 serial.

gg) Support for multiple communications and software systems integration protocols, including but not limited to IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP, IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, ARP, DHCP, APIPA (Auto-IP, link local address), NTP (SNTP), SNMP (V1, V3, MIB-II), 802.1x, DNS, DNSv6, DDNS (including DynDNS.org and/or noip.com), SMTP, iSCSI, UPnP (SSDP), SOAP, CHAP, digest authentication.

hh) On-board Trusted Platform Module (TPM).

ii) Support for encrypted communications based on TLS1.0/1.2 with AES128 or AES256.

jj) Support for encrypted local storage based on IEEE 1619 XTS-AES.

kk) Operating conditions of -20°C to +50°C and 20% to 80% relative humidity (non-condensing)

3.1.2. The control and video quality of the cameras should not be degraded during local video storage access.

3.2. Indoor Dome Camera

3.2.1. Camera shall be able to perform under minimum or ambient lighting conditions as low as 0.1 lux (for color) measured at 3100K.

3.2.2. Camera shall be able to reduce motion blur using Motion Compensated Temporal Filtering (MCTF) or equivalent techniques.

3.2.3. Camera shall be able to reduce bit-rate requirements by highly compressing manually selected areas of no interest such as portions of view covering walls, windows, furniture, etc.

3.2.4. Camera shall be able to run multiple independent video streams, each with a different resolution and frame rate.

3.2.5. Camera shall support alarm-based email and/or SMS notification.

3.2.6. Camera weight, excluding any mounting bracket shall be less than 1 kg.

3.2.7. Camera shall be installable in multiple configurations, including but not limited to flush, surface, ceiling, corner and pole mount configurations.

3.2.8. Camera shall be supplied with any mounting bracket or support kit necessary for selected mounting configuration.

3.2.9. Camera dome bubble shall be surface treated (coating, etc.) to prevent scratches.

3.2.10. Each camera shall have as accessory, one dummy camera looking exactly the same as itself.

3.3 Indoor Box Camera

3.3.1. Camera shall be able to perform under minimum or ambient lighting conditions as low as 0.01 lux (for color) measured at 3100K.

3.3.2. Camera shall be able to reduce false motion alarms due to shaking objects such as fans, flags or plants.

3.3.3. Camera shall be able to provide advanced video analysis capabilities including but not limited to, idle/removed object detection, occupancy, crowd density estimation, and flow analysis.

3.3.4. Camera shall be able to differentiate objects and people.

3.3.5. Camera shall be able to provide independent video streams for manually setup regions of interest.

3.3.6. Camera weight, excluding any mounting bracket shall be less than 1 kg.

3.3.7. Camera shall be supplied with any mounting bracket or support kit necessary for selected mounting configuration.

3.4. Camera Interface Cabinet

3.4.1. Camera Interface Cabinet shall serve the purpose of grouping cameras located in close proximity in one cabinet.

3.4.2. The cabinet shall have protection against vandalism and tampering, including but not limited to padlocks.

3.4.3. The cabinet shall be equipped to conform the Contractor's design will include elements such as:

a) Power supplies,
b) Electrical safety devices such as Circuit Breakers,
c) Cabling interconnections,
d) Network switches,
e) UPS/Battery
f) Incoming mains power and incoming ethernet network cable connection points.

3.4.2. Cabinet shall have only one UPS/Battery, one incoming mains power connection point and one incoming ethernet network cable connection point.

3.4.3. The UPS/Battery shall be scaled in size to match the camera(s) power requirement.

3.4.4. The cabinet shall be designed and installed in a maintenance-friendly way. In particular, maintenance personnel shall be able to perform while standing on the ground in front of the cabinet without need for ladders.

3.4.5. All ethernet switches inside the cabinet shall provide spare ports to connect at least twice the number of currently required devices.

3.4.6. The UPS and ethernet switch installed in the cabinet shall have IP based diagnostic capabilities.

3.5. Video Management System (VMS) Software

3.5.1. The Contractor shall provide a Video Management System (VMS) software that provides management, monitoring, and control of the entire system.

