**Specification Compliance Sheet for BETS Consulting Services Ltd.**

**(for LGED Project)**

**[Revised on 14th November 2017; v-2.0]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL** | **Name of Item** | **Required Specification** | **Offered Specification** | **Remarks** |
| **1** | **Desktop Computer: 3 units** | | |  |
|  | Brand | Dell | Dell |  |
|  | Model | Optiplex 5040 | Optiplex 5050 | Latest model offered |
|  | Processor | Multi-processor, Multi-core (at least 6- core and over 3.2 Ghz) | 7th Generation Core-i5 7500 Processor (3.4GHz) | Complied with upper version |
|  | Memory | 16 GB DDR3 1333MHz | 16GB DDR4, 2400MHz |  |
|  | Hard Disk | 4 TB 7.2k RPM SATA Hard Drive, support 7200 RPM  SATA 3.0GB/s, 10K RPM SATA 3.0GB/s, SATA Solid State Drive | 2TB SATA 7200RPM | As per support/availability with offered model |
|  | Optical Drive | DVD+/-RW | DVD+/- RW |  |
|  | Graphics | 1 GB Integrated Graphics Media Accelerator HD card | 1 GB Integrated Graphics Media Accelerator HD card |  |
|  | Audio | Integrated High Definition Audio with speakers. | Integrated High Definition Audio with speakers. |  |
|  | Networking | Ethernet LAN 10/100/1000 | Ethernet LAN 10/100/1000 |  |
|  | Standard I/O Ports | Standard I/O Ports: 8 USB 2.0 ports; 1 Serial; 1 VGA; 1 Display Port; 1 eSATA | Standard I/O Ports: 8 USB 2.0 ports; 1 Serial; 1 VGA; 1 Display Port; |  |
|  | Keyboard-Mouse | Keyboard and mouse | Keyboard and mouse |  |
|  | Monitor | 22" widescreen flat panel LCD monitor (VGA, DVI-D with HDCP) | Dell 22-inch (viewing size 21.5-inch) widescreen flat panel LCD monitor (VGA, HDMI, Audio-in/out) |  |
|  | Operating System | Windows 7 Professional Edition | License Windows 10 Pro (OEM version) |  |
|  | Warranty | 3 years hardware warranty | 3 years hardware warranty |  |
| **2** | **UPS for Desktop Computer: 3 units** | | |  |
|  | Brand | To be mentioned | Power Guard |  |
|  | Model | To be mentioned | 1200VA |  |
|  | Capacity | 1000 VA | 1000VA |  |
|  | Input Voltage | 230V | 220V |  |
|  | Output Voltage | Voltage on mains: A.V.R.; 180-260Vac (Line mode) | Voltage on mains: A.V.R.; 180-260Vac+10% (Line mode) |  |
|  |  | * Voltage on battery: 220 Vac±6% (Battery mode) | * Voltage on battery: 220 Vac±10% (Battery mode) |  |
|  |  | * Frequency: Synchronized (Line mode) | * Frequency: 50/60Hz * Frequency (inverter mode): 50/60Hz +/-10% |  |
|  | Transfer time | 4 ms | 2 ms |  |
|  | Back-up Time | 3-10 minutes | 10-30 minutes at PC load |  |
|  | Communications Interface | DB-9 port and DB-9 Cable Via Monitoring | N/A |  |
|  | Software |  |  |  |
|  | Warranty |  | 1 year |  |
| **3** | **Server: 1 unit** | | |  |
|  | Server Type | Application/Database/File/ GIS/Internet Server |  |  |
|  | Brand | Dell | Dell |  |
|  | Model | PowerEdge R730 | PowerEdge R730 |  |
|  | Form Factor | Rack Mounted | Rack Mounted |  |
|  | Processor | Multi-processor, Multi-core (at least 6- core and over 2.5 0hz) | Intel Xeon E5-2630 v4 2.2GHz, 10Core, 25M | As per availability & latest model processor |
|  | RAM | 32 Gb 1333 MHz, FCC | 32GB 2400MHz ECC Memory |  |
|  | Hard Drives | 2 x 500Gb 3.5" 720ORPM SATA | 3 x 600GB SAS 1000RPM (2 HDD will be configured as RAID 1 & 1 HDD will be as hot-spare) | Requirement was 2 x HDDs, offered additional 1 x HDDs for hot-spare |
|  | RAID | Minimum 5 | Support RAID 5 | Will be RAID 1 configured and support RAID 5. (to configure RAID 5, minimum 3 HDDs require) |
|  | RAID Controller | Integrated External RAID Controller: Adapter | Integrated PER H730 RAID Controller (support RAID 5) |  |
