

EUROPEAN UNION

Delegation of the European Union to Bosnia and Herzegovina

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Clarification No. 1 to the Tender Dossier

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Tender No:	EC/BIH/TEN/18/002
Subject:	Enhance the quality and safety of information exchange among LEAs in BiH

LOT 1

Q1: In lot 1, in item 1.1, you have requested a monitor with minimum 22" in size. Can you please confirm if a monitor with 21.5" size is compliant?

A1: Please refer to Corrigendum No 1 to the TD.

Q2: In lot 1, in item 1.1, you have requested a monitor that includes $2 \times USB$ ports. Kindly note that desktop monitors do not include any USB ports in them. Can you please confirm if a desktop monitor without $2 \times USB$ ports is compliant? If not, can you please elaborate the use case for the $2 \times USB$ ports?

A2: Please refer to Corrigendum No 1 to the TD.

Q3: In Lot 1, in item 1.2 and 1.3, you have requested a Case - Tower/Midi Tower. Can you please confirm if a Micro tower case is compliant?

A3: Please refer to Corrigendum No 1 to the TD.

Q4: In Lot 1, in item 1.2 and 1.3, you have requested a graphic card with the following ports: VGI + HDMI or DVI. Can you please confirm the desired output ports?

A4: For item 1.2 there is a typing mistake in the technical specifications (instead of VGI it should be VGA). Required output port is VGA and one of the others (HDMI or DVI). Please refer to Corrigendum no 1 to the TD. In Item 1.3 there is no typing mistake and required output port is HDMI and one of the others (DVI or VGA).

Q5: In lot 1, in item 1.2 and 1.3, you have requested a sound card with 3 x Rear Audio jacks. Can you please confirm if only 2 Rear jacks are accepted? 1 would be Line-In and the second would be line-out.

A5: Please refer to Corrigendum No 1 to the TD.

Q6: In lot 1, in items 1.2 and 1.3, you have requested a warranty for 1 year and a commercial warranty for 3 years. Can you please confirm how many warranty years are requested?

A6: For item 1.2 one (1) year warranty is requested, for item 1.3 one (1) year warranty and three (3) years commercial warranty is requested. Both periods, the warranty (1 year) and the commercial warranty (3 years), shall commence on the date of provisional acceptance.

Q7: Items 1.1, 1.2 and 1.3

Instructions to tenderers and technical specification, the following Items and Quantities are requested:

Table 1			
No.	Item(s)	Quantity	
1.1	Monitor	698	
1.2	Desktop computer type 1	611	
1.3	Desktop computer type 2	87	

Please clarify if one Certificate of Origin can be provided for Items 1.2 and 1.3 as confirmation of the origin for one product assembled of these 2 components (table 2), or separate Certificate of Origin must be provided for each item.

Table 2

No.	Item(s)	Quantity
1.2	Desktop computer type 1 with monitor	611
1.3	Desktop computer type 2 with monitor	87

A7: During the tendering stage the tenderers must provide an undertaking signed by their representative certifying compliance with the rule of origin. Please refer to point 4.1 of Instruction to Tenderers.

In addition please refer to PRAG Section 2.3.8. which states:

"When submitting its tender, if the rules of origin apply, the tenderer must state expressly that all the goods meet the requirements concerning origin and must state the country(ies) of origin. When tendering for systems comprising more than one item, the origin of each item in the system must be specified. The tenderer is bound by the declaration of origin she/he submits. The tenderer is obliged to verify that the provided information is correct. Otherwise, the tenderer risks to be excluded because of negligently misrepresenting information. The tenderer must provide a declaration of origin or additional information considering that the issuing authority may refuse to issue a certificate of origin at tendering stage without presentation of commercial invoices.

The declaration of origin must be submitted at the latest during implementation of the contract when the certificate of provisional acceptance is requested. Failing this, the contracting authority will not make any further payment to the contractor. [...]"

Regarding the origin and assembling, please refer to PRAG section 2.3.7, which states:

"[...] The country of origin is not necessarily the country from which the goods were shipped and supplied. Two basic concepts are used to determine the origin of goods, namely the concept of <u>'wholly</u> <u>obtained'</u> products and the concept of products having undergone a <u>'last substantial transformation'</u>:

- <u>If only one country is involved in the production, the 'wholly obtained' concept will be applied</u>. In practice, these goods wholly obtained in a single country must be regarded as having their origin in that country. This will be restricted to mostly products obtained in their natural state and products derived from wholly obtained products.

- <u>If two or more countries are involved in the production of goods</u>, it is necessary to determine which of those countries confers origin on the finished goods. For this purpose <u>the concept of 'last</u> <u>substantial transformation' is applied</u>. In general the criterion of last substantial transformation is expressed in three ways:

- by a rule requiring a change of tariff (sub)heading in the HS nomenclature (i.e. the Nomenclature governed by the Convention on the Harmonized Commodity Description and Coding System);
- by a list of manufacturing or processing operations that do or do not confer on the goods the origin of the country in which these operations were carried out;
- by a value added rule, where the increase of value due to assembly operations and incorporation of originating materials represents a specified level of the ex-works price of the product.

[...]"

Q8: Having in mind that the tender is divided into lots, and that the delivery of some lots is related to the completion of some other lots, while some can be delivered completely independently, please clarify in the case of be awarded for two or more lots, lots that can be considered independent supply can be delivered and charged independently of the completion of the whole contract.

A8: In case a tenderer is awarded more than one lot each lot is considered as individual supply.

