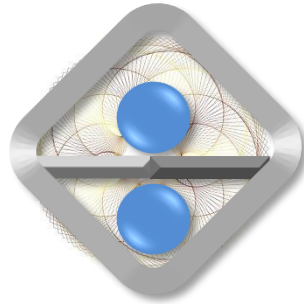


BHARATIYA RESERVE BANK
NOTE MUDRAN PRIVATE LIMITED
CORPORATE OFFICE, BANGALORE



TENDER FOR SUPPLY AND INSTALLATION OF 2X20 KVA
ONLINE UPS FOR BRBNMPL CORPORATE OFFICE

LIMITED TENDER NO: 003/TD/2017-18 dated 20th July 2017

<i>Closing Date & Time for receipt of Tender</i>	14:30 Hrs on 10 th August 2017
<i>Place of receipt of tender by Hand</i>	BRBNMPL, Bangalore
<i>Time & Date of Opening of Tender</i>	16:00 Hrs on 10 th August 2017
<i>Place of Opening of Tenders</i>	BRBNMPL, Bangalore

This notice is being published only as an abundant precaution and is not an open invitation to quote in the Tender. Participation in this tender is by invitation only and is limited to the selected BRBNMPL's Registered / Approved Bidders for the item, who have been sent this Tender by Post/ Courier. Unsolicited offer is liable to be ignored.

**BHARATIYA RESERVE BANK NOTE MUDRAN (P) LTD
BANGALORE -560029**

Phone: 080-66602000, 66602025

Fax: 080 – 66602039, E-Mail: cobangalore@brbnmpl.co.in

Website: www.brbnmpl.co.in

Not Transferable

Security Classification: Non-Security

**TENDER FOR SUPPLY AND INSTALLATION OF 2X20KVA ONLINE UPS FOR
BRBNMPL CORPORATE OFFICE**

LIMITED TENDER NO: 003/TD/2017-18

dated: 20th July 2017

The tender document is sold to:

M/s. _____
Address _____

Details of Contact person in BRBNMPL regarding this tender:

Name : Dr. N Krishnaswamy/C Annadorai

Designation : Deputy General Manager /Assistant General Manager

Address: As above

Phone: 080 – 66602007/080-66602020 , Fax: 080-66602039

Email: nkrishnaswamy@brbnmpl.co.in/cannadorai@brbnmpl.co.in

**BHARATIYA RESERVE BANK NOTE MUDRAN (P) LTD
BANGALORE-560029**

Phone: 080-66602000, 66602025

Fax: 080 – 66602039, E-Mail: cobangalore@brbnmpl.co.in

Website: www.brbnmpl.co.in

Section I: Notice Inviting Tender (NIT)

Tender Sl. No. 003/TD/2017-18

(Date) 20th July 2017

1. Sealed tenders under two-bid system are invited from eligible and qualified tenderers for supply of following goods & services:

Schedule No.	Brief Description of Goods / Services	Quantity (with unit)	Earnest Money (in Rs.)	Remarks
1	SUPPLY AND INSTALLATION OF 2X20KVA ONLINE UPS FOR BRBNMPL CORPORATE OFFICE	01	30,000.00	

Type of Tender (Two Bid / PQB / EOI / RC / Development / Indigenization / Disposal of Scrap / Security item etc.	Limited Tender- Two part Bid System Techno-commercial bid & Financial/Price Bid)
Date of Sale of tender documents	From 20 th July 2017 to 09 th August 2017 during office hours
Price of the Tender Document	NIL
Price of sale of tender documents	NIL
Closing date and time for receipt of tenders	14:30 Hrs on 10/08/2017
Place of receipt of tenders	Bharatiya Reserve Bank Note Mudran Private Limited Corporate Office No 3 & 4 , 1 st Stage , 1 st phase, BTM Layout , Bannerghatta Road, Bangalore- 560029
Time and date of opening of tenders.	16:00 Hrs on 10/08/2017
Place of opening of tenders	Bharatiya Reserve Bank Note Mudran Private Limited Corporate Office, Bangalore
Nominated Person / Designation to Receive Bulky Tender (Clause 21.21.1 of GIT)	Shri. N Krishnaswamy, Deputy General Manager

2. Interested tenderers may obtain further information about this requirement from the above office. They may also visit our website mentioned above for further details.

3. Tenderer may also download the tender documents from the web site and submit its tender by utilizing the downloaded document.

4. Tenderers shall ensure that their tenders, duly sealed and signed, complete in all respects as per instructions contained in the Tender Documents, are dropped in the tender box located at the address given below on or before the closing date and time indicated in the Para 1 above, failing which the tenders will be treated as late and rejected.

5. In the event of any of the above mentioned dates being declared as a holiday/ closed day for the purchase organization, the tenders will be sold / received / opened on the next working day at the appointed time.

6. The tender documents are not transferable.

7. Guidelines for filling up Two- Part tender:

Part-I:

First sealed cover should contain the required EMD amount, cost of tender form (as applicable- ref Page No.2 (Price of the tender document), technical offer along with catalogue/brochure of item offered, supportive documents related to eligibility criteria, tax related documents etc., along with the following annexures of this tender i.e., Section-I, II, III, IV, V, VI, VII, VIII, IX, X, XII, XIII, XIV, XV : All the above mentioned documents should be signed & stamped and to be submitted as techno-commercial offer as acceptance of terms & conditions and the required formats to be maintained.

“OFFERS WITH COUNTER CONDITIONS ARE LIABLE FOR REJECTION”

This first sealed cover should be clearly superscribed with “Part-I: “Technical bid of Supply and installation of 2X20 KVA online ups for BRBNMPL corporate office” against Tender No 003/TD/2017-18 dated 20th July 2017

Price Indication in the Techno-commercial offer will be summarily rejected

Part- II:

Second sealed cover should contain only Section XI – Price schedule to be used for submitting financial bid. Price offer submitted in any other format will liable for rejection. This second sealed cover should be clearly superscribed with “Part-II Price/Financial bid for Supply and installation of 2X20 KVA online ups for BRBNMPL corporate office” against Tender No 003/TD/2017-18 dated 20th July 2017.

