

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

**Contract title:** Supply of equipment “*Technical support for fight against organised crime, financial investigation and cyber-crime*”

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**Publication reference:** *NEAR/BEG//2023/EA-OP/0059*

### **Abbreviations**

<b>No</b>	<b>Acronym</b>	<b>Description</b>
1.	AVL	Automated Vehicle Location
2.	ECC	Error-correcting code (memory)
3.	EU	European Union
4.	EUD	Delegation of the European Commission to the Republic of Serbia
5.	FC	Fibre Channel
6.	FCoE	Fibre Channel Over Ethernet
7.	Gbps	Gigabits Per Second
8.	GHz	Gigahertz
9.	GFE	Government Furnished Equipment
10.	GIS	Geographic Information System
11.	HD	High Definition

No	Acronym	Description
12.	HDD	Hard Disk Drive
13.	HDMI	High-Definition Multimedia Interface
14.	HTTP	Hypertext Transfer Protocol
15.	ISO	International Standardization Organization
16.	IT	Information Technology
17.	KMV	Keyboard, Mouse, Video
18.	LCD	Liquid Crystal Display
19.	MB	Megabyte
20.	Mbps	Megabits Per Second
21.	MoI	Ministry of Interior
22.	PDU	Power Distribution Unit
23.	PoE	Power-Over-Ethernet
24.	RoHS	Restriction of Hazardous Substances
25.	SAN	Storage Area Network
26.	SAS	Serial-Attached SCSI
27.	SATA	Serial Advanced Technology Attachment
28.	SNMP	Simple Network Management Protocol

No	Acronym	Description
29.	SQA	Software Quality Assurance
30.	SSH	Secure Shell
31.	TCP/IP	Transmission Control Protocol/Internet Protocol
32.	UPS	Uninterruptible Power Supply
33.	USB	Universal Serial Bus
34.	WEEE	Waste Electrical and Electronic Equipment

**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.

1. Item Number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
1	<b>HARDWARE REQUIREMENTS</b>			
1.0	<b>Hardware requirements</b>			
[R1]	The Tenderer must include in their offer a complete set of required cables, patch cords, power cords, Ethernet cables, appropriate FC cables, accessories and other physical modules required for the proposed equipment/system to operate in accordance with specifications.			
[R2]	The system must be suited for operation under Central European land climate and weather conditions without requiring a special preparation process.			
[R3]	Operating temperature: -10°C to +35°C unless specified otherwise.			
	<b>LOT 4 – SURVEILLANCE EQUIPMENT</b>			
4.1.	<b>Audio recorder quantity: 16 pieces</b>			
[R4]	<ul style="list-style-type: none"> <li>Type: dictaphone</li> <li>Connection: 3.5mm, USB</li> <li>Screen: LCD</li> <li>Memory: 8GB</li> <li>Recording format: MPEG1 layer3(MP3), PCM(WAV)</li> <li>Compatible operating systems: Windows7/8/10, macOS</li> </ul>			

1. Item Number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
4.2.	<b>4MP Covert Pinhole Network Camera-Main Box and lens unit</b>  <b>quantity: 40 pieces</b>			
[R5]	<ul style="list-style-type: none"> <li>• Resolution: 4MP</li> <li>• Sensitivity: 0,02-0,04 lux</li> <li>• Auto iris</li> <li>• Autofocus</li> <li>• Focal length: 2,8mm</li> <li>• Video resolution: 2880x2160</li> <li>• Operating Temperature oC: -30 ~ +60 C</li> <li>• Power supply: 12Vdc (BNC) and/or PoE</li> <li>• Half of the items must have separate lens unit</li> </ul>			
4.3.	<b>Professional handheld camera 4K, min.20 optical zoom</b>  <b>quantity: 15 pieces</b>			
[R6]	<ul style="list-style-type: none"> <li>• Resolution: 16Mil</li> <li>• Image sensor: 1 / 2,3''</li> <li>• Optical zoom: min 20x</li> <li>• 4k video recording</li> <li>• Image resolution: min 4600x3400</li> <li>• Focal lens: 24-2000mm</li> <li>• Storage: SDXC, SD Card, SDHC</li> <li>• Display: min 3''</li> <li>• Built-in-flash</li> </ul>			
4.4.	<b>IP PTZ Camera 2MP 30x zoom 12vdc</b>			

