

Delegation of the European Union to Bosnia and Herzegovina

Clarification No.3 to the Tender Dossier

Supply of equipment for the development of hydrological flood forecasting system for Sava River Basin in Bosnia and Herzegovina (Phase 1, Bosna River)

Publication reference: EuropeAid/138452/SUP/BA; Tender no: EC/BIH/16/018

QUESTION 1:

LOT 1: Item 1.9. POWER GENERATOR

- a) Is the bigger generator, with approx. 25 kW of power, meant to be installed in some enclosed room/facility or is it supposed to be delivered with housing for outdoor instalment?
- b) Are demanded power generators used as primary power supply or as a back-up option in case of power failure? In case they are meant to be used as a back-up supply is it necessary to offer transfer panels and necessary automation system for starting generators?
- c) In the description of smaller, 4 kW, power generator there is no description of the starting method. Is it required to deliver a starter motor as well?

ANSWER 1:

a, b, c: Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 2:

LOT 1: Item 1.9. POWER GENERATOR: You are asking for total output power: max 30KW. Please specify what do you mean by max.? Can we offer 10KW? It's less than required. Please clarify.

ANSWER 2:

Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 3:

LOT 1: Item 1.9.: POWER GENERATOR

- a) Technical documentation states: "Total Output Power: max. 30 kW" and "Prime Power: max. 25 kW". Please provide minimum values for Total Output Power and Prime Power.
- b) Technical documentation states: "Efficiency: min. 90 %".

Please provide minimum values for Total Output Power and Prime Power.

For this type of equipment it is natural to have efficiency lower then 90%. Is it acceptable to offer power generator with Efficiency: min 85 %"?

- c) Please specify type of power generator: indoor or outdoor?
- d) Is it necessary to offer automatic transfer switch with power generator?

ANSWER 3:

a, b, c, d: Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 4:

LOT 3: Item 3.1. DIGITAL CURRENT METER

- a) We assume, that for automatically calculation of discharge, integrated water level measurement is mandatory.
- b) How many wading rods are required to be delivered and at which lengths?
- c) What are the required cable lengths for digital current meters?

ANSWER 4:

a, b, c: Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 5:

LOT 3: Item 3.1. DIGITAL CURRENT METER

Can we provide an acoustic doppler instrument, instead of the Electromagnetic. The acoustic doppler instruments have a better precision, are less affected to outside influences. In the end this is the current state of the art technology, while electromagnetic is old technology. So the measured results we can provide will be better, the instrument more reliable, and what counts in the end is the discharge measurement not the method. So can we bid with a acoustic doppler instrument?

ANSWER 5:

Digital current meter shall be electromagnetic, as stipulated in the technical specifications, Item 3.1.

OUESTION 6:

LOT 3: Item 3.2. ACOUSTIC DOPPLER CURRENT PROFILER FOR SHALLOW WATER

- a) Acoustic frequency of doppler sensor is required to be "2 MHz to 1 MHz". Is it required that sensor works with one of these two frequencies?
- b) It is required that cell size of doppler sensor is "at least 2 to 10 cm (2MHz) or 2 to 20 cm (1 MHz)". Is "2 to 10 cm" or "2 to 20 cm" referred to the size of the smallest cell or to the cell size in general?
- c) Boat size is required to be up to: $(L \times V \times H)$ 1350 mm x 750 mm x 120 mm. Is it acceptable if one of dimensions (height) is larger than specified in the tender (boat height of 120 mm is extremely small)?

ANSWER 6:

- a) It is required that sensor works with at least one of frequencies in range max. 2 MHz / min. 1 MHz.
- b) The reference is to the cell size in general.
- c) Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 7:

LOT 3: Item 3.2. ACOUSTIC DOPPLER CURRENT PROFILER FOR SHALLOW WATER: An Acoustic doppler complying with all the specifications, the size up 1350 mm x 750 mm x 120 mm and weight up to 15 kg is not provided by European factories. Please allow the bidders to offer an Acoustic doppler smaller and lighter, without affecting the correct functioning of the item required.