The above mentioned two sealed covers should be put in another big cover, sealed and should be superscribed as ‘Offer for Tender for Supply and installation of 2X20 KVA online ups for BRBNMPL corporate office’ against Tender No 003/TD/2017-18 dated 20th July 2017.

- **EMD: An earnest money deposit (E.M.D) as mentioned in NIT shall be submitted along with your quotation in any one of the following forms :**
- a) A/C payee DD

b) Fixed Deposit receipt

c) Bankers Cheque

The EMD should be drawn in favour of “Bharatiya Reserve Bank Note Mudran Private Limited” payable at Bangalore

- Due date of opening on 10th August 2017
- Tender should be addressed to “The Managing Director, BRBNMPL, Corporate Office No 3 & 4 , 1st Stage , 1st phase, BTM Layout , Bannerghatta Road, Bangalore-560029”
- Tenderer must understand the specifications and other requirements before submission of their Bid. We advise tenderer may visit our place on any working day between 09.00 hours & 16.00 hours, with prior intimation, to understand the item to be supplied before submitting their offer.
- Tenderer should ensure that the material/equipment quoted for are as per specification mentioned in the tender. If the material/equipment is not matching to the tender specification the bid shall be summarily rejected. The decision of BRBNMPL on acceptance of the material/equipment quoted is final.
- The tenderer shall satisfy BRBNMPL that they are competent and authorized to submit tender and/or to enter into a legally binding contract with the BRBNMPL. To this effect, any person giving a tender shall render documentary evidence that his signature on the tender submitted by him is legally binding upon himself, his firm or company as the case may be.
- The tender offer may be sent by Regd. Post/ Courier. Parties desirous of handing over Tender Offer by hand should drop the Tender Cover in the Tender Box kept at Reception, Corporate Office, after recording the tender details in the register.

For and on behalf of BRBNMPL, Bangalore

Sd/-

[N Krishnaswamy]

Deputy General Manager

***NOTE: Offers submitted not in line with the above guidelines will be liable for rejection.
Please contact for clarification, if any.***

(To be signed & stamped and submitted alongwith Techno-commercial Bid Part –I)

Section II: General Instructions to Tenderer (GIT)

This Section-II shall be downloaded from website: www.brbnmpl.co.in under the section 'Downloads' and signed & stamped and submitted along with the **Technical bid** as acceptance of terms & conditions.

(To be signed & stamped and submitted alongwith Techno-commercial Bid Part -I)

Section III: Special Instructions to Tenderers (SIT)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/ substitute/ supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

S. No	GIT Clause No.	Topic	SIT Provision
1	1,2,3,4,5,6,7	PREAMBLE-Introduction, Language of Tender, Eligible Tenderers, Eligible Goods and Services (Origin of Goods), Tendering Expense, TENDER DOCUMENTS, Amendments to Tender Documents	No Change
2	8	Pre-bid Conference	Not applicable to this tender
3	9	Time Limit for receiving request for clarification of Tender Documents	No Change
4	10,11,12,13,14,15	Documents Comprising the Tender, Tender Currencies, Tender Prices, Indian Agent, PVC Clause & Formula, Alternative tenders	No Change
5	16	Documents Establishing Tenderer's Eligibility and Qualifications	No Change
6	17	Documents establishing Good's Conformity to Tender document	No Change
7	18	Earnest Money Deposit (EMD) Note: Bidders claiming exemption of EMD should submit the DGS&D (or) NSIC registration certificate without fail along with their techno-commercial offer.	No Change
8	19	Tender Validity (120 days from date of opening of Techno-commercial bid)	No Change
9	20	Signing and Sealing of Tender Note: The following SIT provision is made with respect the following clause 20.4. Number of Copies of Tenders to be submitted : One copy only (duplicate copy not required) 20.9: E procurement: Not permitted	No Change No of Copies : 01
10	21,22,23	Submission of Tenders, Late Tender, alteration and Withdrawal of Tender	No Change
11	24	Opening of tenders	No Change

		Note: Please read the guidelines for filling up two part bid tender as mentioned in NIT above which is described in detail w.r.to clause 24.4	
12	25	Basic Principle	No Change
13	26,27,28, 29,30,31, 32,33,34	Preliminary Scrutiny of Tenders, Minor Infirmary / Irregularity / Non-Conformity, Discrepancy in Prices, Discrepancy between original and copies of Tender, Clarification of Bids, Qualification /Eligibility Criteria, Conversion of tender currencies to Indian Rupees, Schedule-wise Evaluation, Comparison on CIF Destination Basis.	No Change
14	35 to 49	Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders, Tenderer's capability to perform the contract, Tenderer's capability to perform the contract, Cartel Formation / Pool Rates, Negotiations, Contacting BRBNMPL, AWARD OF CONTRACT, Award Criteria, Variation of Quantities at the Time of Award, Parallel Contracts, Serious Misdemeanours, Notification of Award, Issue of Contract, Non-receipt of Performance Security and Contract by BRBNMPL, Return of EMD, Publication of Tender Result.	No Change
15	35..3	Price Preference to small scale industries	Not applicable to this tender
16	50 to 55	Rate Contract Tenders, PQB Tenders, Tenders involving Purchaser's and Pre-Production Samples, EOI Tenders, enders for Disposal of Scrap, Development / Indigenization Tenders	Not applicable to this tender

Section IV: General Conditions of Contract (GCC)

This Section-IV shall be downloaded from website: www.brbnmpl.co.in under the section 'Downloads' and signed & stamped and submitted along with the **Technical- Commercial Bid –Part I** as acceptance of terms & conditions. *(Offer submitted without the signed & stamped copies of Section-IV shall liable to be rejected)*

(To be signed & stamped and submitted alongwith Techno-commercial Bid Part –I)

Section V: Special Conditions of Contract (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below. These Special Conditions will modify /substitute / supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GGC and that in the SCC, the provision contained in the SCC shall prevail.