Q9: Please clarify whether the servers will be connected to storage systems via switch or directly. Some storage systems do not have the ability to directly connect to servers.

A9: All storage systems must have the ability to be used as direct attach storage to the servers over Fibre Channel protocol.

Q10: It is requested to offer a 22" display with 16:9 screen ratio which is not possible on the requested screen size, is it possible to offer a 21,5" display with the 16:9 screen ratio?

A10: Please refer to Corrigendum no 1 to the TD.

Q11: (Desktop Computer type 1):

Q11.1: Is it possible to offer an integrated graphic card instead of a dedicated that meets all requirements (it has the required connectors)?

Q11.2: In the specification you requested 3 audio connectors, since this limits the possible offer to a 1-2 vendors and since this is a business PC can you allow us to offer a PC with 2 audio connectors.

A11.1: It is possible to offer integrated graphics card that meets all requirements.

A11.2: Please refer to Corrigendum No 1 to the TD.

Q12: (Desktop Computer type 2): Is it possible to offer an integrated graphics card instead of a dedicated that meets all requirements (it has the required connectors)? In the specification you requested 3 audio connectors, since this limits the possible offer to a 1-2 vendors and since this is a business PC can you allow us to offer a PC with 2 audio connectors.

A12: Please refer to Answers 11.1 and A11.2 and to Corrigendum no 1 to the TD.

Q13.1: (Notebook): Since the specified battery power limits the offer to one vendor, in order to secure transparency is it possible to offer a notebook that has +/- 4% smaller or larger Wh?

Q13.2: In the specification it is requested to offer a notebook with a memory card reader, since not a lot of vendors today offer an integrated card reader, is it possible to offer an external USB connected card reader.

A13.1: Please refer to Corrigendum no 1 to the TD.

A13.2: No, the offered product must fulfil the requirements specified in the technical specifications.

Q14: (Item 1.2 Desktop Computer Type 1)

Q14.1: Required is Graphic card – VGI + HDMI or DVI. Please confirm that VGI is a typing mistake and the required must be VGA + HDMI or DVI.

Q14.2: Required software: pre-installed Operating System has to support integration with enterprise class directory services MS Active Directory or equivalent. Please find here below a comparison between Windows 10 Professional and Windows 10 Enterprise. Please specify the required operating system.

A14.1: Please refer to Answer A4.

A14.2: It is up to the tenderer to offer the pre-installed operation system according to the requirements specified in the technical specifications.

Q15: (Item 1.3 Desktop Computer Type 2)

Required software: pre-installed Operating System has to support integration with enterprise class directory services MS Active Directory or equivalent. Please find here below a comparison between Windows 10 Professional and Windows 10 Enterprise. Please specify the required operating system.

A15: Please refer to Answer A14.2.

Q16: (Item 1.4 Notebook):

Required is software: pre-installed Operating System has to support integration with enterprise class directory services MS Active Directory or equivalent. Please find here below a comparison between Windows 10 Professional and Windows 10 Enterprise. Please specify the required operating system.

A16: Please refer to Answer A14.2.

Q 17: (Item 1.6 - Handheld barcode reader).

It is required to offer Handheld barcode reader with:

- Print contrast ratio: better than 35%
- Scanning slope: 50° minimum
- Light source: min. 4800 Lux

Q17.1: Please confirm that is acceptable to offer Handheld barcode reader with "Print contrast ratio: "max. 35%" considering that barcode readers with print contrast ratio: 20% is better than barcode readers that have contrast ratio: 35%.

Q17.2: Please confirm that "Scanning pitch" is same as "Scanning slope", considering that it has the same meaning?

Q17.3: Considering that many handheld barcode reader manufacturers doesn't state the intensity of the light source but instead many of them state "Light Immunity", please confirm that is acceptable to offer Handheld barcode reader with Light Immunity: 75,000 lux (direct sunlight)?

A17.1: Please refer to Corrigendum no 1 to the TD.

A17.2: Yes, it is confirmed that "Scanning pitch" is the same as "Scanning slope".

A17.3: Please refer to Corrigendum no 1 to the TD.

Q18: (Item 1.7 - Multifunctional printer) It is required to offer Multifunctional printer reader with: Size: ADF: max 216x356mm, Flatbed: min. 216x297mm. Is it acceptable to offer Multifunctional printer with "Size: ADF: max 216x356mm, Flatbed: min. 216x297mm $\pm 1\%$ "?

A18: Please refer to Corrigendum No 1. to the TD.

Q19: (Item 1.9 - Contact Smart Card Reader)
It is required to offer Contact Smart Card Reader with:
- Card Size: ID-1
- Extended Length APDU support: Yes

Q19.1: Please confirm that "Card Size: ID-1" refers to ISO 7816 standard?

Q19.2: Please confirm that "Extended Length APDU support: Yes" refers to ISO 7816 standard?

A19.1: Yes. Card size ID-1 refers to ISO 7816 standard primarily by reference to ISO/IEC 7810 Identification cards — Physical characteristics, but also with other characteristics such as mechanical strength.

A19.2: It is confirmed that "Extended Length APDU support: Yes" refers to ISO 7816 standard.

Q1: Would it be acceptable to offer the following items of non-EU/IPA ll origin? Item 2.34 - Call recorder Item 2.35 - Call recorder

A1: No. All supplies under lot 2 must originate in one or more of Member states of the European Union and beneficiary countries of IPA II programme as defined under the Regulation (EU) $N^{\circ}236/2014$).

