

## Annex-C (Total: 06 Pages)

### A. List of Goods and Delivery Schedule (Updated)

When completing Form PG4-3A, 3B, 3C & 3D the Tenderer shall quote prices and contract delivery dates for each lot separately, as specified in the List of Goods and Delivery Schedule.

Sl. No.	Description of Items	Unit of Measurement	Quantity	Point of Delivery [Final (Project Site) Destination as specified in TDS]	Completion Time Required (in days)
1	Supply and Installation of Smart Pre-payment metering Networks	Lot	01	Nominated Places under NESCO's jurisdiction area: i) S&D 1-Rajshahi ii) S&D 2 – Rajshahi iii) S&D - Natore iv)S&D 1-Chapai Nawabganj v)S&D 2-Chapai Nawabganj	300 Days from the date of Contract signing
2	Supply, Installation, Testing & Commissioning of Utility Vending Station (UVS)	Lot	06		
3	Supply, Installation, Testing & Commissioning of single phase & three phase Smart Pre-Payment meters.	Nos.	139448		
4	Supply, Installation, Testing & Commissioning of Hand Held Unit	Nos.	10		
5	HES (Head End System) Software Packages & Software License (Processor based Oracle License-Oracle Enterprise Edition with 1 <sup>st</sup> year Support)	Lot	01		
6	Supply, Installation, Testing & Commissioning of Master Information Center (MIC)	Lot	01		
7	Supply, Installation, Testing & Commissioning of Disaster Recovery Center (DRC)	Lot	01		
8	Dismantling of Existing Post Paid & Pre-Payment Meters (Both Single & Three Phase), Carrying & Handover to Designated Store.	Nos	139448		
9	Manpower Training	Lot	01		
10	03 (Three) years Operational support for system	Lot	01		
11	Operation & Maintenance for 03 Years. Annual Operation & Maintenance Cost (AMC) submitted for 01 (One) Year.	Lot	01		
12	Supply, Installation, Testing & Commissioning of DCU (Data Concentrator Unit)	Nos	839		
13	To become Technically Responsive each Bidder/Tenderer must prove interfacing with 03 (Three) other Bidder's Meter (Approved by Procuring Entity) on Demonstration.	Lot	1		

<b>Network</b>
<b>The MIC, the CDC and the DRS will be assigned with real IP address.</b>

Sl. No.	Description of Items	Description of the Network	Unit of Measurement	Quantity
01	<p><b>Network 5:</b></p> <ul style="list-style-type: none"> <li>The MIC to the UVS</li> <li>This is a physical connection via fibre optical line</li> </ul> <p>or</p> <p>This is a Wireless connection.</p>	<ul style="list-style-type: none"> <li>Dedicate leased fibre line(like DDN)</li> <li>@minimum 02mbps</li> <li>A secured &amp; separate APN</li> <li>Alive network for 24x7 round the clock</li> <li>A fixed static IP scheme</li> <li>Bi-directional(Full Duplex)</li> <li>@minimum 1Gbps twisted pair (RJ45)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>GPRS/EDGE</li> <li>Different Locations (NESCO Area).</li> <li>Chosen Data Service Network Provider so the every other operated on air mobile operators will be available for necessary communication amongst them and that has to be ensured.</li> <li>A secured &amp; separate APN.</li> <li>A fixed static IP scheme.</li> <li>Bi-directional (Full Duplex).</li> <li>Must be a secured VPN Connection.</li> </ul>	Nos.	06
02	<p><b>Network 3:</b></p> <ul style="list-style-type: none"> <li>The MIC to Online single phase and 3phase meters.</li> <li>This is a Wireless connection.</li> </ul>	<ul style="list-style-type: none"> <li><b>GPRS/EDGE</b></li> <li>Different Locations (NESCO Area).</li> <li>Chosen Data Service Network Provider so the every other operated on air mobile operators will be available for necessary communication amongst them and that has to be ensured.</li> <li>A secured &amp; separate APN.</li> <li>A fixed static IP scheme.</li> <li>Bi-directional (Full Duplex).</li> <li>@minimum 02 mbps</li> </ul>	Lot	1
03.	<p><b>Network 4:</b></p> <p>The MIC to DCU (Wireless connection)</p>	<ul style="list-style-type: none"> <li>To be mentioned</li> </ul>	Lot	1
04	<p><b>Network 2:</b></p> <ul style="list-style-type: none"> <li>The MIC &amp; DRC to the data Service Network Provider.</li> </ul> <p><b>Network must be ensured by Two (02) Separate Dedicated Optical Fiber Line.</b></p>	<ul style="list-style-type: none"> <li>Dedicate leased fibre line(like DDN)</li> <li>@minimum 02 mbps</li> <li>A secured &amp; separate APN</li> <li>Alive network for 24x7 round the clock</li> <li>A fixed static IP scheme</li> <li>Bi-directional (Full Duplex)</li> <li>Minimum 01 Gbps twisted pair (RJ45)</li> </ul>	<b>Lot</b>	<b>01</b>

<b>Point of Delivery</b> (Location and address)	
<b>Delivery Date:</b> (a) Earliest Delivery Date (b) Latest Delivery Date	