(Clauses of GCC listed below include a possibility for variation in their provisions through SCC. There could be other clauses in SCC as deemed fit)

SI. No.	GCC Clause No.	Topic	SIT Provision
1	1 to 5	Definitions; Interpretation and Abbreviations, Application, Use of contract documents and information, Patent Rights, Country of Origin	No Change
2	6	Performance Security The supplier shall furnish performance security to BRBNMPL for an amount equal to ten per cent of the total value of the contract, valid up to sixty days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.	No Change Performance Security will be released after Successful completion of entire quantity.
3	7 to 15	Technical Specifications and Standards, Packing and Marking, Inspection and Quality Control, Terms of Delivery, Transportation of Goods, Insurance, Spare parts, Distribution of Dispatch Documents for Clearance/ Receipt of Goods	No Change
4	16	Warranty	No Change (One year from date of acceptance)
5	17& 18	Assignment, Sub Contracts	No Change
6	19	19.3. Option Clause: By a suitable provision in the SCC, the Purchaser may reserve the right to increase the ordered quantity by 25% at any time, till final delivery date of the contract, by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of Delivery Period.	No Change except option clause (Option clause No.19.3 is applicable)
7	20 & 21	Prices, Taxes and Duties	No Change
8	22	Terms and Mode of Payment 22.1. Unless otherwise specified in SCC	Clause No.22.1 is applicable
9	23 to 32	Delay in the supplier's performance, Liquidated damages, Custody and Return of BRBNMPL's Materials/ Equipment/Documents loaned to Contractor, Termination for default,	No Change

		Termination for insolvency, Force Majeure, Termination for convenience, Governing language, Notices, Code of Ethics,	
10	33	Resolution of disputes	Arbitration proceedings will be held at Bangalore and venue of arbitration will be Bangalore.
11	34-35	Applicable Law, Secrecy,	No Change
12	36	Disposal / Sale of Scrap by Tender	NOT APPLICABLE TO THIS TENDER

Note: Bidders should note that Warranty clause and Performance Security Clause is applicable to this tender. Please read the GCC carefully before submitting the offer.

- 1) **Pre-Bid Visit:** The bidders are advised to visit the premises to have understanding about scope of work; volume of work, any doubt/clarification may be cleared before submitting their offers. Any claim of ignorance about the system or responsibility shall not be entertained in later stage.
- 2) **Time schedule:** Work shall be completed within 45 days from the date of Issue of work order. The total time period as specified above for the completion of the job is to be strictly maintained and is the essence of the order.
- 3) **Payment:** 90% of total ordered value shall be paid after successful completion of work against FAC (Final Acceptance Certificate) issued by BRBNMPL, and remaining 10% value will be withheld against Security Deposit (including EMD amount) and the same will be released on subject to submission of equal value of Bank Guarantee as per GCC clause 6. The security deposit will be returned after completion of warranty period of 12 months from the date of issue of completion certificate without interest.
- 4) **Security Deposit:** As per clause 6 of General Condition of Contract (GCC).
- 5) **Compensation for delay:** For any delay beyond the time specified above without any valid reason, liquidated damages @ 0.5% of the value of the work shall be levied per week of delay, subject to a maximum of 10% of total value of works completed / final bill value. Quantum of liquidated damages assessed and levied by BRBNMPL shall be final and not challengeable by the supplier / contractor. Contractor has to apply for extension with valid reasons at least 10 days prior to the completion date.
- 6) **Statutory Deductions:** Statutory deductions such as GST, WCT, VAT, Income Tax etc as applicable shall be effected while making payment.
- 7) BIDS submitted not in accordance with the above guidelines & with counter conditions will be liable for rejection. BRBNMPL will examine the materiality/Significance of the deviation /variation if any and shall take its own decision to accept or reject the tender. BRBNMPL's decision on acceptance /rejection shall be final without assigning any reason thereof. BIDS once submitted will not be allowed for revision without the approval of BRBNMPL. Any withdrawal of BID after submission of offer will result in forfeiture of

EMD and blacklisting of vendor. Parties not interested to participate in the tender for any reason, may please intimate us.

- 8) **Materials:** BRBNMPL shall reserve the right to reject any materials if it is found not in conformity with specification and terms and conditions of the order in all respect.
- 9) **Quantum of work:** Quantities mentioned in the schedule of items are as per the prevailing condition & requirement and may vary during the execution of work. Any such variance will be accounted and paid extra as per the quoted rates.
- 10) **Warranty / Defects Liability Period:** Warranty / Defects liability period against this item / job shall be One year from the date of Final Acceptance Certificate. The contractor shall be liable to replace/repair any defects within the warranty/defects liability period free of cost to the BRBNMPL.
- 11) **Recovery & Rectification of work:** In case contractor fails to attend the same as per defect liability period clause above within a week from the date of intimation, it shall be got rectified by the owner through another agency & money spent thus shall be recovered from the contractor. If the work is not completed in all respect or delayed beyond reasonable time or contractor discontinues the work abruptly, then BRBNMPL reserves right to get the remaining work / uncompleted work done through any other agencies at the risk and cost of the contractor. In such case, the pending claims and security deposit of the contractor shall be forfeited.
- 12) **Safety & Security Measures:**
 - a) The contractor should scrupulously confirm to the safety and security norms as stipulated by BRBNMPL while working in the security area.
 - b) The contractor shall take all the precaution while executing this work. Protective gear such as safety helmets, boots, belts etc. shall be provided by the contractor at his own cost to all his workers at site. The Contractor shall impose such requirements on all sub-contractors also. It shall be the responsibility of the contractor to ensure that such protective gear is worn at all times by all personnel working at site. BRBNMPL shall have the right to stop any person not wearing such protective gear from working on the site.
 - c) The contractor has to ensure the character and antecedent of the persons deployed. The contractor must be in a position to produce such documents whenever he is asked to do so. Details shall be furnished as per format when called for. The contractor has to issue printed photo identity card to its workers duly authenticated by the designated security officer of the Company. Contractor should apply for Gate Pass for labors, welding permission and material entry pass etc. as per approved format only, well in advance to avoid any delay in issue of Gate passes.
 - d) On award of the contract the contractor shall sign the Non-disclosure format and abide with that.
 - e) Any worker of the contractor, if found by the Company as unsuitable or having doubtful integrity, shall be removed from the premises at the risk and cost of the contractor. The contractor shall vouch guarantee for the integrity of its workers.
- 13) **Cleanliness:** - Contractor is required to ensure complete cleanliness at the site. Debris generated during the day's work should be disposed-off immediately.