Q2: In lot 2, in item 2.1, 2.2, 2.3 and 2.4, you have requested "Preinstalled server operating system".

Q2.1: Can you please specify the desired version of the operating system?

Q.2.2: Can you please confirm that you want the licenses for the server operating system to be included in our offer?

A2.1: It is up to the tenderer to offer the operating system and its version according to the requirements specified in the technical specifications.

A2.2: Licences for operating system must be included in technical and financial offer.

Q3: In lot 2, in item 2.6, you have requested for storage type 2, Feature requirements: Tiering supported and remote mirroring supported. Can you please confirm if you need the licenses to be included in the financial offer at this stage? Or you only require a storage that supports both features?

A3: Licence for all requested features must be included in technical and financial offer.

Q4: In lot 2, in item 2.7 you have requested Local and remote data protection (snapshot, replication), and QoS. Can you please confirm if you need the licenses to be activated with the storage?

A4: It is necessary for the storage to be delivered with the active functionality required in the documentation. The way in which the solution will be delivered, whether with one or more of the licenses involved, depends on the offer. The licences must be included in technical and financial offer.

Q5: In lot 2, in item 2.7 you have requested Min 96 GB Cache. Can you please confirm if 64 GB is accepted?

A5: The offered product must comply with minimum requirements specified in the technical specifications.

Q6: In lot 2, in item 2.7 the requested that "data must be migrated from an existing storage".

Q6.1: Can you please confirm the existing model and storage capacity that will be migrated from the existing storage to the new one?

Q6.2: Can you please confirm the type of files that are stored in the existing storage?

A6.1: The space used on the existing storage is much smaller than the one defined in the technical specifications. Data Centre is configured on the storage with Virtual Machines which will be migrated with VHD.

A6.2: Data Centre is configured on the storage with Virtual Machines which will be migrated with VHD.

Q7: In lot 2, in item 2.8,

Q7.1: can you please confirm if 16TB is acceptable instead of 17TB usable de-duplicated capacity?

Q7.2: Can you please confirm the required connectivity for the backup storage?

A7.1: The offered product must comply with minimum requirements specified in the technical specifications.

A7.2 According to the technical specifications the following connectivity for the backup storage is required:

- Min. 4x1 Gbps ports, or faster
- Min. 1x1 Gbps management Ethernet port
- Support for extension with min. 4x10 Gbps Ethernet ports or 4 x 16 Gbps FC

Q8: In lot 2, in items 2.20, 2.21, 2.22, 2.23, 2.24, 2.25, 2.26, 2.27 and 2.28, there is no derogation as per tender documents.

A8: Correct. All supplies under lot 2 must originate in one or more of Member states of the European Union and beneficiary countries of IPA II programme as defined under the Regulation (EU) $N^{\circ}236/2014$).

Q9: NTP server: Is it possible instead of Rubidium, which is too big to put it into an IMS chassis 1U high to use very good Oscillator, called DHQ, and its short term stability ($\tau = 1$ sec) is 2.10-12 and accuracy of PPS (pulse per sec) is $< \pm 50$ nsec? Is it accepted to have IP66 for GPS antenna instead of IP67?

A9: Please refer to Corrigendum No 1 to the TD.

Q10: (Item 2.10 – GPS NTP Server) It is required to offer GPS NTP Server with:

Time Accuracy: <50 ns RMS to UTC at 1PPS output. Considering that most of the leading vendor that manufacture GPS NTP Servers Time Accuracy value prefix with a sign ", \pm ", is it acceptable to offer GPS NTP Server with Time Accuracy: < \pm 50 ns RMS to UTC at 1PPS output

A10: Please refer to Corrigendum no 1 to the TD.

Q11: (Item 2.10 – GPS NTP Server)

It is required to offer GPS NTP Server with:

- 1 Day Holdover Accuracy: Rubidium Oscillator < 5 μs
- Size: 1U rack mount

Q11.1: Is it acceptable to offer GPS NTP Server with DHQ Oscillator that fully comply with all requirements instead GPS NTP Server with Rubidium Oscillator, because GPS NTP Server with DHQ Oscillator, in case of GPS signal loss, keeps the exact time in the required precision up to 10% better?

Q11.2: Also, most of the leading vendor that manufacture GPS NTP Servers use 3U (3 unit) housing for GPS NTP Server with Rubidium Oscillator and in case that is not acceptable to offer GPS NTP Server with DHQ Oscillator, is it acceptable to offer GPS NTP Server with Rubidium Oscillator in 3U housing?

A11.1: Please refer to Answer A9.

A11.2: No, the offered product must comply with minimum requirements specified in the technical specifications.

Q12: (Item 2.12 – Network Switch L2 type 1)

It is required to offer Network Switch L2 type 1 with:

• Layer 3 Features: Static routing with min. 2048 entries in IPv4 routing table

Is it really necessary that Layer 2 switch have support for min. 2048 routes? Please, consider to remove this request.

A12: The offered product must comply with minimum requirements specified in the technical specifications.

Q13: (Item 2.12 – Network Switch L2 type 1)

It is required to offer Network Switch L2 type 1 with:

• Stacking: Supported, with min. 1x stacking module slot;

Is it acceptable to offer switch with support for VSS (virtual switching system)? This means that you can use 10G or 40G interface for connection between two switches and you will have same functionality which you have if you are using switch with dedicated stack module?

A13: Please refer to Corrigendum no 1 to the TD.

