



# डॉ. श्यामा प्रसाद मुखर्जी राष्ट्रीय जल एवं स्वच्छता संस्थान

DR. SYAMA PRASAD MOOKERJEE NATIONAL INSTITUTE OF WATER AND SANITATION  
(An autonomous Institution under Dept. of Drinking Water & Sanitation, Ministry of Jal Shakti, GoI)  
Email: [spm.niwas@gov.in](mailto:spm.niwas@gov.in) | Website: [www.spmniwas.in](http://www.spmniwas.in)



Tender document

for

Establishment of Campus Wide VoIP Network at Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation (SPM-NIWAS), Kolkata, West Bengal.

Name of work	Establishment of Campus Wide VoIP Network at Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation (SPM-NIWAS), Kolkata, West Bengal.
Date of issuance of bid document on CPP portal	As per CPP Portal
Bid Document Download start date	As per CPP Portal
Pre-bid queries start date	As per CPP portal
Last date of submission of Pre-bid queries	As per CPP portal
Pre-bid meeting Date	As per CPP portal
Pre-bid Meeting Link	Meeting link: <a href="https://spmniwas-866.my.webex.com/spmniwas-866.my/j.php?MTID=mec5a7d77ab2d74efd2db9b1990ba8f36">https://spmniwas-866.my.webex.com/spmniwas-866.my/j.php?MTID=mec5a7d77ab2d74efd2db9b1990ba8f36</a> Meeting number: 2643 066 1572 Meeting password: 12345
Bid Clarification End Date	As per CPP portal
Bid submission Start date	As per CPP portal
Last date of bid submission	As per CPP Portal
Date and time of opening of Technical Bid	As per CPP Portal
Date & time of opening of Financial Bid of technically qualified bidders	As per CPP Portal
EMD	INR 73,470 /-
Minimum validity of tender offer	180 days from the date of opening of the tender
For Queries	Queries, if any, may be sent in email: <a href="mailto:spm.niwas@gov.in">spm.niwas@gov.in</a>

Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation  
(Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India)

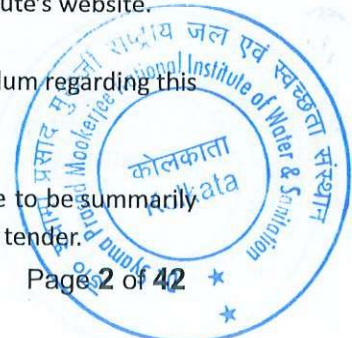
Diamond Harbor Road, Joka, Kolkata- 700 104

E-mail: [spm.niwas@gov.in](mailto:spm.niwas@gov.in)

Notice Inviting Tender through CPP portal

**TENDER DOCUMENT: ESTABLISHMENT OF CAMPUS WIDE VoIP NETWORK IN SPM-NIWAS, JOKA, KOLKATA  
FILE NO. A-39022/26/2026-SPM-NIWAS-DDWS (31482)**

