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BOB

BANK OF BHUTAN

A dhi Company

Banker to the Nation since 1968

Bidding Document
for
Supply, Delivery and Installation of *Modular 60kVA and Scalable to 80 KVA each or more*

Tender No: 000/BoB/TENDER/2017/014

28/11/2017

SALIENT FEATURES OF THE BID

1. Tender No. 000/BOB/TENDER/2017/014	**Date: 28/11/2017**
2. Description of items	
a. Item Name	***Modular 60kVA and Scalable to 80 KVA each or more.***
3. Bids details:	
a. Sale of bid documents:	From 28/11/2017 to 11/12/2017
b. Cost of bid document	No. 1000.00 (non refundable)
c. Place of sale:	BoB, Head Office, Thimphu, Babesa (during office hours)
d. Last date of submission:	11/12/2017 hours at 1300 hours
e. Place of submission:	BoBL, Head Office, Thimphu, Babesa
f. Opening date:	11/12/2017 at 1430 hours
g. Venue for opening of bid	BoB, Head Office, Thimphu, Babesa
4. Bid Security (EMD)	2% of the total value
5. Bid Validity Period	75 Days from the date of bid opening.
6. Quantity Variation (Order)	(+ - 20%) on the total quantity

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CHECK LIST FOR BID SUBMISSION

SL. NO.	PARTICULARS		Requirement	Submitted Yes / No
1	Signed & Stamped Bid Form with mentioned details	a. Marked "Confidential".	Yes	
		b. Mentioned Bid Name, number and date.	Yes	
		c. Addressed to: ***Procurement Officer Bank of Bhutan, Head Office Thimphu, Babesa***	Yes	
		d. Written warning not to open before the specified time and date	Yes	
2	Copies	"**Original**" & "**Copy**" with the name of bidder on the envelope	Yes	
3	Earnest Money Deposit (EMD)	2% of the total value	Yes	
4	Valid Trade License		Yes	
5	Tax Clearance Certificate		Yes	

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REQUEST FOR PROPOSAL (RFP)

A. SCOPE OF WORK:

Bank of Bhutan Limited would like to invite the Bhutanese firms with the valid trade license holder to participate for supply, delivery and installation/testing of ***Modular 60kVA and Scalable to 80 KVA each or more with 180 minutes of backup at full load***. The following are the scope and the specifications;

Uninterrupted Power Supply

Application: To provide Un-Interrupted Power Supply to the Server and IT loads.

1) ***General***

This specification describes the electrical, mechanical characteristics and requirements of three phases, on-line, double conversion, solid-state **Modular Uninterruptible Power Supply (UPS)**. The UPS should be having VFI (Voltage Frequency Independent) technology, fully DSP controlled power factor corrected rectifier and IGBT inverter capable of providing high quality AC power for sensitive electronic equipment loads. It should also supply clean power without any break in the supply in the absence of raw power. Under no conditions will the protected system get direct supply from the raw mains unless there is fault in the protected system. The description of the specification includes aspects related to design, manufacturing, fabrication and putting UPS Systems together with all necessary accessories and auxiliaries to make an operational UPS system in a condition acceptable to the end user.

2) ***Scope of Work***

2.11 The scope covers supply, installation, testing and commissioning of 2 no. of **Modular 60kVA and Scalable to 80 kVA each or more with 180 minutes of backup at full load**

2.12 Supply of remote monitoring interface through SNMP or Modbus protocol to interface with

2.13 Supply of cables and inter connection between battery banks, LT panels and UPS system

2.14 Supply of transformer

3) ***Submittals***

3.11 As bid system bill of materials.

3.12 Product catalogue sheets or equipment brochures.

3.13 Product guide specifications.

3.14 System single-line operation diagram.

3.15 Installation information, including weights and dimensions.

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3.16 Information about terminal locations for power and control connections.

