



## MILLENNIUM CHALLENGE ACCOUNT NEPAL (MCA-NEPAL)

### Supply and Delivery of IT Equipment and Accessories Ref No: (MCA-N/PM/SH/078)

#### ADDENDUM #2

Issued on: 12 August 2024

This Addendum No. #2 modifies respective portions of the Request for Offers (RFO) Document issued on 26 July 2024 and Addendum #1 issued on 07 August 2024. **The changes, as indicated below with Yellow shaded text,** are effective on the date of issue of this Addendum #2.

Except as expressly amended by this Addendum #2, all other terms and conditions of the Request for Offer Document issued on 26 July 2024 and Addendum #1 issued on 07 August 2024 remain unchanged and shall remain in full force and effect in accordance with their terms.

SN	Pages/Paragraph	Addendum
1.	Request for Offer, Pages 3, Clause #3 (g)	<p>Your <b>Form of Offer</b> with the priced <b>Price Schedule</b> should be submitted electronically by <b>14 August 2024 at 15:00 hours local time in Kathmandu, Nepal (GMT+5:45)</b> by the File request link (Dropbox link) provided below, with the name of uploaded file as follows: “[Your Company Name] – IT Equipment”:</p> <p>The File request link (Dropbox link) for submission of Offers is:  <a href="https://www.dropbox.com/request/ytpapLPb1ZkpAbEh85Dh">https://www.dropbox.com/request/ytpapLPb1ZkpAbEh85Dh</a></p> <p>Instruction for uploading your submission:</p> <ul style="list-style-type: none"> <li>● Click this link or type this link correctly in a browser.</li> <li>● Click on <b>Add Files</b></li> <li>● Click on <b>Files from Computer</b> (Choose files from computer)</li> <li>● Click on <b>+Add more files</b> (Optional, only if you have more than one file and so on for other files)</li> <li>● Enter your: <b>First name and Email address.</b></li> <li>● Click <b>Upload</b></li> <li>● <b>Successful upload:</b> completed the submission.</li> </ul>

		<p>Note that the provided <b>Dropbox link</b> will expire on the <b>deadline for submission (exact date and time)</b> as indicated above, consequently no late Offers will be received.</p> <p><b>has been replaced by:</b></p> <p>Your <b>Form of Offer</b> with the priced <b>Price Schedule</b> should be submitted electronically by <b>21 August 2024</b> at <b>15:00 hours local time in Kathmandu, Nepal (GMT+5:45)</b> by the File request link (Dropbox link) provided below, with the name of uploaded file as follows: “[Your Company Name] – IT Equipment”:</p> <p>The File request link (Dropbox link) for submission of Offers is:  <a href="https://www.dropbox.com/request/ytpapLPb1ZkpAbEh85Dh">https://www.dropbox.com/request/ytpapLPb1ZkpAbEh85Dh</a></p> <p>Instruction for uploading your submission:</p> <ul style="list-style-type: none"> <li>● Click this link or type this link correctly in a browser.</li> <li>● Click on <b>Add Files</b></li> <li>● Click on <b>Files from Computer</b> (Choose files from computer)</li> <li>● Click on <b>+Add more files</b> (Optional, only if you have more than one file and so on for other files)</li> <li>● Enter your: <b>First name and Email address.</b></li> <li>● Click <b>Upload</b></li> <li>● <b>Successful upload:</b> completed the submission.</li> </ul> <p>Note that the provided <b>Dropbox link</b> will expire on the <b>deadline for submission (exact date and time)</b> as indicated above, consequently no late Offers will be received.</p>
2.	Request for Offer, Pages 6 to 12, Attachment 1, TECHNICAL SPECIFICATIONS	This has been replaced as per <b>Annex- 1</b> of this Addendum #2.
3.	Request for Offer, Pages 15 to 22, Attachment 3, Submission Form of Supplier’s Proposed Technical Specifications	This has been replaced as per <b>Annex- 2</b> of this Addendum #2.

**Annex- 1**  
**Attachment #1**  
**Technical Specification**

**Lot #1 : Laptop Computer**

**1. Laptop Computer (Type A) with Docking and Monitor – 40 sets**

Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise-Grade Laptop: Robust, Ultra-Slim and sleek Design, Omission of Ethernet Port for enhance system portability.</li> </ul>
Operating System	<ul style="list-style-type: none"> <li>▪ Windows 11 Professional x64 bit English</li> <li>▪ Recovery Image</li> </ul>
Processor Technology	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 with vPro™ Technology</li> </ul>
Processor	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 165H vPro or equivalent</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>▪ Integrated Intel® Arc Graphics / Intel Graphics</li> </ul>
Chipset/Security	<ul style="list-style-type: none"> <li>▪ TPM 2.0 Security Complied</li> </ul>
Display	<ul style="list-style-type: none"> <li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent</li> <li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>
Memory	<ul style="list-style-type: none"> <li>▪ 32 GB DDR5, 2 x SODIMM</li> </ul>
Internal Storage	<ul style="list-style-type: none"> <li>▪ 512 GB PCIe® NVMe™ TLC SSD or Equivalent, Expandable</li> </ul>
Sound/Audio	<ul style="list-style-type: none"> <li>▪ Dual stereo speakers, integrated multi array microphone</li> <li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>
LAN/Wireless technology	<ul style="list-style-type: none"> <li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>
External I/O Ports	<ul style="list-style-type: none"> <li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li> <li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>▪ 1 x HDMI 2.0 port</li> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Micro/Nano-SIM slot (optional)</li> <li>▪ 1 x Standard security lock with peripheral trap (slim)</li> </ul>
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Backlit, spill-resistant premium keyboard</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>
Power Supply/ Battery	<ul style="list-style-type: none"> <li>▪ ~ 65W USB Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery.</li> </ul>
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>

