

## **ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER**

**Contract title: Supply of IT equipment and software for the establishment of a single "National centralized criminal intelligence system" (NCIS)**

**Publication reference: EuropeAid/139498/DH/SUP/RS**

### **LOT 5 – Supply of equipment for International Operational Police Cooperation Department**

**Columns 1-2 should be completed by the Contracting Authority**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the Contractor's technical offer

The tenderers are requested to complete the template on the next pages:

- Column 2 is completed by the Contracting Authority shows the required specifications (not to be modified by the tenderer),
- Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words “compliant” or “yes” are not sufficient)
- Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offered specifications.

**Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet in order to be compliant. Tenderers may not submit a variant solution for the items required in these Technical Specifications. The tenderer is expected to submit documentary evidence (brochures, technical data sheets etc.) of the technical compliance of his offer.**

Provided documentation must be tidy organized, and all items in respective documentation must be clearly identified (highlighted and indicated by "Item Number").

The documentation's page numbers where the information could be found must be clearly stated in the "Notes, remarks, ref to documentation" column of the offer.

**EU Visibility:** All supplies shall comply with the visibility Manual for EU External Actions ([https://ec.europa.eu/europeaid/communication-and-visibility-manual-eu-external-actions\\_en](https://ec.europa.eu/europeaid/communication-and-visibility-manual-eu-external-actions_en)) as well as the EU Visibility Manual produced by the EU Delegation to Serbia.

Stickers should be placed on the supplies with a clearly visible EU flag and the phrase “Provided with the support of the EU” in the operational language of the EU programme and in the Serbian language.

A visibility event should be foreseen and financed by the contractor and organised in conjunction with the Contracting Authority.

## **Contents of the Technical Specification / Technical Offer**

The following abbreviations are used consistently throughout the document:

CCTV	Closed circuit television
CE	Conformité Européenne
FPS	Frames per second
IOPCD	International Operational Police Cooperation Department
IR	Infrared
MoI	Ministry of Interior
ONVIF	Open Network Video Interface Forum
PIR	Passive infrared
PIR/MW	Passive infrared/Microwave
PoE	Power over Ethernet
TCP/IP	Transfer Control Protocol/Internet Protocol

### **Definitions**

**Tenderer:** The company or entity submitting an offer for evaluation. As the number and identity of these entities cannot be known in advance, the generic term Tenderer is used to define those entities submitting offer in response to the Supply Tender Contract Notice.

**Contractor:** The company or entity that signs and implements the contract for the supplies.

**Closed Circuit Television Subsystem (CCTVS):** Complete system that provides a video surveillance and verbatim copy of camera records.

**Intrusion Detection Subsystem (IDS):** Complete system that monitors malicious activity or policy violations.

Access Control Subsystem (ACS): Complete system providing selective restriction of access to a place or resources.

## 1 OVERVIEW

### *General*

EUD is the Contracting Authority responsible for this project. The beneficiary of this project (Beneficiary) is the Ministry of Interior, Directorate for International Police Cooperation (IOPCD).

The objective of this project is supply of security equipment (technical protection system) for strengthening capacities within Home Affairs Sector for the fight against organized crime by strengthening international police cooperation in line with EUROPOL standards.

The technical protection system is a set of technical and procedural complementary measures done in order to assure the required level of protection of the IOPCD premises on which classified information is stored, used and processed.

The principles of building a performing technical protection system are: defence in depth, risks analysis, self-protected node, legality, easy to use, training of personnel, durable development and social responsibility.

### *Scope of the tender*

The subject of this tender is to supply four (4) subsystem components:

- an Intrusion detection subsystem
- a CCTV subsystem
- an Access control subsystem
- a Physical protection subsystem

Structure and list of equipment of each subsystem is presented in "Delivery summary".

### **Delivery summary**

<b>Lot 5: Supply of IT equipment and software for the establishment of a single "National centralized criminal intelligence system" (NCIS)</b>		
<b>No.</b>	<b>Item(s)</b>	<b>Quantity*</b>
<b>Intrusion detection subsystem</b>		
<b>1.1</b>	PIR detector	28
<b>1.2</b>	PIR/MW detector	1
<b>1.3</b>	Glass break detector	1
<b>1.4</b>	Keypad	4