3.17 Drawings for requested optional accessories.

3.18 Pervious installation and the client certificate of completion

3.19 Buyback offer for the existing UPS and battery bank
(The vendors are expected to submit a buyback offer for the existing UPS and the battery bank. However the Bank reserves the right to take up the buyback offer or procure without the buyback offer)

4) ***Vendor qualification criteria***

4.11 Vendor quoting should be a distributor/partners. MAF or partnership certificated must be enclosed

4.12 UPS OEM should be certified for ISO 9001(QMS), ISO 14001(EMS)

4.13 Vendor should have their own service setup locally with at least one certified engineer (CV must be submitted) to guaranty service support as per service level agreements.

5) ***Reference and codes***

The UPS shall be designed in accordance with the applicable sections of the current revision of the following documents. Where a conflict arises between these documents and statements made herein, the statements in this specification shall govern, with below approvals and conformance:

5.11 EN 50091-1, EN/IEC 62040-1-1, EN/IEC 62040-3, FCC Part 15 Class A, ISO 14001, ISO 9001, VFI-SS-111

6) ***System Configuration***

Modular 60KVA or moreUPSand expandable up to 80KVA or more with180 minutes of backup on full load

Module should be of comprising of 15 kVA modules or more and scalable up to 80 kVAor more as per BOQ.

7) ***Environmental Requirements***

7.11 Temperature: UPS system normal operations: 0° to 40°C (32°F to 104°F)

7.12 Batteries : 25°C (77°F)

7.13 Storage : -15°C to +40°C (-4°F to 104°F)

7.14 Relative humidity (operating and storage): 95 % non-condensing.

7.15 Altitude: Up to 2000 meters above sea level.

7.16 Audible Noise: Up to **61 dBA** at 1 meter.

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*8) **Basic requirements***

8.11 **Nominal Voltage**

- Input: 380/ 400/ 415 VAC - Three Phase four wires + ground
- Output: 220/380, 230/ 400, 240/415 VAC (Selectable) - Three Phase four wires + ground

8.12 **Nominal Frequency**

- Input: 50/ 60 Hz (Auto selectable)
- Output: 50/ 60 Hz (Selectable)

8.13 **Power factor**

- UPS Rated power factor: 0.99
- Input power factor: > 0.99

8.14 **Battery**

The battery shall include valve-regulated, lead-acid battery cells installed in MS open rack. A battery disconnect circuit breaker shall be included for isolation of each battery string from the UPS.

8.15 **System Efficiency**

- Online AC to AC efficiency. : **up to 95% (at full load)**
- Eco mode efficiency :> 98%

8.16 **Total Harmonic Distortion**

- Output : < 2% for 0 to 100% linear load and < 5% for full nonlinear load
- Input: Less than 5% for full load

8.17 **Overload Operation**

- 10 minutes @ 125% and 60 seconds @ 150%

*9) **System Description/Configuration***

9.11 The UPS technology should be True Online, Double conversion (VFI).

9.12 UPS shall be Modular. Each module should be rated for 15 kVA or more

9.13 The module should be independent with complete topology of rectifier and inverter inbuilt.

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9.14 The module should be hot swappable which means it can be inserted or removed from the UPS system without disconnecting or disturbing the critical load connected at the output of the UPS.

9.15 The UPS frame for the module should be floor mounted with minimum foot print

9.16 The UPS frame for the modules can be used as stand-alone or in parallel up to minimum of four units (horizontal expansion).

9.17 The UPS frame for the modules should have provision of connecting input/ output/ battery connection cables (from TOP and BOTTOM side).

9.18 Each UPS frame should have provision for independent monitoring the power modules placed in it for electrical parameters and operating status.

9.19 Each hot swappable module should have its own DSP controller, and contain a Full rated rectifier,full rated inverter & battery charging circuit.

9.20 The UPS frame should be provided with build in automatic static bypass & maintenance bypass suitable for the maximum kVA/kW as per the maximum number of the module which can be engaged in the.

9.21 Each power module should have inbuilt provision to isolate itself from the input/ output/ DC bus under fault condition or when being disengaged from UPS.

9.22 UPS comprises a user replaceable continuous duty hot swappable bypass static switch module

9.23 The UPS frame should have capability of 1) connecting parallel without addition of external hardware (except paralleling cable). And 2) connecting in LBS without **addition** of external hardware (except a cable subject to the distance between two UPS is within 20 meter)

9.24 Each power module rectifier shall be capable of providing continuous power to the load as well as for battery charging.