14) **Electricity & Construction water:** Necessary source of electricity & water required for civil works will be taken from the available nearby source. In case the same is not available it should be arranged by the contractor.

15) **Legal jurisdiction:** The court of Bangalore (Karnataka State) only shall have jurisdiction to deal with and decide any legal matter of dispute whatsoever arising out of any work order placed by us.

All Correspondences should be addressed to “ The Managing Director , Bharatiya Reserve Bank Note Mudran (P) Ltd, Corporate Office No 3 & 4 , 1st Stage , 1st phase, BTM Layout , Bannerghatta Road, Bannerghatta Road, Bangalore– 560029

(To be signed & stamped and submitted alongwith Techno-commercial Bid Part –I)

Section VI: List of Requirements

Schedule No.	Brief Description of Goods / Services	Quantity (with unit)	Earnest Money (in Rs.)	Remarks
1	SUPPLY AND INSTALLATION OF 2X20 KVA ONLINE UPS FOR BRBNMPL CORPORATE OFFICE	01	Rs.30,000.00	

Required Delivery Schedule: 45 Days

Required Terms of Delivery, Destination and preferred mode of Transportation:

F.O.R, BRBNMPL, Bangalore

Note :

- a) Bidder should be Registered under GST/VAT/CST
- b) Should have permanent Income tax A/C No as allotted by the income tax authority of government of India.
- c) Should not be blacklisted/debarred by BRBNMPL or any PSU or any govt. Departments.
- d) Copies of certificate/documents related to GST/VAT/CST registration, VAT return of latest quarters, PAN and professional tax registration certificate etc., to be provided along with the bid.
- e) Bidder to furnish stipulated document in support of qualifying criteria. Non – submission or incomplete submission of documents may lead to rejection of offer.

(To be signed & stamped and submitted along with Techno-commercial Bid Part –I)

Section VII: Technical Specifications

1. PREAMBLE:

Bharatiya Reserve Bank Note Mudran (P) Limited (BRBNMPL) is a wholly owned Subsidiary of Reserve Bank of India is engaged in sovereign function of Design and printing of Bank Notes. It has corporate office at Bangalore and has two printing presses at Mysore, Karnataka and Salboni, West Bengal. BRBNMPL Intends to procure 2X20 KVA Online UPS with one-hour backup for its Corporate office at Bangalore with Specification mentioned below.

2. SCOPE OF WORK

Technical Specifications / Requirements

General specifications	
UPS Type	DSP control based ON-LINE Double Conversion Technology
Capacity	2X20 KVA/18KW
Battery Backup	60 min at full load
Supply	3-Phase Input, 3-Phase Output
Operation Mode Normal (online)	Emergency, Recharge, bypass, Maintenance bypass.
Rectifier / Inverter	IGBT with PFC control technology only
Transformer	Isolation transformer only on Input side
Total Efficiency AC/AC at 100% load	≥ 94% (Online mode)
Parallel configuration	≥ 3 units (System should have option of paralleling 3 units if required)

INPUT	
Voltage configuration	Three-phase, 3-wire
Voltage rating	400V
Min/ Max input voltage	320V to 480 V
Nominal Frequency	50 Hz
Max/Min frequency	50 Hz +/- 10%
Phase	Three Phase
Inrush Current	700% of full load current maximum
Current Limit	125% of nominal AC input current maximum
Surge Protection	As per IEC standard
THDi	≤ 3% and should constant from 20% to 100% load
Power factor	> 0.99

OUTPUT	
Voltage Configuration	Three-phase, 4-wire plus ground
Voltage	400V/415 V

Voltage regulation	a) $\pm 1\%$ three-phase RMS average for a balanced three-phase load for the combined variation effects of input voltage, connected load, battery voltage, ambient temperature, and load power factor. b) $\pm 2\%$ three-phase RMS average for a 100% unbalanced load for the combined variation effects of input voltage, connected load, battery voltage, ambient temperature, and load power factor.
Voltage Distortion	$\leq 3\%$ total harmonic distortion (THD) for linear loads and $\leq 5\%$ THD for 100% nonlinear loads
Crest factor	3:1
Frequency	50 Hz and Pure sine wave
Frequency regulation	50 Hz +/- 0.1%
Output power factor	0.9 or better
Overload Capacity	125% for ten minutes (without bypass source) 150% for one minute (without bypass source)
Wave form	Pure Sinusoidal
Output Voltage adjustment	$\pm 5\%$ (Software Controlled adjustment)

Batteries (2 Battery bank of 01 hour each)

Make	Reputed make
Type	Sealed Maintenance Free
Rated battery life	min 3 years
Battery back up	60 mints with full load
Battery stand	Suitable battery stands with MS fabricated with powder Coated with louvers in covered unit.
Battery link and cabling	suitable battery link and interconnecting copper cable from UPS to battery shall be supplied by vendor
The accumulator bank must have an expected service life of three years with a capacity of 60 minutes at 100 % load. Detailed Battery backup calculation sheet and manufacturer charging/discharging characteristic chart shall be attached along with the technical bid also Battery type should be specified in the document.	