ANSWER 7:

Please note that the particular requirement related to dimensions is formulated as "up to". Therefore it is allowed for the specific item to be smaller and lighter within the specified dimensions, as long as it complies with the requirement "The boat must be stabile on the higher flow velocity, up to 5 m/s". Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 8:

LOT 3: Item 3.2. ACOUSTIC DOPPLER CURRENT PROFILER FOR SHALLOW WATER

Is this instrument meant for stationary measurement? If not, if you intend to make moving boat measurements you won't be able to get quality data without a RTK and GPS. In your specification you're not mentioning RTK and/or GPS. Please clarify how you intend to do the measurements, stationary, moving boat or both?

ANSWER 8:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 9:

LOT 3: Item 3.4 - INFLATABLE BOAT

a) A PVC (HypalonTM- NeopreneTM) inflatable boat is required.

After contacting the most important European Inflatable boat manufacturers, we kindly inform you that such material is not frequently used to produce inflatable boat, but custom-made, considering the sealing of glues and of joints. Therefore, we ask you to accept an inflatable boat made in Strongan, a most commercial material used for inflatable boat, that not affect the use required by you.

- b) Please specify if demountable boats are required, or boats with hull. If boats with hull are required, could we offer boats in fiberglass of the latest generation?
- c) Considering the dimension of modern boat and its accessories, we kindly inform you that in the market a boat with max 70 Kg weight is not available. Therefore, please accept weight up to 70 kg.

ANSWER 9:

- a) As per market research it has been established that the concerned item is available at the market.
- b) Please see Corrigendum No. 3 to the Tender Dossier.
- c) The requirement as stipulated in the technical specifications for item 3.4., namely "Weight: max. 70 kg" is confirmed. Please note the reference "max." being the same as "up to".

QUESTION 10:

LOT 4: Item 4,1. PRECIPITATION GAUGE STATION

- a) All-weather precipitation gauge: given the purpose of the system (all-weather) and the power supply (solar) we assume that you are asking for a static weighing precipitation gauge upon totalizer and collector principle (bucket) without any moving parts (e.g. tipping bucket; self-emptying device) or collection funnel with mesh. These (systems with moving parts and collection funnel) have much higher demand in terms of maintenance and power supply (heating in winter period) and are not suitable for unattended and solar supplied stations. Please confirm.
- b) Is it acceptable if two out of three dimensions of protective control cabinet are different approximately $\pm 10\%$ from those that are demanded?

ANSWER 10:

- a) All precipitation gauge stations will be connected to distribution network of electricity /power grid and normally rain gauges during winter will be supplied with power demands through the network, including power demands for heating. Solar panels are used as back-up option in case of power failure. According to this, all solutions for rain gauges are acceptable if it satisfies WMO standards.
- b) Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 11:

LOT 4: Item 4.2. COMPLEX METEOROTOGICAL STATION

- a) In point 4.1 "Precipitation stations", it is required for rain gauges to have ring heater with minimum 35 W power, while in point 4.2 "Complex meteorological stations", no heaters are required. 1. Is the lack of ring heaters in point 4.2 simply an oversight, or do 9 complex meteorological stations really require no ring heaters?
- b) Is power supply from the power grid (220 -240 VAC) required for stations in points 4.1 and 4.2? If grid power supply is required, who provides it? If it is the contractor, what are the distances from stations to power sources and who provides connections to the power grid?
- c) It is required for data loggers to be configured for data acquisition from solar radiation sensor, but in combined weather sensor configuration, no solar radiation sensor or any parameters relevant to this sensor are listed. Is it required for combined weather sensor to contain a solar radiation sensor or is it enough for data logger to be configured to receive data from such sensor, so it can be added in future?
- d) Are control cabinets and solar panels for complex meteorological station meant to be mounted on 10 m pole or are they supposed to be mounted on a separate pole? If it is separate pole, what are pole dimensions?