9.25 Each UPS system shall be sized to maintain a kVA as per Bill of Material, and be equipped with an individual battery bank capable to supply this load for the time as indicated in Bill of Materials and Data Sheet.

9.26 UPS should go in Dormancy Mode which means,if load is lesser, all extra modules will go in sleep mode, thereby enhancing the efficiency of a UPS. These modules should then turn ON immediately, if the load increases. This Dormancy mode will be applicable when Batteries are fully charged, Rectifier Inverter & Bypass is normal.

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10) ***Modes of operations***

The UPS system shall be designed to operate as a double conversion, on-line system in the following modes.

10.11 **Normal:** The rectifier and battery charger shall draw power from the utility AC source and shall supply DC power to the inverter while simultaneously charging the battery. The inverter shall convert DC to AC and continuously supply clean power to the critical load.

10.12 **Backup mode:** Upon failure of the utility AC power source, the critical load shall be supplied by the inverter without any interruption and shall obtain its power from the battery.

10.13 **Recharge:** Upon restoration of the utility AC power source (prior to complete battery discharge), the rectifier/battery charger shall power the inverter and simultaneously recharge the battery.

10.14 **Bypass Mode:** The static bypass transfer switch shall be used to transfer the load to the bypass without interruption to the critical power load in synchronise condition and with 10 Ms break in un synchronised condition.

10.15 **Maintenance Mode**: During failure of a redundant UPS power module, UPS should have a provision of removing the faulty power module & adding new power module in online mode (hot swappable) without effecting the load. In case of maintenance of the entire UPS system, a manual internal maintenance bypass switch shall be provided to isolate the UPS inverter output and static bypass transfer switch for maintenance. This shall allow the UPS to be tested or repaired without affecting load operation. UPS should have an electronic interlocking between maintenance bypass switch & UPS module inverters to ensure inverter output is off during maintenance bypass operation to avoid any fault.

10.16 **Parallel Mode:** Two or more UPS units (up to 4) of same capacity should be capable of working in parallel mode N+1, N+X & N+N of operation providing same voltage & frequency. The output of parallel UPS system should be shorted to provide common output. The UPS units working in parallel mode of operation should share the load equally. In case of failure of redundant UPS, rest of the UPS units should be able to support the critical load without any interruption.

11) ***UPS components & their function***

11.11 Rectifier & charger: Rectifier & charger denotes the solid-state equipment and controls necessary to convert incoming AC power to DC power for input to the inverter and for battery charging. The rectifier cum PFC shall be three phase fully DSP controlled & have low input iTHD& high PF. Charger section should be CVCC type (Constant Voltage

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Constant Current) for efficient battery charging & supplying regulated DC voltage. The charger section should have an electronic switch in battery path to isolate battery bank from UPS in case of fault.

11.12 **Modular design**: The rectifier, charger & inverter shall be constructed in a power module and be a building block of UPS. The power modules should be capable of plug in / out in UPS online mode without affecting the load.

11.13 **Static bypass**: A bypass static transfer switch shall be provided as an integral part of the UPS to provide high speed load transfer from inverter to bypass and vice versa. The Static switch shall be a Bi-directional using naturally commutated high-speed static (SCR type) device rated to carry full load current continuously.

11.14 **Uninterrupted Transfer**: The static bypass transfer switch shall automatically cause the bypass source to supply power to the critical load without interruption after the logic senses one of the following conditions:

- Inverter overload exceeds unit's rating
- Battery protection period expired and bypass source is available
- Inverter failure
- Interrupted Transfer: If the bypass source is beyond the conditions stated below, the UPS will make an interrupted transfer (less than 10 msec. in duration).

11.15 **Manual maintenance bypass**: Manual maintenance bypass switch should be inbuilt in the UPS to bypass the complete UPS in event of failure of any of its components, so that repairs can be undertaken without interrupting the load.

11.20 **DPS Digital Control**: The UPS system should have digital control through fully DSP controlled microprocessor circuitry to enhance reliability and provide excellent control dynamics.