On-Line Battery Test

The UPS shall be provided with Auto On-Line Battery Test feature. The test shall ensure the capability of the battery to supply power to the inverter while the load is supplied power in the normal mode.

Battery Charger: -

The battery charger shall recharge the battery to 90% of its fully charged condition preferably within six to eight (6-8) hours and at the same time supplying full load current to the system. The charger should have the Temperature Compensated Charging. The battery charger output

voltage shall be automatically adjusted in proportion to the ambient temperature of the battery to avoid over-charging.

The system must include one or more battery chargers:

- with IGBT technology;
- separate from the rectifier;
- with charging voltage independent from the DC bus voltage;
- dedicated and independent for each accumulator bank;

The battery charger must be able to operate with the following types of accumulator:

- Lead acid, hermetically sealed
- Lead acid, vented

Depending on the temperature, the battery charger shall be able to select the most suitable recharge method automatically, without operator intervention, alternating float mode in combination with “intermittent” charge in such a way as to limit the effects of corrosion (plate sulphation) and significantly prolong battery life. The maintenance charge voltage must be automatically regulated in relation to the temperature of the battery compartment. The battery compartment must be equipped with a temperature sensor for this purpose.

The following parameters must be adjustable and configurable:

- Maximum recharge current limit;
- Constant float mode current and voltage;
- Switching threshold from fast recharge mode to maintenance mode.

The battery charge regulation and control circuit shall also provide the following functions:

- Continuous monitoring of the battery circuit (battery interrupted) with visual alerts on the local user interface;
- Monitoring of battery efficiency, via partial discharge at settable intervals; the check consists in continuously monitoring the discharge current and comparing it with the ideal discharge curve;
- Continuous monitoring of the battery charger's output voltage to ensure it remains within the limits required to optimize battery life. Recharging voltage anomaly alerts followed by deactivation of the charger;
- Residual battery capacity display.

Isolation Transformer

Suitable rating isolation transformer with copper wound shall be supplied and installed along with each UPS on Input side and test reports (Efficiency and losses) of the isolation transformer shall be enclosed along with the technical bid. The cooling of Isolation transformer shall be by forced cooling with inbuilt cooling fans. Supplier shall specify the Isolation transformer make and other specification along with technical bid for evaluation purpose.

Operating Ambient Temperature:-

UPS Module : (0 degree to 45degree centigrade).

Battery : 30 degree \pm 5 degree centigrade.

Cooling

Cooling of the UPS shall be by forced air and there should be redundant fans.

Grounding

The AC output neutral shall be electrically isolated from the UPS chassis. The UPS chassis shall have an equipment ground terminal. Provisions for local bonding shall be provided

Wiring

Installation and required accessories like cables, lugs etc will be in the scope of supplier and Wiring practices, materials and coding shall be in accordance with the requirements of the National Electrical Code (NFPA 70). All bolted connections of bus bars, lugs, and cables shall be in accordance with requirements of the National Electrical Code and other applicable standards.

Conformity to standards

The system must conform to the following standards:

- Safety: EN62040-1.
- EMC emissions: EN62040-2.
- EMC immunity: EN62040-2 class C2 and C3.

Display & Metering:

- Input AC voltage line-to-line/ line-to-neutral for each phase
- Input AC current for each phase
- Input frequency
- Battery voltage and DC link voltage
- Battery charge/discharge current
- Output AC voltage line-to-line and line-to-neutral for each phase
- Output AC current for each phase
- Output frequency
- I/P & O/P Apparent power for each phase
- I/P & O/P Active power for each phase
- I/P & O/P kWh meter
- Battery time left during battery operation
- The total operating time of the UPS and inverter

Alarm Messages

The interface must be able to display at least the following status or event information and UPS monitoring should be web based and user friendly.

- Input power out of tolerance
- Battery charger problem
- Battery test failed
- Low battery warning
- Low battery shutdown
- DC bus overvoltage
- Bypass frequency out of range

- Load transferred to bypass
- Excessive retransfers attempted
- Static switch failure
- UPS output not synchronized to bypass power
- Output under voltage
- Output overvoltage
- Output over current
- System output overloaded
- Load transferred to bypass due to overload
- Overload shutdown
- Control error
- Critical power supply failure
- Load transferred due to internal protection
- External shutdown (remote EPO activated)
- Fan failure
- Over temperature shutdown
- UPS is on battery operation
- UPS is on bypass operation
- Battery mode with mains supply / no mains supply
- Battery low charge warning
- Battery on fast charge
- Abnormal battery recharge voltage
- Minimum battery voltage
- Battery fault
- Battery charge circuit broken
- Battery charger system fault

A predictive/statistical algorithm and interpretation of logged data (number, duration and type of events) regarding:

- out of tolerance Input voltages
- overloads
- battery mode operation
- switching to standby power supply
- over- temperature

The UPS must predict potential criticalities for the UPS itself, due to ambient conditions, in advance and alert the maintenance service / monitoring system.

Diagnostics

The system will be equipped with a microprocessor able to run full machine diagnostics to determine:

- Self-compensation of components to ensure stable settings over time;
- Acquisition of the main diagnostic and monitoring information by computer (local or remote);
- First installation procedure wizard;

- Full test procedure at full load on UPS, with no further external loads (auto-charge mode)
 - ❖ Rectifier;
 - ❖ Inverter;
 - ❖ Bypass;
 - ❖ Power bus;
 - ❖ Cables, contactors and fuses;

Uninterrupted Transfer / Retransfer

The transfer control logic shall automatically turn on the static transfer switch, transferring the critical AC load to the bypass source, after the transfer logic senses any of the following conditions:

- Inverter overload capacity exceeded
- Critical AC load overvoltage or under voltage
- Battery protection period expired
- Out of tolerance inverter input DC voltage
- Over temperature
- Inverter fault
- Retransfer of the critical AC load from the bypass source to the inverter output shall be automatically initiated unless inhibited by manual control.

