<u>**Corrigendum in Technical Specification for Tender No. CC-1/2007**</u>

# Section III: Schedule of Requirement

**1(a). Server - Dual Processor based (All the options have to be quoted).**

**(i) AMD Based (Option – 1)**

| Parameters | Original Specification | Revised Specification |
|---|---|---|
| Chipset | Either of the following :-<br>• AMD Chipset 8111 & 8132<br>• Broadcom Serverworks HT-2100 Northbridge and HT1000 Southbridge Chipset | Either of the following :-<br>• AMD Chipset 8111 & 8132<br>• Broadcom Serverworks HT-2100 Northbridge and HT1000 Southbridge Chipset<br>• Nvidia MCP 55 Pro |
| Form Factor (new parameter) | | Rackmountable |
| Storage | 8 Nos. Hot Plug 146GB 3Gb/sec SAS Disks with 15000 RPM or higher in RAID-5. | 8 Nos. Hot Plug 146GB 3Gb/sec SAS Disks with 10000 RPM or higher in RAID-5. |
| Backup Device | Internal Digital Linear Tape (DLT) Drive with 40/80 GB or higher. | Internal/External Digital Linear Tape (DLT) Drive with 40/80 GB or higher. |
| Server Management Software | Web based monitoring for: -<br>• Support Remote Access & Remote monitoring<br>• Server trouble shooting<br>• Health Indicator and Corrective Action including Auto Mated Power Cycling<br>• OS Watch DOG Timer and Fault Resilient Booting<br>• Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability. | (i) Web based monitoring for: -<br>• Support Remote Access & Remote monitoring<br>• Server trouble shooting<br>• Health Indicator and Corrective Action including Auto Mated Power Cycling.<br>• Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability.<br>(ii) Enhanced **Intelligent Platform Management Interface (IPMI) Card** |
| Other features, if any | Support Memory Mirroring/Memory Sparring, Hardware Periodic Memory Scrubbing for Enhanced Memory throughput | Parameter Deleted |

## 1(a)(ii) Intel Based (Option – 2)

| Parameters | Original Specification | Revised Specification |
|---|---|---|
| **Processor** | **2 x Dual Core  Intel Xeon** DP CPU **3.6** GHz or higher with 2MB L2 or more cache. | **2 x Dual Core  Intel Xeon** CPU **3.0** GHz or higher with 4MB L2 or more cache. |
| **PCI** | Atleast 4 with two hot-plug 64-bit/100/133 Mhz PCI-X and two PCI Express x4/x8 slots. | Atleast 4 with two 64-bit/100/133 Mhz PCI-X and two PCI Express x4/x8 slots. |
| **I/O Ports** | At least 1 parallel, 1 serial and 4 Nos. USB 2.0(2 in front and 2 in rear), 3 RJ45 Port, 1 PS/2 Keyboard Port, 1 PS/2 Mouse Port. | At least 1 serial and 4 Nos. USB 2.0(2 in front and 2 in rear), 3 RJ45 Port, 1 PS/2 Keyboard Port, 1 PS/2 Mouse Port. |
| **Floppy Drive** | Internal 3.5" 1.44 MB floppy drive | 3.5" 1.44 MB floppy drive |
| **Server Management Software** | Web based monitoring for: - <ul><li>Support Remote Access & Remote monitoring</li><li>Server trouble shooting</li><li>Health Indicator and Corrective Action including Auto Mated Power Cycling</li><li>OS Watch DOG Timer and Fault Resilient Booting.</li><li>Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability.</li></ul> | (i) Web based monitoring for: - <ul><li>Support Remote Access & Remote monitoring</li><li>Server trouble shooting</li><li>Health Indicator and Corrective Action including Auto Mated Power Cycling.</li><li>Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability.</li></ul>(ii) Enhanced **Intelligent Platform Management Interface (IPMI) Card** |