11.21 **Intelligent cooling**: The UPS system should be forced cooled through cooling fans that use the air from the ambient to intelligently cool the control electronics, device heat sinks and magnetics provided in the system. The cooling fans should be multi-speed with speed control based on the loading conditions on the UPS, thereby saving energy and enhancing the life of the cooling fans.

11.22 **Emergency Power off (EPO)**: The UPS should have built in facility through which it can be switched off immediately through local switch or remote Emergency Power Off switch wherein the load is disconnected from the UPS under emergency condition. Restarts are possible after manual inspection and removing the conditions of emergency and resetting the Emergency Power Off switch.

11.23 **Event Monitoring**: UPS should have built-in SRAM to stores up to 500 events with date and time stamping of the historical records and event logs. It should be possible to

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monitor these events from the front LCD panel of the UPS or on a PC if the UPS is connected through a SNMP card on a LAN.

11.24 **Communication Interface**: UPS should have a wide choice of communication interface through SNMP / Modbus protocol using the RS232 / RS485 / Ethernet port.

- RS 232: The UPS should have RS232 port for serial communication with the computer for monitoring purpose.
- RS 485: The UPS should have RS 485 port for communication/ broadcast information about its status to the Building Management System. There should a provision of cascading up to 30 UPS system for communication through RS 485 port.
- SNMP: UPS should have an Ethernet port to broadcast information about its status to Network Management software on servers in a LAN through SNMP protocol.

  This connectivity should also provide control of the UPS and shall offer complete UPS management solutions.

11.26 Metering: An MCU or DSP shall control the display functions of the monitoring system. All three-phase parameters shall be displayed simultaneously. All voltage and current parameters shall be monitored using true RMS measurements for accurate (±1%) representation of non-sinusoidal waveforms typical of computers and other sensitive loads.

The following parameters shall be displayed:

- **Main input**
  - Three-phase main input line-to-neutral voltage
  - Three-phase main input line-to-line voltage
  - Three-phase main input current
  - Main input frequency
  - Three-phase input power factor
- **Bypass**
  - Each phase bypass input line-to-neutral voltage
  - Bypass input line-to-line voltage
  - Bypass input frequency
- **UPS output**
  - Each phase output voltage of UPS
  - Each phase output current of UPS
  - Output line-to-line voltage of UPS

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- Power factor of each phase
- UPS output frequency

- **Local load**
  - Load of each phase (% of total load)
  - Active power, apparent and reactive power of each phase (output)
  - Load crest factor
- **Battery**
  - Battery bus voltage
  - Battery current
  - Forecasted Battery backup time (remaining time)
  - Battery temperature (in degree centigrade)
- **Parallel load**
  - Apparent power of each output phase (for parallel operation system)
  - Active power of each output phase (for parallel operation system)
  - Inactive power (Reactive power) of each output phase (for parallel operation system)

C. **Power Flow Mimic:** Each UPS module shall be equipped with a mimic to indicate power flow to the critical load along with an indication of the availability of the rectifier/charger, battery, automatic bypass, inverter, load. The mimic shall provide a quick and easy indication of the load level (displayed on LCD), including for overload conditions (displayed on LCD). This power flow is also shown in the LCD menu.

D. **Alarms and Status Information:** Alarm and status conditions shall be reported via the display and control panel shall report the alarms and status information. Each alarm shall be visually displayed in text form and an audible alarm will sound for each alarm displayed

12System Protection

The UPS shall have built-in protection against: surges, sags, and over-current from the AC rectifier input source, over-voltage and voltage surges from output terminals of paralleled sources, and load switching and circuit breaker operation in the distribution system.

The UPS rack system shall be protected against sudden changes in output load and short circuits at the output terminals. The UPS shall have built-in protection against permanent damage to itself and the connected load for all predictable types of malfunctions. Fast-acting current limiting devices shall be used to protect against cascading failure of solid-state devices. Internal UPS malfunctions shall cause the module to trip off-line with minimum damage to the module and provide maximum information to maintenance personnel regarding the reason for tripping off line. The load shall be automatically transferred to the bypass line uninterrupted, should the

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connected critical load exceed the capacity of the available on-line modules. The status of protective devices shall be indicated on a graphic display screen on the front of the unit.