1. Dr. Syama Prasad Mookerjee - National Institute of Water and Sanitation, Dept. of Drinking Water & Sanitation, Joka, Kolkata hereafter called SPM-NIWAS is a Central Autonomous Body under the Ministry of Jal Shakti, Government of India. The Institute intends to establish a state-of-the-art campus wide VoIP Telephony network on top of existing Campus LAN and extending the Campus LAN nodes wherever necessary in its JOKA, KOLKATA campus. This campus area VoIP Telephony network would be interconnecting buildings, covering Admin Block, Training halls, hostels, guest house, residential flats and Director's bungalow.
2. The Institute on behalf of Director & Head, SPM-NIWAS, is inviting E- Tender through NIC e-procurement portal URL <http://eprocure.gov.in/eprocure/app> in two bid system from reputed System Integrators (SI) having proven track record in implementing campus wide local Area Network (LAN) including setting up of IP Telephony System for **Establishment of Campus Wide VoIP Network at Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation (SPM-NIWAS), Kolkata, West Bengal.** The bidder should have successfully executed work of Supply, Installation & Commissioning of Local Area Network (LAN) / WAN / WLAN / IP Telephony/ Passive Networks to a comparable Government institution of repute.
3. The bidder must have Experience of having successfully completed similar type of works during last 5 years ending last day of month previous to the one in which applications are invited should be either of the following: -
  - a) One similar completed works costing not less than the amount equal to Rs. 29,00,000 (Rupees Twenty Nine Lakhs Only) of the estimated cost.
  - or
  - b) Two similar completed works costing not less than the amount equal to Rs. 18,00,000 (Rupees Eighteen Lakhs Only) of the estimated cost.
  - or
  - c) Three similar completed work costing not less than the amount equal to Rs. 14,50,000 (Rupees Fourteen Lakh Fifty Thousand Only) of the estimated cost.
4. The applying firm/company must have an annual average turnover of last 03 financial years not less than Rs. 20 Lakhs (i.e. FYs 2022-23, 2023-24 & 2024-25). The tender document can also be downloaded from over website [www.spmniwas.in](http://www.spmniwas.in) and <https://jalshakti-ddws.gov.in/>.
5. The materials to be supplied, installed and commissioned as per the specifications mentioned in the scope of work provided in Tender Notice. Interested bidders can apply online through NIC e-procurement portal URL <http://eprocure.gov.in/eprocure/app>". The tender can also be downloaded from institute's website.
6. The tender document is available on the website of CPP portal. Any corrigendum/addendum regarding this tender will be available in CPP portal bid.
7. Incomplete/ambiguous and conditional bids will not be accepted and such bids are liable to be summarily rejected. In case of canvassing by any bidders at any stage, shall be liable to rejection their tender.



8. The Director, SPM-NIWAS reserves the right to cancel the tender, amend or withdraw any of the terms and conditions contained in the Tender Document or to reject any or all tenders without giving any notice or assigning any reason. The decision of the Director, SPM-NIWAS in this regard shall be final and binding.

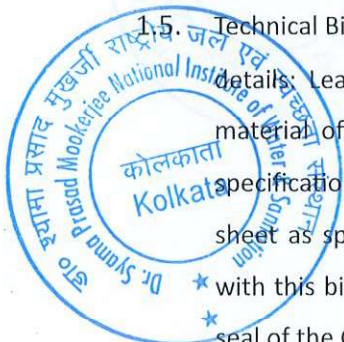


**Dr. Tapan Saha**  
**Administrative Officer**  
**(SPM-NIWAS, Kolkata)**



1. GENERAL TERMS & CONDITIONS:

- 1.1. Tender will be available on NIC e-procurement portal URL <http://eprocure.gov.in/eprocure/app>.
- 1.2. EMD amount of Rs. 73,470/- should be paid online through NEFT or RTGS in SPM-NIWAS account and payment receipt to be uploaded with tender document during submission of bid. Bids without EMD amount shall not be considered for further evaluation. Tender received without EMD or lesser amounts will be summarily rejected. No further correspondence will be accepted on the subject. The bidders have to upload the scanned copy of prescribed Bid Security (also known as Earnest Money) with bid. The bidders to note that, the bids without attaching the EMD proof in bid will summarily be rejected and will not be considered for any kind of further evaluation. If the Earnest Money Deposit (EMD) is provided through Bank Guarantee (BG) or Demand Draft (DD), the original BG/DD shall be mandatorily submitted in physical form to the Procurement Cell, SPM-NIWAS, Joka, Kolkata, on or before the bid submission closing date on CPPP, failing which the bid may be liable for rejection.
- 1.3. It should further be noted that as per DoE, MoF OM No. F.20/2/2014-PPD (Pt) dated 25.07.2017, Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or as registered with the Central Purchase Organization or the concerned Ministry or Department or Start-ups as recognized by Department of Industrial Policy & Promotion (DIPP) may be exempted from submission of Earnest Money Deposit (EMD) subject to meeting the professional and financial capability of the MSEs/ start-ups firms for running the contract successfully. Such bidders must upload valid MSME/ UDYAM certificate with bid. However, as per DoE OM No. F.20/2/2014-PPD (Pt) dated 20.09.2016, this tender service relates to security, civil, mechanical and electrical operation and maintenance and the Institute reserve the right to prefer Bidder with prior experience and turnover rather than giving order to new entities.
- 1.4. The tender shall remain open for acceptance (offer validity) for 180 days from the date of opening of tenders by SPM-NIWAS. The time limit for acceptance may be extended by SPM-NIWAS at its discretion for such further period, as it may notify.
- 1.5. Technical Bid shall consist of EMD for the required amount as per the tender documents and technical details: Leaflets / information brochures (if any) showing the technical and general details of the material offered shall also be enclosed with the technical bid, scanned copy if any, from tender specifications, clause-wise and commercial terms and conditions should be clearly mentioned in the sheet as specified. The tender form and all annexures and attachments thereto shall be submitted with this bid with each page being consecutively numbered and duly signed by the bidder along with seal of the Contractor.