Warranty	<ul style="list-style-type: none"> <li>Three-years warranty</li> </ul>
Docking Station	<ul style="list-style-type: none"> <li>Type – Universal Thunderbolt 4</li> <li>Ports – at least 3 x USB-A, 1 x USB-C</li> <li>Ethernet – 1 xRJ45 Gigabit or higher speed</li> <li>2 x DisplayPort, 1xHDMI 2.0 or higher</li> <li>4 x Simultaneously display support.</li> <li>Connectivity – Integrated / detachable cable</li> <li>Audio port – 1 x 3.5mm audio combo jack (optional)</li> <li>Power on indicator – LED</li> <li>Windows 10/11, macOS support</li> <li>Power supply – standard 220v, 50Hz</li> </ul>
Desktop Monitor	<ul style="list-style-type: none"> <li>Size/type – 23 ~24 inches IPS</li> <li>Display resolution – WUXGA (1920 x 1200)</li> <li>Aspect Ration – 16:10</li> <li>Connectivity - at least 1xHDMI, 1xDP or equivalent</li> <li>USB Ports – 2 x USB 3.0</li> <li>Stand – adjustable height and angle (VESA)</li> <li>Power Supply – Standard 220V, 50Hz</li> </ul>
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>Business enterprise grade premium multi-device wireless keyboard and mouse combo (USB/Bluetooth)</li> </ul>

## 2. Laptop Computer (Type B) - without Docking and Monitor – 25 sets.

Type	<ul style="list-style-type: none"> <li>Business Enterprise-Grade Laptop: Robust, Ultra-Slim and sleek Design, Omission of Ethernet Port for enhance system portability.</li> </ul>
Operating System	<ul style="list-style-type: none"> <li>Windows 11 Professional x64 bit English</li> <li>Recovery Image</li> </ul>
Processor Technology	<ul style="list-style-type: none"> <li>Intel® Core™ Ultra 7 with vPro™ Technology</li> </ul>
Processor	<ul style="list-style-type: none"> <li>Intel® Core™ Ultra 7 165H vPro or equivalent</li> </ul>
Chipset/Security	<ul style="list-style-type: none"> <li>TPM 2.0 Security Complied</li> </ul>
Memory	<ul style="list-style-type: none"> <li>64 GB DDR5, 2 x SODIMM</li> </ul>
Internal Storage	<ul style="list-style-type: none"> <li>1 TB PCIe® NVMe™ TLC SSD or Equivalent, Expandable</li> </ul>
Graphics Card	<ul style="list-style-type: none"> <li>Integrated Intel® Arc Graphics / Intel Graphics</li> </ul>
Display	<ul style="list-style-type: none"> <li>Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent higher</li> <li>Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>
Sound/Audio	<ul style="list-style-type: none"> <li>Dual stereo speakers, integrated multi array microphone</li> <li>1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>
LAN/Wireless technology	<ul style="list-style-type: none"> <li>Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>
External I/O Ports	<ul style="list-style-type: none"> <li>2 x USB 3.1 Gen 1 Type-A ports</li> <li>2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>1 x HDMI 2.0 port</li> </ul>

	<ul style="list-style-type: none"> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Micro/Nano-SIM slot (optional)</li> <li>▪ 1 x Standard Security Lock with Peripheral Trap – Slim</li> <li>▪ USB 3.0 to Gigabit RJ45 Adapter (laptops without an Ethernet port)</li> </ul>
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Backlit spill-resistant premium Keyboard</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>
Power Supply/ Battery	<ul style="list-style-type: none"> <li>▪ ~ 65W Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery</li> </ul>
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise class premier multi-device wireless keyboard and mouse (Bluetooth)</li> </ul>
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ Three-years warranty</li> </ul>

## Lot #2 – Multifunctional Printer

### 1. Multifunctional Printer (MFP) – 1 set

Machine Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Multifunctional Machine</li> <li>▪ (All-In-One)</li> </ul>
Printing Output	<ul style="list-style-type: none"> <li>▪ Monochrome (Standard - A4, A3, Letter)</li> </ul>
Standard Functions	<ul style="list-style-type: none"> <li>▪ Print, Copy, Scan, Email</li> </ul>
Printing Speed	<ul style="list-style-type: none"> <li>▪ Up to 70 ppm (Standard Letter, A4) or equivalent higher speed</li> <li>▪ Monthly duty cycle – up to 300,000 pages or equivalent higher volume printing capacity</li> <li>▪ First copy out =&lt;5 second or faster</li> </ul>
Copy and Print Resolution	<ul style="list-style-type: none"> <li>▪ Standard automatic Duplex Printing</li> <li>▪ Manual One-sided printing</li> <li>▪ Copy resolution up to 600 x 600 dpi,</li> <li>▪ Print resolution up to 1200 x 1200 dpi enhanced.</li> <li>▪ Copying reduce/enlarge: 25% ~ 400%.</li> <li>▪ Economic /Grayscale Printing (default)</li> </ul>
Printer Processor	<ul style="list-style-type: none"> <li>▪ Intel ATOM Quad Core/Dual-Core/ARM or any Dual Custom Processor or equivalent higher</li> </ul>
Printer Memory	<ul style="list-style-type: none"> <li>▪ 4GB total or equivalent or higher</li> </ul>
Internal Storage (HDD/SSD)	<ul style="list-style-type: none"> <li>▪ 128 GB SSD or higher (512 GB Preferred) or equivalent higher advanced technology storage.</li> </ul>
Control Panel	<ul style="list-style-type: none"> <li>▪ 10.1” TFT/LCD/LED Color Display Touch Screen</li> </ul>
Connectivity and other printing options	<ul style="list-style-type: none"> <li>▪ Standard RJ-45 Ethernet (10/100/1000 Base-T)</li> <li>▪ High speed USB 2.0/3.0 direct printer connection</li> <li>▪ Additional latest wireless feature such as WiFi (IEEE 802.11 b/g/n) or WiFi Direct or AirPrint and Bluetooth and cloud printing preferred.</li> <li>▪ Print from USB disk (USB 2.0 or higher) feature.</li> </ul>