14. Warranty

The standard manufacturer's warranty for all the supplied items against defects in materials and workmanship is for 12 months from the date of installation. After the expiry of warranty, the product should be supported through comprehensive Annual Maintenance Contract (AMCs).

15. Pre-Dispatch Inspections:

Before shipment, vendor should completely test the system in its factory. Client or third parties can ask for UPS pre-dispatch inspection on chargeable basis for the major specifications that constitutes routine test.

16. Fabrication

16.1 Materials: Vendor to certify that all materials of the UPS is new, of current manufacture, high grade and free from all defects and will not have been in prior service except as required during factory testing.

16.2 Construction and Mounting: The UPS unit should comprised of rectifier/charger, inverter, static transfer switch, maintenance bypass switch, and static bypass input switch housed in a free-standing steel enclosure with key-lockable doors. Also, switch gears to be provided at input, output, static bypass & maintenance bypass of UPS. Front access only is required for servicing, adjustments, and installation. Also, switch gears to be provided at input, output, static bypass & maintenance bypass of UPS. Front access only is required for servicing, adjustments, and installation. The enclosure should be built to comply with IP20. The UPS cabinet should be cleaned, primed, and painted with the manufacturer's standard colour.

17. Technical Specification:

Technical Specification:

Automatic self-test: Periodic battery self-test ensures early detection of a battery that needs to be replaced.

Intelligent battery management: Maximizes battery performance, life, and reliability through intelligent, precision charging.

LCD display: Alpha-Numeric Display which displays system parameters and alarms.

Temperature-compensated battery charging: Prolongs battery life by regulating the charge voltage according to battery temperature.

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User-replaceable batteries: Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR)

With below specifications:

Output

- Output power capacity: 60KVA or more
- Max Configurable Power (Watts): 80 KVA or more
- Nominal Output Voltage: 230V , 400V 3PH
- Neutral Output Current: 80A
- Output Voltage Note: Configurable for 380 : 400 or 415 V 3 Phase nominal output voltage
- Efficiency at Full Load: 95.0 %
- Output Voltage Distortion: Less than 2%
- Output Frequency (sync to mains): 50/60 Hz +/- 3 Hz user adjustable +/- 0.1
- Output Frequency (not synced): 50Hz +/- 0.1% for 50Hz nominal
- Other Output Voltages: 380, 400, 415
- Topology: Double Conversion Online
- Waveform type: Sine wave
- Overload Operation: 10 minutes @ 125% and 60 seconds @ 150%
- Output Voltage THD: < 2% for 0 to 100% linear load and < 5% for full nonlinear load
- Output Voltage Tolerance: +/-1% static and +/- 5% at 100% load step
- Bypass: Built-in Static Bypass

Input

- Nominal Input Voltage: 400V 3PH
- Input frequency: 40 - 70 Hz
- Input Connections: Hard Wire 5-wire (3PH + N + G)
- Input voltage range for main operations: 340 - 477V
- Efficiency at Full Load: 95.0 %
- Input Total Harmonic Distortion: Less than 5% for full load
- Type of Input Protection Required: gL fuse
- Other Input Voltages :380, 400, 415
- Maximum Short Circuit Withstand (Icw): 30.0kAmps
- Maximum Input Current: 59.0A
- Input Power Factor at Full Load: 0.99

Batteries & Runtime

- Battery type: VRLA
- 32 Numbers of 100 AH batteries with rack
- Typical recharge time: 3.5hour(s)

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- Nominal Battery Voltage: +/-192 V (split battery referenced to neutral)
- End of Discharge Maximum Battery Current: 110.0A
- DC Overcurrent Protection:756A
- End of Discharge Battery Voltage: +/-154 V
- Efficiency in Battery Operation: 94.0 %
- Maximum Available Short Circuit Current:2kAmps
- Overload Operation: 10 minutes @ 125% and 60 seconds @ 150%

Communications & Management

- Interface Port(s): DB-9 RS-232 , SmartSlot
- Control panel: Multi-function LCD status and control console
- Audible Alarm: Alarm when on battery : distinctive low battery alarm : configurable delays
- Emergency Power Off (EPO): Yes

