

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

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

p 1 /19

Publication reference: *NEAR/BEG/2022/EA-OP/0069*

Abbreviations

| No | Acronym | Description |
|-----------|----------------|---|
| 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 |
| 12. | HDD | Hard Disk Drive |

| No | Acronym | Description |
|-----|---------|--|
| 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 |
| 29. | SQA | Software Quality Assurance |

| No | Acronym | Description |
|-----|---------|---|
| 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 | HARDWARE REQUIREMENTS | | | |
| 1.0 | Hardware requirements | | | |
| [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. | | | |
| | LOT 5 – SURVEILLANCE EQUIPMENT | | | |
| 5.1. | Audio recorder quantity: 16 pieces | | | |
| [R4] | <ul style="list-style-type: none"> Type: dictaphone Connection: 3.5mm, USB Screen: LCD Memory: 8GB Recording format: MPEG1 layer3(MP3), PCM(WAV) Compatible operating systems: Windows7/8/10, macOS | | | |

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|----------------------|--|------------------------------|---|---------------------------------------|
| 5.2. | 4MP Covert Pinhole Network Camera-Main Box and lens unit quantity: 40 pieces | | | |
| [R5] | <ul style="list-style-type: none"> • Resolution: 4MP • Sensitivity: 0,02-0,04 lux • Auto iris • Autofocus • Focal length: 2,8mm • Video resolution: 2880x2160 • Operating Temperature oC: -30 ~ +60 C • Power supply: 12Vdc (BNC) and/or PoE • Half of the items must have separate lens unit | | | |
| 5.3. | Professional handheld camera 4K, min.20 optical zoom quantity: 15 pieces | | | |
| [R6] | <ul style="list-style-type: none"> • Resolution: 16Mil • Image sensor: 1 / 2,3'' • Optical zoom: min 20x • 4k video recording • Image resolution: min 4600x3400 • Focal lens: 24-2000mm • Storage: SDXC, SD Card, SDHC • Display: min 3'' • Built-in-flash | | | |
| 5.4. | IP PTZ Camera 2MP 30x zoom 12vdc | | | |

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|----------------------|---|------------------------------|---|---------------------------------------|
| | quantity: 12 pieces | | | |
| [R7] | <ul style="list-style-type: none"> Image sensor: 1/2.8" progressive scan RGB CMOS 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 Dany/night: Automatically removable infrared-cut filter Minim illumination: Color: 0.1 lux at 30 IRE F1.4, B/W: 0.01 lux at 30 IRE F1.4 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 Resolution: 1920x1080 HDTV 1080p to 320x180 Frame rate: Up to 60/50 fps (60/50 Hz) in all resolutions Video streaming: Multiple, individually configurable streams in H.264, H.265 and Motion JPEG, Controllable frame rate and bandwidth Audio streaming: Two-way, full duplex Casing: IP66-, NEMA 4X- and IK10 Aluminium casing, polycarbonate (PC) dome Connectors: RJ45 10BASE-T/100BASE-TX PoE, RJ45 push-pull connector (IP66) included, I/O connector for DC or AC input, 4 configurable alarm Inputs/outputs: mic | | | |

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|----------------------|---|------------------------------|---|---------------------------------------|
| | in/line in, line out | | | |
| [R8] | <ul style="list-style-type: none"> 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 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 Memory: min. 1024 MB RAM, 512 MB Flash Operating conditions: -30 °C to + 50 °C (-22 °F to 122 °F) Maximum intermittent temperature +55 °C Humidity 10–100% RH (condensing) | | | |
| 5.5. | Digital camera quantity: 15 pieces | | | |
| [R9] | <ul style="list-style-type: none"> Camera type: DSLR Sensor: 24.2MP APS-C CMOS 4, 23.5 x 15.6mm Image processor: EXPEED 4 AF points: 11-point AF, 1 cross-type ISO range: 100 to 25,600 Max. image size: 6,000 x 4,000px | | | |

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|----------------------|---|------------------------------|---|---------------------------------------|
| | <ul style="list-style-type: none"> • Metering zones: 420 pixel RGB sensor • Video: 1920 x 1080 at 60p, 50p, 30p, 25p, 24p • Viewfinder: Optical pentamirror, 95% coverage • Memory card: SD/SDHC/SDXC UHS I • LCD: 3.0-inch fixed, 921K dots • Max burst: 5fps • Connectivity: Bluetooth • Weight: max 450g (body only, with battery and memory card) | | | |
| 5.6. | Mobile pentabrid DVR 4CH min 1080p quantity: 40 pieces | | | |
| [R10] | <ul style="list-style-type: none"> • 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 • Audio: 1/1, RCA • Video Compression: H.265+/H.265/H.264+/H.264 • Audio compression: AAC(only for the 1st channel), G.711A, G.711U, PCM • Resolution: Mainstream: 1st channel 5M-N(1~10fps), other channels 4M-N/1080P(1~15fps); 1080N/720P/960H/D1/CIF (1~25/30fps), Sub stream: | | | |