<b>1.5</b>	Control panel	1
<b>1.6</b>	Indoor alarm sounder	2
<b>CCTV subsystem</b>		
<b>2.1</b>	Day/night outdoor IP video camera	7
<b>2.2</b>	Day/night indoor IP video camera	6
<b>2.3</b>	Server with storage and video recording/management/client software	1
<b>Access Control Subsystem</b>		
<b>3.1</b>	Access Control Point	10
<b>3.2</b>	Access Controller	1
<b>3.3</b>	Electromagnetic lock and mechanical closing device	5
<b>3.4</b>	Emergency exit system	5
<b>3.5</b>	Access card	100
<b>Physical protection subsystem</b>		
<b>4.1</b>	Door Type 1	1
<b>4.2</b>	Door Type 2	1
<b>4.3</b>	Metal Safe	1
<b>4.4</b>	Safety / Security Window Film	5
<b>System common equipment</b>		
<b>5.1</b>	Electrical cables and raceways	1
<b>5.2</b>	Switch 24 ports	1
<b>5.3</b>	Workstation type I	2
<b>5.4</b>	Workstation type II	1
<b>5.5</b>	LED Reflectors	3

The implementation of the contract will take place in several stages:

- Delivery of all hardware, software, and additional equipment;
- Installation and integration works;

- Roll-out and testing;
- Commissioning;
- Training;
- Warranty.

### *Beneficiary's Responsibility*

In order to ensure smooth project implementation and to provide the Contractor with the necessary information, the Beneficiary is responsible for:

- Organise site visit for the potential tenderers and create minutes of it;
- Provision of premises for accommodation of the technical protection system components;
- Provision of necessary power supply (mains and UPS) at the points of delivery;
- Provision of necessary rack space in an existing server room rack for placing video server, switch;
- Delivery of video server and workstations operating systems;
- Preparation / repair of existing doors before installation of the elements of the Access control subsystem;
- Preparation / repair of windows on the ground floor before installation of Safety / Security Window Films;
- Establishing working team responsible for the cooperation with the Contractor during the all stages of the Project implementation;
- Identifying persons to be trained;
- Operating the system after provisional acceptance.

## **2 DESCRIPTION OF THE SYSTEM**

### *Intrusion detection subsystem*

Intrusion Detection Subsystem consists of a control panel, detectors, keyboards and alarm sounders. It will be installed on locations, where administrative and security zones are planned to be located (IR sensors to be installed in all offices and 3 halls - ground floor-entrance/1<sup>st</sup> floor-left and right of administrative and security zones, except server room where IR/MW and glass break detector to be installed) and will provide:

- 24/7 real-time alarming, as well as definition of working regimes depending on shifts,
- uninterrupted operation,
- an interface for remote access and remote configuration and keyboards for local activation/deactivation of the system.

Intrusion detection alarm signal will be sent to the police officer located in the room in front of the main entrance/exit of the building and to IOPCD officer on duty room. The control panel will be placed in server room and will be connected to the beneficiary LAN.

### *CCTV subsystem*

Video Surveillance Subsystem is server/client based and consists of 7 outdoor and 6 indoor IP cameras, a video server and 3 workstations. The cameras to be installed at the following locations: 2x street side of the building, 1x entrance from the street hall, 2x courtyard/parking, 1x backside/outside the room at the end of the corridor

(IT room), 1x outside the entrance door of the building, 1x inside entrance door of the building, 1x outside entrance door of the security zone, 1x server room, 1x corridor hall/archive ground floor, 2-corridor hall/archive first floor and will be connected to the server via the technical protection system common switch.

The subsystem will provide:

- 24/7 uninterrupted video surveillance of Beneficiary building perimeter and important locations inside the building (archives),
- local storage of recordings for at least 30 days with resolution of 5M,
- remote video monitoring from 3 locations and remote configuration.

Video server with switch will be placed in a rack in the beneficiary server room and will be connected to the beneficiary LAN.

#### *Access control subsystem*

Access control subsystem consists of: Access Control Points, Access Controller, Electromagnetic locks, Mechanical closing devices, Emergency exit systems and Access cards. It will provide access through the protected doors only to those persons whose entry is allowed and controlled by the Access Controller. The controller should maintain a date-, time-, and location-stamped record of each transaction (transaction is defined as any successful or unsuccessful attempt to gain access through a controlled door by the presentation of identifying information's). Access Controller contains all the modules needed for its proper functioning: central module, expansion modules for connecting Access Control Point, communication module for connecting the beneficiary LAN, power supply module, software program, metal housing cabinet etc. The Access Controller will be placed in the server room.