Q14: (Item 2.14 – Network Switch L3 type 1)

It is required to offer Network Switch L3 type 1 with:

• Features: OSPF, QoS, VLAN, ACLs, MAC address filtering, support for CLI and Web interface

Q14.1: Is it request for OSPF mandatory or we can offer switch without OSPF?

Q14.2: Is it acceptable to offer switch with static routing functionality included and optional OSPF functionality which can be activated with additional license?

A14.1: OSPF requirement is mandatory.

A14.2: No. The offered product must comply with minimum requirements specified in the technical specifications.

Q15: (Item 2.15 – Network Switch L3 type 2)

It is required to offer Network Switch L3 type 2 with:

• Stacking bandwidth: at least 160 Gbps with possibility to interconnect up to 9 switches as a single logical device. Min. one cable for stacking must be included

Is it acceptable to offer switch with support for VSS (virtual switching system)?

This means that you can use 10G or 40G interface for connection between two switches and you will have same functionality which you have if you are using switch with dedicated stack module?

A15: Please refer to Corrigendum no 1 to the TD.

Q16: (Item 2.16 – L3 Modular Network switch)

To increase competitiveness, please consider removing or changing this request from specification <u>or</u> <u>simplify full specification</u>:

Chassis

- Bandwidth scalability per line-card slot: Up to 48 Gbps on all slots
- AC/DC input power: Supported
- Mounting: 19- and 23-in. rack compatible
- Number of Interfaces Supported per Line Card: Min. 240 x 10/100 Fast Ethernet (RJ-45), Min. 240 x 10/100 Fast Ethernet (RJ+45) with IEEE 802.3af at Power over Ethernet (PoE/PoE+), Min. 244 x 1000BASE-X (fiber), Min. 240 x 10/100/1000BASE-T Gigabit Ethernet, Min. 240 x 10/100/1000BASE-T Gigabit Ethernet with IEEE 802.3af at PoE/PoE+, Min. 68 x 10 Gigabit Ethernet

Supervisor Engine

- Number of free uplink plug-in SFP/SFP+ port to perform optical backbone connections: Min. 4 nonblocking 10 Gigabit Ethernet uplinks (SFP+) or 4 nonblocking 1 Gigabit Ethernet uplinks (SFP)
- Centralized switching capacity: Min. 560 Gbps
- Per-slot switching capacity: Min. 48 Gbps
- Throughput: Min. 225 Mpps for IPv4, 110 Mpps for IPv6, 225 Mpps for L2 Bridging
- CPU: Min. Quad core 1.8 GHz
- CPU queues: Min. 64
- Feature set: advanced quality of service (QoS), rate limiting, access control lists (ACLs), and. Dynamic IP routing protocols Open Shortest Path First (OSPF), BGPv4, advanced hardwarebased IP unicast and IP Multicast routing, support for IPv6 Layer 3 switching in hardware
- Cluster: Possibiliy to connect min. 2 physical switches into a single virtual switch and the data plane of both clustered switches is active at the same time in both chassis. Cluster members are connected by virtual switch links (VSLs) using standard Gigabit or 10 Gigabit Ethernet connections between the cluster members. VSLs can carry regular user traffic in addition to the control plane communication between the cluster members

Line Card 1 and 2

• L2-4 Jumbo Frame support: up to 9216 bytes

A16: Please refer to Corrigendum No 1 to the TD.

Q17: Item 2.17 – Network Switch

Q17.1: Please define feature set that this switch need to support.

Q17.2: Is it acceptable to offer switch with Layer 2 functionality?

Q17.3: Please consider to remove request:

• Support for Jumbo Frames: Min. 9216 bytes

A17.1: Please refer to Corrigendum No 1 to the TD.

A17.2: No. The offered product must comply with minimum requirements specified in the technical specifications.

A17.3: Please refer to Corrigendum No 1 to the TD.

Q18: (Item 2.22 – Firewall type 2)

It is required to offer Firewall type 2 with:

• Support for (or upgrade with additional license): Application visibility and control, Application based routing, URL filtering, SSL inspection, Intrusion prevention, Antivirus and Antispam

Is it necessary to include this license in offer or we can offer firewall without this additional license?

A18: Firewall without additional license can be offered, but the firewall must support all functionalities required in the technical specifications without any additional licence.

Q19: (Item 2.26 – Sandbox appliance)

It is required to offer Sandbox appliance with:

• Emulations files/month: min. 100K

• Operating System - Has to support integration with enterprise-class directory services MS Active Directory

Q.19.1: Please define daily emulation files per hours? According to this request and considering that month have 30 days and if we divide requested value 100K with 30 days and 24 hours, we got that minimum Emulation files/hour is 143. Please confirm, that is acceptable to offer Sandbox appliance with minimum 143 Emulation files/hour.

Q19.2 Please explain this request. Does this mean that Sandbox appliance must be able to protect against attacks targeting multiple Windows OS environments?

A19.1: Manufacturers are having new way of marking the technical characteristics of the emulation of the files, and that the same is no longer expressed on a monthly level, but per hour. Using the formula: emulation files / hour * 24hours * 30days, supports emulation min. 100K files / month.

A19.2: Virtual Machines: min. 4 with Preinstalled Operating System - Has to support integration with enterprise-class directory services MS Active Directory which means that the device itself needs to have virtual machines with preinstalled Operating System that emulate files. These operating systems should be licensed. The device must have the ability to protect against attacks for different Windows OSs.