- seal of the Contractor.
- 1.6. Restrictions on Public procurement from countries which share a land border with India on grounds of Defense of India will be applicable with this tender. Ref: F. No.6/18/2019-PPD Min. of Finance, Dept. of exp. PPD dated 23rd July 2020 (Order No. 1&2) and any other Govt. orders on public procurements.
  - 1.7. No alteration or amendments shall be allowed after submission and opening of the tenders.
  - 1.8. The financial bids of technically qualified bidders only will be opened. The time and date of opening of price bids shall be intimated to the technically qualified bidders through e-procurement portal online.
  - 1.9. The tender will be awarded to the technically qualified bidder with the lowest total cost on whole job basis (both supply, installation and execution works including CAMC together).
  - 1.10. Bidder must submit a certificate of undertaking that he is in position to supply the materials with a credit of 90 days after clear receipt of materials, installation and commissioning of materials at site.
  - 1.11. The Joint Secretary cum Director & Head, SPM-NIWAS, reserves all rights to reject any tender including of those tenderers who fail to comply with the instructions without assigning any reason what so ever and does not bind itself to accept the lowest or any specific tender. SPM-NIWAS can also relax the conditions of the tender at the discretion of the competent authority. The decision of the Joint Secretary cum Director & Head, SPM-NIWAS in this regard shall be final and binding.
  - 1.12. In case of any dispute arising with regards to this tender or its conclusion, the decision of the Joint Secretary cum Director & Head, SPM-NIWAS in this regard shall be final and binding.
  - 1.13. The tendered work if awarded, is not transferable.
  - 1.14. Tender not complying with the above conditions are liable to be rejected without any further reference.
  - 1.15. On publication of the bid, bidder shall download the NIT and all the supply and work items details from website as mentioned in the NIT and minutely go through the instructions/terms conditions/critical dates/eligibility criteria of the NIT.
  - 1.16. The Bidders shall have to scan all the required documents mentioned in this NIT into PDF format of 100 dpi resolution, for uploading as part of Bid.

1.17. Bill of Quantity (BOQ), which is in MS-Excel shall be downloaded, filled up properly and uploaded with the bid after digital signing. The Bidder shall always open the BOQ sheet with Macro Enabled.

1.18. Bidders shall furnish a declaration (**Annexure-A** of pre-qualification information) as a part of bid that they are not been blacklisted by any department/ organization of Government of India. Any wrong declaration in this regard which comes to notice at a later date will disqualify them and the bids so



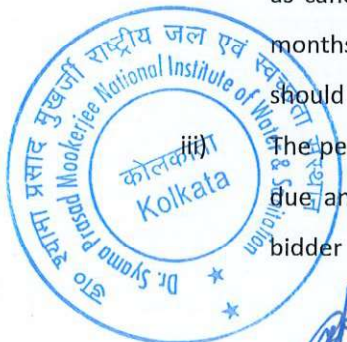
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received will be rejected.