3.5.2. VMS Software shall be composed of a server component and a client component.

a) The server shall be responsible for configurations such as storage management and event logs (logbook), as well as managing user profiles, access rights, licensing, and event/alarm management.

b) The client shall be connected to the server component and receive events and alarms from the VMS and show live and playback.

3.5.3. VMS software shall be upgradable to have advanced resiliency features such as multi-site video recording, VMS server clusters, redundant storage management, and automated network reconfiguration. However, the Contractor shall not supply said license upgrades in this project.

3.5.4. VMS software shall be able to configure all aspects of the cameras supplied as well as core aspects of any ONVIF compliant camera.

3.5.5. VMS software shall be technically able to support at least twice the number of cameras installed per the Contractor's design. Additional license upgrades to increase capacity shall not be supplied with this project.

3.5.6. VMS software shall be technically able to log sustained events at a rate of at least 300 events per second and at a short duration (30 seconds) peak rate of at least 3.000 events per second.

3.5.7. VMS software shall be able to log up to 2 GB of events on a local file structure or an unlimited number of events in a supported SQL database management system (DBMS). The Contractor shall specify which DBMS's are supported.

3.5.8. Both VMS server and client software components shall be certified to run on the cooperating systems being used in DGIL, including Windows 10, Windows Server versions 2012, 2016, and 2019.

3.5.9. VMS software shall include functionality which is necessary in order to be compliant with EU GDPR and Turkish KVKK regulations.

4. Queue Management System Requirements

4.1. General Conditions

4.1.1. The Contractor shall provide a Queueing Management System (QMS) to efficiently manage the queue of individuals that have come to PRU for information and case assistance.

4.1.2. The QMS shall be able to handle multiple types of queues, guiding them into different desks.

4.1.3. Initially the types of queues shall be designed as:

- **a)** Information: These individuals shall be seeking information about general rules and regulations about employing foreign individuals. They can be given information by not just civil servants but also outsourced personnel with basic training in the legislature.
- **b)** Case assistance: These individuals shall be seeking assistance of sorts. They will have already made an application and have a reference number for the application. They are most often just seeking information on the status of their application or detailed explanation on the reason their application was rejected. They have to be handled only by civil servants, as only civil servants have access to the DGIL information systems.
- **c)** Appointment: These individuals shall be those who called the call centre, and have been forwarded to the PRU. They can be expected to have a detailed case which requires expertise. The Contractor shall assume that the appointment mechanism running on the DGIL call center efficiently schedules individuals, therefore not generate a large load on appointments.

4.1.4. The desks shall be assigned statuses based on who is running them. These statuses are initially designed as:

- **a)** Outsourced: Currently 3 of the 6 desks are occupied by outsourced personnel. The Contractor shall assume that at any given time, about half of the desks shall be occupied by outsourced personnel.
- **b)** Civil Servant: Currently 2 of the 6 desks are occupied by civil servants.
- **c)** Civil Servant with Seniority: Currently 1 of the 6 desks are occupied by civil servants. The Contractor shall assume that at any given time there shall be only 1 or 2 desks occupied by civil servants with seniority.

4.1.5. Multiple queues shall be managed so that:

- **a)** Information type requests are routed into primarily Outsourced type desks. Civil servants' desks can be used only when there is a queue for Information type requests but no queue for Case Assistance type requests (ie. Civil servants are free to assist Information type requests).
- **b)** Case Assistance type requests will be routed only towards civil servants, with or without seniority.
- **c)** Appointment type requests will be routed with high priority and only to civil servants with seniority. Therefore, when there is an Appointment type request on the queue, this individual will be prioritized before all others.

4.1.6. Types and priorities on the queues shall be made visible by given ticket numbers:

- **a)** Numbers 01 to 299 shall represent Information type.
- **b)** Numbers 301 to 499 shall represent Case Assistance type.
- **c)** Numbers 601 to 699 shall represent Appointment type.

4.1.7. The QMS shall be installed as "completely physical" type, and shall be composed of the following components:

- **a)** A single "QMS Server"
- **b)** A single Token Dispenser
- **c)** Six separate Calling Units to be installed at desks
- **d)** Six separate LED Token Displays to be installed at desks

e) A single LCD Token Display

4.1.8. The QMS shall be able to be extended later to enable "hybrid" operation, where individuals can get tokens through self-sign-in using their smartphones and mechanisms such as QR-codes or Near Field Communication (NFC). The Contractor shall explain in detail, in their Proposal how this extension mechanism shall work.