**1(c). Server - Single Processor based (All the options have to be quoted).**

**(i) AMD Based (Option –1)**

| Parameter | Original Specification | Revised Specification |
|---|---|---|
| **Chipset** | Either of the following :- <br> • AMD Chipset 8111 & 8132 <br> • Broadcom Serverworks HT-2100 Northbridge and HT1000 Southbridge Chipset | Either of the following :- <br> • AMD Chipset 8111 & 8132 <br> • Broadcom Serverworks HT-2100 Northbridge and HT1000 Southbridge Chipset <br> • Nvidia MCP 55 Pro |
| **Form Factor (new parameter)** | | Rackmountable |
| **Storage** | 6 Nos. Hot Plug 146GB 3Gb/sec SAS Disks with 15000 RPM or higher in RAID-5. | 6 Nos. Hot Plug 146GB 3Gb/sec SAS Disks with 10000 RPM or higher in RAID-5. |
| **Backup Device** | Internal Digital Linear Tape (DLT) Drive 40/80 GB. | Internal/External Digital Linear Tape (DLT) Drive with 40/80 GB or higher. |
| **Server Management Software** | Web based monitoring for: - <br> • Support Remote Access & Remote monitoring <br> • Server trouble shooting <br> • Health Indicator and Corrective Action including Auto Mated Power Cycling <br> • OS Watch DOG Timer and Fault Resilient Booting <br> • Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability. | (i) Web based monitoring for: - <br> • Support Remote Access & Remote monitoring <br> • Server trouble shooting <br> • Health Indicator and Corrective Action including Auto Mated Power Cycling. <br> • Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability. <br> (ii) Enhanced **Intelligent Platform Management Interface (IPMI) Card** |
| **Other features, if any** | Support Memory Mirroring/Memory Sparring, Hardware Periodic Memory Scrubbing for Enhanced Memory throughput | Parameter Deleted |

**(ii) Intel Based – (Option – 2)**

| Parameter | Original Specification | Revised Specification |
|---|---|---|
| Processor | Single processor Dual Core Intel Xeon 2218 2.6 GHz or higher with 2MB or more L2 cache. | Single processor Dual Core Intel Xeon 2.66GHz or higher with 4 MB or more L2 cache. |
| FSB | 1066 MHz | 1333MHz |
| Chipset | Intel 3000 | Intel 5000V / 5000P |
| Server Management Software | Web based monitoring for: -<br>• Support Remote Access & Remote monitoring<br>• Server trouble shooting<br>• Health Indicator and Corrective Action including Auto Mated Power Cycling<br>• OS Watch DOG Timer and Fault Resilient Booting<br>• Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability. | (i) Web based monitoring for: -<br>• Support Remote Access & Remote monitoring<br>• Server trouble shooting<br>• Health Indicator and Corrective Action including Auto Mated Power Cycling.<br>• Raid Array Diagnostic Tool with ability to view Disc status and array status with pre-failure warning capability.<br>(ii) Enhanced **Intelligent Platform Management Interface (IPMI) Card** |

## Schedule II : Desktop Computers.

| Parameter | Original Specification | Revised Specification |
|---|---|---|
| Certification | New Parameter | Red Hat Certified |

## Schedule III : Laptops

| Parameters | Specification | Revised Specification |
|---|---|---|
| Memory | • DDR2 512MB 667-MHz<br>• Two SODIMM slots supporting dual channel memory supporting 512MB/1GB/2GB modules<br>• Upgradeable to 4GB or more. | • DDR2 512MB 400-MHz or higher<br>• Two SODIMM slots supporting dual channel memory supporting 512MB/1GB/2GB modules<br>• Upgradeable to 4GB or more. |
| Communication | • Integrated 10/100 ethernet.<br>• Integrated 56K v.92 Modem<br>• Integrated Infrared port compatible with IrDA Standards 1.1 (Fast IR) and 1.0 (Slow IR). | • Integrated 10/100 ethernet.<br>• Integrated 56K v.92 Modem |
| Certification | New Parameter | Red Hat/SUSE Certified. |