	<ul style="list-style-type: none"> <li>Print from Cloud repositories preferred (Dropbox, OneDrive, and Google Drive) or equivalent.</li> </ul>
Scanning Options / File Format Support	<ul style="list-style-type: none"> <li>Scan to USB directly connected to Printer.</li> <li>Scan to Email via SMTP support.</li> <li>Scan to Network/FTP/SFTP/SMB features.</li> <li>Scan to Cloud (desirable)</li> <li>Standard format - PDF, PDF/A, JPEG, TIFF and wider range of file format support and OCR.</li> <li>Other security features</li> </ul>
OS Support	<ul style="list-style-type: none"> <li>Windows® Server2012/Server2012 R2/ Server2016/Server2019/Server 2022, Windows 10/11 and Mac OS X (10.11) or higher versions</li> <li>Both PCL and advanced PostScript (PS). PDF and XPS printing support</li> </ul>
Paper Handling (ADF, Trays and Paper Output Options)	<ul style="list-style-type: none"> <li>Robust feeder design (multiple size support – ~A4</li> <li>DADF/DSDF with standard Single-Pass Duplex Automatic Document Feeder for scan and copy.</li> <li>Paper Tray/Cassette/Drawer - Total FOUR Trays (Letter, A4 ~ A3) including - bypass and high capacity Tandem/Deck or equivalent options enough for high volume printing.</li> <li>Paper/Size/Thickness: Standard Letter, A4, A3 - up to 200/300 GSM/140LB or equivalent paper weight support</li> <li>Paper output Accessories - Office Finisher Unit (OFU) with up to 50 Sheets (20 lb/80 gsm) single-position stapling or equivalent feature.</li> </ul>
Power Supply	<ul style="list-style-type: none"> <li>Standard 220 v, 50 Hz Nepal</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>Power Cables, USB Cables and ADF, Cover etc.</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>3 Years</li> </ul>

### Lot #3 – Video Conferencing System

#### 4. Video Teleconferencing (VTC) System for mobile Use -1 set

<b>Auto Tracking Conference Camera</b>	
Type	<ul style="list-style-type: none"> <li>Professional Auto Tracking PTZ Camera</li> </ul>
Picture Elements	<ul style="list-style-type: none"> <li>Single/Double Lens with 1/25” ~1.0” Image Sensor</li> </ul>
Output Resolution	<ul style="list-style-type: none"> <li>4K Ultra HD</li> </ul>
Zoom	<ul style="list-style-type: none"> <li>15~30 Advance Zoom or Equivalent</li> </ul>
FOV/PTZ	<ul style="list-style-type: none"> <li>60~120-degree horizontal coverage or equivalent</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>3G-SDI/ HDMI / IP / USB/ RS-232/ RS-422 etc. Audio IN/OUT options</li> </ul>
Video Formats	<ul style="list-style-type: none"> <li>MPEG/AVI/MOV/WMV compatible with Windows</li> </ul>
Auto Tracking /AI Functions	<ul style="list-style-type: none"> <li>Human Detection/Motion Tracking Feature</li> </ul>
OS Support	<ul style="list-style-type: none"> <li>Plug and Play – Windows/Mac OS</li> </ul>

<b>Power Supply</b>	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>
<b>Accessories</b>	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable, remote control, Extension cable/wire up to 20M, mounting kit etc. to make the system functional.</li> </ul>
<b>Warranty</b>	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>
<b>Audio Speakerphone</b>	
<b>Type</b>	<ul style="list-style-type: none"> <li>▪ Full duplex microphone array speakerphone</li> </ul>
<b>Audio acoustic features</b>	<ul style="list-style-type: none"> <li>▪ Advanced echo cancellation / noise suppression features for powerful wideband voice processing</li> </ul>
<b>Voice/Audio Control</b>	<ul style="list-style-type: none"> <li>▪ Speaker volume adjustable via Remote control/Touch Control/button control for volume up/down, mute, call and hang-up functions</li> </ul>
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>▪ Bluetooth/LAN/audio IN/OUT, USB 3.0/USB-C/HDMI/ RS-232/ RS-422 with options for MIC POD expansion and external audio system</li> </ul>
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>
<b>Accessories</b>	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable/HuB, remote control and extension cable up to 20M to make the system functional.</li> <li>▪ Mounting Kits (if applicable)</li> </ul>
<b>OS Support</b>	<ul style="list-style-type: none"> <li>▪ Plug and Play with Standard Windows and Mac OS</li> </ul>
<b>Expected Apps to be Compatible With</b>	<ul style="list-style-type: none"> <li>▪ Skype/Skype for Business</li> <li>▪ Microsoft Teams</li> <li>▪ Zoom</li> <li>▪ Cisco WebEx, Jabber,</li> </ul>
<b>Warranty</b>	<ul style="list-style-type: none"> <li>▪ At least ONE Year</li> </ul>
<b>Carrying Bag</b>	<ul style="list-style-type: none"> <li>▪ Appropriate carrying bag to accommodate Conference Camera, Speakerphone and Accessories</li> </ul>

