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

**INCLUDING CHANGES FOR LOT 1 INTRODUCED BY THE CORRIGENDUM NO.2 TO THE TENDER DOSSIER**

**Contract title:** Supply of the equipment for the EU support to the Parliaments of Bosnia and Herzegovina in EU Integration Tasks

**Publication reference:** EuropeAid/139632/DH/SUP/BA

**Lot 1: Supply and installation of server hardware and system software for Parliaments in BiH**

|  |
| --- |
| 1. **Minimum requirements and supporting documentation**
 |
| * Tenderers are required to demonstrate that the offered specifications are responsive to the Tender Dossier requirements identifying model, manufacturer and country of origin of each individual item in their Technical Offer providing necessary documentation (catalogues, guides, brochures, manuals, booklets, etc.) with detailed technical specifications for all items being offered thus enabling the Contracting Authority to verify the information provided in the offer.
 |
| * Technical specifications described in column 2, Table Annex III: The Contractor's technical offer, are the **minimum** requirements. Tenderer may offer better specs, with improved, additional or new features, but must not provide offer not strictly complying with the minimum requirements.
* Notes, remarks, ref to documentation in column 4, Table Annex III: The Contractor's technical offer **should clearly indicate title of the supporting document with page number where is in the document highlighted requested specification for EVERY item offered,** so that evaluators can see the exact configuration.
 |
| 1. **Completeness of the supply**
 |
| * Supply delivery, including installation, integration and final customization must include all needed accessories required for the supplies to be presented for provisional acceptance fully installed, operational and ready for use.
 |
| * Accessories, fixing, fittings, connections, joints, links, extensions, modules, software and legal licenses as well as documentation used during delivery, installation, integration and customization before provisional acceptance must therefore be anticipated and calculated into the offer.
 |
| * It shall be the sole responsibility of the Tenderer to ensure that all pre-requisites for the completeness of the supply delivery are met before its commencement.
 |
| 1. **Supply delivery**
 |
| * The locations of delivery are provided in the table under section 4. Data centre equipment is to be installed in data centre offices at location receiving such equipment. The exact locality for each installation will be agreed with the beneficiaries at the time of the commencement of the delivery.
 |
| * The Tenderer must provide the necessary measures to prevent any damage during delivery, installation, integration and customization stages. If any damage occurs during delivery, installation, integration and customization stages, the Tenderer must appropriately rectify it.
 |
| * The Tenderer must keep the installation site(s) clean and safe against any hazard (e.g. fire, etc.) during all supply/installation stages until formal acceptance.
 |
| * Installation, operational and regular maintenance manuals in English must be included with the supply.
 |
| * Installation, testing, demonstration and training must be completed within the time frame set out in the Special Conditions of Supply Contracts included in the Tender Dossier. At the end of this period, all items supplied, including hardware and accompanying software must be fully operational and the staff chosen by the Beneficiary will have been given full training for safe and efficient use of the items.
 |
| * Successful Tenderer will be provided with defined legal conditions (e.g. Declaration of confidentiality or similar), under which, when signed, access to confidential resources needed for successful delivery, installation and integration will be obtained, including physical access to installation locations and individual computer network device settings at locations.
 |
| * Successful Tenderer must follow the provisions of the defined legal conditions (e.g. Declaration of confidentiality or similar) through entire duration of the contract with Contracting Authority.
 |
| * Each single requirement that describes the specific item feature as well as all requirements describing overall item features have to be considered as describing feature(s) that have to come already pre-installed with or embedded within the item, meaning that they cannot be additionally nor externally added.
 |

1. **Places of Delivery**

Equipment and software have to be delivered, as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Location**  | **Abbr.** | **Address** | **Notice** |
| **1** | Parliament of BIH | **PA BIH** | Trg Bosne i Hercegovine 1, 71000 Sarajevo, BiH | All equipment to be delivered, installed and customized with training accomplished and commissioning finalized. |
| **2** | Parliament of Federation of BIH | **PA FBIH** | Hamdije Kreševljakovića br. 371000 Sarajevo, BiH | All equipment to be delivered, installed and customized with training accomplished and commissioning finalized. |
| **3** | National Assembly of RS | **NA RS** | Vuka Karadžića br.2.78000 Banja Luka, BiH | All equipment to be delivered, installed and customized with training accomplished and commissioning finalized. |
| **4** | Assembly of Brčko District | **A BD** | Mladena Maglova, 2, 76100 Brčko distrikt,BiH | All equipment to be delivered, installed and customized with training accomplished and commissioning finalized. |