- 1.19. The Tender Inviting Authority (Dr. Syama Prasad Mookerjee - National Institute of Water and Sanitation), reserves the right to select a vendor on the grounds of his experience, the clients, the capacity or turnover of the vendor which can infuse confidence that selected vendor can complete the work within given time.
- 1.20. Bid Language: All documents to be uploaded by the Bidder shall be in English language only. In case the Bidder intends to upload a document, which is not in English but in any of the other scheduled language in the country, the Bidder shall also submit a Notarized version of the English Translation. Bidder/ System Integrator/ Contractor used in the bid document refer to prospective bidders and is used interchangeably.
- 1.21. Resolution of Dispute: In case of disputes, if any, the decision on the matter of dispute by the Tender Inviting Authority (Dr. Syama Prasad Mookerjee - National Institute of Water and Sanitation) shall be the final and binding. It is also provided that the courts at Kolkata in West Bengal State only will have the jurisdiction to decide the dispute between the Office of the Tender Inviting Authority and other party in respect of the matter arising out of the contract/purchase order for the tender itself.
- 1.22. **Bid Security (i.e. Earnest Money Deposit) and Performance Security Deposit :**
- i) The bidders have to submit the Bid Security/EMD Rs. 73,470/- except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organisation or the concerned Ministry or Department. The bid security/ EMD will be submitted in the form of Bank Guarantee in favour of Director, SPM-NIWAS from any of the commercial banks. Bid securities of the unsuccessful bidders will be returned to them after expiry of the final bid validity and after award of the contract to the successful bidder. No interest will be payable on bid security. The bid security of the successful bidder will be returned after successful execution of work order. **The BG for EMD should be submitted as per the format given in Annexure-B**
- ii) The successful bidder will have to deposit the Performance Security in the form of Bank Guarantee @5% of the contract value to ensure the performance of the contract in favour of Director, SPM-NIWAS within 30 days after issuance of contract, failing which, the contract shall be treated as cancelled/ terminated. The Performance Security Deposit shall remain valid for a period of 39 months of all the contractual obligations of the successful bidder and will be interest free. PBG should be submitted as per the format given in the **Annexure-C**
- iii) The performance security deposit in the form of bank guarantee will be returned to the bidder on due and satisfactory performance of the services and on completion of all obligations by the bidder under the terms of the Contract and on submission of a "No Demand Certificate" subject to



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such deduction from the security, as may be necessary for making the SPM-NIWAS claims against the Contract. No interest/ charges (if any) on performance security deposit shall be payable by SPM-NIWAS to the bidder. The security deposit will be forfeited in case of non-compliance of scope of work to the satisfaction of the institute.

- iv) The Bid Security/EMD of the successful bidder shall be forfeited in the following circumstances:
- If not deposit the Performance Security within 30 days.
  - If does not commence to deploy the requisite human resources, machineries, tools and consumables within ten days after issue of letter of award of work by SPM-NIWAS
  - In the event of successful bidder declining to accept the offer made by this Institute without any valid reason
  - Withdraw/ modify bid during the period of validity
  - Fail to execute formal contract agreement within the given timeline
  - Commit any breach of Tender Conditions/ Contract which attracts penal action of forfeiture of EMD
  - If any of the certificates/documents furnished by the Bidder, found to be false / fabricated / bogus, the bidder will be liable to blacklisted and their 100% E.M.D. will be forfeited.
  - If any of the bidders wants to withdraw their bid at any stage after Opening of the Bid may face a penalty of 100% EMD forfeiture.
  - If any of the bidder (s) withdraw their bid after the Work Order issued to the Bidder (s), their 100% E.M.D. and ePBG will be forfeited, as the case may be
- v) In case of unsatisfactory performance and breach of any terms and conditions stipulated in the contract, the Performance Security Deposit of the Bidder will be liable to be forfeited by the Institute besides termination of the contract.