## Lot #4 – Uninterruptable Power Supply System (UPS)

### 5. 3 kVA Smart UPS - 1 Sets

Type/Capacity	<ul style="list-style-type: none"> <li>▪ 3000 VA Smart UPS System</li> <li>▪ Tower Casing</li> </ul>
Power Input Voltage/Current	<ul style="list-style-type: none"> <li>▪ 220 V, 50/60 Hz +/-3 Hz Auto Sensing</li> <li>▪ IEC320- C19 Input Connection</li> <li>▪ Input Voltage range – 160 ~ 285 V adjustable.</li> <li>▪ At least 95.0 % efficiency at full load</li> </ul>
Power Output Voltage/Current	<ul style="list-style-type: none"> <li>▪ 3.0 kVA, 2.7kWatts</li> <li>▪ Nominal Output voltage – 220 ~230 configurable</li> <li>▪ At least 95% Efficiency at full load</li> <li>▪ (1) IEC C19 outlet connection</li> <li>▪ (4+) IEC C13 outlet connections</li> </ul>
Batteries	<ul style="list-style-type: none"> <li>▪ 2x2 Maintenance-free sealed Lead-Acid battery (Leak-proof)</li> <li>▪ Expected re-charge time 3 Hrs.</li> <li>▪ Expected Battery Life (years): 3- 5 years.</li> </ul>
Backup/runtime	<ul style="list-style-type: none"> <li>▪ At least 8 ~ 12 minutes of runtime at half load</li> </ul>
Output Frequency	<ul style="list-style-type: none"> <li>▪ Sinewave, 50 Hz (47 - 53 Hz), +/-5% distortion</li> </ul>
Communication	<ul style="list-style-type: none"> <li>▪ Smart-Connect, USB &amp; Serial support.</li> <li>▪ LED/LCD/Light status display for On-Line, On-Battery, Battery Replace and Overload Indicator</li> </ul>
Audible Alarm	<ul style="list-style-type: none"> <li>▪ Alarm when UPS is on battery, distinctive low battery and configurable delays or defects.</li> </ul>
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, C13, C19 type,</li> <li>▪ Serial/USB cable, Serial-RJ-45 etc.</li> <li>▪ User manual</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>

### 6. 20 kVA UPS for Data Center (Redundant) -1 set

<b>External Features</b>	
Chassis Type	<ul style="list-style-type: none"> <li>▪ Tower with trolley wheelbase</li> </ul>
UPS Type/Capacity	<ul style="list-style-type: none"> <li>▪ 20 kVA Smart, Double Conversion Online</li> </ul>
Architecture	<ul style="list-style-type: none"> <li>▪ Modular design for quick service and less maintenance via self-diagnosis and replaceable spare parts.</li> </ul>
User Interface	<ul style="list-style-type: none"> <li>▪ Control Panel/LCD display - Alpha-numeric displays for system parameters and alarms.</li> </ul>
Signal and Alert	<ul style="list-style-type: none"> <li>▪ Audible alarms notify changes in utility and UPS power conditions, programmable with auto reset and various frequencies.</li> </ul>
Installation	<ul style="list-style-type: none"> <li>▪ Easy installation, customizable to connect with external battery bank, with adequate option for charging system and scalability.</li> </ul>
Diagnostics	<ul style="list-style-type: none"> <li>▪ Self-test features to ensures early detection of electricity fault or battery issue.</li> </ul>



<b>Input Power Ratings (Municipal Feed)</b>	
Input Frequency	▪ 45 ~ 65 Hz (auto sensing)
3- Phase Input Voltage range	▪ 304 ~ 477V, Others 380V ~ 415V
Input Power Factor at Full Load	▪ 0.99
Input Connections	▪ Hard Wire 5-wire (3PH + N + G)
<b>Output Power ratings (Pure Sine Wave)</b>	
Max Configurable Power	▪ 20.0 kW / 20.0kVA
Nominal Output Voltage	▪ 220 V Single Phase/3 Phase (Configurable for 380: 400 or 415 V 3-Phase nominal output voltage)
Output Voltage Distortion	▪ Less than 3% at full load
Efficiency at Full Load	▪ 95.0 % or higher
Output Frequency (sync to mains)	▪ 50 Hz Sync to mains, 60 Hz Sync to mains
Output connection	▪ Customizable for 3Phase to 3Phase or 3Phase to Single phase, Hard Wire 5-wire (3PH + N + G), IEC 320 standard installations.
Bypass	▪ Built-in maintenance bypass
Warranty	▪ 3 Years
<b>Installation/Operation</b>	
Installation	▪ This UPS will serve as a redundant use for the existing 20 kVA APC Smart-UPS - SUVT 20KHS model. Vendor must conduct a test installation, synchronizing the offered UPS to the existing wiring infrastructure that connects with 32 x 150 Ah, 12V battery bank setup.
Monitoring	▪ Pre-Installed Network Management, Interface Ports(s), RJ-45 10/100 Base-T Smart slot with audible and visible alarm. EMP/Temperature Sensor, Web/SNMP Management Card for remote access/management.
Documentation / Manual	▪ CD with software/firmware, User Manual for graceful power programming.