Maintenance bypass

The manual bypass switch will be provided internally and must ensure that equipment downstream of the UPS is supplied directly by the UPS upstream power source when rectifier, inverter and static switches are open. Switching to the manual bypass and back will be possible without load supply interruption (Make Before Break).

Replacement Parts Stocking

Parts shall be available through an extensive network to ensure around-the-clock parts availability throughout the country. Recommended spare parts shall be fully stocked by local field service personnel (in Bengaluru office) with back-up available from national parts center and the manufacturing location. The national parts center Customer Support Parts Coordinators shall be on-call 24 hours/day, 7 days/week, and 365 days/year for immediate parts availability. Tenderers may also produce Bengaluru service center address along with strength support in the form of escalation chart. The UPS systems are going to feed the power to very critical equipment's, and it is the responsibility of local service team to attend any emergency situation immediately during warranty period as well as post warranty period. Hence, service center at Bengaluru is very much essential.

Battery Circuit Breaker

A suitable battery circuit breaker (DC breaker) shall be provided to isolate the battery from the UPS. This breaker shall be in a separate wall mounted NEMA-1 enclosure. The battery breaker provides a manual disconnecting means, short circuit protection, and over current protection

for the battery system. When opened, there shall be no battery voltage in the UPS enclosure. The UPS shall be automatically disconnected from the battery when the battery reaches the minimum discharge voltage level. **During any abnormalities (over charging)/accident, UPS should be able to trip the battery breaker automatically. So necessary arrangement needs to be done.**

Other Protections

Battery protection period expired Input Over/ under voltage, Output over/ under voltage, Output short circuit, Inverter overload, Rectifier overload, Inverter Overvoltage/under voltage, over temp, surge protection.

- It must have Generator Compatibility.
- Must have complete protection for EMI / RF as per the IEC standard.
- Units have built in surge, spike and line noise protection.
- It should have Intelligent Battery Management system
- UPS should be compact and with small footprints.
- UPS sound level should be within the limit as per the standard.
- Provisions should be provided to connect to solar power plant in future

Warranty/Guaranty

The equipment's (complete system including battery banks) supplied shall be guaranteed against all types of defects for a period of one year **(01)** from the date of handing over of the equipment to BRBNMPL after successful completion of acceptance testing. Any defects in the system/subassemblies found within the guarantee period shall be rectified/replaced by the supplier free of cost. During this period, servicing at bimonthly interval or earlier, as prescribed by the manufacturer and as mutually agreed to, shall be carried out free of cost. It also includes battery health checks of the all the battery banks. Supplier shall also indicate the service facility they can offer at the place of installation and the telephone number and address of their service center. During the warranty period, breakdown call response time should be within 4 hrs in all working hours and 24hrs during after office hours and weekends. The track record of the firm in implementing and maintaining similar UPS systems, the nearest local(Bengaluru) service establishment and the promptness in attending to service/breakdown calls shall also form basis of tender evaluation.

Rating test

8 hrs full load endurance test shall be carried out at factory premises and followed by 110% load for 1 hr period. Test to ascertain the rated and transient capacities and overall efficiency of the system will be carried out at factory and with the battery backup of 60 minutes with full load at the factory. Satisfactory performance at this stage meeting the prescribed limits will only be construed as acceptance of the UPS. The quoted UPS which falls short of our prescribed minimum overall efficiency will not be accepted. If the full load endurance test needs to be conducted at NCDIR, then vendor should arrange all load banks with necessary cable arrangement along with metering (Digital oscilloscope- to find out transients and I/P & O/P wave forms). The cost for energy consumption during the endurance test shall be deducted in the final bill after due certification from the Engineer-in-charge.

Note: The Contractors shall submit all technical supporting document details of the system along with the tender and also should attach the Battery backup calculations and battery discharge characteristics catalog along with the technical bid for evaluation purpose.

SUBMITTALS

The following documents must be submitted along with the offer.

- Manufacturers Authorization letter to submit offer mentioning this tender.
- Reference list where similar UPS systems have been supplied in India.
- Product catalogue sheets or equipment brochures.
- Circuit diagram showing the UPS units, load sharing mode along with the input and output panel requirements.

3.QUALIFICATIONS

- a) **Manufacturer experience:** The manufacturer shall have a minimum 10 years of experience in the design, manufacture and testing of UPS systems.
- b) **Service Centre:** Should have a fully functional service centre with spares stock for attending the breakdown calls. Details of the service centre must be provided.
- c) **ISO Certification:** The manufacturer and bidder shall be ISO 9001 and ISO 14001 certified.

Section VIII: Quality Control Requirements

As mentioned in the Specification & Scope of work in Section VII of this tender.

- ✓ The bidder should be a manufacturer/ authorized representative of a manufacturer/whole sale dealer and should be in business of manufacture and or supply and maintenance of the offered items for a minimum period of Two years in India as on bid calling date.
- ✓ If the Bidder is not a manufacturer, he should provide documentary evidence (e.g. Manufacturers' Authorization Form) for having tied up with the main participating agencies. The Manufacturer's Authorization form specific to this tender should be submitted as per the Section –XIV.
- ✓ Please indicate the MAKE, PRODUCT NO , SPECIFICATION/DATA SHEET and Brochures of the product
- ✓ The Product should carry a warranty of one (1) year replacement & repair from the date of installation.
- ✓ Adequate specialized expertise are available to ensure that the support services are responsive and the Bidder will assume total responsibility for the fault-free operation of the solution proposed and maintenance during the warranty period and provide necessary maintenance services.
- ✓ If any vendor offers any components/parts/equipment's of higher capacity than that specified it will be considered as equivalent and no weightage will be given.
- ✓ The bidder should furnish the information on major past supplies under the relevant product/services and satisfactory performance for the last Two financial years.
- ✓ The selected Bidder should carry out all installation tasks in coordination with the BRBNMPL, depending on the requirement.
- ✓ The selected Bidder should undertake, during the period of contract, if required by BRBNMPL, the relocation / shifting of the equipment without any cost.