ANSWER 11:

- a) Please see Corrigendum No. 3 to the Tender Dossier.
- b) All stations in items 4.1 and 4.2 require power grid supply 220-240V, that will be provided by the Beneficiary.
- c) It is not required to configure data logger for solar radiation sensor as no sensor is listed.
- d) Please see Corrigendum No. 3 to the Tender Dossier. Please also refer to Corrigendum No. 2 to the Tender Dossier.

OUESTION 12:

LOT 4: With reference to the Section 4.2 COMPLEX METEOROLOGICAL STATION: We have verified that the "complex station" UMB-binaries and UMB-ASCII interfaces are LUFFT proprietary protocols, this requirement prevents the participation of all instrument manufacturers with equal or better performance characteristics than the LUFFT-OTT. However, it would be a serious form of vice as it would mean that the technical requirements are suitable to favour a single company. Please confirm that this requirement is not mandatory in order to encourage the participation of all European producers in the competition and to ensure free competition.

ANSWER 12:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 13:

LOT 4: Item 4.3. GROUNDWATER LEVET MEASURING STATION

- a) What is required cable length for the groundwater level sensor with measuring range of 0...100 m?
- b) Water temperature sensor on groundwater level station is mentioned as "optional". Do we need to include water temperature sensor on groundwater level station?
- c) Where and how are sensors supposed to be mounted in an enclosed facility, observation well... (do we need to offer protective caps for tubes)?

ANSWER 13:

- a), c): Please see Corrigendum No. 3 to the Tender Dossier.
- b) Bidders can offer better specification than the minimum required.

QUESTION 14:

LOT 4: Item 4,4. HYDROLOGICAL STATION

a) In the technical specification, 10 radar water level sensors are requested. In location descriptions it is noted that only 4 hydrological stations, with radar sensors, are installed on bridges.

How/where are other 6 radar sensors installed? If they are mounted on holders on river banks, the characteristics of those holders should be provided.

- b) What are required cable lengths for radar sensors?
- c) How many staff gauges must be installed per station?
- d) How/where are staff gauges supposed to be installed: on a bridge column, iron U-shaped poles, concrete poles...?
- e) It is required for staff gauge to have maximum width of 150 mm. Can staff gauge 160mm wide be offered (type: standard, enameled, 1 m high with 2 cm-division)?

ANSWER 14:

- a) All hydrological stations with radar sensors are installed on bridges.
- b) Please see Corrigendum No. 3 to the Tender Dossier.
- c) Please refer to Corrigendum No. 2 to the Tender Dossier.
- d, e) Please see Corrigendum No. 3 to the Tender Dossier. Please also refer to Corrigendum No. 2 to the Tender Dossier.

OUESTION 15:

LOT 1: Item 1.4. NETWORK SWITCH

- a) What do you mean with "Min 4 OSPF ports"? Is it "QSFP" Ports?
- b) In reference to "24 x 1/10 Gbps ethernet interface", how many 1Gbps and how many 10 Gbps are required?

ANSWER 15:

a, b) Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 16:

LOT 1: Item 1.4. NETWORK SWITCH

a) Technical documentation states: "Min 4 OSPF ports"

Since there is no OSPF ports avalaible in network industry, is this mistyping and please provide us detailed info regarding this request?

b) Technical documentation states: "DVMRP, PIM DM and PIM SM must be supported. (if license is required, to be included in the offer)".

DVMRP is basically an extension to the RIP unicast routing protocol and has all of the problems associated with RIP as a routing protocol. DVMRP has difficulties with network scaling in some topologies, primarily due to the periodic reflooding necessary to detect new hosts.

Since most of switch manufacturers terminate support for this protocol, is it acceptable to offer Network switch without support for this protocol and please provide info for what purpose you will need this protocol?

ANSWER 16:

- a) Please see Corrigendum No. 3 to the Tender Dossier.
- b) The particular requirement as stipulated in the technical specifications is hereby confirmed. That also means, if a licence is necessary, the bidder have to include it in the offer.