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	<b>quantity: 12 pieces</b>			
[R7]	<ul style="list-style-type: none"> <li>Image sensor: 1/2.8" progressive scan RGB CMOS</li> <li>Lens: Varifocal, 4.3-137.6 mm, F1.4 - 4.0, Horizontal field of view: 58.3°- 2.4° Vertical field of view: 35.5°- 1.4° Autofocus and auto-iris</li> <li>Dany/night: Automatically removable infrared-cut filter</li> <li>Minim illumination: Color: 0.1 lux at 30 IRE F1.4, B/W: 0.01 lux at 30 IRE F1.4</li> <li>Video compression: H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles H.265 (MPEG-H Part 2/HEVC) Main Profile, Motion JPEG</li> <li>Resolution: 1920x1080 HDTV 1080p to 320x180</li> <li>Frame rate: Up to 60/50 fps (60/50 Hz) in all resolutions</li> <li>Video streaming: Multiple, individually configurable streams in H.264, H.265 and Motion JPEG, Controllable frame rate and bandwidth</li> <li>Audio streaming: Two-way, full duplex</li> <li>Casing: IP66-, NEMA 4X- and IK10 Aluminium casing, polycarbonate (PC) dome</li> <li>Connectors: RJ45 10BASE-T/100BASE-TX PoE, RJ45 push-pull connector (IP66) included, I/O connector for DC or AC input,</li> </ul>			

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	4 configurable alarm Inputs/outputs: mic in/line in, line out			
[R8]	<ul style="list-style-type: none"> <li>Security: Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X (EAP-TLS) network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware, secure boot</li> <li>Supported protocols: IPv4, IPv6 USGv6, HTTP, HTTP/2, HTTPS, SSL/TLS, QoS Layer, 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SRTP, TCP, UDP, IGMP, RTCP, ICMP, DHCPv4/v6, ARP, SOCKS, SSH, NTCIP, LLDP, CDP, MQTT, Syslog</li> <li>Memory: min. 1024 MB RAM, 512 MB Flash</li> <li>Operating conditions: -30 °C to + 50 °C (-22 °F to 122 °F) Maximum intermittent temperature +55 °C Humidity 10–100% RH (condensing)</li> </ul>			
4.5.	<b>Digital camera</b>  <b>quantity: 15 pieces</b>			
[R9]	<ul style="list-style-type: none"> <li>Camera type: DSLR</li> <li>Sensor: 24.2MP APS-C CMOS 4, 23.5 x 15.6mm</li> <li>Image processor: EXPEED 4</li> <li>AF points: 11-point AF, 1 cross-type</li> </ul>			



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	<ul style="list-style-type: none"> <li>• ISO range: 100 to 25,600</li> <li>• Max. image size: 6,000 x 4,000px</li> <li>• Metering zones: 420 pixel RGB sensor</li> <li>• Video: 1920 x 1080 at 60p, 50p, 30p, 25p, 24p</li> <li>• Viewfinder: Optical pentamirror, 95% coverage</li> <li>• Memory card: SD/SDHC/SDXC UHS I</li> <li>• LCD: 3.0-inch fixed, 921K dots</li> <li>• Max burst: 5fps</li> <li>• Connectivity: Bluetooth</li> <li>• Weight: max 450g (body only, with battery and memory card)</li> </ul>			
4.6.	<b>Mobile pentabrid DVR 4CH min 1080p</b>  <b>quantity: 40 pieces</b>			
[R10]	<ul style="list-style-type: none"> <li>• Video: analogue camera 4 cameras BNC, HDVCI cameras MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps, AHD cameras 5MP, 4MP, 1080P@25/30, 720P@25/30fps, 5MP, 4MP, 1080P@25/30, 720P@25/30fps, IP camera 4+2 Channel, each channel up to 6MP</li> <li>• Audio: 1/1, RCA</li> <li>• Video Compression: H.265+/H.265/H.264+/H.264</li> <li>• Audio compression: AAC(only for the 1st channel), G.711A, G.711U, PCM</li> <li>• Resolution: Mainstream: 1st channel 5M-N(1~10fps), other channels 4M-</li> </ul>			