(To be signed & stamped and submitted alongwith Techno-commercial Bid Part –I)

Section IX: Qualification/ Eligibility Criteria

Experience & Past Performance:

- Bidder should have supplied **similar items** during last five years ended on 31/03/2017 and should be presently in the business of same field. They should have sold at least 12 units (Cumulative) in any one year during the last 05 years.

Note: Documentary proof (copies of POs executed) for the above qualifying criterion should be submitted along with your offer duly signed by authorized signatory of your company.

Financial standings:

- Financial statements (Balance Sheet & P&L accounts) for the last three years should be submitted along with your techno-commercial bid.
- Bidders should not have suffered any financial loss for more than one year during last three Years ending 31.03.2017.
- All financial standings data like P/L accounts, Balance sheets, etc. should be duly certified by certified accountants i.e. Chartered Accountants (CA).

General:

- Bidder should give a declaration that they have not been blacklisted / debarred by BRBNMPL/Government of India in the past 5 years ending 31.03.2017. Also they should not have been blacklisted at present.
- Original Manufacturers may submit their offer directly or through their authorized distributor/dealers. Necessary authorization certificate should be submitted to this effect.
- The Tenderer should be registered in INDIA under State GST/VAT Act / Central Sales Tax Act / also to be registered under Central Excise Act (if applicable).
- The firm should confirm that they are competent and legally authorized to submit the tender and / or to enter into legally binding contract.
- The tenderer shall enclose a confidentiality statement duly signed and stamped as below: **“The information, which is contained in this document, will not, in whole or in part be reproduced, transferred to other documents/electronic media or disclosed to others without written consent of BRBNMPL”. Bidder shall also undertake to maintenance secrecy, exclusivity and confidentiality of the high security currency printing environment of BRBNMPL.**

Bidder to furnish stipulated documents in support of fulfilment of qualifying criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.

Section X: Tender Form

(To be submitted along with Price bid)

Date

To
The Managing Director,
BRBNMPL,
No.3 & 4, 1st phase, 1st stage
BTM Layout
Bangalore – 560047

Ref: Your Tender Document No. 003/TD/2017-18 dated 20th July 2017

We, the undersigned have examined the above mentioned tender enquiry document, including amendment No. -----, dated _____ (if any), the receipt of which is hereby confirmed. We now offer to supply and deliver (Description of goods and services) in conformity with your above referred document for the sum of (total tender amount in figures and words), as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 6, read with modification, if any, in Section V — "Special Conditions of Contract", for due performance of the contract.

We agree to keep our tender valid for acceptance for a period upto as required in the GIT clause 19, read with modification, if any in Section-III — "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender upto the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

Dated this _____ day of _____

For & on behalf of

(Signature with date)

(Name and designation)

Duly authorized to sign tender for and on behalf of

.....

**Section XI: Price Schedule
PRICE BID FORMAT**

(To be submitted in company's letterhead)

TENDER FOR SUPPLY AND INSTALLATION OF 2X20 KVA ONLINE UPS FOR BRBNMPL

CORPORATE OFFICE

Ref: Tender document No. 003/TD/2017-18 dated 20th July 2017

From,

Date:

Company Name,
Address.

To

The Managing Director
Bharatiya Reserve Bank Note Mudran Private Limited
Corporate Office, No. 3 & 4, 1st stage, 1st phase, B.T.M. Layout
Bannerghatta Road, Bangalore-560029

Sl. No.	Item Description	Unit	Qty. Req d.	Total Basic Price (Rs.)	GST@.....% (Rs.)	Rate Per unit (Rs.) (F.O.R BRBNMPL Bangalore)	Total Amount for Required quantity (F.O.R BRBNMPL Bangalore inclusive of all) (Rs)
			A	B	C	D = Sum of B to C	E = D X A
1	20 KVA online UPS with DSP control based ON-LINE Double Conversion technology, Three phase input and Three phase output, IGBT with PFC control technology, Isolation transformer only on input side	Nos	02				
2	Battery bank for 60 Min back up along with interconnecting cables, cable from UPS to Battery Bank with battery stand (fully covered with louvers) with 36 months' warranty No of Batteries to be mentioned	Nos	02				
3	Installation & Commissioning charges	Nos	02				
4	Buy back of the existing 15 KVA UPS with battery bank and stand	Nos	02				

	Total (1+2+3-4)						
--	-----------------	--	--	--	--	--	--

Total Amount in Words

Yours faithfully,

()

Name

Signature and Date

Company Seal

Section XII
I. TECHNICAL BID
(To be submitted in company's letterhead)

From,
Company Name,
BRBNMPL Vendor Registration No:
Address.

To
The Managing Director
BRBNMPL
Bangalore-560029

Dear Sir,

Sub: Part-I: Techno - Commercial Bid for "TENDER FOR SUPPLY AND INSTALLATION OF 2X20 KVA
ONLINE UPS FOR BRBNMPL CORPORATE OFFICE"

Reference: Your Tender Enquiry No. No. 003/TD/2017-18 dated 20th July 2017

We have received your Tender enquiry cited and we are pleased to enclose the following as our technical bid for your kind consideration.