4.1.9. The QMS shall be able to continue to work in the case of fault in any number of peripheral units.

4.1.10. All components shall have operating conditions of 0°C to +50°C and 20% to 80% relative humidity (non-condensing).

4.2. QMS Server

4.2.1. The QMS server shall manage all queueing operations with its embedded software.

4.2.2. The QMS server shall log all queueing operations into its log file, an internal embedded database, or an external SQL based database management system (DBMS).

4.2.3. The Contractor shall install the system using either log files or internal embedded databases.

4.3. Token Dispenser

4.3.1. The Token Dispenser shall be connected to the QMS server with RJ-45 LAN cabling.

4.3.2. The Token Dispenser shall be based on a kiosk with a touchscreen and a thermal token printer.

4.3.3. The Token Dispenser shall have only two physical inputs, those for power and RJ-45 LAN cabling.

4.3.4. The Token Dispenser shall have a lockable port cover to protect the device from tampering.

4.3.5. The Token Dispenser shall use thermal printing mechanism which does not require ink.

4.3.6. The Token Dispenser shall dispense tokens on thermal paper with at least 80mm width.

4.3.7. The thermal printer shall be visually disguised within the Token Dispenser.

4.3.8. The Token Dispenser shall have a surge arrestor and power backup module.

4.3.9. The Token Dispenser shall have sufficient cooling mechanisms with multiple directions for outward airflow.

4.4. Calling Unit

4.4.1. Calling Units shall be connected to the QMS server through wireless modes of communication, including but not limited to short range custom RF, Bluetooth or Wi-Fi.

4.4.2. Wireless communication may be enabled through either an external module or through internal capability.

4.5. LED Token Display

4.5.1. LED Token Displays shall be connected to the QMS server through wireless modes of communication, including but not limited to short range custom RF, Bluetooth or Wi-Fi.

4.5.2. Wireless communication may be enabled through either an external module or through internal capability.

4.5.3. The LED Token Displays will simply display the token being served.

4.5.4. LED Token displays shall have at least 1.024 LEDs, in a 64x16 matrix.

4.5.5. LED Token displays shall have a lifecycle of at least 100.000 hours and shall be working on voltage levels to facilitate this.

4.5.6. LED Token displays shall have operating conditions of 0°C to +50°C and 20% to 80% relative humidity (non-condensing).

4.6. LCD Token Display

4.6.1. LCD Token Displays shall be connected to the QMS server through wireless modes of communication, including but not limited to short range custom RF, Bluetooth or Wi-Fi.

4.6.2. Wireless communication may be enabled through either an external module or through internal capability. In case of an external module, this module shall be using standards compliant wired communication techniques including but not limited to RS-232/485 with the LCD token Display.
4.6.3. The LCD Token Display shall display the status of all six desks. This shall include which tokens are being served and which tokens are assigned next.
4.6.4. All information displays in the LCD Token Display shall be in Turkish language.

5. Server and Storage System Requirements

5.1. Server

5.1.1. Contractor will provide a server that will be used to run the server component of the Video Management System software.
5.1.2. Server shall be housed in a 1U chassis with four 3.5 inch hot-swap disk slots at the front and an LCD bezel.
5.1.3. Server shall be supplied with static rails.
5.1.4. Server shall have an enterprise level single CPU with 8 cores and 16 threads support and at least 2.800 Mhz clock frequency.
5.1.5. Server shall have 128 GB UDIMM ECC memory installed.
5.1.6. Server shall have two 480 GB boot disks installed, pre-configured as hardware RAI 1.
5.1.7. Boot disks installed on the server shall be of type M.2 NVME.
5.1.8. Server shall have four 960 GB data disks installed, pre-configured as hardware RAID10.
5.1.9. Disks installed on the server shall be of type SSD SAS, with long life rating of 3 time DWPD.
5.1.10. Server BIOS will support UEFI boot mode with GPT partition.
5.1.11. Server shall have Trusted Platform Module 2.0 v3 installed.
5.1.12. Server shall have an on-board dual 1 Gb network adapter.
5.1.13. Server shall have Windows Server 2019 Standard edition pre-installed without any Client Access Licenses (CAL).
5.1.14. Server shall have basic next business day support agreement for 3 years.