QUESTION 17:

LOT 1: Item 1.4. NETWORK SWITCH

OSPF is a routing protocol not indicated for physical ports. Considering the nature of the item requested, the technical specification could be, instead, referred to "4 ports QSFP+". Could you confirm that such specification requires 4 ports QSFP+"?

ANSWER 17:

a) Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 18:

LOT 4: With reference to the Section 4.3 GROUNDWATER LEVEL MEASURING STATION: Please confirm that we can provide an interface either by GSM / GPRS data transmission and serial interface on the device.

ANSWER 18:

Both of GSM and GPRS data transmission options are requested.

QUESTION 19:

LOT 4: With reference to the Section 4.4 HYDROLOGICAL STATION "On location must be installed staff gauge. Depends on location should be chosen technical variations of staff gauge (vertical, horizontal, inclined or step type). "In order to compare, with the same conditions, all the offers, please indicate the exact number of staff gauge per each hydrological station.

ANSWER 19:

Please refer to Corrigendum No. 2 to the Tender Dossier.

OUESTION 20:

LOT 4

Question No.	Item No.	Page nr.	Requested technical specifications	Proposed technical specifications	Explanation
a)	4.1.	43 of 61	Requested Ring heating for all- weather precipitation gauge sensor is minimal 35 Watt	Ring heating for all- weather precipitation gauge sensor to be minimal 20 Watt	Ring heating power depends on the system, it is not the same for every station instalment and it should not be obligatory as the system can perfectly function with lower heating power.
b)	4.2.	47 of 61	Requested operating temperature range for Weather sensor is from -50 to 60°C	Operating temperature range for Weather sensor to be from -40 to 60°C	Locations where these stations will be installed have never had measured temperature data in this range, even the ranges lower than one that we propose would be more than enough for realistic measuring on these meteorological stations sites.
c)	4.3.	50 of 61	c.1) Requested operating range for groundwater temperature measurement is from -25 to 70°C c.2) Interface at site for groundwater level measuring station is Infrared (IrDA)	Operating range for groundwater temperature measurement to be from -5 to 60°C Interface at site for groundwater level measuring station to be optional, or at least more options than Infrared, like Bluetooth, RS485 or similar.	Requested temperature range is impossible for groundwater measuring sites, and our proposal is more than enough for realistic measuring of temperatures for these hydrological stations. We believe that there should be more options given for communication interface for these stations. User should have more than one option to connect, to be sure that different options are always available if there is no possibility to connect via Infrared or similar, due to malfunction or different problem.

ANSWER 20:

- a, b, c1) Please see Corrigendum No. 3 to the Tender Dossier.
- c2) As stipulated in Annex II +III Technical Specifications + Technical Offer, pg. 1: Unless otherwise specified, the requirements in these technical specifications are presented as a minimum standard which the offered goods must meet."

QUESTION 21:

LOT 4: Appendix III listed the locations of future monitoring stations. Do the monitoring stations already exist?

ANSWER 21:

For the stations in responsibility of FHMI please note that only hydrological stations Sarajevo, Zenica and Tuzla out of the listed stations in Appendix III are active stations that are going to be automatised. There are no existing stations in the other locations listed.

For the stations in responsibility of RHMS RS please note that only meteorological stations Sokolac and Han Pijesak currently work with analogue instruments. Rest of the stations used to work as analogue. All of them are planned to be automatised.

OUESTION 22:

LOT 1: Item 1.7 Rugged Laptop – Water resistant laptop

- a) You are asking for M.2 Slots (2 internal). After deep conversations with the manufacturers, please note that M.2 slot is obsolete and out of order since the advanced technology is to offer SATA disks. We kindly ask you to remove this requirement.
- b) You are asking for IEC 60529 ingress protection: IP-65 (dust-tight, protected against pressurized water). Please note that the offered specifications are fabricated under Military Standard MIL-STD 810G 516.6 and MIL-STD 810G 514.6. We kindly ask you to confirm that these standards are acceptable instead of IEC 60529 IP65.