Environmental and Conformance

- Operating Temperature: 0 - 40 °C
- Operating Relative Humidity: 0 - 95 %
- Storage Temperature: -15 - 40 °C
- Storage Relative Humidity: 0 - 95 %
- Audible noise at 1 meter from surface of unit: 61.0dBA
- Online thermal dissipation: 5146.0BTU/hr
- Protection Class: NEMA 1, IP 20
- Approvals: EN 50091-1, EN/IEC 62040-1-1, EN/IEC 62040-3, FCC Part 15 Class A, ISO 14001, ISO 9001, VFI-SS-111

B. BIDDING INSTRUCTION:

The bidder(s) shall submit the bid in accordance with the following clauses, if fails to comply the following clauses, the Bank will not open the bid and will consider as non-responsive bid.

a) Bids shall be delivered by hand, courier or registered post to the following addressed during office hours; Quotation by fax or by electronic means is not acceptable;

Procurement Officer
Bank of Bhutan, Head Office,
Thimphu, Babesa

b) The outer envelope shall be without any other information's of bidder with the following;

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i. The word **"Confidential".**

ii. Provide a warning not to open before the ***specified time*** and **date**.

iii. Provided ***scope of work (scope name), Tender number*** and ***date.***

iv. Two copies clearly marked ***"ORIGINAL"*** and ***"COPY"*** with signed sealed by the person authorized to sign the Bid on behalf of the Bidder.

v. The Original & Copy of the bid shall indicate the name and address of the Bidder, to enable the bid to be returned unopened in case if it is not complied the above clause B(a&b).

C. **LAST DEADLINE FOR SUBMISSION:**

a) Date: 11th Dec., 2017 at 1:00 PM
b) Place for submission: Procurement Unit, Head Office, Babesa, Thimphu
c) Any Bid received by the Bank after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

D. **DEADLINE FOR OPENING OF BIDS:**

a) Date: 11th Dec., 2017 at 2:30 PM
b) Place of opening: Meeting Room, Head Office, Babesa, Thimphu
c) In case the due date of submission and opening of the bid becomes non-working day, submission and opening of bid shall on next working day at the same time.
d) The quotation(s) will be opened in the presence of bidders or their representatives who choose to attend at the specified venue and time.

E. The quotation rate should be quoted or submitted in accordance with the following Terms and Conditions of Supply and delivery and shall be for an integral part of the Contract.

a) **PRICE**:

i. Price quoted must be in Ngultrum; other currency shall not be accepted.

ii. The price quoted of the items should of genuine products. None genuine products rate is not acceptable to Bank.

iii. The quoted price shall be inclusive of all related costs including taxes & duties, and installation/implementation and as per clause 1 of the bidding document.

iv. The following are the Price, quantity and delivery schedule;

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Sl. No	Name	Unit (No.)	Unit Rate (Nu.)	Total Amt. (Nu.)	Inst. Period	AMC (%)
LOT I	***Modular 60kVA and Scalable to 80 KVA each or more***	2				
Total		**2**				
Insert Amount (In Words)						
Delivery period	*Maximum period of delivery and installation is 45 calendar days from the date of issue of the Purchase Order by the Purchaser.*					

Signature of supplier	**Suppliers Official Stamp**
Name of Supplier: ..... Contact No.: ..... Email id:	
Date :	

Note: Non-compliance of clause E(a) mentioned above shall treat as non responsive.

b) **EVALUATION OF QUOTATION**:

Evaluation shall carry out item wise with the following evaluation criteria;

Evaluation Criteria;

Sl.No.	Particulars	%	TOTAL
1	**Delivery and Implementation Schedule**		5.00%
1.1	15 Days or Less	5.00%	
1.2	16 Days to 30 Days	3.00%	
1.3	31 Days to 45 Days	1.00%	
2	**Dealership / OEM Certificate**		5.00%
2.1	OEM Channel Partner	5.00%	
2.2	Authorize Dealer/Distributors	3.00%	
2.3	Authorized Re-seller and others	1.00%	
3	**Warranty**		5.00%
3.1	Three years or More	5.00%	
3.2	Two Years	3.00%	