Table 1: Delivery location

**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 offeredspecifications.

| **Column 1** | **Column 2** | **Column 3** | **Column 4** | **Column 5** |
| --- | --- | --- | --- | --- |
| **ID No.** | **Specifications required** | **Qty** | **Specifications Offered** |  **Notes, remarks, ref to documentation** | **Evaluation Committee’s notes**  |
| 1.1. | **Virtualization server*** Form factor: 19” rack with rack mounting kit max 2U
* Power supply: 2 hot-plug redundant power supplies (min.800W each)
* Fans: Redundant, hot plug
* Processor: at least 2 installed, 8 core each, Passmark CPU Mark for each processor 10950 or higher
* Memory min : 128GB DDR4 2,666 GHz / upgradeable on at least 3TB – total of 24 RAM slots
* ECC Memory protection
* Installed SSD or SD Card as boot device for hypervisor, capacity of SD Card or SSD to be sufficient for hypervisor offered in Item 1.17
* Network interfaces: min. 4x1GbE and 2x10Gbe SPF+ (optics not installed)
* Network interfaces: Dedicated 1GbE for management which support redirected KVM operations and shared remote USB/DVD devices
* FC: Fibre Chanel HBA - 1 x Dual Port 16Gbps FC HBA (with optics installed)
* Supported OS: VMWare vSphere ESXi, Microsoft Hyper-V, Microsoft Windows Server, Red Hat® Enterprise Linux, SUSE® Linux Enterprise Server
* Warranty: 1 year
 | **6** |  |  |  |
| 1.2 | **Primary storage subsystem*** Form factor: 19” rack 2U with rack mounting kit
* Controllers: minimum of dual redundant controllers in Active-active configuration
* Fans: Fully redundant
* Host interface: min. 4x16Gb/sec Fibre Channel Ports included with optics
* Power supplies: Fully redundant
* Cache memory: min. 64GB
* Hot swappable disks: Yes
* Raid: Supports minimum 2 disk failures
* Disks installed: 24 x Single Disk installed with minimum capacity of 1.8TB each, 10000 rpm, 12Gb/s
* Storage Protocols: min. FCP, iSCSI, NFS, CIFS or SMB file access protocol
* Support for multitenancy
* Support for dynamically resizing volumes
* Support for block level deduplication
* Support for compression
* Support for thin provisioning
* Support for snapshots
* Supported OS: Windows Serrver, Linux®, Oracle Solaris, AIX, HP-UX, Mac® OS, VMware® vSphere, Microsoft Hyper-V
* Min. 1 years warranty on hardware, software support for a period of 12 months (including the right to updates and new versions of the software)
 | **4** |  |  |  |
| 1.3 | **Storage Area Networks FC Switch*** Form factor: 19” rack mounting kit, max 2U
* 12 active FC ports with optics installed
* 16Gb port speed
* Compatible with Item number 1, 2, 5, 6 for creating SAN
* 5m FC duplex Fibre Channel cables for all active FC ports
* 1 x power supply 220V/50Hz
* Warranty: 1 year
 | **6** |  |  |  |
| 1.4 | **SERVER RACK 24U*** Rack unit 24U
* Symmetrical cabinet WxDxH = 600x1100x1200mm +/-10%
* Protection class IP20, electrically grounded
* Cable entry via bottom and top cover
* Mobile, heavy duty castors
* Doors with holes for horizontal self-ventilation of mounted systems
* To enable mounting of Rack mountable equipment of this lot
* Warranty: 1 year
 | **1** |  |  |  |
| 1.5 | **Backup server*** Form factor: 19” rack with rack mounting kit, max 2U
* Power supply: 2 hot-plug redundant power supplies (min.800W each)
* Fans: Redundant, hot plug
* Processor: at least 1 installed, 8 core each, Passmark CPU Mark for each processor 10950 or higher
* Memory min: 64GB DDR4 2,666 GHz / upgradeable on at least 3TB – total of 24 RAM slots
* ECC Memory protection
* Min 2 x min 240GB SSD 2,5 inch Hot Plug
* Network interfaces: min. 4x1GbE and 2x10Gbe SPF+ (optics not installed)
* Network interfaces: Dedicated 1GbE for management which support redirected KVM operations and shared remote USB/DVD devices
* FC: Fibre Chanel HBA - 1 x Dual Port 16Gbps FC HBA (with optics installed)
* Supported OS: VMWare vSphere ESXi, Microsoft Hyper-V, Microsoft Windows Server, Red Hat® Enterprise Linux, SUSE® Linux Enterprise Server
* Warranty: 1 year
 | **3** |  |  |  |
| 1.6 | **Backup storage subsystem*** Form factor: 19” rack with rack mounting kit
* Controllers: minimum of dual redundant controllers in Active-active configuration
* Fans: Fully redundant
* Host interface: min. 2x16Gb/sec Fibre Channel Ports included with optics
* Power supplies: Fully redundant
* Cache memory: min. 64GB
* Hot swappable disks: Yes
* Raid: Supports minimum 2 disk failures
* Disks installed: 12 x Single Disk installed with minimum capacity of 4TB each, 7200 rpm, 12Gb/s
* Storage Protocols: min. FCP, iSCSI, NFS, CIFS or SMB file access protocol
* Support for multitenancy
* Support for dynamically resizing volumes
* Support for block level deduplication
* Support for compression
* Support for thin provisioning
* Support for snapshots
* Supported OS: Windows Serrver, Linux®, Oracle Solaris, AIX, HP-UX, Mac® OS, VMware® vSphere, Microsoft Hyper-V

