



Republic of Serbia

**MINISTRY OF FINANCE**

**Department for Contracting and Financing of EU Funded Programmes (CFCU)**

Belgrade, 22 November 2022

**CONTRACTING AUTHORITY'S CLARIFICATIONS No.2**

**Supply contract for the "Implementation of Automated Import System (AIS),  
Automated Export System (AES) and Customs Decision System (CDS)"**

**Publication ref: NEAR/BEG/2022/EA-OP/0117**

<b>No.</b>	<b>Question</b>	<b>Answer</b>
1	<p>Item 11 Backup software</p> <p>Backup implementation includes software installation, backup plan creation, and migration of one test VM. Please clarify and confirm that the tenderer will not be responsible for the migration of all the Customer's VMs. Please also clarify and confirm if the Customer will include their VMs in the backup plan at a later stage.</p>	<p>We confirm that tenderer will not be responsible for the migration of all the Customer's VMs and that Customer will include their VMs in the backup plan at a later stage.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>
2	<p>Item 1.15 GENERAL REQUIREMENTS / Training</p> <p>You have requested that the training should include minimum 5 days for up to 10 persons. Training should be official for the proposed SDDC solution and organized by certified professionals. Please clarify if the training should be conducted in a training center, or it should be done on-site at the Customer's premises.</p>	<p>All training materials must be packaged for electronically delivery and accessible for <b>on-demand requests</b>.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>
3	<p>Please confirm that the Replication to the datacenter in Kragujevac is not part of this project.</p>	<p>We confirm that that the Replication to the datacentre in Kragujevac is not part of this project.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified,</p>

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		<p>the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>
4	<p>General requirements</p> <p>Team, in the General technical requirements, you have specified: Proposed shared storage system must be closely integrated with SDDC solution so that some new storage resources can be automatically provisioned from SDDC centralized management console. In item 1.10, you have required guest OS and Antivirus only. Please clarify if you require a cloud option for the guest OS or if you have an existing option for the above requirement, part of the General technical requirements.</p>	<p>In item 1.10 we asked for the following:</p> <ul style="list-style-type: none"> <li>- SDDC (software-defined data center),</li> <li>- guest OS and</li> <li>- Antivirus</li> </ul> <p>Under SDDC there are:</p> <ul style="list-style-type: none"> <li>- Server operating system – <b>hypervisor</b>, covered with licenses for <b>unlimited number of guest virtual machines</b> and</li> <li>- <b>Single centralized management console</b></li> </ul> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>
5	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.9 Backup SAN Storage, Disk drives support: SSD, 15K, 10K and NLSAS drives (including FIPS-certified SEDs)</p> <p>In regard to request for backup system that supports Data-at-rest encryption: Self-encrypting drives (SEDs) in SSD or HDD formats may we offer solution that has Data-at-rest encryption implemented in a way as it is requested for primary storage solution under 1.8 meaning having this feature at SW level? This way we will be able to provide better solution for backup that is build upon same technology as primary storage solution better suited for administration, so please confirm</p>	<p>We confirm that we will accept storage systems for backup with software data-at-rest encryption.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>

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<b>No.</b>	<b>Question</b>	<b>Answer</b>
	<p>that you will accept storage systems for backup with software data-at-rest encryption.</p>	
<p align="center"><b>6</b></p>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.8 Shared SAN Storage System, Ability to monitor the system through a cloud (SaaS) based service via web browser.</p> <p>The service must enable monitoring of performance (Latency, IOPS, Bandwidth, IO Size, Queue Depth), capacity utilization, storage system components as well as to perform predictive analysis and proactively monitor the correctness of the system. Metrics that you are asking for solution to provide such as IO Size and Queue Depth are in a direct correlation to I/O rate, data rate, and response times. This means that IO Size is directly correlated with I/O rate and data rate, and queue depth are directly correlated to system capabilities with latency hence these two metrics are redundant to all others. Having this in mind, please confirm that you will accept solution with storage system metrics only: I/O rate, data rate, and response times.</p>	<p>We confirm that we will accept Shared storage systems with a cloud monitoring solution with storage system metrics only: I/O rate, data rate, and response times.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>
<p align="center"><b>7</b></p>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER, 1.8 Shared SAN storage system</p> <p>In your request it is stated "Platform: Unified storage platform for block, file and vVol data without additional devices". Please confirm that you will accept storage system which supports block protocols and</p>	<p>See Clarifications No.1 #5.</p> <p>This issue will be remedied by means of corrigendum no.2 to Tender Dossier.</p>