Access Control Points should be installed from the both sides of the controlled doors and designed for surface mounting on a wall or door frame which eliminates the need for wall enclosures. The Access Control Points should allow two factor authentication (Access Card and/or Fingertip Identification). It will include beepers, red and green LEDs, to provide audiovisual feedback to users. Total number of ten (10) Access Control Points shall be connected and integrated with the Access Controller Subsystem. Access Control Point should contain all the elements necessary for its normal operation (open / closed door contacts, cables, connectors, etc.)

Total numbers of five (5) doors should be connected to Access control subsystem. Three (3) of them are existing one (main entrance / exit door of the building, corridor door of the first floor and room No. 13 door on the first floor). Two (2) doors should be supplied as new one (Server room door and the corridor door in the ground floor) and should be additionally equipped with electromotor multipoint locks. The procedure for using these electromotor multipoint locks should be defined by the beneficiary during the installation phase.

Electromagnetic locks for all five (5) doors integrated with the Access Control Subsystem should be installed for automatic opening/closing. Standard mechanical closing devices should be installed on all five (5) doors for mechanical closing.

Access Control Points from inside of the protected area should have a feature for Emergency exit system, consisting of Emergency door release button (installed in glass protected housing to unlock the door for exit in the event of emergency) and Floor/wall mounted door electromagnetic lock (to fix open door when Emergency door release button is already activated).

#### *Physical protection subsystem*

Two (2) new security doors should be supplied according to EN 1627-1 standard, security resistance class 3 (RC3). The type and colour of the door finishing will be decided by the beneficiary before the start of the production and the final installation of the doors. The newly supplied door for the Server room should be installed in place of the existing one, without any additional construction work. The newly supplied door in the corridor on the ground floor will be installed on a newly built wall

door frame structure. This structure should completely close the corridor with dimensions height 390 cm, width 288 cm and will be constructed of metal profiles detailed in the TS. Wall door frame structure will be coated with plasterboards and painted in colour that fits with the existing interior.

One (1) Metal Safe with electronic code lock for containing security documents should be supplied.

Safety / Security Window Film should be supplied and applied on five (5) ground floor windows from the street side of the building (Terazije str.).

#### *System common equipment*

Various common equipment should be supplied to support different security subsystems:

Electrical cables and raceways for connecting subsystem elements.

24 ports Switch for TCP/IP connectivity of subsystem elements.

Workstation type I and Workstation type II for setup, monitoring and maintenance of all subsystems. Beneficiary will be responsible for delivery of workstations operating system.

LED Reflectors to improve CCTVS video recording.

### 3 LOT 1 SUPPLY OF TECHNICAL PROTECTION SYSTEM

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	<b>SYSTEM GENERAL REQUIREMENTS</b>			
	<ol style="list-style-type: none"> <li>1. <b>Supply of equipment shall be installed and implemented as unique harmonised system and understood as a “turnkey solution” with main functionalities defined in this Technical Specification.</b></li> <li>2. <b>Unless otherwise specified all requirements specified in the TS shall be considered as minimum.</b></li> <li>3. Under this contract, the Contractor is required to: <ul style="list-style-type: none"> <li>• Deliver, install and configure all equipment to support the appropriate end-user services;</li> <li>• Configure all LAN/WAN network services to ensure user access to the System from all locations;</li> <li>• Perform tests of the System;</li> <li>• Deliver training;</li> <li>• Provide warranty services;</li> <li>• Provide detailed documentation of the System;</li> <li>• Other as necessary for full operation of the proposed turnkey solution.</li> </ul> </li> <li>4. The Contractor must provide complete documentation of the System at the latest at the Provisional Acceptance. Technical</li> </ol>			



1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	<p>Documentation related to the System must include:</p> <ul style="list-style-type: none"> <li>• System Design Specification (as-built project);</li> <li>• Software Installation and Configuration Manuals;</li> <li>• Test Summary Report;</li> <li>• User and Training Manuals on Serbian language;</li> </ul> <p>5. All hardware must operate on 220VAC, 50Hz, power supply and be suitable for direct connection to the standard power outlets in Beneficiary country.</p>			
1.	<b>Intrusion detection subsystem</b>			
1.1.	<b>PIR detector</b>	<b>Quantity: 28</b>		
	Manufacturer's name:			
	Product type, model:			
1.1.1.	Compliant with EN 50131-2-2, Grade 3, Class II			
1.1.2.	Compatible with Control panel from point 1.5.			
1.1.3.	Wide angle			
1.1.4.	Detection range minimum 10 m			
1.2.	<b>PIR/MW detector</b>	<b>Quantity: 1</b>		
	Manufacturer's name:			
	Product type, model:			