Q20: (Item 2.27 – Firewall Management Appliance)

It is required to offer Firewall Management Appliance with:

• Included software package: Management Network Policy; Management Endpoint policy; Monitoring, Logging, Reporting and Event Analysis; Integration with Active Directory

Some firewall vendors use separate virtual appliance for management and logging. Is it acceptable to offer one virtual appliance for Management Network Policy, Management Endpoint policy and the other virtual appliance for Logging, Reporting and Event Analysis?

A20: No. Only one appliance is to be offered according to the requirements in the technical specifications.

Q21: (Items 2.1 - 2.4): It is required to offer servers with OS support for Oracle Solaris.

Oracle Corporation still has not tested its Oracle Solaris operating system with broad range of latest generation server vendors. In order to be able to offer the latest and most advanced generation of servers, please omit the request for Oracle Solaris support.

A21: Please refer to Corrigendum no 1 to the TD.

Q22: (Item 2.1 – Server type 1): Considering some requirements of the server specification (processor, HDD, RAID support, Fiber channel HBA), it seems that the specification was written for one generation old server platform that is already considered obsolete. Please clarify the following points:

Q22.1: Please define the type of memory requested for this server

Q22.2: RAID support: is it possible to offer 12 Gbps hardware RAID controller

Q22.3: Fibre Channel: is it possible to offer 16Gb dual port HBA

A22.1: Please refer to Corrigendum no 1 to the TD.

A22.2: Please refer to Corrigendum no 1 to the TD.

A22.3: Please refer to Corrigendum no 1 to the TD.

Q23: (Item 2.3 – Server type 3): Please clarify is it possible to offer 16Gb dual port HBA?

A23: Please refer to Corrigendum no 1 to the TD.

Q24: (Item 2.4 – Server type 4): Please clarify the following points:

Q24.1: Please specify the requested power for power supply units

Q24.2: Fibre Channel: is it possible to offer 16Gb dual port HBA

A24.1: Please refer to Corrigendum no 1 to the TD.

A24.2: Please refer to Corrigendum no 1 to the TD.

Q25: (Item 2.5 – Storage type 1):

It is required to offer storage system with support for various RAID types: RAID 0, 1, 5, 6, 10, 50. The most recent generation of storage systems from various vendors supports common set of RAID types 1, 5, 6, 10, and other RAID types can usually be achieved thru internal storage virtualization technologies.

Please correct requested RAID types to RAID 1, 5, 6, 10 to be able to offer most recent generation of storage systems available on the market.

A25: Please refer to Corrigendum no 1 to the TD.

Q26: (Item 2.5 – Storage type 1):

It is required to offer storage system with 8 GB read/write cache. Please clarify if required cache capacity is specified per controller or total storage system?

A26: It is required to offer 8 GB read/write cache per controller.

Q27: (Item 2.18 – FC SAN Switch):

It is required to offer 24 port 8 Gb FC switch with 405 Gbit/sec aggregate device bandwidth. A fully populated FC Switch with 24 enabled ports provides 384 Gb aggregate device bandwidth (24 port x 8 Gb x 2 for full duplex).

As this aggregate device bandwidth capacity cannot be achieved with 24 port 8Gb FC switch, please clarify if 16 Gb FC switch should be offered?

A27: Please refer to Corrigendum no 1 to the TD.

Q28: (Item 2.2 Server type 2)

Taking into account the server specification with requested power supplies, it can happen that power supplies will have inadequate power under maximum load. Please clarify is it possible to offer 2x 800W redundant power supplies.

A28: Yes.

Q29: (Item 2.3 Server type 3)

It is specified to offer 64 GB DDR4 with Advanced ECC (Error-correcting code) memory.

Advanced ECC memory provides protection against single-bit errors and can detect and in some cases protect against multi-bit memory errors.

Not all server vendors use the same term "Advanced ECC" for memory error protection.

Please omit the term "Advanced" from the specification to be able to offer a broader range of server vendors to improve competitiveness.

A29: Please refer to Corrigendum No 1 to the TD.

Q30: (Item 2.3 Server type 3)

Taking into account the server specification with requested power supplies, it can happen that power supplies will have inadequate power under maximum load. Please clarify is it possible to offer 2x 800W redundant power supplies.

A30: Please refer to Answer A28.

Q31: (Item 2.3 Server type 3)

It is specified to offer Storage controller with possibility to upgrade up to 12 HDD without additional HW components. Please clarify this request.

A31: Server and storage controller must provide the ability to install additional SAS hard drives up to 12 HDD total per server without need for additional HW components like storage HBA (host-bus adapter), SAS cables or drive bays.

Q1: (Item 3.2 - Rack cabinet 42U type 1) Please define KVM cable length?

A1: Please refer to Corrigendum no 1 to the TD.

Q2: (Item 3.2 and 3.3 - Rack cabinet 42U type 1 and Rack cabinet 42U type 2) Due the compatibility, is it necessary that all equipment must be from the same manufacturer?

A2: Yes, all equipment must be from the same manufacturer.

Q3: (Item 3.4 - Micro Data Center)

Due the compatibility, is it necessary that all equipment must be from the same manufacturer?

A3: Yes, all equipment must be from the same manufacturer.

Q4: (Item 3.5 - Micro Data Centar Rack)

It is evident that in this specification error has occurred because there is <u>no such device on the market</u>. <u>It's probably a typo mistake</u>. Please, consider changing specification for this item?