## Annex - 2

### Attachment -3

#### Submission Form of Supplier's Proposed Technical Specifications

Supply and Delivery of IT Equipment and Accessories, MCA-N/PM/SH/078

(Supplier shall propose better or equivalent Technical Specifications than described in Attachment 1 and 3)

MCA-Nepal's Required Specification		SUPPLIERS SPECIFICATION
<b>Lot #1: Laptop Computer</b>		
<b>1. Laptop Computer (Type A) with Docking and Monitor – 40 sets</b>		
<b>BRAND/MODEL NAME</b>		
Type	<ul style="list-style-type: none"><li>Business Enterprise-Grade Laptop: Robust, Ultra-Slim and sleek Design, Omission of Ethernet Port for enhance system portability.</li></ul>	
Operating System	<ul style="list-style-type: none"><li>Windows 11 Professional x64 bit English</li><li>Recovery Image</li></ul>	
Processor Technology	<ul style="list-style-type: none"><li>Intel® Core™ Ultra 7 with vPro™ Technology</li></ul>	
Processor	<ul style="list-style-type: none"><li>Intel® Core™ Ultra 7 165H vPro or equivalent</li></ul>	
Graphics	<ul style="list-style-type: none"><li>Integrated Intel® Arc Graphics /Intel Graphics</li></ul>	
Chipset/Security	<ul style="list-style-type: none"><li>TPM 2.0 Security Complied</li></ul>	

Display	<ul style="list-style-type: none"> <li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent</li> <li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>	
Memory	<ul style="list-style-type: none"> <li>▪ 32 GB DDR5, 2 x SODIMM</li> </ul>	
Internal Storage	<ul style="list-style-type: none"> <li>▪ 512 GB PCIe® NVMe™ TLC SSD or Equivalent, Expandable</li> </ul>	
Sound/Audio	<ul style="list-style-type: none"> <li>▪ Dual stereo speakers, integrated multi array microphone</li> <li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>	
LAN/Wireless technology	<ul style="list-style-type: none"> <li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>	
External I/O Ports	<ul style="list-style-type: none"> <li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li> <li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>▪ 1 x HDMI 2.0 port</li> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Micro/Nano-SIM slot (optional)</li> <li>▪ 1 x Standard security lock with peripheral trap (slim)</li> </ul>	
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Backlit, spill-resistant premium keyboard</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>	
Power Supply/ Battery0	<ul style="list-style-type: none"> <li>▪ ~ 65W USB Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery.</li> </ul>	
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ Three-years warranty</li> </ul>	
Docking Station	<ul style="list-style-type: none"> <li>▪ Type – Universal Thunderbolt 4</li> <li>▪ Ports – at least 3 x USB-A, 1 x USB-C</li> <li>▪ Ethernet – 1 xRJ45 Gigabit or higher speed</li> <li>▪ 2 x DisplayPort, 1xHDMI 2.0 or higher</li> <li>▪ 4 x Simultaneously display support.</li> <li>▪ Connectivity – Integrated / detachable cable</li> <li>▪ Audio port – 1 x 3.5mm audio combo jack (optional)</li> <li>▪ Power on indicator – LED</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ Windows 10/11, macOS support</li> <li>▪ Power supply – standard 220v, 50Hz</li> </ul>	
Desktop Monitor	<ul style="list-style-type: none"> <li>▪ Size/type – 23 ~24 inches IPS</li> <li>▪ Display resolution – WUXGA (1920 x 1200)</li> <li>▪ Aspect Ratio – 16:10</li> <li>▪ Connectivity – at least 1xHDMI, 1xDP or equivalent</li> <li>▪ USB Ports – 2 x USB 3.0</li> <li>▪ Stand – adjustable height and angle (VESA)</li> <li>▪ Power Supply – Standard 220V, 50Hz</li> </ul>	
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise grade premium multi-device wireless keyboard and mouse combo (USB/Bluetooth)</li> </ul>	

<b>2. Laptop Computer (Type B) - without Docking and Monitor – 25 sets.</b>		
<b>BRAND/MODEL NAME</b>		
Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise-Grade Laptop: Robust, Ultra-Slim and sleek Design, Omission of Ethernet Port for enhance system portability.</li> </ul>	
Operating System	<ul style="list-style-type: none"> <li>▪ Windows 11 Professional x64 bit English</li> <li>▪ Recovery Image</li> </ul>	
Processor Technology	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 with vPro™ Technology</li> </ul>	
Processor	<ul style="list-style-type: none"> <li>▪ Intel® Core™ Ultra 7 165H vPro or equivalent</li> </ul>	
Chipset/Security	<ul style="list-style-type: none"> <li>▪ TPM 2.0 Security Complied</li> </ul>	
Memory	<ul style="list-style-type: none"> <li>▪ 64 GB DDR5, 2 x SODIMM</li> </ul>	
Internal Storage	<ul style="list-style-type: none"> <li>▪ 1.0 TB PCIe® NVMe™ TLC SSD or Equivalent, Expandable</li> </ul>	
Graphics Card	<ul style="list-style-type: none"> <li>▪ Integrated Intel® Arc Graphics / Intel Graphics</li> </ul>	