Min. 1 years warranty on hardware, software support for a period of 12 months (including the right to updates and new versions of the software) | **3** |  |  |  |
| 1.7 | **Backup software for 4 processors with following features:*** 4 processor license
* Integration with Item 2 on hardware level supported
* Support for protecting Platform-virtualisation software from Item 1.17 for agentless backup with Changed Block Tracking mechanism
* Incorporate Virtual Machines image level backup and Virtual Machines host based replication to Disaster Recovery site technologies managed from the single console
* Support any vendor and type of storage for backup and provide build in deduplication and compression technology for saving the backup disk space.
* Store backup files in a type of self – sufficient storage containers and have no dependency on backup catalog for recovery
* Provide automated backup verification technology which will guarantee the recoverability of Virtual Machine server at VM, Guest OS and Application levels
* Provide ability to exclude single files and folders from image level backup processing
* Provide forever incremental backup approach
* Support direct SAN restores
* Able to leverage the backup infrastructure and provide the instant isolated virtual LAB environment for test purposes and recovery operations
* Have an ability to instantly start multiple Virtual Machines directly from backup at any chosen recovery point ensuring the Recovery Time Objective for production server is equal to High Availability
* Min. 1 years warranty for software, software support for a period of 12 months (including the right to updates and new versions of the software)
 | **3** |  |  |  |
| 1.8 | **Firewall**Secure Connectivity & Features:* Policy-Based NAT, User Group-Based Authentication, SIP/H.323 NAT Traversal.
* Virtual Private Network (VPN): IPSec and SSL, Dedicated Tunnels, DES, 3DES, and AES Encryption Support, SHA-1/MD5 Authentication, Hub and Spoke VPN Support, IKE Certificate Authentication, IPSec NAT Traversal, Dead Peer Detection,
* Traffic Shaping: Policy-based Traffic Shaping, Differentiated Services (DiffServ) Support, Guarantee/Max/Priority Bandwidth, Application traffic shaping.
* Networking/Routing: Multiple WAN Link Support, Policy-Based Routing,
* Management/Administration Options: Console Interface, WebUI (HTTP/HTTPS), Telnet/Secure Command Shell (SSH), Role-Based Administration Multiple Administrators and User Levels.
* High Availability (HA): Active-Active, Active-Passive, Stateful Failover (FW and VPN),
* OS Features: Advanced Threat Protection, Per-Device Security Policies, Enterprise-class Firewall, VPN - IPSec and SSL, SSL-encrypted Traffic Inspection, Antivirus/Antispyware, Antispam, Intrusion Prevention System (IPS), Web Filtering, Application Control, Monitoring, Logging and Reporting, SSD storage for events logging with minimum capacity 120 GB, Central Management supported.
* FW throughput: min 10Gbps
* VPN throughput: min 2Gbps
* IPS throughput: min 2Gbps
* Firewall, IPS, Application Control and Malware Protection enabled throughput: min 1Gbps
* Concurrent Sessions: 2 million
* Interfaces: 16 x 1GbE, 4 x SFP (no optics modules included)
* Services: 1y for IPS, Application Control, Webfiltering, Antispam, Techical support
* Warranty: 1 year
 | **8** |  |  |  |
| 1.9 | **Web Application Firewall*** Reverse Proxy, Monitoring: SQL Injection, Cross Site Scripting, Anti web Defacement, Data Leak Prevention, support for HTTP, PCI DSS, HTTPS RFC.
* Application delivery: Application Aware Load Balancing, SSL Offload, Data Compression
* Protection: Cross Site Scripting, SQL Injection, Session Hijacking, Cookie Tampering/Poisoning, Cross Site Request Forgery, Command injection, Remote File Inclusion, Forms Tampering, Hidden Field Manipulation, Outbound Data Leakage, HTTP Request Smuggling, Remote File Inclusion, Encoding Attacks, Broken Access Control, Search Engine, Hacking, Brute Force Login, Access Rate Control, Schema Poisoning, XML Parameter Tampering, XML, Intrusion Prevention, External Entity Attack, Buffer Overflows, Denial of Service. Support for LDAP (Active Directory)
* Technical specification:
	+ Delivered as virtual machine for virtualization platform from Item 1.17
	+ Min 1 vCPU
	+ Min 10 vNIC
	+ HTTP throughput min 20Mbps
* Warranty: 1 year including technical support
* Miscellaneous: Installed software must include all needed licenses for 1 year
 | **4** |  |  |  |
| 1.10 | **E-mail security applliance*** E-mail protection for all incoming and outgoing mails
* Requested number of users for E-mail security appliance is 250 or if sizing is done by number of messages per hours, system should support 10.000 messages per hour
* Spam blocking
* Phishing detection and blocking
* Graymail detection and unsubscribe
* Advanced malware protection
* Outbreak filters
* Rack mount 1 – 2U
* 2-port 1GBASE-T copper network interface (NIC), RJ-45
* Warranty: 1 year including technical support
* Miscellaneous: Installed software must include all needed licenses for 1 year
 | **1** |  |  |  |
| 1.11 | **Web security appliance*** URL Filtering and dynamic content analysis
* Requested number of users for Web security appliance is 250
* Advanced Malware protection
* Application visibility and control
* Data loss prevention
* Roaming user protection
* Rack mount 1 – 2U
* 2 port 1G Base-T copper network interface (NICs), RJ – 45
* Warranty: 1 year including technical support
* Miscellaneous: Installed software must include all needed licenses for 1 year
 | **1** |  |  |  |
| 1.12 | **Layer 3 Core Switch in stack configuration (2 each) with following specification:*** Layer 3 switch with backplane stacking
* Supported OSPF, Policy based routing, BGP, RIP, DHCP server, BFD
* Stacking throughput minimum 200 Gbps
* Min 24 x RJ45 10/100/1000 ports, Ports 1-24 supporting MACsec
* Support minimum of 2 SFP+ ports (optics not included)
* Additional ports: minimum 1x Stacking module slot, 1x RJ-45 Serial console port
* Minimum 9 stacking members in stack