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
1.2.1.	Compliant with EN 50131-2-4, Grade 3, Class II				
1.2.2.	Compatible with Control panel from point 1.5.				
1.2.3.	Wide angle				
1.2.4.	Detection range minimum 10 m				
1.3.	<b>Glassbreak detector</b>	<b>Quantity: 1</b>			
	Manufacturer's name:				
	Product type, model:				
1.3.1.	Compliant with EN 50131-2-7, Grade 3, Class II				
1.3.2.	Compatible with Control panel from point 1.5.				
1.3.3.	Detection range minimum 7 m				
1.4.	<b>Keypad</b>	<b>Quantity: 4</b>			
	Manufacturer's name:				
	Product type, model:				
1.4.1.	Compliant with EN 50131-1&3, Grade 3, Class II				
1.4.2.	Compatible with Control panel from point 1.5.				
1.4.3.	LCD: minimum two line with back light				

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
1.5.	<b>Control panel</b>	<b>Quantity: 1</b>			
	Manufacturer's name:				
	Product type, model:				
1.5.1.	Compliant with EN 50131-1&3, Grade 3, Class II				
1.5.2.	Number of programmable areas: minimum 10				
1.5.3.	Number of zones: minimum 40				
1.5.4.	Number of users: minimum 100				
1.5.5.	Interfaces: minimum RS 232, Ethernet				
1.5.6.	Programmable outputs (relay or open collector): minimum 2				
1.5.7.	Should enable remote programming and monitor using standard Web browser				
1.5.8.	Should enable IP based alarm transmission in accordance with EN 50136 (alarm receiver software should be supplied)				
1.5.9.	All necessary cables and accessories for installation, to be included				
1.5.10.	Power supply: 220V – 20V AC, 50Hz - 60Hz				
1.5.11.	Accu battery should be supplied. Capacity in accordance with EN 50131-6 Grade 3				
1.6.	<b>Indoor alarm sounder</b>	<b>Quantity: 2</b>			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	Manufacturer's name:			
	Product type, model:			
1.6.1.	Compatible with control panel from 1.5.			
2.	<b>CCTV subsystem</b>			
2.1.	<b>Outdoor day/night IP video camera with IR</b>	<b>Quantity: 7</b>		
	Manufacturer's name:			
	Product type, model:			
2.1.1.	Image Sensor: 1/3" or bigger			
2.1.2.	Compression: H.264, MJPEG			
2.1.3.	Multiple configurable streams			
2.1.4.	Resolution: 5 MP (Configurable)			
2.1.5.	Frame rate: 12 FPS at 5 MP (configurable)			
2.1.6.	Varifocal lens			
2.1.7.	Horizontal field of view: 35° - 85°			
2.1.8.	Motion detection is required			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
2.1.9.	In low light condition camera should automatically switch from day to night mode and vice versa			
2.1.10.	In night mode camera should automatically remove infrared cut filter			
2.1.11.	Built in IR illuminator is required			
2.1.12.	IR illuminator range: min. 15 m			
2.1.13.	Discreet observation and optimum image quality under the most difficult lighting condition is required			
2.1.14.	Automatic shutter is required			
2.1.15.	Full dynamic range is required			
2.1.16.	Privacy masks is required			
2.1.17.	Casing: Outdoor IP66 and NEMA 4X rated high level protection			
2.1.18.	Mounting brackets should be compatible with camera casing for outdoor use and wall mounting. All cables should go through the camera casing and bracket (no outside view of cables).			
2.1.19.	Operating temperature: -30° to 50°C			
2.1.20.	ONVIF compliant			
2.1.21	Power supply: PoE			
2.2.	<b>Indoor day/night IP dome video</b>	<b>Quantity: 6</b>		

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	camera with IR			
	Manufacturer's name:			
	Product type, model:			
2.2.1.	Image Sensor: 1/2.5" or bigger			
2.2.2.	Compression: H.264, MJPEG			
2.2.3.	Multiple configurable streams			
2.2.4.	Resolution: 5 MP			
2.2.5.	Frame rate: 12 FPS at 5 MP (Configurable)			
2.2.6.	Varifocal lens			
2.2.7.	Horizontal field of view: 40° - 100°			
2.2.8.	Motion detection is required			
2.2.9.	In low light condition camera should automatically switch from day to night mode and vice versa			
2.2.10.	In night mode camera should automatically remove infrared cut filter			
2.2.11.	Built in IR illuminator is required			
2.2.12.	IR illuminator range: min. 15 m			