|  | Optical Drive | Combo CD-RW/DVD-ROM | Combo CD-RW/DVD-ROM |  |
|  | Network Interface | Dual integrated 4 Gb Ethernet with load balancing | Integrated Quad Port Gigabit Ethernet with load balancing |  |
|  | USB Ports | 2 front I 2 rear I i internal | 2 front, 2 rear, internal |  |
|  | Power Supply | Dual (redundant hot swappable) | Dual Power Supply (redundant hot swappable), 750W |  |
|  | Operating System | Windows Server 2008 Standard Edition plus 5 CALS | Windows Server 2012 Standard Edition plus 5 CALS or latest version |  |
|  | Configured for | Domain File Server, IIS and SQL Server | Domain File Server, IIS and SQL Server | Will be configured together with customer’s support |
|  | Warranty | 3 years hardware warranty | 3 years hardware warranty |  |
| **4** | **10 KVA On-Line UPS for Server: 1 unit** | | |  |
|  | Brand | To be mentioned | EATON |  |
|  | Model | To be mentioned | 9PX 11KVA |  |
|  | Form Factor | Rack mount | Rack Mount |  |
|  | Output Capacity | 10KVA | 11KVA |  |
|  | Input | Nominal Voltage: 220VAC  Voltage Range: 160-300VAC (70% to 100% load);  Frequency: 50HZ +/-8% | Nominal Voltage: 220VAC  Voltage Range: 176-276V without derating (up to 100–276V with derating)  Frequency: 40-70Hz, 50/60Hz auto selection, frequency converter as standard, THDI < 5% |  |
|  | Output | Nominal voltage: 220VAC +/-2% (230V or 240V re-settable via LCD panel);  Frequency: Synchronized (Line mode) ; 50HZ +/- 1% (Battery mode) | Output voltage: 200/208/220/230/240/250V +/– 1%; THDU <2% |  |
|  | Batteries | Backup: Available runtime for 30 minutes with full load  External Battery Bank: Rack mount 4U; 12V/9AH\*20pcs \* 3 sets Hot swap user replaceable | Backup: Available runtime for 30 minutes with full load  External Battery Bank: Rack mount  (1 set internal battery bank + 2 sets external battery bank) |  |
|  | Management | Web browser supported as applicable | Web browser supported as applicable |  |
|  | Management Software | Automatic server shutdown via network communications | Automatic server shutdown via network communications |  |
|  | Audible Alarm | Battery mode: Beeping when battery low  Overload: Beeping twice per second  UPS fault: Continuously beeping | Battery mode: Beeping when battery low  Overload: Beeping twice per second  UPS fault: Continuously beeping |  |
|  | Bypass | Automatic when Overload and UPS failure | Automatic when Overload and UPS failure |  |
|  | Cooling | Force air cooling | Force air cooling |  |
|  | Communication | Panel: LCD;  Interface: RS-232 and Intelligent Slot | Panel: LCD;  Interface: RS-232 and Intelligent Slot |  |
|  | Warranty | 3 years hardware warranty | 3 years hardware warranty |  |
| **5** | **Network Switch** | | |  |
|  | Brand | Cisco | Cisco | The required model of Cisco Switch does not match properly with the required specification. Required specification is mixed-up which not complied with required brand/model. |
|  | Model | 2960x-24TS-L | 2960x-24TS-L | Cisco 2960x-24TS-L offered with standard specification. |
| **6** | **LAN Cabling** | | | **Need site visit / detail requirement before submit offer** |
|  |  |  |  |  |
| **7** | **Server Rack (with Console Monitor & KVM Switch)** | | |  |
|  | Brand | To be mentioned | Dell |  |
|  | Model | To be mentioned | Netshelter SX 42U |  |
|  | Height | 42 U | 42 U |  |
|  | Width | 19" | 19" |  |
|  | Other equipment | Integrated power rail (6 port min) | Integrated power rail (6 port min) |  |