## Schedule IV: Thin Clients.

| Parameter | Original Specification | Revised Specification |
|---|---|---|
| **Processor** | AMD Geode NX 1 GHz or above Fan Less Embedded Processor | Either of these -<br>• AMD Geode NX 1 GHz or above Fan Less Embedded Processor<br>• VIA C7 1 GHz or above Fan Less Embedded Processor<br>• VIA Eden 1 GHz or above Fan Less Embedded Processor |
| **Operating System** | • Embedded Red Hat Enterprise Linux 4 and above.<br>• Compressed read-only file system.<br>• NFS and Samba file system support.<br>• CUPS/LPR/LPD and Samba print support for Deskjet, Laserjet and Dot Matrix printers.<br>• X11R6 local Windows manager.<br>• Password protected setup. | • Embedded Red Hat Enterprise Linux 4 or any other Linux Operating System with kernel 2.6.18 and above.<br>• Compressed read-only file system.<br>• NFS and Samba file system support.<br>• CUPS/LPR/LPD and Samba print support for Deskjet, Laserjet and Dot Matrix printers.<br>• X11R6 local Windows manager.<br>• Password protected setup. |
| **Local Applications** | Local Red Hat Enterprise Linux 4 with<br>• Open Office 2.0.4 or latest<br>• Firefox 1.5.x with Sun JVM 1.5 upwards support<br>• Adobe Acrobat Reader (Latest version)<br>• Flash Player<br>• Local Mail Client Support. | Local Linux OS with<br>• Open Office 2.1 or latest<br>• Firefox 1.5.x or latest with Sun JVM 1.5 upwards support<br>• Adobe Acrobat Reader 7.0 or latest.<br>• Flash Player<br>• Local Mail Client Support.<br>• Support for Devanagari script with Unicode font and available in Remington/ Phonetic/ Transliteration/ Inscript keyboard layouts. |
| **Memory** | 512 MB SODIMM DDR Memory upgradeable to 1GB or more. | 512 MB DDR/DDR2 Memory upgradeable to 1GB or more. |
| **Audio** | 1/8-inch mini microphone, Internal Stereo amplified speaker, 1/8-inch mini full 16-bit stereo | 1/8-inch mini microphone, External Stereo amplified speaker, 1/8-inch mini full 16-bit stereo |
| **Networking** | • Integrated 10/100 Mbps auto sensing Ethernet with RJ-45 connector.<br>• TCP/IP with DNS and DHCP.<br>• Wake on LAN<br>• DHCP support for automatic upgrades and unit configuration.<br>• PPP | • Integrated 10/100 Mbps auto sensing Ethernet with RJ-45 connector.<br>• Wireless LAN 802.11<br>• TCP/IP with DNS and DHCP.<br>• Wake on LAN<br>• DHCP support for automatic upgrades and unit configuration.<br>• PPP |

| | | |
|---|---|---|
| **Security** | • Password Protection setup. <br>• Kensington Lock Support | • Password Protection setup. |
| **Power Supply** | • 50 Watts or less power supply. <br>• No moving parts in the Thin Client. | • 65 Watts or less power supply. <br>• No moving parts in the Thin Client. |
| **Mounting of Thin Clients** | Desktop/Vertical VESA Mounting with kit. | Desktop/Vertical VESA Mounting with kit.. The Thin Client can be mounted on the TFT with substantial stability. |
| **Regulatory Standards** | Regulatory standards FCC, UL and RoHS compliant. | Parameter Deleted |
| **Management Tool** <br>**(to be supplied as part of Thin Client Management Software)** | **Thin Client Management software tool complaint with HTTP/HTTPS/SNMP with following features: -** <br><br>• Single Deployment; <br>• Secure Management; <br>• Remote management, configuration and upgrades through management software; <br>• Complete image upgrade; <br>• Send messages; <br>• Easy migration; <br>• Wake Client Remotely (Wake on LAN) <br>• Remote Screen Shadowing of entire desktop (via VNC viewer); <br>• PXE BIOS for image network boot. | **Thin Client Management software tool complaint with HTTP/HTTPS/SNMP with following features: -** <br><br>• Single Deployment; <br>• Secure Management; <br>• Remote management, configuration and upgrades through management software; <br>• Complete image upgrade; <br>• Send messages; <br>• Easy migration; <br>• Wake Client Remotely (Wake on LAN) <br>• Remote Screen Shadowing of entire desktop (via VNC viewer); <br>• **PXE BIOS for image network boot.** <br>• **Software should be Linux based.** |