A4: Yes, it is a typing mistake. Please refer to Corrigendum No 1 to the TD

Q5: (Item 3.11 - Server room air conditioning system type 2) It is required to offer:

• Cooling distribution unit with general characteristics and components of the cabinet as follows (1 psc):

o 2 (or more) pairs of dividers

o Number of connections per pair splitter: 3 (or more)

o Branches dimensions DN25 - DN25 ball valve and the valve for measuring and regulating the flow of DN25

o Dimension DN40 splitter with dual ball valves and check valves DN40

o Connections external piping on the top side, DN40

o Pipe fitting DN40 for removal impurity

Is it acceptable to offer?

- Cooling distribution unit with general characteristics and components of the cabinet as follows (1 psc):
 - o Dimension DN50 splitter with dual ball valves and check valves DN50
 - o Connections external piping on the top side, DN50
 - o Pipe fitting DN50 for removal impurity

As it specified in Item 3.10 and Item 3.12

A5: Please refer to Corrigendum no 1 to the TD.

Q6: (Item 3.13, 3.14 and 3.15 - Server room air conditioning system type 4, 5 and 6)

Due the competitiveness, please consider to decrease value for cooling capacity from min. 6.9 kW to min. 6.8 kW (or add $\pm 2\%$) for both, INDOOR and OUTDOOR unit.

Due the competitiveness, please consider removing request:

• Range of performance (cooling): 1,5-7,4 kW for both, INDOOR and OUTDOOR unit And please consider to change or increase value for

- Air power: Change value from max. 1410 m3/h to max. 24 m3/min for INDOOR UNIT because most of the leading air conditioning vendors air flow rate signify with m3/min
- Air power: Increase value from max. 2700 m3/h to max 3400 m3/h or 57 m3/min for OUTDOOR UNIT

Also, please consider to increase value for pipe length from max. 30 m to value "from 30 m up to 50 m" because it's better that professional air conditioning systems support as much as possible distance between outdoor and indoor units.

A6: Please refer to Corrigendum No 1 to the TD.

Q7: (Item 3.16 and 3.17 - Server room air conditioning system type 7 and 8)

Due the competitiveness, please consider removing request:

• Range of performance (cooling): 1,5-5,6 kW for both, INDOOR and OUTDOOR unit

And please consider changing or increase value for:

- Air power: Change value from max. 900 m3/h to max. 15 m3/min for INDOOR UNIT because most of the leading air conditioning vendors air flow rate signify with m3/min
- Air power: Increase value from max. 2400 m3/h to max. 3100 m3/h or 51 m3/min for OUTDOOR UNIT

Also, please consider to decrease value for Height difference (outdoor unit higher/lower) from 30 m to 20 m.

A7: Please refer to Corrigendum No 1 to the TD

Q8: (Item 3.16 and 3.17 - Server room air conditioning system type 7 and 8) To increase competitiveness, please consider to change value for: INDOOR UNIT

- Sound pressure level (cooling): From max. 37 dB(A) to max. 38 dB(A)
- Sound power level (cooling): From max. 52 dB(A) to max. 54 dB(A)
- OUTDOOR UNIT
 - Sound pressure level (cooling): From max 46 dB(A) to max. 48 dB(A)
 - Sound power level (cooling): From max. 63 dB(A) to max. 64 dB(A)

A8: Please refer to Corrigendum No 1 to the TD.

Q9: (Item 3.26, 3.27, 3.28, 3.29, 3.30, 3.32 and 3.33 - System for access control, video surveillance, intruder detection and environment monitoring in server rooms type 1, 2, 3, 4, 5, 7 and 8)

Q9.1: Is it acceptable to offer PC for Central Supervisory Control System and client application with the following technical characteristics?

- Graphic card Integrated with HDMI or DVI and VGA port Instead
- Graphic card Integrated with HDMI, DVI and VGA port
- Monitor: 2x 22" monitor min. resolution 1920x1080 with HDMI or DVI port Instead
- Monitor: 2x 22" monitor min. resolution 1920x1080 with HDMI and DVI port

Also, it is specified Central Supervisory Control System with the following characteristics:

• Store data in an RDBMS

Q9.2: Please confirm that is acceptable to offer Microsoft SQL Server Express for data store.

A9.1: Please refer to Corrigendum no 1 to the TD.

A9.2: A Relational Database Management System (RDBMS) is a database management system (DBMS) that is based on the relational model. RDBMS is the basis for Structured Query Language (SQL), and for all modern database systems. It is up to tenderer to offer a solution for storing data which complies with the requirements specified in the technical specifications.

Q10: (Item 3.11 - Server room air conditioning system type 2)

Q.10.1: Please define Cooling capacity for internal air units? Is it acceptable to offer internal air units with following characteristics:

• Cooling capacity up to 23,5 kW at q=0,87 l/s, Tw=7,2/13,8°C; Ta=32,2°C As it specified in Item 3.10 and Item 3.12

Q10.2: Due the competitiveness, please consider to change dimension for Chiller. Is it acceptable to offer Chiller air / water (glycol) for outdoor installation with the following dimensions: max. 650x2500x1500 mm?

Q10.3: Also please, remove this request from Chiller specification: - Minimum power 9,5 kW; 400/3/50 or change to: - Maximum power 9,5 kW; 400/3/50 because it's better to have a device with less power consumption

A10.1, 10.2 and 10.3: Please refer to Corrigendum No 1 to the TD.

Q11: General inquiry Is it possible to offer factory refreshed or refurbished equipment?

A11: No. All offered equipment must be new and unused.