* Hot plug redundant min power supply with min 250W
* Full stacking kit supplied with cables sufficient for installation where switches are next to each other (minimum 1m stacking cable lenght)
* 8 x Direct attach cables (twinax), 7m length,
* Warranty : 1 year, with technical support and software upgrades
 | **3** |  |  |  |
| 1.13 | **Layer 2 Access switch 48 ports*** Layer 2 switch with static and RIP routing, ACLs and QoS
* min 2 fixes 10Gigabit ports SPF+,
* support IEEE 802.3at (PoE+)
* Layer 2 switching: jumbo packet support, IEEE 802.1v protocol VLANs, GVRP or IEEE 802.1Q protocol pr equivalent and MVRP, VLAN support and tagging
* Layer 3 routing: Static IP routing, min 256 static and 1800 RIP routes
* min of 48 RJ-45 autosensing 10/100/1000 PoE+ ports and 4 SFP+ 1/10Gbe ports
* Warranty : 1 year, with techical support and software upgrades
 | **48** |  |  |  |
| 1.14 | **Wireless Access system with 8 Access points with management Appliance users and guests or equivalent with following specifications:*** Supports 3x3:3 Wave 2 802.11ac technology
* Support Dual radio 2.4Ghz and 5Ghz
* Supports MU-MIMO with 3 spatial streams
* Power Specifications: IEEE 802.3af PoE and IEEE 802.3at PoE
* Built-in Bluetooth for ibeacon (or equivalent) or Bluetooth ibeacons (or equivalent) delivered separately
* Minimum of two 1GbE Ethernet ports
* Identity-aware, dynamic routing across wired and wireless networks
* User group policies can be applied network wide or granularly to individual APs
* Unique pre-shared keys for invidual users or groups on the same SSID:
* Separate guest VLAN SSID
* Open SSID with Captive Web Portal (CWP) authentication
* Application Visibility and control
* Warranty: 1 year
 | **2** |  |  |  |
| 1.15 | **UPS*** Double-conversion, on-line topology
* Minimum rating 5.000 VA / 4.500 W
* Input voltage range for main operations 175 - 280V +/- 5%
* Expandable with at least one (1) extension battery packs, for extended runtime
* Input connection: Terminals
* Nominal output voltage: 230V
* Output connections: Terminals
* Network management card for remote management and monitoring
* At least one free slot for additional communication card
* Aplhanumeric LCD Display
* Format: convertible rack-mountable / tower (rack-mount kit supplied with device)
* Maximal rack height 4U
* Power Distribution: Redundant
* Input: 230V (32A) IEC309
* Output: Min. 20 x C13
* Support for 1+1 for parallel redundant function
* Warranty: Device, excluding battery: 1 year
 | **3** |  |  |  |
| 1.16 | **Server Operating system** **•** 64 Bit support**•** Support for virtualization**•** 560 client licences• It is required to offer sufficient licencing to support (per 1 site):- Operating system for 4 virtual machines to be installed on item 1.1 Virtualization server. Proper licencing according to offered CPU must be in place with rights for virtual machine live migration from one virtualization server to another.- Operating system for 1 physical backup server (Item 1.5). Proper licencing according to offered CPU must be in place. Total number of sites is 3 (three). Total number of required client access licences per user for all sites is 560 (five hundred and sixty). Clients access licenses will be divided according to tender specification for site installation• Warranty : 1 year, including support  | **1** |  |  |  |
| 1.17 | **Platform-virtualisation software*** Partitioning of a physical server into multiple VMs.
* Conversion of physical servers to virtual servers.
* High availability: Ability to restart VMs on another host in case of hardware failure for minimum downtime
* Live Migration: Movement of running VMs from one physical host to another, without downtime.
* Template/Image Library: Availability of a template or image library for the rapid provisioning of new VMs
* Integrated data protection with deduplication
* Replication
* Management software or virtual appliance for managing all aspect of offered platform
* 1 year software subscription for all licenses enabling product updates and upgrades
 | **3** |  |  |  |
| 1.18 | **Endpoint Protection Bundle for protecting internal workstations and mobile devices with following modules:*** Antivirus
	+ Realtime protection
	+ Antimalware
	+ Websecurity
	+ Device control
	+ Malicious Traffic Detection
	+ Host Intrusion Prevention (HIPS)
	+ Client Firewall
	+ Application Control
	+ DLP
	+ Patch Assessment
	+ Web Control/Filtering
* Mobile Device Management
	+ Mobile Application Management (iOS, Android, Windows Phone 8), BYOD Management (iOS, Android, Windows Phone 8/Windows 10 Mobile, Windows 10 Desktop)]
	+ Enterprise App Store
	+ View installed apps per device
	+ Whitelisting and blacklisting
	+ Rooting/Jailbreak detection
* Web gateway
	+ Delivered as Virtual appliance for Item 1.17
	+ HTTPS scanning with exceptions and certificate validation
	+ Automated threat updates
	+ Automatically detects anonymizing proxies
	+ Common site categories
	+ Common file type controls with size limit options
	+ Time-of-day and location-based polices
	+ Granular controls over social web app features
	+ Automated Active Directory synchronization
	+ Transparent or explicit proxy operation
	+ Traffic, Performance, Users, Search, Policy and Content reports
	+ Web-based management console
	+ Role-based administration
* Email gateway
	+ Delivered as Virtual appliance for Item 15
	+ Anti-Spam, anti-virus and anti-phishing detection
	+ Automatic updates to stop the latest threats
	+ Phishing URL protection
	+ Block infected attachments
	+ Active Directory Sync
	+ DLP support
	+ Email quarantine for end users
	+ Time-of-click URL protection
	+ Support for SPF and DKIM anti-spoofing
	+ Email encryption included
* 1 year software subscription for all licenses enabling product updates and upgrades
 | **460** |  |  |  |
| 1.19 | **System administrators training**The estimated number of users requiring training and the related estimated minimum number of training hours for system administrators are as follows:* System administrators; Number of users:8; Number of hours:40