Display	<ul style="list-style-type: none"> <li>▪ Display - 14" Diagonal. WUXGA (1920 x 1200), IPS, Anti-glare, non-Touch Screen or equivalent higher</li> <li>▪ Webcam - Resolution: 1080p FHD IR/RGB Hybrid with Shutter</li> </ul>	
Sound/Audio	<ul style="list-style-type: none"> <li>▪ Dual stereo speakers, integrated multi array microphone</li> <li>▪ 1 x 1/8" / 3.5 mm Headphone/Mic Combo Universal Audio Jack</li> </ul>	
LAN/Wireless technology	<ul style="list-style-type: none"> <li>▪ Intel® Wi-Fi 6E AX211 2x2 AX and Bluetooth® 5.1/ IEEE 802.11ax - Gigabit Support</li> </ul>	
External I/O Ports	<ul style="list-style-type: none"> <li>▪ 2 x USB 3.1 Gen 1 Type-A ports</li> <li>▪ 2 x Thunderbolt™ 4 with USB™ Type-C ports</li> <li>▪ 1 x HDMI 2.0 port</li> <li>▪ 1 x Headphone/microphone universal Combo Jack</li> <li>▪ 1 x Micro/Nano-SIM slot (optional)</li> <li>▪ 1 x Standard Security Lock with Peripheral Trap – Slim</li> </ul>	
Keyboard/Touchpad	<ul style="list-style-type: none"> <li>▪ Backlit spill-resistant premium Keyboard</li> <li>▪ Pointing Device: Touchpad with multi-touch gesture support</li> </ul>	
Power Supply/Batter	<ul style="list-style-type: none"> <li>▪ ~ 65W Slim Power Adapter (AC)</li> <li>▪ Replaceable Lithium-Ion, 3-Cell long life, 51 Wh (or higher) Fast/Express Charging Li-ion battery</li> </ul>	
External Keyboard/Mouse	<ul style="list-style-type: none"> <li>▪ Business enterprise class premier multi-device wireless keyboard and mouse (Bluetooth)</li> </ul>	
Carrying bag	<ul style="list-style-type: none"> <li>▪ Good quality branded laptop carrying bag (back-pack)</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ Three-years warranty</li> </ul>	

## Lot #2: Multifunctional Printer

<b>3. Multifunctional Printer (MFP) – 1 set</b>		
	<b>BRAND/MODEL NAME</b>	

Machine Type	<ul style="list-style-type: none"> <li>▪ Business Enterprise Grade Multifunctional Machine</li> <li>▪ (All-In-One)</li> </ul>	
Printing Output	<ul style="list-style-type: none"> <li>▪ Monochrome (Standard - A4, A3, Letter)</li> </ul>	
Standard Functions	<ul style="list-style-type: none"> <li>▪ Print, Copy, Scan, Email</li> </ul>	
Printing Speed	<ul style="list-style-type: none"> <li>▪ Up to 70 ppm (Standard Letter, A4) or equivalent higher speed printing</li> <li>▪ Monthly duty cycle – up to 300,000 pages or equivalent higher volume printing capacity</li> <li>▪ First copy out =&lt;5 second or faster</li> </ul>	
Copy and Print Resolution	<ul style="list-style-type: none"> <li>▪ Standard automatic Duplex Printing</li> <li>▪ Manual One-sided printing</li> <li>▪ Copy resolution up to 600 x 600 dpi,</li> <li>▪ Print resolution up to 1200 x 1200 dpi enhanced.</li> <li>▪ Copying reduce/enlarge: 25% ~ 400%.</li> <li>▪ Economic /Grayscale Printing (default)</li> </ul>	
Printer Processor	<ul style="list-style-type: none"> <li>▪ Intel ATOM Quad Core/Dual-Core/ARM or any Dual Custom Processor or equivalent higher</li> </ul>	
Printer Memory	<ul style="list-style-type: none"> <li>▪ 4GB total or equivalent or higher</li> </ul>	
Internal Storage (HDD/SSD)	<ul style="list-style-type: none"> <li>▪ 128 GB SSD or higher (512 GB Preferred) or equivalent higher advanced technology storage.</li> </ul>	
Control Panel	<ul style="list-style-type: none"> <li>▪ 10.1” TFT/LCD/LED Color Display Touch Screen</li> </ul>	
Connectivity and other printing options	<ul style="list-style-type: none"> <li>▪ Standard RJ-45 Ethernet (10/100/1000 Base-T)</li> <li>▪ High speed USB 2.0/3.0 direct printer connection</li> <li>▪ Additional latest wireless feature such as WiFi (IEEE 802.11 b/g/n) or WiFi Direct or AirPrint and Bluetooth and cloud printing preferred.</li> <li>▪ Print from USB disk (USB 2.0 or higher) feature.</li> <li>▪ Print from Cloud repositories preferred (Dropbox, OneDrive, and Google Drive) or equivalent.</li> </ul>	
Scanning Options / File Format Support	<ul style="list-style-type: none"> <li>▪ Scan to USB directly connected to Printer.</li> <li>▪ Scan to Email via SMTP support.</li> <li>▪ Scan to Network/FTP/SFTP/SMB features.</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ Scan to Cloud (desirable)</li> <li>▪ Standard format - PDF, PDF/A, JPEG, TIFF and wider range of file format support and OCR.</li> <li>▪ Other security features</li> </ul>	
OS Support	<ul style="list-style-type: none"> <li>▪ Windows® Server2012/Server2012 R2/ Server2016/Server2019/Server 2022, Windows 10/11 and Mac OS X (10.11) or higher versions</li> <li>▪ Both PCL and advanced PostScript (PS). PDF and XPS printing support</li> </ul>	
Paper Handling (ADF, Trays and Paper Output Options)	<ul style="list-style-type: none"> <li>▪ Robust feeder design (multiple size support – ~A4</li> <li>▪ DADF/DSCF with standard Single-Pass Duplex Automatic Document Feeder for scan and copy.</li> <li>▪ Paper Tray/Cassette/Drawer - Total FOUR Trays (Letter, A4 ~ A3) including - bypass and high capacity Tandem/Deck or equivalent options enough for high volume printing.</li> <li>▪ Paper/Size/Thickness: Standard Letter, A4, A3 - up to 200/300 GSM/140LB or equivalent paper weight support</li> <li>▪ Paper output Accessories - Office Finisher Unit (OFU) with up to 50 Sheets (20 lb/80 gsm) single-position stapling or equivalent feature.</li> </ul>	
Power Supply	<ul style="list-style-type: none"> <li>▪ Standard 220 v, 50 Hz Nepal</li> </ul>	
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, USB Cables and ADF, Cover etc.</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ 3 Years, Spares and Onsite Support</li> </ul>	