ANSWER 22:

a, b) Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 23:

LOT 1: Item 1.10 Power Generator – Movable: You are asking for total weight (dry): max 75 Kg. After deep conversations with the manufacturers, there is no generator in these specifications (as required) can be max 75Kg. Please confirm that total weight (dry): less than of 115 Kg is acceptable.

ANSWER 23:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 24:

LOT 1: Item 1.10: POWER GENERATOR – movable: A movable power generator covering a power min 4 Kw max 10 Kw and a total weight (dry) max 75 Kg is requested. We kindly inform you that a power generator complying with both these specs together does not exist in the market. Please allow the bidders to offer a power generator covering the requested power range but with a total weight (dry) approximately 100 Kg.

ANSWER 24:

Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 25:

LOT 1: Items 1;1 and 1.2 (servers). In regard with internal storage capacity you requested, please clarify is it necessary to provide RAID system for that capacity, and whether you need a net capacity after providing RAID-system?

ANSWER 25:

For items 1.1 and 1.2 the required total capacity of internal storage considers a net capacity after providing RAID system.

OUESTION 26:

LOT 1: Item 1.3. Please Confirm that you requested two Power Distribution Units.

ANSWER 26:

Yes, two PDUs should be integral part of server rack.

QUESTION 27:

LOT 1: Item 1.4 (switch). Please confirm that you requested min 4 QSFP ports instead of OSFP. We also kindly ask you to clarify do you intend to use these devices as fibre channel switches? Please specify quantities of SFP and/or SFP+ ports, or how many should be SFP, and how many SFP+ ports?

ANSWER 27:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 28:

LOT 1: Item 1.6. (UPS). Regarding requested power factor, please confirm that UPS with 560W output or more is acceptable for you.

ANSWER 28:

UPS Power factor should be in accordance with power needs of workstation.

QUESTION 29:

LOT 1: Items 1.5, 1.7 and 1,8 (workstations). As you know there are many the levels of OS compatibility. Please clarify do you require the workstations to only be connected to servers under items 1.1 and 1.2 as clients, or some other level of compatibility. Please understand that we need more information.

ANSWER 29:

PCs listed in items 1.5, 1.7 and 1.8 will be connected to servers as clients only.

QUESTION 30:

LOT 1: Item 1.5.: DESKTOP WORKSTATION (All-in-one): Technical documentation states: "DVD+/-RW with Dual Layer DVD+R write capacity". Is it acceptable to offer External DVD+/-RW with Dual Layer DVD+R write capacity?

ANSWER 30:

Any technical solution that would satisfy the required functionality is acceptable.

QUESTION 31:

LOT 1: Item 1.8.: LAPTOP: Technical documentation states: "Dimensions: max. 400 mm (W) x 260 mm (D) x 27 mm". Is it acceptable to offer laptop with dimensions +-5% deviation?

ANSWER 31:

Please refer to Corrigendum No. 2 to the Tender Dossier.

OUESTION 32:

LOT 1: Item 1.6.: UPS (Uninterruptable power supply for desktop computer)

a) Technical documentation states: "Power Factor: ≥0.8"

This value is property for UPS units with greater power and smart electronic board. UPS for desktop computer usually have power factor from 0.5 to 0.6. Is it acceptable to offer UPS with power factor \geq 0.5?

b) Technical documentation states: "Transfer time: ≤4 Ms".

This value is property for UPS units with greater power and smart electronic board. UPS for desktop computer usually have transfer time between 8 and 12 ms. Is it acceptable to offer UPS with transfer time ≤12 ms?

ANSWER 32:

- a) This requirement is confirmed as stipulated in the technical specifications, i.e. power factor must be >0.8.
- b) This requirement is confirmed as stipulated in the technical specifications, i.e. transfer time must be ≤ 4 Ms.

OUESTION 33:

LOT 1: Items no. 1.1 and 1.2: It is required to offer a RAID controller with 2GB cache memory.