## Master Information Center (MIC) Hardware

Sl. No.	Description of Items	Unit of Measurement	Quantity
1	Workstation With Required Software (Both System and application)	Nos.	01
2	Database Server	Nos.	02
3	Application Server	Nos.	02
4	Accounting & MIS Server	Nos.	02
5	SMS Server	Nos.	01
6	Back-Up Server	Nos.	01
7	Rack with Monitor Console Kit	Nos.	01
8	External Storage	Nos.	01
9	SAN Switch	Nos.	02
10	Tape Library	Nos.	01
11	Rack Mounted Router	Nos.	02
12	Rack Mounted Managed Switch	Nos.	02
13	Rack Mounted Fire wall	Nos.	02
14	Laser Printer with required Software (Both System & Application).	Nos.	01
15	Laptop with required Software (Both for System & Application)	Nos.	01
16	Computer Table & Chair for each Computer, 01 No File Cabinet, Necessary Lighting, Printer Table.	Lot.	01
17	30 KVA Generator	Nos.	01
18	Online UPS 10 KVA 04 hr. backup With required Software (Both for System & Application)	Nos.	01
19	Civil Works: Construction of MIC : 50 Sq.M (With Raise Floor, Aesthetic Interior decoration & Necessary Furniture), <b>CCTV (Minimum 04 Nos CC Camera &amp; UPS) System.</b>	Lot	01
20	A.C With related Materials & Services (Split Type 02 Ton x 04 Nos)	Lot	01
21	Implementation	Lot	01

Point of Delivery (address of location)	
Delivery Date: (a) Earliest Delivery Date (b) Latest Delivery Date	

## Disaster Recovery Center (DRC) Hardware

Sl. No.	Description of Items	Unit of Measurement	Quantity
1	Workstation With Required Software (Both System and application)	Nos.	01
2	Database Server	Nos.	03
3	Application Server	Nos.	02
4	Accounting & MIS Server	Nos.	02
5	SMS Server	Nos.	01
6	Back-Up Server	Nos.	01
7	Rack with Monitor Console Kit	Nos.	01
8	External Storage	Nos.	01
9	SAN Switch	Nos.	02
10	Tape Library	Nos.	01
11	Rack Mounted Router	Nos.	02
12	Rack Mounted Managed Switch	Nos.	02
13	Rack Mounted Fire wall	Nos.	02
14	Laser Printer with required Software (Both System & Application).	Nos.	01
15	Laptop with required Software (Both for System & Application)	Nos.	01
16	Computer Table & Chair for each Computer, 01 No File Cabinet, Necessary Lighting, Printer Table.	Lot.	01
17	30 KVA Generator	Nos.	01
18	Online UPS 10 KVA 04 hr. backup With required Software (Both for System & Application)	Nos.	01
19	Civil Works: Existing Infra-Structure Development for DRC (With Raise Floor, Aesthetic Interior decoration & Necessary Furniture, <b>CCTV (Minimum 04 Nos CC Camera &amp; UPS) System.</b>	Lot	01
20	A.C With related Materials & Services (Split Type 02 Ton x 02 Nos)	Lot	01
21	Implementation	Lot	01

Point of Delivery (address of location)	
Delivery Date: (a) Earliest Delivery Date (b) Latest Delivery Date	

## Utility Vending Station (UVS) Hardware

Sl. No.	Description of Items	Unit of Measurement	Quantity
1	Workstation with Required Software (Both System and application)	Nos.	02
2	GPRS/EDGE Modem with Required Software (both System and application)	Nos.	02
3	SIM Card with required Software (Both System & Application)	Nos.	02
4	Slip Printer With required Software (Both for System & Application)	Nos.	02
5	Laser Printer with required Software (Both System & Application).	Nos.	01
6	UPS 5 KVA 2 hr. backup with Required Software (Both System and application)	Nos.	01
7	A.C with related Materials & Services (Split Type 02 Ton x 01 No)	Nos.	01
8	Civil Works: Construction of UVS: 50 Sq.M Aesthetic Interior decoration & Necessary Furniture for Each UVS Minimum for Each UVS : 02 Nos Ceiling Fan (56"), Computer Table & Chair for each Computer, 01 No File Cabinet, Necessary Lighting, CCTV (Minimum 04 Nos CC Camera & UPS) System aesthetic decoration with Thai Aluminium & Glass, Printer Table, Necessary Electrical Wiring etc.)	Lot	01

Point of Delivery (address of location)	
Delivery Date: (a) Earliest Delivery Date (b) Latest Delivery Date	

<b>Manpower Training</b>			
Sl. No.	Description of Items	Quantity	Description of Manpower Training
1	Software Engineer	2	<ul style="list-style-type: none"> <li>• Linux, Windows, API, DLL, HES, PLC, PL/SQL/JAVA, VPN, Related HES with AMI server and related areas as required.</li> <li>• Every piece of Software supported Hardware that is involved in the system and on interfacing with conventional network and Meters focusing at major on PLC, Data Concentrator Unit, GPRS, VPN, and Related HES with AMI server and related areas as required.</li> <li>• On the electrical parts of the system as well as the customization of the meter and related areas as required</li> </ul>
2	Network & Hardware Engineer	2	Every piece of Software supported Hardware that is involved in the system and on interfacing with conventional network and Meters focusing at major on PLC, Data Concentrator, GPRS, VPN, and Related HES with AMI server and related areas as required.
3	Electrical Engineer	16	On the electrical parts of the system as well as the customization of the meter and related areas as required
4	Operator and End User	-	POST operate the vending station and the related areas as required

Address of location	
Date:	
(a) Earliest Delivery Date	
(b) Latest Delivery Date	

The tenderer will provide required Training for Minimum **10 (Ten) Man.Month** for Human Resources at Manufacturers / Suppliers Country.