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3.3	One year	1.00%	
4	**Price Schedule**	**80.00%**	80.00%
5	**Experience and Technical Capacity**		
5.1	*Record of similar task carried out by the firm.*	2.00%	5.00%
5.2	*OEM Training Certification*	1.50%	
5.3	*After Sales Support*	1.50%	
	Total		**100.0%**

c) In evaluating the quotations, the Bank will determine for each quotation and evaluated price by adjusting the price quotation by making any correction for any arithmetical errors as follows;

i. Where there is a discrepancy between amounts in figures and in words, the amount in words will govern;

ii. Where there is discrepancy between the Unit Rate and the line item, total resulting from multiplying the Unit Rate by the quantity, the Unit Rate as quoted shall govern unless in the opinion of the Bank there is an obviously gross misplacement of the decimal point in the Unit Rate, in case the line item total as quoted shall govern, and the Unit Rate shall be corrected.

iii. If the supplier refuses to accept the correction, this quotation will be rejected and the bid security shall be forfeited.

F. BID SECURITY:

a) The bid shall be accompanied by a bid security of 2% of the total value in the form of cash warrant/ demand draft /unconditional Bank Guarantee/Banker's Cheque in a original form; duplicate copies shall not be accepted;

b) Insufficient bid security amount shall be treated as non responsive.

c) Any bid not accompanied by bid security shall be treated as non responsive

d) Minimum validity of bid security is 75 calendar days from the date of submission/opening of quotation/bid. Lesser validity of bid security will treat as none responsive bid.

e) The Bid Securities of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder furnishing the Performance Security.

f) The Bid Security shall be forfeited if the bidder;

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i. Withdraws the bid during the Bid validity period before awarding, or
ii. Fails to furnish 10% performance security & sign agreement within time frame.
iii. Fails to accept the award of contract.
iv. Fails to accept the correction as per clause E (c) of the bidding document.

G. AWARD OF CONTRACT:

a) The award will be made to the bidder as per clause E (b) of the evaluation of quotation.

b) The bidder whose bid is accepted will be notified of the award of contract.

c) Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.

H. VALIDITY OF THE OFFERS

a) Quotation(s) shall be valid for a period of 75 calendar days from the deadline for receipt of quotation(s) or opening of quotation(s).

b) A bid validity for a shorter period shall be rejected and consider as non-responsive.

c) Bank shall request extension of bid validity if necessary. If fails to accept the extension, the Bank shall treated as non-responsive bid.

I. PEROFRMANCE SECURITY AND CONTRACT SIGNING

a) The successful bidder should report to Bank within 10 days for contract signing after issuance of the award notification with 10% of the total value.

b) Bank shall forfeit the Bid Security or performance security in whole or part after deducting all cost or expenses or other amounts that are to be paid to Bank or blacklist the firm, if the bidder;

i. Fails to perform his/her contractual obligation

ii. Fails to sign the contract within the stipulated time.

iii. Fails to take remedial action against Bank notification within 14 calendar days

c) Bank shall ask the successful bidders to renew or another Security deposit if necessary. If fails, Bank shall forfeit bid security and cancel the award and blacklist the firm for minimum of three years.

d) Performance security shall return after the expiry of contract or warranty.

I have read and hereby correctly state data/ accept all terms/ conditions/ criteria / other aspects, mentioned above on this page, unconditionally,

Signature & Seal_____ (Authorized Signatory)

J. *DELIVERY PLACE & PERIOD;*

a) Place of delivery and Installation/testing: Bank of Bhutan, Phuentsholing, Bhutan

b) The maximum time period for the supply and delivery of the goods is *[45]* calendar days after the date of purchase order (exclusive purchase order date).

c) The bidder shall take remedial action within 14 calendar days after notified by Bank, if the goods supplied were defective or not as per the purchase specifications.

K. LIQUIDITY DAMAGE:

a) Bank shall levy 0.15 % per day on the total value, if fails to delivery or implement with the prescribe time frame.

b) Maximum liquidity damage: 15 % of the total value.