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	<p>N/1080P(1~15fps); 1080N/720P/960H/ D1/CIF (1~25/30fps), Sub stream: D1/CIF(1~15fps)</p> <ul style="list-style-type: none"> <li>• Display interface: 1 HDMI ,1 VGA</li> <li>• Network interface: 1 RJ-45 Port (100M)</li> <li>• Network Protocols: HTTP, HTTPS, TCP/IP, IPv4/IPv6, Wi-Fi, 3G/4G, SNMP, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search (Supports IP camera, DVR, NVS, etc.)</li> <li>• Max users access: 128</li> </ul>			
[R11]	<ul style="list-style-type: none"> <li>• Interoperability: ONVIF 16.12, CGI Conformant</li> <li>• Video detection: Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis</li> <li>• Playback functions: Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom</li> <li>• Storage: 1 SATA Port, up to 6TB capacity internal</li> <li>• 1 Port, for PTZ Control</li> <li>• Integrated 4G modem and GPS</li> <li>• for installation and deployment in the vehicle</li> <li>• Power supply: DC12V/1.5A, &lt;10W</li> <li>• Operating conditions: -10°C ~ +45°C (+14°F ~ +113°F), up to 55°C/131°F with case fan, 10~ 90% RH</li> </ul>			

1. Item Number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
2	<b>Installation, configuration and commissioning</b>			
[R12]	<ul style="list-style-type: none"> <li>No instalation is required for this Lot.</li> </ul>			
3	<b>Documentation</b>			
[R13]	<p>The equipment must be delivered with the following:</p> <ul style="list-style-type: none"> <li>List of equipment;</li> <li>Certificate of Warranty;</li> <li>Certificate of Origin;</li> <li>Licenses (if applicable);</li> <li>User manuals, Administrator manuals, Maintenance manuals;</li> <li>Backup and Disaster Recovery Procedures (if applicable);</li> <li>Procedures for system software installation, configuration, integration, customization;</li> <li>CD / DVD or USB media with: equipment drivers, restore operating systems, installation kits for software.</li> </ul> <p>All above mentioned documents will be delivered to the Beneficiary in English language.</p> <p>All the documents must be delivered in electronic format and hard-copy (if not available in electronic form).</p>			
4	<b>Warranty</b>			

1. Item Number	2. Specifications required	3. Specifications offered	4. Notes, remarks, ref to documentation	5. Evaluation committee's notes
[R14]	<ul style="list-style-type: none"> <li>Duration of warranty is 1 (one) year for each item of this Lot</li> <li>Warranty starts from the date of issuance of Provisional Acceptance Certificate.</li> <li>The Tenderer must submit the Certificate of Warranty for equipment/system to the Contracting Authority stating the commencement date as the date of issuance of Provisional Acceptance Certificate.</li> <li>Tenderers must provide local reliable warranty service agent providing maintenance and the rapid supply of equipment for the Warranty duration.</li> </ul>			
5	<b>Commercial warranty</b>			
[R15]	<ul style="list-style-type: none"> <li>Duration of commercial warranty is minimum 1 (one) year for each item of this Lot.</li> <li>Commercial warranty starts from the date of issuance of Final Acceptance Certificate.</li> <li>Detailed description of the organisation of the proposed service and description of the commercial warranty must be included in the offer.</li> </ul>			
6	<b>Support &amp; maintenance requirements during warranty and commercial warranty period</b>			
[R16]	The following activities/operations must be assured during the warranty and commercial			

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	<p>period:</p> <ul style="list-style-type: none"> <li>• Maintenance regarding the supplied equipment/software in the agreed parameters (performance, availability and data integrity etc.);</li> <li>• Improvements to the technical performances if the case;</li> <li>• Solving bugs that have not been identified during the implementation and which occur during the production stage.</li> <li>• The Tenderer must repair defects or damages at his own cost during the warranty and commercial warranty period.</li> <li>• During warranty and commercial warranty period, the Tenderer must repair or alternatively replace the defective equipment within a maximum of 15 days from officially submitted warranty support request.</li> <li>• During warranty and commercial warranty period, the Tenderer must replace equipment for the period of time needed for repairs in case the defect or damage cannot be repaired within the solution time requested.</li> <li>• During the Warranty period, the Tenderer must fully replace equipment in case the defect or damage that cannot be repaired.</li> <li>• In case of media failure, replacement will take place without returning the original</li> </ul>			

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	<p>media, due to security constraints. Diagnostics of the failed storage media must also be performed in the beneficiary institution under the supervision of its competent staff member.</p> <p>Minimum Service level requirements (SLR) are stated in the table below:</p>			

### Service level agreements (SLA)

Severity Level	Definition	TRT	TF	TNB
Priority 1 – major operational impact	Critical functions are not available. Critical service (application mode) is not available. General activity is significantly disturbed.	8 hours	3 days	1 week
Priority 2 – significant operational impact	Significant operational impact on the activity of many users.	2 days	5 days	1 weeks
Priority 3 - minor operational impact	Medium/Minor operational impact on the activities. It affects a user or computer service (function) with little impact. Activity can take place almost normally.	3 days	1 week	2 weeks
Priority 4 - Information request	Information request. There is no operational impact. The production activity is not affected.	1 week	2 weeks	1 month

### NOTE:

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c4f\_annexiitechspeciitechoffer\_en (1) LOT 4

- **TRT = Time to React or Response Time (Acknowledge Time):**

Time expressed in working hours between the time support provider received notification of the error and the time client was informed on notification being received.