General requirements related to the trainings are:1. Detailed training plan for system administration should be developed during the first phase of the project
2. Training plan should cover all equipment which is part of the Lot 1 of this specification including its installation and configuration
3. The training provider’s instructors should have a substantial and proven experience in their respective fields.
4. All trainings must be conducted in one of the BiH official languages.
5. All training materials must be in one of the BiH official languages.

Trainings will take place at the beneficiary location as stipulated in the table under section 4 of Preamble of the Technical Specifications for this lot. |  |  |  |  |

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

**INCLUDING CHANGES FOR LOT 2 INTRODUCED BY THE CORRIGENDUM NO.2 TO THE TENDER DOSSIER**

**Contract title:** Supply of the equipment for the EU support to the Parliaments of Bosnia and Herzegovina in EU Integration Tasks

**Publication reference:** EuropeAid/139632/DH/SUP/BA

**Lot 2: Supply and installation of client hardware (HW) for Parliaments in BiH**

|  |
| --- |
| 1. **Minimum requirements and supporting documentation**
 |
| * Tenderers are required to demonstrate that the offered specifications are responsive to the Tender Dossier requirements identifying model, manufacturer and country of origin of each individual item in their Technical Offer providing necessary documentation (catalogues, guides, brochures, manuals, booklets, etc.) with detailed technical specifications for all items being offered thus enabling the Contracting Authority to verify the information provided in the offer.
 |
| * Technical specifications described in column 2, Table Annex III: The Contractor's technical offer, are the **minimum** requirements. Tenderer may offer better specs, with improved, additional or new features, but must not provide offer not strictly complying with the minimum requirements.
* Notes, remarks, ref to documentation in column 4, Table Annex III: The Contractor's technical offer **should clearly indicate title of the supporting document with page number where is in the document highlighted requested specification for EVERY item offered,** so that evaluators can see the exact configuration.
 |
| 1. **Completeness of the supply**
 |
| * Supply delivery, including installation, integration and final customization must include all needed accessories required for the supplies to be presented for provisional acceptance fully installed, operational and ready for use.
 |
| * Accessories, fixing, fittings, connections, joints, links, extensions, modules, software and legal licenses as well as documentation used during delivery, installation, integration and customization before provisional acceptance must therefore be anticipated and calculated into the offer.
 |
| * It shall be the sole responsibility of the Tenderer to ensure that all pre-requisites for the completeness of the supply delivery are met before its commencement.
 |
| 1. **Supply delivery**
 |
| * The locations of delivery are provided in the table under section 4. The exact locality for each piece of equipment will be agreed with the beneficiaries at the time of the commencement of the delivery.
 |
| * The Tenderer must provide the necessary measures to prevent any damage during delivery stages. If any damage occurs during delivery the Tenderer must appropriately rectify it.
 |
| * Each single requirement that describes the specific item feature as well as all requirements describing overall item features have to be considered as describing feature(s) that have to come already pre-installed with or embedded within the item, meaning that they cannot be additionally nor externally added.
 |

1. **Places of Delivery**

Equipment and software have to be delivered, as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Location**  | **Abbr.** | **Address** | **Notice** |
| **1** | Parliament of BIH | **PA BIH** | Trg Bosne i Hercegovine 1, 71000 Sarajevo,BiH | All equipment to be delivered |
| **2** | Parliament of Federation of BIH | **PA FBIH** | Hamdije Kreševljakovića br. 371000 Sarajevo, BiH | All equipment to be delivered |
| **3** | National Assembly of RS | **NA RS** | Vuka Karadžića br.2.78000 Banja Luka, BiH | All equipment to be delivered |
| **4** | Assembly of Brčko District | **A BD** | Mladena Maglova, 2, 76100 Brčko distrikt, BiH | All equipment to be delivered |