Q1: Would it be acceptable to offer the following alternate solution for Item 5.8 and Item 5.9: Instead: 50 FPS @ FHD resolution (1920x1080) offer: 60 FPS @ HDx (1440x1080) resolution?

A1: No. The offered product must comply with minimum requirements specified in the technical specifications.

Q2: Would it be acceptable to offer the following items of non-EU/IPA ll origin? Item 5.10 - Mobile device + CMS connectivity license Item 5.11 - Mobile device Item 5.12 - Tablet

A2: No. All supplies under lot 5 must originate in one or more of Member states of the European Union and beneficiary countries of IPA II programme as defined under the Regulation (EU) $N^{\circ}236/2014$).

Q3: Regarding requested monitoring of web services (integration module license), what is the preferred way of informing users about unavailability of services?

A3: Unavailability of services should be displayed on the Command and Control centre as an Error alarm with email to the responsible person with content (Which resource, IP address, Date, Time of unavailability).

Q4 Can you clarify what is the purpose of database for resource and basic assets, and how is it integrated in the system?

A4: Database for resource and basic assets represents a dynamic management (Create, Read, Update, Delete) set of forms, lists with predefined attributes for every type and category of assets and resources (ie Cars, Guns etc.).

Q5: What kinds of traffic anomalies should be detected by system? – explain in more detail or provide example.?

A5: Under traffic anomalies we consider traffic congestion, speeding vehicles (average speed between points A and B), wrong turn, and wrong direction detection.

Q6.1: Is there a tolerance for geographic limitation of content access?

A6.1: No, there is not. There are multiple filters which disable possibility of misusing data and information. Geographical, IP address and role based information filtration combined with additional processes of identification are required to be implemented in order to do accomplish this level of security.

Q.6.2 Can those limitations be overridden, in case of inaccurate positioning?

A6.2: No, they cannot. In previous question we can clearly see that GPS positioning is not the only factor which disables the misuse of data and information. If GPS is inaccurate and system shows location other than allowed one, system has to notify user and suggest reposition.

Q7: How is traffic rerouting expected to take place?

A7: Traffic rerouting is a feature which suggests routes based on the calculation of traffic congestion similar to navigation applications. Must have option to send and receive sets of data (API, Json, XML) to other systems ie. when integrated to systems for traffic management (smart city red lights management, smart city smart signalisation and drivers notification).

Q8: (Item 5.1 Document Management system module license)

In item 5.1 is stated that document management system is a centralized system on the level of single county, where within one county there are more police departments with more police stations.

Please explain more in detail access rights to the data in the following sense:

Q8.1: Is there an exchange of documents between the counties using Document Management System module that is subject of this item, since all counties are represent as separate system. ?

Q8.2: Is there a hierarchical structure within one county that determines who sees what data within a Document Management system module. (in terms of the affiliation of a user to a police administration or a police station)? If there is hierarchical structure please describe it in details for each county?

Q8.3: Is there an interaction in the sense of exchange of documents between police administrations and police stations within one county using Document Management system module

A8: Every county will have its own app tenant and county specific access rights hierarchically organized. Users and roles are managed in separate tenants of Identity Management but Ministry of Interior will define data and document exchange protocols and procedures to integrate all the tenants in one system.

A8.1: Yes, as mentioned above, MoI will define exact protocol and procedures for data and document exchange in order to enable on-demand access for specific queries.

A8.2: Yes, there is a hierarchy in every MoI in FB&H but not every county has the same number police departments. Currently, the hierarchy access will be divided to users from the organizational hierarchy (County, Departments, Stations - Roles) which you can find on every MoIs website.

A8.3: Yes, police administrations will be able to exchange data and documents with police stations using this module to accomplish lots of benefits ie reducing paper waste, increase speed and productivity.

Q9: (Item 5.1 Document Management system module license)

Please explain more in detail, what is the exact number of police administrations and police stations per county?

A9: Details about the correct number of police stations varies per county but there is only one administration per county. More details can be found on Ministries of Interior websites.

Q10: (Item 5.1 Document Management system module license)

The module should have the following functionality:

- Official record
- Official record on the violation
- Official record on receiving verbal report via phone
- Official record on collected notifications from the citizens
- Record on investigation
- Record on face recognition
- Record on receiving verbal report
- Record on questioning the suspect
- Record on hearing the witness
- Record on recognizing objects
- Reports on body searching without warrant
- Report on usage of the force
- Report with photo document
- Report on the committed violation
- Report supplement to the Prosecution's office
- Order for deposit
- Request for expertising papillary lines
- Document approval

Does this mean that the above mentioned functionalities should be implemented in such a way that for each item there is a form corresponding to the paper form and after filling user can generate pdf or word document with the all data, ready for printing and further distribution through the Document Management System module?

If the above mentioned functionalities are to be implemented otherwise please give us a detailed description.

A10: Yes, that's correct. All of the above-mentioned records are forms already defined regarding standardized forms and paperwork for every county with the ability to be stored, managed or printed according to the needs and procedures of the MoI.

Q11: (Item 5.1 Document Management system module license)

In item 5.1 Reports and records are mentioned. Please clarify:

Q11.1: Please confirm that there are no differences in the counties in the structure of the reports and records that are the subject of item 5.1?

Q11.2: If there is a difference in the structure of the reports and records per canton, please provide us details description for each report and record for each canton

A11.1: Basically, most of the reports are the same in the structure with minor differences, different laws per county define their own protocols and forms.