## Schedule V : Laser Printers.

**5(b). Laser Printers**

| Parameter | Original Specification | Revised Specification |
|---|---|---|
| **Print Speed** | 20 ppm | 22 ppm |
| **Warranty** | Three Years Comprehensive on-site warranty. | Three Years Comprehensive on-site warranty from OEM. |

## Schedule VI : Line Matrix Printers

| Parameter | Original Specification | | Revised Specification | |
|---|---|---|---|---|
| Print Speed | **Print Speed** (LPM, upper case characters, lower case characters) :- High Speed – 1200/1028<br><br>**Graphics Speed** :- 60 x 72 dpi – 100 inches per minute | | **Print Speed** (LPM, upper case characters, lower case characters) :- High Speed/Draft – 1200/1028<br><br>**Graphics Speed** :- 60 x 72 dpi – 100 inches per minute | |
| Typefaces | High Speed, Data Processing, Near Letter Quality | | High Speed/Draft, Data Processing, Near Letter Quality | |
| Character Pitch | 10,12,13.3,15,17.1,20 | | 10,12,13.3 or 13.33,15,17.1 or 17.14,20 | |
| Line Spacing | 6,8,10.3,n/72,n/216 | | 6,8,10 or 10.3,n/72,n/216 | |
| Printable Width | 2.5" to 18.9" | | 2.5" to 13.6" or better | |
| Emulations | Serial matrix printer, Epson FX 1800, IBM ProPrinter III XL, Printronix P Series, Printronix P Series XQ, DEC LG, ANSI 3.64 | | Epson FX 1800 or Epson FX 1180, IBM ProPrinter III XL, Printronix P Series, DEC LG, ANSI 3.64 or Tally ANSI or Genicom ANSI | |
| Resident Character Sets | Unicode UTF-8, IBM World Trade, ECMA Latin-1, DEC Multinational, IBM Code Page 437 and 850, OCR A, OCR B | | Unicode UTF-8 or Dev Unicode, ECMA Latin-1 or Latin1 8859-1, DEC Multinational, IBM Code Page 437 and 850 or Code Page 437 and 850 | |
| Fonts | High Speed, Data Processing, Serif, Sans Serif, OCR-A, OCR-B | | High Speed or Draft, Data Processing, OCR-A, OCR-B | |
| Bar Codes | Code 39, Code 128, interleaved 2/5, UPC-A,UPC-E, EAN 8, EAN 13, EAN 128, Codabar, Identicon 2 to 5, MSI, POSTNET, Royal Mail, PDF 417 | | Code 39, Code 128, interleaved 2/5, UPC-A,UPC-E, EAN 8, EAN 13, EAN 128, Codabar, Identicon 2 to 5, MSI, POSTNET, PDF 417 | |
| Paper Handling | **Type** | Fan folded, Continuous, Edge-perforation | **Type** | Fan folded, Continuous, Edge-perforation |
| | **Width** | 3" to 17" | **Width** | 3" to 17" |
| | **Copies** | Upto 6 parts | **Copies** | Upto 6 parts |
| | **Thickness** | 0.025" | **Thickness** | 0.025" |
| | **Paper Path** | Straight through paper path with easy-load dual adjustable tractors | **Paper Path** | Straight through paper path with easy-load dual adjustable tractors |
| | **Feed** | Bottom feed | **Feed** | Bottom feed |
| | **Forms Control** | 14 and 12 channel electronic vertical format unit, paper-out detector and alarm, paper motion detector and alarm. | **Forms Control** | 14 and 12 channel electronic vertical format unit or VFU and VT Channel, paper-out detector and alarm, paper motion detector and alarm. |
| Interface | IEEE-1284 Parallel Port, RS-232, Ethernet 10/100 and Wireless 802.11b/g. | | IEEE-1284 Parallel Port, RS-232, Ethernet 10/100 | |