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|----------------------|---|------------------------------|---|---------------------------------------|
| | D1/CIF(1~15fps) <ul style="list-style-type: none"> Display interface: 1 HDMI ,1 VGA Network interface: 1 RJ-45 Port (100M) 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.) Max users access: 128 | | | |
| [R11] | <ul style="list-style-type: none"> Interoperability: ONVIF 16.12, CGI Conformant Video detection: Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis 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 Storage: 1 SATA Port, up to 6TB capacity internal 1 Port, for PTZ Control Integrated 4G modem and GPS for installation and deployment in the vehicle Power supply: DC12V/1.5A, <10W Operating conditions: -10°C ~ +45°C (+14°F ~ +113°F), up to 55°C/131°F with case fan, 10~ 90% RH | | | |
| 2 | Installation, configuration and commissioning | | | |

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| [R12] | <ul style="list-style-type: none"> The Contractor will be responsible for delivery, installation, configuration and start-up of the supplies delivered. The Contractor will be also responsible for integration of the supplies delivered with the existing infrastructure, if required by the nature of the supplies provided. The Beneficiary reserves the right to delegate minimum 2 of its employees to actively participate in the installation and configuration phase together with the Contractor's implementation team. Contractor will also perform specific installation and configuration tasks as stated in the requirements of specific items of this Lot. | | | |
| 3 | Documentation | | | |
| [R13] | <p>The equipment must be delivered with the following:</p> <ul style="list-style-type: none"> List of equipment; Certificate of Warranty; Certificate of Origin; Licenses (if applicable); User manuals, Administrator manuals, Maintenance manuals; Backup and Disaster Recovery Procedures (if applicable); Procedures for system software installation, configuration, integration, customization; | | | |

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|----------------------|--|------------------------------|---|---------------------------------------|
| | <ul style="list-style-type: none"> CD / DVD or USB media with: equipment drivers, restore operating systems, installation kits for software. <p>All above mentioned documents will be delivered to the Beneficiary in Serbian and English languages, except the documents which are provided by the manufacturers. Excmpted documents will be delivered 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 | Warranty | | | |
| [R14] | <ul style="list-style-type: none"> Duration of warranty is 1 (one) year for each item of this Lot Warranty starts from the date of issuance of Provisional Acceptance Certificate. 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. Tenderers must provide local reliable warranty service agent providing maintenance and the rapid supply of equipment for the Warranty duration. | | | |
| 5 | Commercial warranty | | | |

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| [R15] | <ul style="list-style-type: none"> Duration of commercial warranty is minimum 1 (one) year for each item of this Lot. Commercial warranty starts from the date of issuance of Final Acceptance Certificate. Detailed description of the organisation of the proposed service and description of the commercial warranty must be included in the offer. | | | |
| 6 | Support & maintenance requirements during warranty and commercial warranty period | | | |
| [R16] | <p>The following activities/operations must be assured during the warranty and commercial period:</p> <ul style="list-style-type: none"> Maintenance regarding the supplied equipment/software in the agreed parameters (performance, availability and data integrity etc.); Improvements to the technical performances if the case; Solving bugs that have not been identified during the implementation and which occur during the production stage. The Tenderer must provide Help Desk support (phone & e-mail), available minimum during working hours (8h–17h local time) during the warranty and commercial warranty period. The Tenderer must repair defects or | | | |

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| | <p>damages at his own cost during the warranty and commercial warranty period.</p> <ul style="list-style-type: none"> • Registering and tracking problems must take place using a dedicated software application for incident and problem management provided by the Tenderer. • The application for the registration and tracking of problems must be also used for the management of issues and events that occur in the implementation stage of the project. • During warranty and commercial warranty period, the Tenderer must repair or alternatively replace the defective equipment within a maximum of 48 hours from officially submitted warranty support request. • 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. • During the Warranty period, the Tenderer must fully replace equipment in case the defect or damage that cannot be repaired. • In case of media failure, replacement will take place without returning the original media, due to security constraints. Diagnostics of the failed storage media must also be performed in the beneficiary | | | |

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| | <p>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:

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

2021.1

c4f_annexiitechspeciitechoffer_en (1) LOT 5

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 | SATT | Total |
|----|--|---|------|------|-----|---------------|-----|------------------------------|-------------------------------|-------------------|--------------------------------|-------------------------------------|-------------------------------------|------|------|------|-------|
| | LOT 5 | | | | | | | | | | | | | | | | |
| 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 Despota Stefana 107, Palilula, Belgrade |
| SSIM Belgrade | Service for Special Investigative Methods (SSIM) CID Belgrade | Kneza Miloša 101, Belgrade |

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|---------------|--|--|
| 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 5.1 | 11 items | Republic Public Prosecutor's Office, Nemanjina 22-26, Belgrade |

| Item | ARTICLE | Place of acceptance |
|--------|-----------|--|
| No 5.1 | 5 items | Central Warehouse of the Ministry of Interior, Milorada Jovanovica 7, Belgrade |
| No 5.2 | All items | |
| No 5.3 | All items | |
| No 5.4 | All items | |
| No 5.5 | All items | |
| No 5.6 | All items | |

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