Table 1: Delivery location

| **Column 1** | **Column 2** | **Column 3** | **Column 4** | **Column 5** |
| --- | --- | --- | --- | --- |
| **ID No.** | **Specifications required** | **Qty** | **Specifications Offered** |  **Notes, remarks, ref to documentation** | **Evaluation Committee’s notes**  |
| 2.1 | **Notebook PC*** Display: min 15.6” Full HD (1920 X 1080) LED, anti-glare, min 220 cd/m2
* CPU: Passmark CPU Mark 7000 or higher
* RAM: min 8 GB DDR4, 2133 MHz, expandable to 32GB
* Connecting: LAN 10/100/1000 Mbits/s, WLAN Dual band ac/b/g/n, Bluetooth
* Camera: min HD webcam
* HDD: 1x SSD 256 GB
* Interface: 3x USB 3.0 (min 1 USB with power-always-on technology), 1x USB 2.0, 1x VGA, 1x HDMI, 1x Memory Card Slot (3-in-1 reader), 1x RJ-45
* Security: BIOS password, HDD password, Kensington Lock support, TPM 2.0 module
* Integrated keyboard: BiH Latin font, numerical, resistant to shedding
* Battery, power adapter, min. 48Wh, 4500 mAh, current adapter min. 65W
* Operating System: Preinstalled Operating System (standalone) 64bit
* Warranty: 1. year
 | **386** |  |  |  |
| 2.2 | **Mini desktop PC with Display*** Small desktop PC with volume lower than 2.5 l
* CPU: CPU: Passmark CPU Mark 7000 or higher
* RAM: min 8 GB DDR4
* Operating System: Preinstalled Operating System (standalone) 64bit
* Connecting: LAN 10/100/1000 Mbit/s
* HDD: min 1x SSD 256 GB M.2 NVMe
* Interface: 2x USB 3.0, 2x USB 2.0, 1x Display port, 1xRJ-45
* Security: Boot sector virus protection, control of all USB interfaces, BIOS Password, HD password
* Wireless: M.2 WLAN 802.11ac (2x2) and BT 4.1
* Display Diagonal Size min 54 cm
* Display Aspect ratio: 16 :9
* Display resolution: min 1920x1080
* Display Connectivity: Display port **or** 1xDVI-D **or** D-SUB as needed to be connected to PC
* Accessories : Universal monitor stand
* Warranty: 1 year
 | **160** |  |  |  |
| 2.3 | **Document scanner*** Scanner Type: Sheet Fed Scanner
* Imager Sensor Type: Color CCD
* Optical resolution: Min. 600dpi
* Scan side: front, back, duplex
* Interface: USB 3.0 / USB 2.0 / USB 1.1 / 10/100/1000Base Ethernet port
* Scanning specs A4 landscape: Simplex Min. 60ppm
* Scanning specs A4 portrait: Simplex Min. 60ppm
* Output resolution: adjustable 50 - 600dpi
* Daily Duty Cycle: Min. 11.000 scans/day
* ADF: Min. 100 pages

OS Supported: Min. Microsoft Windows 7, Microsoft Windows 8, Microsoft Windows 10, Microsoft Server 2016 | **7** |  |  |  |

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

**INCLUDING CHANGES FOR LOT 3 INTRODUCED BY THE CORRIGENDUM NO.2 TO THE TENDER DOSSIER**

**Contract title:** Supply of the equipment for the EU support to the Parliaments of Bosnia and Herzegovina in EU Integration Tasks