A11.2: Structure of the documents is mostly the same, only minor differences are present due to the different Laws per County.

Q12: (Item 5.1 Document Management system module license)

In item 5.1 is stated: Incident report must have the following parameters or functionalities at least: Search of all incidents by parameters: ordinal number. Please clarify:

Q12.1: Please explain how ordinal number is generated?

Q12.2: Is ordinal number unique at the level of single county?

A12.1: Ordinal number is a unique ID generated automatically by the system as a combination of numbers, dashes and letters, protocol number in combination with current date ie 287-1-28119/4 but this is not a generic rule and will be determined per a document and form accordingly but the system has to enable dynamic number generation

A12.2: Yes, ordinal number is unique on the single county level in order to maintain document integrity.

Q13: (Item 5.1 Document Management system module license)

In item 5.1 is stated: "The system enables assigning number of items, number of acts in accordance with office business ". Please clarify:

Q13.1: Is the number of items, number of acts in accordance with office business, protocol number? so, how the protocol numbers within one county are assigned?

Q13.2: Is ordinal number unique at the level of Single County?

A13.1: Yes, the numbers of items and acts are in accordance with office businesses protocol number which is unique on the single county level in order to maintain document integrity.

A13.2: Yes, the ordinal number is unique on the single county level in order to maintain document integrity.

Q14: (Item 5.13 System Installation and integration)

Q14.1: Does the training take place at the user's location or on the Bidder location (for each item from 5.1 to 5.7)?

Q14.2: Please provide us a detailed description of the documentation Bidder need to deliver (e.g. user documentation, technical documentation...) for each item individually (from 5.1 to 5.7)?

A14.1: Training mandatory has to take place at each county premises and to be organized specially for that county's MoI employees.

A14.2: Under term documentation we consider user manuals and documentation, technical manual, implementation project documentation per module.

Q15: (Items 5.1- 5.7)

In the documentation related to LOT 5 there is no information whether the source code is supplied for all required items (5.1 to 5.7) and whether the end user gets the right to modify the source code. Please clarify:

Q15.1: Please clarify whether the source code for items 5.1-5.7 is delivered?

Q15.2: Did the end users gets the right to modify the source code?

A15.1: No, source code is not a part of the procurement but the user licence is. The offered solution must be licensed for at least 500 users per county.

A15.2: No, end user can't modify the source code because user licence is matter of the procurement hence there will not be any option for modification.

Q16: (Items 5.2- 5.7)

In the documentation related to LOT 5 (items 5.2 to 5.7), it is not specified which database can be used to implement items 5.2 to 5.7. Please clarify:

Q16.1: Do the end users (counties) have enough database licenses for items in LOT 5 (5.2-5.7) and can they be used?

Q16.2: If counties have enough database licenses please describe exactly what database license counties have?

Q16.3: Due to cost savings is it allowed to use the database license that is mentioned in item 5.1 (Document Management system module license) for items 5.2 to 5.7?

Q16.4 Please confirm that Bidders must write which exactly database license is included in item 5.1

A16.1: The end users (counties) don't have enough database licenses for items in LOT 5 (5.2-5.7). Tenderers must deliver appropriate number of licenses for database that fully support all the required functionalities without any future cost to the end users regarding the license for the offered database.

A16.2: Please refer to Answer A16.1.

A16.3: Tenderers are allowed to use the database required for item 5.1 for items 5.2-5.7. Also, it is acceptable that the bidders for items 5.2-5.7 offer other database that fully support all the required functionalities, provide database licenses for all users in counties, without any future cost to end users regarding the license for the offered database.

A16.4: Yes, tenderers must clearly state which exactly database license is included in item 5.1.

Q17: (Items 5.8- 5.9)

Please clarify, what kind of communication (wireless, 3G, etc.) will be provided at the cameras location? Who is responsible to provide appropriate communication, police agencies or bidders?

A17: Due to the different types of locations there will be a combination of different communication methods starting, in best case scenarios, from Optic fibre, Copper, WiFi even to 3G and 2G. MoIs are responsible for the communication infrastructure, locations (pillars) and power supply.

Q1: (Item 6.1 – Replication software):

It is required for replication software to be compatible with:

"Compatible with VMware Essentials, VMware Enterprise and VMware vCenter Standard"

Please clarify VMware Essentials, is it VMware vCenter Server for Essentials.

Please clarify VMware Enterprise, is it VMware vSphere Enterprise.

Please note that VMware vSphere Essentials does not include vSphere Replication and does not support replication management software, for example VMware Site Recovery Manager.

A1: Please refer to Corrigendum no 1 to the TD.

Q2: (Item 6.4 – Backup & Replication Software): Please clarify requested feature: "Auto archiving backup"

A2: Backup & Replication software must provide native tape support for archiving files and VM backups to standalone tapes or tape libraries.

Q3: (Item 6. – Backup & Replication Software):

A requested feature of Backup & Replication software is "Possibility verification VM replication" Please clarify this request and whether this feature should be optional or fully functional feature.

A3: Verification of VM replication must be fully functional feature included in backup & replication software and provided in technical and financial offer.

Q1: (Item 8.1 - Bluetooth smart card reader) It is required to offer Bluetooth smart card reader with: - ID-1 card format

Please confirm that "ID-1 card format" refers to ISO 7816 standard?

A1: Yes. Card size ID-1 refers to ISO 7816 standard primarily by reference to ISO/IEC 7810 Identification cards — Physical characteristics, but also with other characteristics such as mechanical strength.