- **TF = Time to Fix (workaround or final solution) or Resolution time:**

Time expressed in working hours or days between the time support provider receives validated Service Request and the time response on the resolution is sent to the beneficiary Priority or Severity Level – How important the reported incidents are in relation to the system based on the affected functionality and business impact.

- **TNB = Time until the new build:**

Amount of time required for Contractor to provide a new patch or build that implement a resolution for the incident.



**DISTRIBUTION LIST:**

No	Item	Special Prosecution Office for the fight against cybercrime	SCUC	UFAC	THB	SPBOK CID OPA	JFI	Crime Analysis Service (CAS)	DDIM CID Belgrade City Police	SSIM CID Belgrade	Regional Police Department Nis	Regional Police Department Novi Sad	Regional Police Department Kraljevo	SKOR	NCKF	SATIT	Total
	<b>LOT 4</b>																
1.	Audio recorder	11		5													16
2.	4MP Covert Pinhole Network Camera-Main					30			1		3	3	3				40

	Box and lens unit																
3.	Professional handheld camera 4K, min.20 optical zoom								2	2	3	3	3				15
4.	IP PTZ Camera 2MP 30x zoom 12vdc								2	10							12
5.	Digital camera		8	5	2												15
6.	Mobile pentabrid DVR 4CH min 1080p					5			5	20	3	3	4				40

## ADDRESSES OF THE BENEFICIARIES

Beneficiary abbreviation	Beneficiary (organizational unit within Ministry of Interior of the Republic of Serbia)	Address
SPO	Special Prosecution Office for the fight against cybercrime	Nemanjina 22-26, Belgrade
SCOC-SUCC	Special Unit responsible for Combating Cyber-crime within the Service for Combating Organised Crime (SCOC)	Stari obrenovački put bb, Belgrade
UFAC	Unit for Fight Against Corruption (Anti-Corruption Department)	Bulevar Zorana Đinđića 104, Belgrade
THB	Trafficking in Human Beings (THB) Unit	Stari obrenovački put bb, Belgrade
SCOC-SAD	Special Action Department within the Service for Combating Organised Crime SCOC	Kneza Miloša 101, Belgrade
FIU	Financial Investigation Unit	Kneza Miloša 101, Belgrade
CAS	Crime Analysis Service	Bulevar Mihajla Pupina 2a
SSIM CID Belgrade City Police	Service for Special Investigative Methods (SSIM) CID Belgrade City Police Administration	Bulevar Despotu Stefana 107, Palilula, Belgrade
SSIM Belgrade	Service for Special Investigative Methods (SSIM) CID Belgrade	Kneza Miloša 101,

		Belgrade
SSIM Niš	Service for Special Investigative Methods (SSIM) Regional Police Department Niš	Bul. 12. Februar 89, Niš
SSIM Novi Sad	Service for Special Investigative Methods (SSIM) Regional Police Department Novi Sad	Pavla Papa 46, Novi Sad
SSIM Kraljevo	Service for Special Investigative Methods (SSIM) Regional Police Department Kraljevo	Izletnička bb, naselje Ribnica, Kraljevo
SKOR	Criminal Intelligence Service	Bulevar Zorana Đinđića 104, Belgrade
NCFK	National Centar for Criminalistic Forensic	Kneza Miloša 103, Belgrade
SATIT	Sector for Analytic, Telecommunication and Information Technology	Kneza Miloša 101, Belgrade

## **Annex II + III: Technical Specifications + Technical Offer - part II – Place of delivery/Acceptance**

Item	ARTICLE	Place of acceptance
No 4.1	11 items	Republic Public Prosecution's Office, Nemanjina 22-26, Belgrade

Item	ARTICLE	Place of acceptance
No 4.1	5 items	Central Warehouse of the Ministry of Interior, Milorada Jovanovica 7, Belgrade
No 4.2	All items	
No 4.3	All items	
No 4.4	All items	
No 4.5	All items	

No 4.6	All items	
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