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	<p>vVols and doesn't have file and NVMe/TCP protocols.</p>	
<p align="center"><b>8</b></p>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.8 Shared SAN Storage System, Supported protocols for block: FC, NVMe-FC, iSCSI, NVMe/TCP, and VMware Virtual Volumes (vVols) 2.0.</p> <p>In the Technical specification's topology, it is suggested that NVMe-FC will be used along with a supported SAN Switch platform. Having in mind NVMe/TCP protocol will not be used beside NVMe-FC they should not be required. Please confirm that you will accept storage system which has not file and NVMe/TCP protocols supported since there is no true requirement for them.</p>	<p>See Clarifications No.1 #5.</p> <p>This issue will be remedied by means of corrigendum no.2 to Tender Dossier.</p>
<p align="center"><b>9</b></p>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.8 Shared SAN Storage System, Platform: Unified storage platform for block, file and vVol data without additional devices</p> <p>Storage vendors have different approaches when using block and file protocols for communication with application on servers' infrastructure in the same storage platform and it is not that common that same platform supports both. Based on TS documentation and system topology, platform will be using block protocols using FC/NVMe-FC or iSCSI in rear cases. Because of that, please confirm that is acceptable to offer storage system which has block protocols</p>	<p>See Clarifications No.1 #5.</p> <p>This issue will be remedied by means of corrigendum no.2 to Tender Dossier.</p>

No.	Question	Answer
	<p>and vVols supported OR solution that enables NAS functionality using additional HW or Virtual components that enables NAS access.</p>	
<p>10</p>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.2 ToR switch</p> <p>What transceivers are needed on ToR switch for connecting to servers?</p>	<p>Connections between servers and ToR switches are defined in Items No 1.4 and 1.5:  <i>“Networking Cables: 4 x SFP28 to SFP28, 25GbE, Passive Copper Twinax Direct Attach Cable, 5 Meter (compatible with TOR switches Item No. 1.2)”</i>                      and in Item No 1.6:  <i>“Networking Cables: 2 x SFP28 to SFP28, 25GbE, Passive Copper Twinax Direct Attach Cable, 5 Meter (compatible with TOR switches Item No. 1.2)”</i></p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet</p>
<p>11</p>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.2 TOR switch</p> <p>What type of optical cables will be used for connecting 100G SR transceivers (“2 x Transceiver, 100GBASE SR4 QSFP”) since this type of transceiver has MPO type of connector?</p>	<p>For connection between ToR switches and CORE switches we will use optical patch cords according to the type of connector on transceivers (LC or MPO). In part 1.15 GENERAL REQUIREMENTS subtitle Installation, Configuration and Start-up are listed: 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.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>

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<b>12</b>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.13 Application load balancers</p> <p>10 Gigabit capable Fiber Ports (SFP+): min. 8 (SR or LR or 10G copper direct attach) - 40 Gigabit capable Fiber Ports (QSFP+): min. 4 (SR4 or LR4 or QSFP+ optical breakout cable assemblies available to convert to 10G ports)". Please provide information about requested ports (10G and 40G) and distance of requested cables length?</p>	<p>See Clarifications No.1 #40 and #41.</p> <p>This issue will be remedied by means of corrigendum no.2 to Tender Dossier.</p>
<b>13</b>	<p>ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER- 1.12 CORE switch</p> <p>What type of optical cables will be used for connecting 100G SR transceivers ("12 x 100GBASE SR4 QSFP Transceiver, MPO, 100m over OM4 MMF") since this type of transceiver has MPO type of connector?</p>	<p>See Clarifications No.2 #11.</p> <p>Please refer to the existing Technical Specifications. Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet.</p>