Please clarify if the RAID controller should have cache write protection, for example battery/capacitor or flash backed write protection?

ANSWER 33:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 34:

LOT 1: Item no. 1.1: It is required to offer 512 GB internal storage (hot pluggable HDD).

Beside given capacity, please clarify what kind of hard drives is requested with Application Server, i.e. rotation speed, interface type (SATA, SAS) and RAID configuration.

ANSWER 34:

Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 35:

LOT 1: Items no. 1.1 and 1.2:

a) It is required to offer 2 x Dual-Ports 8GB Fibre Channel Adapters Included.

Please clarify if the beneficiary has SAN (storage area network) and SAN storage device already implemented on site? Will the existing SAN storage device be used for the scope of this project? If so, please provide information and model about existing infrastructure.

- b) The request is that the OS must provide end-to-end software for defining networking solution across public, private, and hybrid cloud implementations. Please clarify what network technologies the solution has to support and need to be implemented in the scope of this project?
- c) The request is that the OS must allow setting up virtual machines on a single physical host. Please clarify:
 - what virtual machines (guest operating systems) will be used?
 - number of virtual machines that will be used per server?
 - who will provide licenses for guest operating systems?

ANSWER 35:

- a) <u>RHMS RS and FHMI</u> do not have SAN network and SAN storage device. For <u>Sava River Watershed Agency (WA SA)</u>, the storage system currently deployed is HP MSA 2040 Energy Star SAN Dual Controller SFF Storage (PN: K2R80A). There are currently 4 available FC ports, but SAN switch can be acquired, so port availability is not an issue.
- b) RHMS RS and FHMI use standard simple TCP/IP Local Area Network, so that solution MUST be supported.
- c) For RHMS RS and FHMI:
 - In most cases, more than 90 % will be used Windows OS (Win 7,8, 10...)
 - 3 or more
 - Licences need to be provided by Contractor

For <u>WA SA</u>: current infrastructure is based on Hyper-V virtualization platform with Veeam Backup Essentials for Hyper-V backup solution. The requested preinstalled server OS needs to be compatible with the beneficiary's current infrastructure and support at least two virtual machines per physical host with same host and guest OS – based on the licence of the preinstalled OS.

QUESTION 36:

LOT 1: Item no. 1.2: It is required to offer max. 2 (two) CPUs with minimum Average CPU Mark of 7,000.

- a) Is it acceptable to offer one processor with sufficient benchmark performance?
- b) This request can be fulfilled with low-performance processors. As per best practice for database servers, please consider to raise the benchmark required for database servers.

ANSWER 36:

Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 37:

LOT 1, Item 1.5: DESKTOP WORKSTATION (All-in-one): At least one PCI e Mini card Slot or Equivalent is requested. Since Desktop All-in-one has an hardware structure different from a standard desktop, please confirm that slot M2 of new generation can be provided, instead of PCI cards, now obsolete and not compatible with hardware of Desktop All-in-one.

ANSWER 37:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 38:

LOT 1: Item 1.6 : UPS (Uninterruptable power supply for desktop computer): Please clarify if Voltage Regulation (On battery): +/-10%" is the input or the output value. In addition please specify the numeric value of Voltage Regulation.

ANSWER 38:

It's output value. As stipulated in the technical specifications nominal value of voltage regulation is 220 - 240VAC.

QUESTION 39:

LOT 2: Item 2.1: Concerning the Database Item should the below feature be included in the basic license offered or just ability to be implemented in the future?

"RDBMS must have ability to selectively encrypt sensitive database content with no application modification."

ANSWER 39:

Yes, it should be included in licence.

QUESTION 40:

LOT 2: Item 2.1 - RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS): The following information are requested for servers, in order to properly identify the software:

On which servers the requested software will be installed? On servers already existing? If so, could you please provide more information on their processors (for example the type of processor, how many core the processor is composed by, how many processor per server)?

The final solution shall be active/active or active/passive?

ANSWER 40:

The requested software will be installed on server specified in Lot 1, item 1.2.