### Lot #3 : Video Conferencing System

<b>4. Video Teleconferencing (VTC) System for mobile Use -1 set</b>		
<b>BRAND/MODEL NAME</b>		
Type	<ul style="list-style-type: none"> <li>▪ Professional Auto Tracking PTZ Camera</li> </ul>	
Picture Elements	<ul style="list-style-type: none"> <li>▪ Single/Double Lens with 1/25” ~1.0” Image Sensor</li> </ul>	

Output Resolution	<ul style="list-style-type: none"> <li>▪ 4K Ultra HD</li> </ul>	
Zoom	<ul style="list-style-type: none"> <li>▪ 15~30 Advance Zoom or Equivalent</li> </ul>	
FOV/PTZ	<ul style="list-style-type: none"> <li>▪ 60~120-degree horizontal coverage or equivalent</li> </ul>	
Connectivity	<ul style="list-style-type: none"> <li>▪ 3G-SDI/ HDMI / IP / USB/ RS-232/ RS-422 etc. Audio IN/OUT options</li> </ul>	
Video Formats	<ul style="list-style-type: none"> <li>▪ MPEG/AVI/MOV/WMV compatible with Windows</li> </ul>	
Auto Tracking /AI Functions	<ul style="list-style-type: none"> <li>▪ Human Detection/Motion Tracking Feature</li> </ul>	
OS Support	<ul style="list-style-type: none"> <li>▪ Plug and Play – Windows/Mac OS</li> </ul>	
Power Supply	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>	
Accessories	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable, remote control, Extension cable/wire up to 20M, mounting kit etc. to make the system functional.</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>	
<b>Audio Speakerphone</b>		
Type	<ul style="list-style-type: none"> <li>▪ Full duplex microphone array speakerphone</li> </ul>	
Audio acoustic features	<ul style="list-style-type: none"> <li>▪ Advanced echo cancellation / noise suppression features for powerful wideband voice processing</li> </ul>	
<b>Voice/Audio Control</b>	<ul style="list-style-type: none"> <li>▪ Speaker volume adjustable via Remote control/Touch Control/button control for volume up/down, mute, call and hang-up functions</li> </ul>	
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>▪ Bluetooth/LAN/audio IN/OUT, USB 3.0/USB-C/HDMI/ RS-232/ RS-422 with options for MIC POD expansion and external audio system</li> </ul>	
<b>Power Supply</b>	<ul style="list-style-type: none"> <li>▪ AC, Standard 220~240C, 50/60Hz</li> </ul>	
<b>Accessories</b>	<ul style="list-style-type: none"> <li>▪ Power adapter/cord/cable/HuB, remote control and extension cable up to 20M to make the system functional.</li> <li>▪ Mounting Kits (if applicable)</li> </ul>	



<b>OS Support</b>	<ul style="list-style-type: none"> <li>▪ Plug and Play with Standard Windows and Mac OS</li> </ul>	
<b>Expected Apps to be Compatible With</b>	<ul style="list-style-type: none"> <li>▪ Skype/Skype for Business</li> <li>▪ Microsoft Teams</li> <li>▪ Zoom</li> <li>▪ Cisco WebEx, Jabber,</li> </ul>	
<b>Warranty</b>	<ul style="list-style-type: none"> <li>▪ At least ONE Year</li> </ul>	
<b>Carrying Bag</b>	<ul style="list-style-type: none"> <li>▪ Appropriate carrying bag to accommodate Conference Camera, Speakerphone and Accessories</li> </ul>	