**Publication reference:** EuropeAid/139632/DH/SUP/BA

**Lot 3: Supply and installation of conference room equipment for Assembly of Brčko District**

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| 1. **Minimum requirements and supporting documentation**
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| * Tenderers are required to demonstrate that the offered specifications are responsive to the Tender Dossier requirements identifying model, manufacturer and country of origin of each individual item in their Technical Offer providing necessary documentation (catalogues, guides, brochures, manuals, booklets, etc.) with detailed technical specifications for all items being offered thus enabling the Contracting Authority to verify the information provided in the offer.
 |
| * Technical specifications described in column 2, Table Annex III: The Contractor's technical offer, are the **minimum** requirements. Tenderer may offer better specs, with improved, additional or new features, but must not provide offer not strictly complying with the minimum requirements.
* Notes, remarks, ref to documentation in column 4, Table Annex III: The Contractor's technical offer **should clearly indicate title of the supporting document with page number where is in the document highlighted requested specification for EVERY item offered,** so that evaluators can see the exact configuration.
 |
| 1. **Completeness of the supply**
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| * Supply delivery, including installation, integration and final customization must include all needed accessories required for the supplies to be presented for provisional acceptance fully installed, operational and ready for use.
 |
| * Accessories, fixing, fittings, connections, joints, links, extensions, modules, software and legal licenses as well as documentation used during delivery, installation, integration and customization before provisional acceptance must therefore be anticipated and calculated into the offer.
 |
| * It shall be the sole responsibility of the Tenderer to ensure that all pre-requisites for the completeness of the supply delivery are met before its commencement.
 |
| 1. **Supply delivery**
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| * The location of delivery is provided in the table under section 4. Data centre equipment is to be installed in data centre offices at location receiving such equipment. The exact locality for each installation will be agreed with the beneficiaries at the time of the commencement of the delivery.
 |
| * The Tenderer must provide the necessary measures to prevent any damage during delivery, installation, integration and customization stages. If any damage occurs during delivery, installation, integration and customization stages, the Tenderer must appropriately rectify it.
 |
| * The Tenderer must keep the installation site(s) clean and safe against any hazard (e.g. fire, etc.) during all supply/installation stages until formal acceptance.
 |
| * Installation, operational and regular maintenance manuals in English must be included with the supply.
 |
| * Installation, testing, demonstration and training must be completed within the time frame set out in the Special Conditions of Supply Contracts included in the Tender Dossier. At the end of this period, all items supplied, including hardware and accompanying software, must be fully operational and the staff chosen by the Beneficiary will have been given full training for safe and efficient use of the items.
 |
| * Successful Tenderer will be provided with defined legal conditions (e.g. Declaration of confidentiality or similar), under which, when signed, access to confidential resources needed for successful delivery, installation and integration will be obtained, including physical access to installation locations and individual computer network device settings at locations.
 |
| * Successful Tenderer must follow the provisions of the defined legal conditions (e.g. Declaration of confidentiality or similar) through entire duration of the contract with Contracting Authority.
 |
| * Each single requirement that describes the specific item feature as well as all requirements describing overall item features have to be considered as describing feature(s) that have to come already pre-installed with or embedded within the item, meaning that they cannot be additionally nor externally added.
 |

1. **Place of Delivery**

Equipment and software have to be delivered, as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Location**  | **Abbr.** | **Address** | **Notice** |
| **1** | Assembly of Brčko District | **A BD** | Mladena Maglova 2, 76100 Brčko distrikt BiH. | All equipment to be delivered, installed and customized with training accomplished and commissioning finalized. |

Table 1: Delivery location

| **Column 1** | **Column 2** | **Column 3** | **Column 4** | **Column 5** |
| --- | --- | --- | --- | --- |
| **ID No.** | **Specifications required** | **Qty** | **Specifications Offered** |  **Notes, remarks, ref to documentation** | **Evaluation Committee’s notes**  |
| 3.1 | **Central Conferencing unit*** Complete digital transmission with interception prevention
* Min 6 simultaneously open microphones with Auto-Off
* up to 60 discussion or conference units without an additional power supply unit
* up to 250 microphone units, 2 languages ​​and 16 translating units
* Min 2 analog audio inputs for connecting external audio sources
* Min 8 analog audio outputs for connecting to video conferencing systems, audio / video recorders, sound systems or wireless language distribution systems

The central conference unit must comply with the IEC 60914 standard. | **1** |  |  |  |
| 3.2 | **Delegate conference unit with touchscreen*** Should be portable to allow for its application for permanent installation or temporary use for meetings, voting or simultaneous translation.
* Incorporated speaker and a 3-pin microphone insert (port neck) and high-resolution color screen, touch sensitive.
* The conference unit should be controlled by delegates or from a remote location by the operator / chairperson. The microphone button should be indicated by the LED indication when the unit is on (Red) or in the case of a voice request (Green).
* The speaker of the conference unit should be automatically turned off when the microphone is activated.

In addition to the aforementioned conference unit should also allow:* To be connected to the system as chairman, delegate or dual delegate
* To enable full digital audio transmission
* Card reader
* Microphone and "mute" button
* Configuration button for other functionality
* It should enable display on the speaker display and further requests
* Voting results

Delegate conference unit must comply with IEC 60914 standard. | **40** |  |  |  |
| 3.3 | **Microphone for delegate conference unit, labium neck*** The microphone must be cardioid characteristics
* The microphone should be flexible
* Microphone length, minimum: 45cm
 | **40** |  |  |  |
| 3.4 | **Control conferencing software**The software should enable the configuration, control, management and personalization of each individual conference through conference equipment.The control conferencing software must be able to be installed on a standard computer unit connected via TCP / IP LAN for the purpose of integrating and preparing conference, management and control.Features of management conferencing software:* Configuration of the conference
* Set up conference equipment and configurations
* Extensive controlling by voting
* Full language support
* Multiple user profiles with different functionality / buttons
* A system for sending pre-recorded messages and self-recorded messages
* Managing names
* Different reports and import / export of content

The software must be compatible with the following operating systems:* Windows 7
* Windows 8
* Windows 10
* Windows Server 2003 SP2 (or later)
* Windows Server 2008 (32-bit and 64-bit) and R2

For each installation of conference equipment to be managed, one basic management software package is required. | **1** |  |  |  |
| 3.5 | **Additional software modules*** Software module for microphone control

The software module must enable the user to fully control the microphone within the conference system.* Software Management Agenda
* Software module for mimic / synoptic

The software module should allow the geographic display of the screen.* Software module for delegate information

Provides a database of delegates, and allows the creation of an individual user profile.* Software module for multilingual display

The module should allow multilingual display* Software license to enable voting within a conference system for 50 participants

A software license for voting in a conference system for up to 50 participants* Chip card software module

The software module should allow the user to log on to a chip card conference via a conference unit.* Software module for programming chip cards