1. Our company's profile.

- a) Name of the firm :
- b) Status of the firm : Proprietor / Partnership / Regd. Company / Co-op. Society
- c) Local / Central Sales Tax / Service Tax / Excise Regn. No.: (Copy of Certificate enclosed)
- d) Income Tax P.A.N. No.: (Copy enclosed)
- e) Bankers and their Address:
- f) Whether falling within MSME? (Micro, Small and Medium Enterprise) , if so please furnish documentary evidence to this effect. (In case documentary evidence to this effect is not furnished it will be presumed that you do not belong to MSME and accordingly shall be taken on record.)

2. Documents in support of eligibility criteria :

a) Financial Soundness:

Sl. No	Description	2016-17	2015-16	2015-14
1	Annual Turnover			
2	Net profit			
3	Net worth of the firm			

(To be filled by tenderer. Please don't write like "attached" or "refer" and attach certificate of chartered accountant in the above format)

b) Experience.

Sl. No	Company Name	Work order No & Date	Details of work	Order Value	Date of completion
1					
2					
3					
4					
5					

(To be filled by tenderer. Please don't write like "attached" or "refer")

- We confirm that we possess the necessary technical competence and financial resources as mentioned in Section -IX of this tender document, to ensure supply of the tendered item, as per your specifications and delivery schedule. Necessary documents like copies of Work orders, Certificate of chartered accountant for the financial standing are enclosed herewith.
 - Technical details of the items like make, model number, data sheet etc. for the items mentioned in our BOQ.
 - Write up about the proposed system and its working principle.
 - We have never been blacklisted /debarred by BRBNMPL.
 - We confirm having been in the business continuously for the last three years. (documentary proof attached)
 - We also enclosed herewith DD No. _____ for Rs. _____ as EMD against this tender.
3. We confirm that we have quoted exactly for the tendered product as per your specifications given in Section VII.
 4. We confirm that the Price bid is quoted exactly as per your format Section-XII and is inclusive of material, labour and all statutory levies, duties, laying, freight, handling, loading, unloading charges, delivery at your Press.
 5. We confirm that there would not be any price escalation during the supply period.
 6. We confirm that we will abide by all the tender terms & conditions and we do not have any counter conditions. As required, we enclose herewith the complete set of copy of tender documents duly signed by us as a token of our acceptance.
 7. We also confirm that the undersigned is duly authorized and have the competence to sign the contract for and on behalf of the firm.

II. Compliance Statement:

Sl.No.	Item	Details	Ref /Page No. of Document attached
1	Company profile, Address, Phone, FAX no, Contact Person, etc		
2	Proprietorship/ Partnership/Limited etc		
3	VAT No		
4	Service Tax No		
5	PAN / Income Tax Registration Number etc.		
6	Bankers Name and address with branch code/Account no/Type of account/When opened etc.		
7	Experience as per Section IX of tender document		
8	Financial Standing as per Section IX of tender document. (Please attach certificate from chartered accountant as per the format mentioned in Section XI-2(a))		
9.a	Make, Model, Technical Catalogue of the major components offered like cameras, switches, server, OFC etc with detailed Specification.		
9.b	System architecture drawing of the above system for installation.		
10	Approval/Standards of the above system.		
11	Copy of agreement or any other legal document between the manufacturer and the bidder where the former has authorized the latter to sell and service its products. (Incomplete responses without the required documents are liable to be cancelled)		

12	Year of commencement of business.		
13	Number of key persons who have sufficient experience to develop such system.		
14	Whether full fledge service set up will be available for the above work at nearby place / city from where after sale service can be provided and name of place.		
15	Agreed to enter into "integrity fact" as per the annexure -I		
16	Enclose duly filled format for 4.1 to 4.16 of Section-VII		

We have attached the documentary evidence in support of above-mentioned information. We understand that if the details given in support of claims made above are found to be untenable or unverifiable or both, our bid may be rejected without any reference to us. We further clearly understand that BRBNM (P) L is not obliged to inform us of the reasons of rejection of our bid.

(Signature, Name, designation, contact address and Telephone number of the authorized signatory)
Seal

Section XIII: Manufacturer's Authorization Form

To

.....

.....

(Name and address of BRBNMPL)

Dear Sirs,

Ref. Your Tender document No 003/TD/2017-18 dated 20th July 2017

We, who are proven and reputable manufacturers of (name and description of the goods offered in the tender) having factories at hereby authorize Messrs (name and address of the agent) to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above goods manufactured by us.

We further confirm that no supplier or firm or individual other than Messrs. (name and address of the above agent) is authorized to submit a tender, process the same further and enter into a contract with you against your requirement as contained in the above referred tender enquiry documents for the above goods manufactured by us.

We also hereby extend our full warranty, as applicable as per clause 16 of the General Conditions of Contract read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this tender document.

Yours faithfully,

.....

.....

[Signature with date, name and designation]

For and on behalf of Messrs

(Name & address of the manufacturers]

Note: This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.

Section XIV: Checklist for tenderers

Check list for Tenderers	
Please ensure that	
1	<p>a) EMD amount, Technical offer along with catalogue/brochure, supportive document related to eligibility criteria, tax related documents are submitted.</p> <p>b) Following annexures of the tender i.e Section – I, II, III, IV, V, VI, VII, VIII, IX, X, XII, XIII, XIV are signed and stamped and submitted along with techno-commercial offer. Battery bank calculation to be submitted mandatorily.</p> <p>c) EMD amount of Rs 30,000 /- (Rupees Thirty Thousand only) in the form of demand draft/Bankers cheque/FD</p>
2	<p>The above mentioned Sealed Cover Super-scribing “<u>TENDER FOR SUPPLY AND INSTALLATION OF 2X20KVA ONLINE UPS FOR BRBNMPL CORPORATE OFFICE</u>” against Tender document No. No. 003/TD/2017-18 dated 20th July 2017</p>
3	<p>All Correspondence should be addressed to The Managing Director Bharatiya Reserve Bank Note Mudran Private Limited No 3 & 4 , 1st Stage, 1st Phase B T M layout, Bannerghatta Road Bangalore - 560029</p>