L. TERMINATION OF CONTRACT

The Bank may terminate the Contract in whole or in part, if the Supplier fails to perform any terms and conditions of the bidding document/purchase order/agreement;

a) If the Supplier fails to perform any other obligation(s) under the Purchase Order/contract agreement, or

b) If the Supplier does not take any remedial action within a period of (14) fourteen calendar days after notification by Bank and shall blacklist for minimum of three years.

c) If the Supplier, in the judgment of the Bank, has engaged in any corrupt or fraudulent practices in competing for or in executing the tasks under this Purchase Order/contract agreement, or

d) The Bank may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent without compensation to the Supplier, and

e) If the maximum liquidity damage exceed 15 % of the total value.

M. PAYMENT TERMS:

a) Payment shall be made in Ngultrum after deducting 2% TDS.

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b) No advance payment shall be provided to the bidder prior to delivery and implementation of goods by the bidders.

c) Payment shall be made within thirty (30) days of presenting invoices.

N. OTHER TERMS AND CONDITIONS:

a) Further information/clarification can be obtained from the Procurement Unit, Head Office, Thimphu, Babesa in writing. Other form of clarification will not entertain.

b) If the bidder deliberately gives wrong information in the bidding, Bank of Bhutan reserves the right to reject this contract at any stage and forfeit the EMD/Performance Security;

c) The successful bidder shall not sub-contract the assignment.

d) The Bank is not bound to accept the lowest bid and reserves the right to accept or reject or cancel any or all the bids without assigning any reason whatsoever.

e) The Bank may procure any of the items from the open market in case the supplier fails to supply and deliver the goods within the stipulated time and realize the difference amount between the quoted price & market price from the security deposit.

f) Any Terms and Conditions hereinafter may only be varied with the written agreement of the Bank and no terms and conditions put forward at any time by the Supplier shall form any part of the Contract.

g) Any interlineations, erasures or overwriting shall be valid only if they are signed sealed or initial by the person signing the Bid.

h) Bank shall add any terms and condition apart from this bidding document, if require during the time of executing contract agreement.

i) All other clarification with regards to the procurement procedures and governing laws; it shall be governed and referred to the BoB Procurement Rules and Regulations 2013.

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Signature & Seal_____ (Authorized Signatory)

(Sample Contract Agreement)

THIS CONTRACT AGREEMENT made the *[insert number]* day of *[insert month]*, *[insert year]*,

BETWEEN

(1) *Bank of Bhutan Ltd, incorporated under the Companies Act of Bhutan* and having its principal place of business at *Babesa, P.O Box 102, Thimphu Bhutan* (hereinafter called "the Bank"), and

(2) *[insert name of Supplier]*, a corporation incorpoUnit Rated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier").

WHEREAS the Bank invited Bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency/ies]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall constitute the Contract between the Bank and the Supplier, and each shall be read and construed as an integral part of the Contract, viz.:

   (a) This Contract Agreement;
   (b) The Special Conditions of Contract;
   (c) The General Conditions of Contract;
   (d) Technical Requirements (including Schedule of Supply and Technical Specifications);
   (e) The Supplier's Bid and original Price Schedules;
   (f) The Bank's Notification of Award of Contract;
   (g) The form of Performance Security;
   (h) The form of Bank Guarantee for Advance Payment;
   (i) *[insert here any other document(s) forming part of the Contract]*

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

I have read and hereby correctly state data/ accept all terms/ conditions/ criteria / other aspects, mentioned above on this page, unconditionally,

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4. In consideration of the payments to be made by the Bank to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Bank to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

5. The Bank hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Bhutan on the day, month and year indicated above.

For and on behalf of the Bank	For and on behalf of the Supplier
Signed: *[insert signature]*	Signed:*[insert signature of authorized representative(s) of the Supplier]*
in the capacity of [insert title or other appropriate designation]	in the capacity of [insert title or other appropriate designation]
in the presence of [insert signature] [insert identification of official witness]	in the presence of [insert signature] [insert identification of official witness]

"Thank You"

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Signature & Seal_____ (Authorized Signatory)