## Lot #4: Uninterruptible Power Supply System

5. 3 kVA Smart UPS -1 set		
	BRAND/MODEL NAME	
Type/Capacity	<ul style="list-style-type: none"> <li>▪ 3000 VA Smart UPS System</li> <li>▪ Tower Casing</li> </ul>	
Power Input Voltage/Current	<ul style="list-style-type: none"> <li>▪ 220 V, 50/60 Hz +/-3 Hz Auto Sensing</li> <li>▪ IEC320- C19 Input Connection</li> <li>▪ Input Voltage range – 160 ~ 285 V adjustable.</li> <li>▪ At least 95.0 % efficiency at full load</li> </ul>	
Power Output Voltage/Current	<ul style="list-style-type: none"> <li>▪ 3.0 kVA, 2.7kWatts</li> <li>▪ Nominal Output voltage – 220 ~230 configurable</li> <li>▪ At least 95% Efficiency at full load</li> <li>▪ (1) IEC C19 outlet connection</li> <li>▪ (4+) IEC C13 outlet connections</li> </ul>	
Batteries	<ul style="list-style-type: none"> <li>▪ 2x Maintenance-free sealed Lead-Acid battery (Leak-proof)</li> <li>▪ Expected re-charge time 3 Hrs.</li> <li>▪ Expected Battery Life (years): 3- 5 years.</li> </ul>	
Backup/runtime	<ul style="list-style-type: none"> <li>▪ At least 8 ~ 12 minutes of runtime at half load</li> </ul>	
Output Frequency	<ul style="list-style-type: none"> <li>▪ Sinewave, 50 Hz (47 - 53 Hz), +/-5% distortion</li> </ul>	
Communication	<ul style="list-style-type: none"> <li>▪ Smart-Connect, USB &amp; Serial support.</li> <li>▪ LED/LCD/Light status display for On-Line, On-Battery, Battery Replace and Overload Indicator</li> </ul>	
Audible Alarm	<ul style="list-style-type: none"> <li>▪ Alarm when UPS is on battery, distinctive low battery and configurable delays or defects.</li> </ul>	
Accessories	<ul style="list-style-type: none"> <li>▪ Power Cables, C13, C19 type,</li> <li>▪ Serial/USB cable, Serial-RJ-45 etc.</li> <li>▪ User manual</li> </ul>	

Warranty	<ul style="list-style-type: none"> <li>▪ At least ONE year</li> </ul>	
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**6. 20 kVA UPS for Data Center (Backup) -1 set**

<b>BRAND/MODEL NAME</b>		
<b>External Features:</b>		
Chassis Type	<ul style="list-style-type: none"> <li>▪ Tower with trolley wheelbase</li> </ul>	
UPS Type/Capacity	<ul style="list-style-type: none"> <li>▪ 20 kVA Smart, Double Conversion Online</li> </ul>	
Architecture	<ul style="list-style-type: none"> <li>▪ Modular design for quick service and less maintenance via self-diagnosis and replaceable spare parts.</li> </ul>	
User Interface	<ul style="list-style-type: none"> <li>▪ Control Panel/LCD display - Alpha-numeric displays for system parameters and alarms.</li> </ul>	
Signal and Alert	<ul style="list-style-type: none"> <li>▪ Audible alarms notify changes in utility and UPS power conditions, programmable with auto reset and various frequencies.</li> </ul>	
Installation	<ul style="list-style-type: none"> <li>▪ Easy installation, customizable to connect with external battery bank, with adequate option for charging system and scalability.</li> </ul>	
Diagnostics	<ul style="list-style-type: none"> <li>▪ Self-test features to ensures early detection of electricity fault or battery issue.</li> </ul>	
<b>Input Power Ratings (Municipal Feed)</b>		
Input Frequency	<ul style="list-style-type: none"> <li>▪ 45 ~ 65 Hz (auto sensing)</li> </ul>	
3- Phase Input Voltage range	<ul style="list-style-type: none"> <li>▪ 304 ~ 477V, Others 380V ~ 415V</li> </ul>	
Input Power Factor at Full Load	<ul style="list-style-type: none"> <li>▪ 0.99</li> </ul>	
Input Connections	<ul style="list-style-type: none"> <li>▪ Hard Wire 5-wire (3PH + N + G)</li> </ul>	
<b>Output Power ratings (Pure Sine Wave)</b>		

Max Configurable Power	<ul style="list-style-type: none"> <li>20.0 kW / 20.0kVA</li> </ul>	
Nominal Output Voltage	<ul style="list-style-type: none"> <li>220 V Single Phase/3 Phase (Configurable for 380: 400 or 415 V 3-Phase nominal output voltage)</li> </ul>	
Output Voltage Distortion	<ul style="list-style-type: none"> <li>Less than 3% at full load</li> </ul>	
Efficiency at Full Load	<ul style="list-style-type: none"> <li>95.0 % or higher</li> </ul>	
Output Frequency (sync to mains)	<ul style="list-style-type: none"> <li>50 Hz Sync to mains, 60 Hz Sync to mains</li> </ul>	
Output connection	<ul style="list-style-type: none"> <li>Customizable for 3Phase to 3Phase or 3Phase to Single phase, Hard Wire 5-wire (3PH + N + G), IEC 320 standard installations.</li> </ul>	
Bypass	<ul style="list-style-type: none"> <li>Built-in maintenance bypass</li> </ul>	
Warranty	<ul style="list-style-type: none"> <li>3 Years</li> </ul>	
<b>Installation/Operation</b>		
Installation	<ul style="list-style-type: none"> <li>This UPS will serve as a redundant use for the existing 20 kVA APC Smart-UPS - SUVT 20KHS model. Vendor must conduct a test installation, synchronizing the offered UPS to the existing wiring infrastructure that connects with 32 x 150 Ah, 12V battery bank setup.</li> </ul>	
Monitoring	<ul style="list-style-type: none"> <li>Pre-Installed Network Management, Interface Ports(s), RJ-45 10/100 Base-T Smart slot with audible and visible alarm. EMP/Temperature Sensor, Web/SNMP Management Card for remote access/management.</li> </ul>	
Documentation / Manual	<ul style="list-style-type: none"> <li>CD with software/firmware, User Manual for graceful power programming.</li> </ul>	