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
2.2.13.	Discreet observation and optimum image quality under the most difficult lighting condition is required				
2.2.14.	Automatic shutter is required				
2.2.15.	Full dynamic range is required				
2.2.16.	Privacy masks is required				
2.2.17.	Casing: Indoor IP52 rated (white colour)				
2.2.18.	Mounting brackets should be suitable for wall mounting. All cables should go through the camera casing and bracket (no outside view of cables).				
2.2.19.	Operating temperature: 0° to 50°C				
2.2.20.	ONVIF compliant				
2.2.21.	Power supply: PoE				
2.3.	<b>Server with storage and video recording/management/client software</b>	<b>Quantity: 1</b>			
	Manufacturer's name:				
	Product type, model:				
2.3.1.	The server should enable: - connection of minimum 13 cameras as specified in 2.1 and 2.2 via switch as specified in 5.2				

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	<ul style="list-style-type: none"> <li>- recording, live picture view, archive playback and export simultaneously,</li> <li>- support for at least H.264 and MJPEG</li> <li>- local and remote subsystem management,</li> <li>- minimum 3 remote clients</li> </ul>			
2.3.2.	Operational memory: minimum 16GB DDR4			
2.3.3.	Hard disks: <ul style="list-style-type: none"> <li>- minimum two 220GB SSD discs configured in hardware mirror.</li> <li>- .minimum 24TB raw space of SATA 7200 rpm Hot-swap Hard Drives (min. 4 bays) - enterprise class, configured in hardware RAID 5.</li> </ul>			
2.3.4.	Format of housing: 19" Rack mounting			
2.3.5.	The server should be delivered with drivers for Microsoft Windows server 2012 or newer operating system (The Beneficiary will deliver operating system) and video recording/ management/client software compatible with server OS.			
2.3.6.	Operating system and application software should be installed on separate SSD discs			
2.3.7.	Power supply: Minimum 2 redundant hot plug power supplies			
2.3.8.	Network ports: At least 2 Gigabit Ethernet ports			
2.3.9.	Optical drive: minimum DVD RW			
2.3.10.	Connections: At least 2xUSB 3 ports			



1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
2.3.11.	Video: at least 1xDVI and 1xHDMI ports			
2.3.12.	Raid controller: support for minimum two disc arrays.			
2.3.13.	Sliding rack rails			
2.3.14.	Compatible with cameras from points 2.1. and 2.2.			
2.3.15.	Cameras network should be separated from LAN/Clients network			
2.3.16.	Recording speed: configurable per each camera (up to the camera max. FPS)			
2.3.17.	Recording duration: configurable to min. 30 days. Records older than configured should be automatically erased.			
2.3.18.	ONVIF compatible			
2.3.19.	Video motion detection function is required			
2.3.20.	Video recording/management/client software licence/s should be permanent			
2.3.21.	At least 3 levels of remote access rights: Level 1: only live picture view Level 2: live picture view and archive playback Level 3: all rights (administrator)			
2.3.22.	Archive export should be able via remote access, optical drive and USB. Software for playback on Windows OS based PC should be supplied if needed.			
3.	<b>Access control subsystem</b>			

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
3.1.	Access Control Point	Quantity: 10			
	Manufacturer's name:				
	Product type, model:				
3.1.1.	Two factor authentication: Card and/or Fingerprint				
3.1.2.	Fingerprint captured resolution: At least 500 dpi				
3.1.3.	Audio/visual door status presentation				
3.1.4.	Door sensors included (Close/open door contact, etc.)				
3.1.5.	Compatible with item 3.2 Access Controller				
3.2.	Access Controller	Quantity: 1			
	Manufacturer's name:				
	Product type, model:				
3.2.1.	Compliant with EN 50133-1, Recognition class 3, Access class B				
3.2.2.	Integration with CCTV subsystem				
3.2.3.	Number of controlled access points: At least 10				
3.2.4.	Number of active cardholders: At least 100				
3.2.5.	Number of controlled doors: At least 5				