|  |  | Exhaust fans | Exhaust fans |  |
|  |  | Fully enclosed — lockable | Fully enclosed — lockable |  |
|  |  | Horizontal and vertical cable management | Horizontal and vertical cable management |  |
|  | Support | On-site next day response for 3 years from Date of Acceptance | On-site next day response for 3 years from Date of Acceptance (within Dhaka City) |  |
|  | **KVM Switch (Keyboard / Video / Monitor/KCM Switch)** | | |  |
|  | Keyboard | Rack mount keyboard in slide drawer | Dell 1U Rack mount 17-inch console LCD monitor in slide drawer along-with keyboard |  |
|  | Console Monitor | Rack mount LCD monitor in slide drawer |  |
|  | KVM Switch | 12 Port, Including cables for File / Email / Management / Web Servers / Internet Content Filtering Appliance plus existing servers | Dell 16 Port analog KVM Switch with server connecting cables |  |
| **8** | **Internet Content Filtering Appliance (Firewall):** | | | **Not Offered** |
| **9** | **External Storage/External Drive Array** | | |  |
|  | Device Type | Hardware appliance directly connected to File Server |  |  |
|  | Brand | Dell | Dell |  |
|  | Model | NX3230 | NX3230 |  |
|  | Form Factor | Rack mounted, as applicable | 2U Rack Mountable |  |
|  | Hard Drives | 4 x 1Tb 3.5" 7200RPM SATA II + 1 x 1TBb 3.5" 7200RPM SATA II (Hot Spare) | 4 x 1TB 3.5" 7200RPM SATA Hot-Plug HDD + 1 x 1TB 3.5" 7200RPM SATA Hot-Plug HDD (Hot Spare) |  |
|  | Expansion | Up to fifteen (15) 3 Gbps SAS, NL SAS and SATA II | Up to twelve (12) minimum 6 Gbps SAS, NL SAS and SATA II |  |
|  | RAID level | minimum 5 | RAID 5 |  |
|  | Cable Connection | SAS Cable | SAS Cable |  |
|  | Host interface | Two 3GB SAS | Two 6GB SAS |  |
|  | Management | As appropriate | iDRAC8 Enterprise |  |
|  | Warranty | 3 years hardware warranty | 3 years hardware warranty |  |
| **10** | **External Backup Device (Data back-up and Recovery Device): 1 unit** | | |  |
|  | Brand | Dell | Dell |  |
|  | Model | PowerVault 114T | PowerVault 114 (Single Drive) |  |
|  | Form Factor | Rack Mounted | Rack Mounted |  |
|  | Scalability | Scalable | Scalable |  |
|  | Console Management | Central Console Management | Central Console Management |  |
|  | Hot Swappable | Yes | Yes |  |
|  | Connectivity | eSATB and USB connect | SAS/Ethernet |  |
|  |  | Allow transparent non-disruptive back-up services | Allow transparent non-disruptive back-up services |  |
|  |  | Use back-up media which is easily and securely removed to off-site Storage | Use back-up media which is easily and securely removed to off-site Storage |  |
| **11** | **Large Scale Printer (Laser Printer): 1 unit** | | |  |
|  | Brand | To be mentioned | Brother |  |
|  | Model | To be mentioned | HL-L6200 |  |
|  |  | Ethernet adapter and USB 2.0/3.0 | Ethernet, Wireless, USB |  |
|  |  | Print mono draft 40-50 ppm minimum | Up to 50ppm |  |
|  |  | 1200 x 1200 resolution | 1200x1200 dpi |  |
|  |  | Manual or Auto Duplex | Duplex |  |
| **12** | **Digitizer** |  |  | **Not Offered** |
|  |  |  |  |  |
|  |  |  |  |  |
| **13** | **Laser Printer (A4 Laser Printer): 1 unit** | | |  |
|  | Brand | To be mentioned | Brother |  |
|  | Model | To be mentioned | HL-2365 |  |
|  |  | Ethernet adapter and USB 2.0/3.0 | Ethernet, USB |  |
|  |  | Print mono draft 40-50 ppm minimum | Up to 30ppm |  |
|  |  | 600 x 600 resolution | 600x600 dpi |  |
|  |  | Manual or Auto Duplex | Duplex |  |
| **14** | **Server Room Infrastructure** | | | **Need site visit / detail requirement before offer submission** |