The software module should allow the user to program the chip card for use during the conference | **1** |  |  |  |
| 3.6 | **A conference application for display**The primary purpose of this application is to display information via large screens (plasma monitors or projection screens)It should able to show:* List with information speaker / request
* Information in the mimic speaker / request dialog
* Graphical display of voting results
* List of voting results
* Results of the vote on the mimic diagram
* Agenda

The size of the text, color and number of lines must be configured in the settings of the conference administrator application, while the selection that is displayed on each screen is created through a conference application.It must be possible to run up to eight applications for display within one system, where there must be at least 6 views available in each. | **1** |  |  |  |
| 3.7 | **Application for external control**This application should allow access and control of the system via a PC in order to manage the complete system | **1** |  |  |  |
| 3.8 | **Chip cards - packaging 50 pieces**Chip cards must conform to ISO standard 7816-1 / 2/3 | **1** |  |  |  |
| 3.9 | **Chip card programming / reading device**The programmer chip card must be connected via a USB port.It should be based on standard Windows OS installation drivers. | **1** |  |  |  |
| 3.10 | **A workstation for controlling and voting with a monitor**The workstation must be in accordance with the offered software solution of the conference system. It should provide the user with smooth operation when starting, designing and managing the conference system. Another work unit separated for displaying video content.The monitor should have the following characteristics:* It should be Led technology
* Sizes 21 "
* Format: 16: 9
* Resolution 1920x1080, 200 cd / m2, 600: 1
 | **2** |  |  |  |
| 3.11 | **55" monitor to display the result of the vote**Screen Size: 55 "Screen Type: LEDResolution: Full HDViewing Angle: 178/178Format: 16: 9Connection: HDMI x 4, Composite video input x 1, SCART x 1, Ethernet (LAN) x 1, USB x 3With the monitor deliver a wall mount | **2** |  |  |  |
| 3.12 | **Switch 24 ports*** 24 x 10/100/1000 Mbit connectors, with mounting possibility in the 19 "wardrobe with 1U height, internal power supply
 | **1** |  |  |  |
| 3.13 | **HDMI amplifier and splitter*** Input: 1 HDMI connector
* Outputs: 4 HDMI ports
* Maximum data rate: 10.2Gbps (3.4Gbps per graphic channel)
* It must conform to the HDMI standard
* It must support HDMI and HDCP
 | **1** |  |  |  |
| 3.14 | **Translation unit*** Support up to 31 translation channels
* Highlighted activation / deactivation button
* Volume control, and should be equipped with a signalling button that alerts the speaker to speak too fast

The translation unit should comply with the IEC 60914 standard. | **2** |  |  |  |
| 3.15 | **Microphone for delegate conference unit, labium neck*** The microphone must be cardioid characteristics
* The microphone should be flexible
* Microphone length, minimum: 45cm
 | **2** |  |  |  |
| 3.16 | **Interpreting booths Simultaneous translation cabin**Cabin for simultaneous translation for two translators with sides and roof according to ISO standards, ISOO10T (1600mmW) dimension \* 1600mm (D) \* 2000mm (H), the cabin must be portable for folding and folding and must have a flight case transport) ISO4043:2016 International Standard | **1** |  |  |  |
| 3.17 | **Headphones to listen to subtitles through delegate microphones*** Headphones must be light and easy to use
* Replacement sponges on headphones must be possible
* The headphone jack should be: 3.5 mm 90 ° stereo
* Color: Black
* Headphones need to be in accordance with IEC 60914 standard.
 | **42** |  |  |  |
| 3.18 | **Sound system****6.5 "two-way built-in speaker 100 V / 20 W,** * The loudspeaker should be equipped with power transformers for systems:
* 100V: 20 - 10 - 5 w
* 70V: 20 - 10 - 5 - 2.5 w
 | **12** |  |  |  |
| 3.19 | **Mixer amplifier 100 v / 125 w*** Output Power RMS 100 in: 125 w
* Output power RMS 4 ohms: 125 w
* Dynamic Output Power 100 in: 125 w
* Number of microphone balanced inputs: 4
* Number of phantom power inputs: 4
* Number of unbalanced inputs: 4
 | **1** |  |  |  |
| 3.20 | **INSTALLATION MATERIAL**System cables for connection of conference system and voting system, as well as other necessary non-specified material, video cables, sockets, channels, etc  | **1** |  |  |  |
| 3.21 | **INSTALLATION**Installation, connection, programming and commissioning of the subject equipment. | **1** |  |  |  |
| 3.22 | **SYSTEM ADMINISTRATORS TRAINING**The estimated number of users requiring training and the related estimated minimum number of training hours for system administrators are as follows:* System administrators; Number of users:2; Number of hours:32

General requirements related to the trainings are:1. Training plan should cover all equipment which is part of LOT 3 of this specification including its installation and configuration
2. The training provider’s instructors should have a substantial and proven experience in their respective fields.
3. All trainings must be conducted in one of the BiH official languages.
4. All training materials must be in one of the BiH official languages.

Trainings will take place at the beneficiary location as stipulated in the table under section 4 of Preamble of the Technical Specifications for this lot. |  |  |  |  |