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
3.2.6.	Programmed individual time schedules: Up to 255			
3.2.7.	Number of access groups: Up to 255			
3.2.8.	<p>Access Control System shall support following alarms/events:</p> <ul style="list-style-type: none"> <li>• Card unknown</li> <li>• Card not authorized</li> <li>• Card outside time profile</li> <li>• Card anti-passback</li> <li>• Card blocked</li> <li>• Card blacklisted</li> <li>• Access denied</li> <li>• Access timeout</li> <li>• PIN code error</li> <li>• Door open time exceeded</li> <li>• Door opened unauthorized</li> <li>• Door blocked</li> </ul>			
3.2.9.	<p>Access Control System shall support Multi-Functional Card Assignment:</p> <ul style="list-style-type: none"> <li>• Normal access card</li> </ul>			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	<ul style="list-style-type: none"> <li>• Attendance card</li> <li>• Arming/disarming card</li> </ul>			
3.2.10.	Access Control System shall support anti-passback security feature			
3.2.11.	Access Control pre and post-event video recording, linking video clip with the event information			
3.2.12.	Software for monitoring, programing, report and control included			
3.2.13.	Access Control System must support standard Web browser user access			
3.2.14.	All necessary cables and accessories for installation, to be included			
3.3.	<div> <div>Electromagnetic lock and mechanical closing device</div> <div>Quantity: 5</div> </div>			
	Manufacturer's name:			
	Product type, model:			
3.3.1.	Electromagnetic lock for surface installation including all necessary mechanical elements			
3.3.2.	Durability: At least 200 000 cycles			
3.3.3.	Holding force: At least 7000 N			
3.3.4.	Mechanical closing device for surface installation with all necessary mechanical elements			

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
3.3.5.	Compatible with item 3.2 Access Controller				
3.4.	<b>Emergency exit system</b>	<b>Quantity: 5</b>			
	Manufacturer's name:				
	Product type, model:				
3.4.1.	Emergency door release button in glass protected housing must be installed to unlock the door for exit in the event of emergency				
3.4.2.	Floor/wall mounted door electromagnetic lock in the event of emergency to fix open door				
3.4.3.	Electromagnetic holding force: At least 20 kg				
3.4.4.	Emergency exit system must be in compliance with item 3.2 Access Controller				
3.5.	<b>Access card</b>	<b>Quantity: 100</b>			
	Manufacturer's name:				
	Product type, model:				
3.5.1.	Compatible with item 3.2 Access Controller and Access Control Point item 3.1				
3.5.2.	Thickness: Less than 1mm				
3.5.3.	Possibility of colour customisable printing				

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
4.	<b>Physical protection subsystem</b>				
4.1.	<b>Door Type 1</b>	<b>Quantity: 1</b>			
	Manufacturer's name:				
	Product type, model:				
4.1.1.	Compliant with EN 1627-1, Resistance Class 3 and EN 12209				
4.1.2.	Door dimensions: high 210 cm width 100 cm, single leaf				
4.1.3.	Lock cylinder compliant with EN 1303				
4.1.4.	Electro motor multipoint lock for frequent use compliant with prEN 15685 and prEN 14846				
4.1.5.	Security: At least 10 kN Side load				
4.1.6.	Unlock time: Less than 2 sec				
4.1.7.	Durability: At least 200 000 cycles				
4.1.8.	Compatible with item 3.2 Access Controller				
4.2.	<b>Door Type 2</b>	<b>Quantity: 1</b>			
	Manufacturer's name:				
	Product type, model:				

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
4.2.1.	Compliant with EN 1627-1, Resistance Class 3 and EN 12209			
4.2.2.	Door dimensions: Double leaf (high 230 cm, width 130 cm), leaf 1 (width 100 cm), leaf 2 (width 30 cm)			
4.2.3.	Lock cylinder compliant with EN 1303			
4.2.4.	Electro motor multipoint lock for frequent use compliant with prEN 15685 and prEN 14846			
4.2.5.	Security: At least 10 kN Side load			
4.2.6.	Unlock time: Less than 2 sec			
4.2.7.	Durability: At least 200 000 cycles			
4.2.8.	Compatible with item 3.2 Access Controller			
4.2.9.	Size of the corridor opening need to be closed with wall door frame structure: height 390 cm, width 288 cm			
4.2.10.	Wall door frame structure width: At least 10 cm including plasterboard			
4.2.11.	Wall door frame metal structure: Constructed with steel metal profiles at least 60X60X3 mm, fastened in at least 10 points and the gap between profiles not bigger than 150 mm			
4.3.	<b>Metal Safe</b>	<b>Quantity: 1</b>		
	Manufacturer's name:			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	Product type, model:			
4.3.1.	Compliant with EN 1143-1, Grade 0			
4.3.2.	Electronic codelock			
4.3.3.	Volume: At least 270 litre			
4.3.4.	Masse: Less than 400 kg			
4.4.	<b>Safety / Security Window Film</b> <b>Quantity: 5</b>			
	Manufacturer's name:			
	Product type, model:			
4.4.1.	Dimensions: high 220 cm, width 120 cm,			
4.4.2.	At least 4 mil, 100 micron			
5.	<b>System common equipment</b>			
5.1.	<b>Electrical cables and raceways</b> <b>Quantity: 1</b>			
	Manufacturer's name:			
	Product type, model:			
5.1.1.	CCTV subsystem cables: average distance of cameras to video server/server room is 20 meters			