5.2. Storage

5.2.1. Contractor will provide a storage server that will be used to serve as long term storage medium in the system.
5.2.2. Storage server shall be housed in a 2U chassis with twelve 3.5 inch hot-swap disk slots at the front and an LCD bezel.
5.2.3. Storage server shall be supplied with static rails.
5.2.4. Storage server shall have a single CPU, with 8 cores and 16 threads support and at least 3.100 Mhz clock frequency.
5.2.5. Storage server shall have 128 GB RDIMM memory installed.
5.2.6. Storage server shall have a hardware RAID controller with 8 GB NVME cache.
5.2.7. Storage server shall have two 480 GB boot disks installed, pre-configured as hardware RAID 1.
5.2.8. Boot disks installed on the storage server shall be of type M.2 NVME.
5.2.9. Storage server shall have six 16 TB data disks installed, pre-configured as hardware RAID5.
5.2.10. Data disks installed on the storage server shall be of type SATA 7.2K.
5.2.11. Storage server BIOS will support UEFI boot mode with GPT partition.
5.2.12. Storage server shall have Trusted Platform Module 2.0 v3 installed.
5.2.13. Storage server shall have dual 1 Gb and dual 10 Gb network adapters.
5.2.14. Storage server shall have TrueNAS Core storage operating system installed, providing iSCSI targets and FTP server to cameras and VMS server.
5.2.15. Storage server shall have basic next business day support agreement for 3 years.
5.2.16. Storage server shall have 1+1 750W redundant power supplies with Titanium level efficiency.

5.3. VMS Client

5.3.1. Contractor shall provide a VMS client PC for systems administrators to access video feeds.
5.3.2. VMS client shall be in All-in-One (AIO) form factor.
5.3.3. VMS client shall have at least 27 inch sized, 1920x1080 resolution, anti-glare screen.
5.3.4. VMS client shall have an integrated IR camera.
5.3.5. VMS client shall have a desktop CPU with 10 cores and 20 threads support and at least 2.800 Mhz frequency.
5.3.6. VMS client shall have at least 64 GB DDR4 ECC memory.
5.3.7. VMS client shall have dual 1 TB M.2 NVME Class 40 drives configured as RAID 1.
5.3.8. VMS client shall not have wifi module.
5.3.9. VMS client shall have an NVIDIA GTX type GPU with 4 GB DDR5 memory, capable of simultaneously accelerating video decoding on all channels provided by all cameras.
5.3.10. VMS client shall have a wireless keyboard and mouse.
5.3.11. VMS client shall have a lockable port cover.
5.3.12. VMS client shall have a Trusted Platform Module (TPM).
5.1.13. Server shall have Windows 10 Professional edition pre-installed.
5.3.14. VMS client shall have at least 3 year hardware service warranty.

5.4. Server Cabinet

5.4.1. Server Cabinet shall serve the purpose of grouping servers in one cabinet.
5.4.2. The cabinet shall have protection against vandalism and tampering, including but not limited to padlocks.
5.4.3. The cabinet shall be equipped to conform the Contractor's design will include elements such as:
- **a)** Servers
- **b)** Power supplies,
- **c)** Electrical safety devices such as Circuit Breakers,
- **d)** Cabling interconections,
- **e)** Network switches,
- **f)** UPS/Battery
- **g)** Incoming mains power and incoming ethernet network cable connection points.

5.4.4. Cabinet shall have only one UPS/Battery.
5.4.5. The UPS/Battery shall be scaled in size to match the servers(s) power requirement and provide 30 minutes of power.
5.4.6. All ethernet switches inside the cabinet shall provide spare ports to connect at least twice the number of currently required devices.
5.4.7. The UPS and ethernet switch installed in the cabinet shall have IP based diagnostic capabilities.
5.4.8. Cabinet shall have adequate cooling mechanisms such as fan groups or vortex tubes to supply cooling capacity of at least 5.000 Btu/h.
5.4.9. Cabinet shall have at least IP54 rating.