OUESTION 41:

Having in mind obligations of the supplier described in the tender documentation, please give us more information on the equipment you have now. This applies, particularly, to the storage system. We also kindly ask you to confirm that you have a fibre channel switches with enough free and licensed ports which can be used.

ANSWER 41:

There are different beneficiaries of the equipment subject to this tender. They have different existing equipment. Storage system should meet required technical specifications. Please also refer to Answer 35 of this Clarifications No. 3.

More specifically for one of the beneficiaries, namely for the Sava River Watershed Agency (WA SA) the storage system currently deployed is HP MSA 2040 Energy Star SAN Dual Controller SFF Storage (PN: K2R80A). There are currently available 4 FC ports, but SAN switch can be acquired, so port availability is not an issue.

QUESTION 42:

General Requirements 1.3.8.2 Installation of Power generator: Technical documentation states:

"Generator installation, configuration and putting into operation in HMI should include:

- Preparation of the installation plan;
- Set the generator to the prepared location and conducting of electrical works;
- Connection generator to the local electricity network;
- Testing of the system."

Is there an AC / DC distribution cables from prepared location for power generator to the local electricity network?

ANSWER 42:

Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 43:

General Requirements 1.3.8.1: IT hardware and software installation, it is requested to provide the following services: a) Establishment of virtualization clustered environment;

Clustered environment are usually implemented using common storage repository like SAN storage device. As per technical specification, there is no SAN storage specified with this procurement. Please clarify if the beneficiary has SAN storage device on site, and if it is planned to use existing SAN storage device for the scope of this project?

b) Provision of the required virtual machines (in terms of virtual resources needed);

Please clarify what guest operating systems will be installed on this virtual machines and the number of virtual machines?

c) Registration and configuration of the dedicated domain;

Please clarify the exact concept and scope of "Registration and configuration of the dedicated domain"? Is it a web domain, an Active Directory/LDAP domain, ...?

ANSWER 43:

- a) For the <u>RHMS RS and FHMI</u>: No, it is not planned to use existing devices, it should be part of this Project. For <u>WA SA</u>, the storage system currently deployed is HP MSA 2040 Energy Star SAN Dual Controller SFF Storage (PN: K2R80A).
- b) Please also refer to Answer 35 of this Clarifications No. 3. The Bidder should prepare all the elements for future virtualization. For <u>WA SA</u>, the current infrastructure is based on Hyper-V virtualization platform with Veeam Backup Essentials for Hyper-V backup solution. The requested preinstalled server OS needs to be compatible with WA SA's current infrastructure and support at least two virtual machines per physical host with same host and guest OS based on the licence of the preinstalled OS.
- c) Yes, it is web domain.

QUESTION 44:

General Requirements 1.4.6: "...the Contractor is obliged to troubleshoot the problem and/or replace this component with another one possessing the same technical characteristics and quality not later than 24 hours following the receipt of the notification..."

Please clarify if every item must be covered with 24 hours problem resolution warranty (except items excluded with 1.4.8). Please clarify whether the warranty conditions should apply on weekends and holidays?

ANSWER 44:

Please see Corrigendum No. 3 to the Tender Dossier.

OUESTION 45:

General Requirements, 1.4.8: "...To ensure the prompt elimination of the potential defects, certificates shall be provided to demonstrate availability of the service centers in BIH for all the supplied equipment."

Please clarify what kind of certificates shall be provided to demonstrate availability of the service centers in BIH for all the supplied equipment?

ANSWER 45:

Please see Corrigendum No. 3 to the Tender Dossier.

QUESTION 46:

Could you please specify the place where training will be provided?

ANSWER 46

Given that the question is raised in general, we draw attention to the fact that different trainings are foreseen in LOT 2, LOT 3 and LOT 4. Depending on the matter that is subject of the training, trainings will be held in the selected indoor/building or on the field, as indicated in the technical specifications. If the place/space for training is rented, rental costs are to be borne by the Contractor.