1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
5.1.2.	Intrusion detection subsystem cables: average distance of sensors/keypads/sounders to control panel/server room is 20 meters			
5.1.3.	Access control subsystem cables: average distance of doors to controller/server room is 15 meters			
5.1.4.	An adequate Patch panel to be supplied			
5.1.5.	All cables should run on the wall surface and should be enclosed in suitable PVC cable raceways. No cable may be directly exposed.			
5.1.6.	The Contractor will be responsible for the removal, and reinstatement to the original condition, of any fixtures, fittings and structures, disturbed during the installation of cabling			
5.2.	<b>Switch 24 ports</b>	<b>Quantity: 1</b>		
	Manufacturer's name:			
	Product type, model:			
5.2.1.	No. of ports: minimum 24 x 10/100/1000 Base-T (auto-sensing) PoE+ ports			
5.2.2.	IP v6 ready			
5.2.3.	Format of housing: 19" rack mounting			
5.2.4.	Priority queues: minimum 4 per port			
5.2.5.	Switching Capacity: minimum 35 Gbps			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
5.2.6.	Forwarding rate: minimum 25 Mpps			
5.3.	<b>Workstation type I</b> (Monitoring and configuration)	<b>Quantity: 2</b>		
	Manufacturer's name:			
	Product type, model:			
5.3.1.	Case: Tower			
5.3.2.	Processor: PassMark CPU Mark minimum 7900			
5.3.3.	RAM: 8GB, DDR4			
5.3.4.	HDD: SSD minimum 240 GB			
5.3.5.	Graphic adapter: minimum 4GB memory, 1xDisplay port, 1xDVI			
5.3.6.	Optical drive: minimum DVD RW+			
5.3.7.	Network adapter: Integrated Gigabit Ethernet			
5.3.8.	Standard serial port			
5.3.9.	USB ports: minimum 3xUSB 2 and 3xUSB 3 ports, out of which at least 3 should be located on the front of the unit			
5.3.10.	Microphone (3.5mm) and Headphone (3.5mm) ports should be located on the front of the unit			
5.3.11.	Internal speaker for business audio			

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
5.3.12.	Keyboard: USB Keyboard 104-key				
5.3.13.	Optical wheel mouse (USB connector)				
5.3.14.	The workstation should be delivered with drivers for Windows 10 OS (The Beneficiary will deliver OS) and video (refer to 2.3. -video server) , intrusion detection (refer to 1.5.7.), access control (refer to 3.2.12&3.2.13) client software if needed				
5.3.15.	Monitor: LCD, at least 27", resolution minimum 1920x1080, response time: maximum 5ms, contrast: minimum 1000:1, brightness: minimum 250cd/m2, desk and wall mount. Connectivity: compatible with PC				
5.3.16.	All necessary cables and accessories for installation, to be included.				
5.4.	<b>Workstation type II</b> (Monitoring)	<b>Quantity: 1</b>			
	Manufacturer's name:				
	Product type, model:				
5.4.1.	Case: Tower				
5.4.2.	Processor: PassMark CPU Mark minimum 7900				
5.4.3.	RAM: 8GB, DDR4				
5.4.4.	HDD: SSD minimum 240 GB				

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
5.4.5.	Graphic adapter: minimum 4GB memory, 1xDisplay port, 1xHDMI			
5.4.6.	Optical drive: minimum DVD RW+			
5.4.7.	Network adapter: Integrated Gigabit Ethernet			
5.4.8.	Standard serial port			
5.4.9.	USB ports: minimum 3xUSB 2 and 3xUSB 3 ports, out of which at least 3 should be located on the front of the unit			
5.4.10.	Microphone (3.5mm) and Headphone (3.5mm) ports should be located on the front of the unit			
5.4.11.	Internal speaker for business audio			
5.4.12.	Keyboard: USB Keyboard 104-key			
5.4.13.	Optical wheel mouse (USB connector)			
5.4.14.	The workstation should be delivered with drivers for Windows 10 OS (The Beneficiary will deliver OS) and video (refer to 2.3. -video server) , intrusion detection (refer to 1.5.7.), access control (refer to 3.2.12&3.2.13) client software if needed			
5.4.15.	Monitor: LCD, at least 42", resolution minimum 3840x2160, response time: maximum 5ms, contrast: minimum 1000:1, brightness: minimum 250cd/m2, wall mounted. Connectivity: compatible with PC			
5.4.16.	All necessary cables and accessories for installation, to be included. Cable for connecting PC and monitor should be min. 5m long.			

1. Item Number	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
5.5.	<b>LED Reflectors</b>	<b>Quantity: 3</b>			
	Manufacturer's name:				
	Product type, model:				
5.5.1.	LED reflector at least 1500 Lumens				
5.5.2.	Case: compliant with IP 44				
5.5.3.	Built in moving sensor				
5.5.4.	Beam angle: min. 100°				
5.5.5.	Mains power supply				
5.5.6.	All necessary cables and accessories for installation, to be included				
6.	<b>Training</b>	<b>Quantity: 1</b>			
6.1.	A common training for the system (all subsystems) operators/users and administrators (configuration) should be provided at the Beneficiary site. Duration minimum 5 days for minimum 3 persons.				
7.	<b>Warranty</b>				
7.1.	The warranty of all the system/subsystem elements must remain valid for 1 year after provisional acceptance				

## 1. Delivery Location

No.	Location	Address	Notice
1	Ministry of Interior of RS, MoI	Central MoI Warehouse “Atex” Milorada Jovanovića 9, 11000 Belgrade	

**In addition of what it is foreseen in the Special conditions, the contractor is obliged to ensure the correct functionalities throughout the entire warranty period:**

Following each intervention, it is obligatory to control the changes applied and problems solved more frequently and intensively, keep documentation and make a record of all the activities taken (at least once in 15 days in the next two months following each intervention). It is mandatory to check quarterly if the entire system functions properly within the scope of the proactive maintenance (the procedure of checking if the system functions properly will be agreed subsequently until the system is put into operation). The Contractor shall be responsible for the 24/7 technical support and maintenance of all the equipment on call within the guarantee period. During the guarantee period, regardless of the type of malfunction and level of emergency, the Supplier, shall not be allowed remote login into the system. Considering alarm system he Contractor is obliged to begin the repair operations on Supplies not later than 6 hours following receipt of the notification in the Central Office of the Contractor about the failure of the equipment. In all cases the Contractor shall complete the repair not later than 24 hours following receipt of the respective notification, or duly document the reasons for any additional delay. Considering video surveillance system he Contractor is obliged to begin the repair operations on Supplies not later than 12 hours following receipt of the notification in the Central Office of the Contractor about the failure of the equipment. In all cases the Contractor shall complete the repair not later than 48 hours following receipt of the respective notification, or duly document the reasons for any additional delay. The Contractor is obliged to provide technical support for maintaining the entire system and availability of the original spare parts in the market, in accordance with the technological progress, observing the principles of compatibility with the equipment installed, at least 7 years after the guarantee expires. The Contractor shall implement the latest operative software version for administration and management of the video surveillance and analytics and client applications. The Contractor is required to take a serious approach and manage the project in accordance with the standards and principles of project management, deliver the description of the solution suggested, specifications, installation, configuration, additional settings, implementation, relocation and integration of the system (in accordance with the recommendations and best practice of the manufacturer of the components concerned). It is also obligatory to define strategies of protecting data from loss (back-up and archive policy) and implement functionality of backup, archive, retrieve, restore, as well as to define and carry out procedures for safe recovery of the system components and the system itself in accordance with the defined back-up policy by the Beneficiary. The back-up does not refer to the video footage archived. The Beneficiary reserves its rights not to return certain media (hard drives or USB/Flash disks) in case of their failure. Both parties register the failure and then the Beneficiary has right to destroy the failed media.