1.23. **Liquidated Damages** : If the delay is solely attributable to the Supplier, the Purchaser reserves the right to impose Liquidated Damages (LD) in the event of delay in delivery and/or completion of services beyond the stipulated delivery schedule, SPM-NIWAS shall be entitled to recover Liquidated Damages (LD) from the Seller at the rate of 0.5% (zero point five) of the contract price of the delayed/undelivered stores or services for each week of delay or part thereof, subject to a maximum of 10% (ten percent) of the value of the delayed stores/services.

## 2. DEFINITION

2.1. The term Institute shall mean SPM-NIWAS, Joka, Kolkata.



2.2. The term Bidder shall mean the bidder selected by the Institute for the supply of materials & works.

### 3. SCOPE OF WORK

#### 3.1. Name of the work:

Establishment of campus area VoIP Telephony network in SPM-NIWAS campus interconnecting buildings, including Admin Block, Training halls, hostels, residential flats, guest house, and Director's bungalow.

#### 4. Completion period:

4.1. Within 90 days from the date of LOA / Work Order.

#### 5. Scope of Supply:

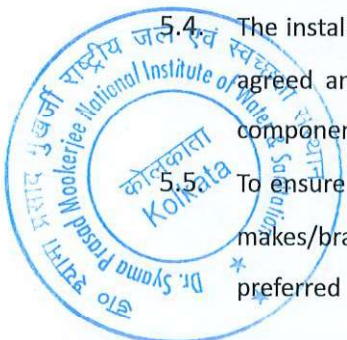
5.1. The Bidder has to supply all the materials listed in the Bill of Materials (**Annexure - I**) as per the corresponding technical specification (**Annexure - II**) for the establishment of campus area VoIP network in SPM-NIWAS campus interconnecting buildings, Training halls, hostels, guest house, out door open areas and Director's bungalow in consultation and finalization with SPM-NIWAS.

5.2. Installation and testing of UTP cables and network components may required for the extension of Campus LAN as per the bill of material enclosed in the Bill of materials (**Annexure - I**).

5.3. The bidder is advised that the quantities and scope of passive components are indicative and may vary (increase or decrease) depending on actual site requirements assessed during execution. Payment shall be admissible only for actual quantities of items successfully supplied, installed, and accepted. The bidder shall be responsible for taking back any excess or unused materials at their own cost, with no claim whatsoever.

5.4. The installation of cables and other VoIP telephony network components should be as per the layout agreed and approved by SPM-NIWAS. The installation should be as per the TIA standard and all components should be labelled as per the standard.

5.5. To ensure quality and prevent the use of sub-standard VoIP telephony and network components, the makes/brands indicated against each item in the Bill of Materials (**Annexure-I**) shall be treated as preferred benchmark makes. Equivalent or superior makes conforming fully to the technical



specifications given in Annexure-II may be proposed by the bidder, subject to the following conditions:

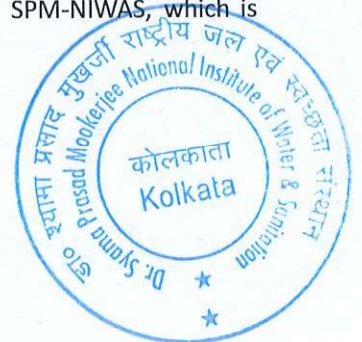
- a) The proposed alternative make shall strictly meet or exceed all technical, performance, and compliance requirements specified in the tender document.
- b) Documentary evidence, including technical datasheets, test reports, and relevant certifications, shall be submitted along with the technical bid for evaluation.
- c) Final acceptance of any alternative make shall be at the sole discretion of SPM-NIWAS, based on technical evaluation by the competent authority.
- d) Supply, installation, testing, and commissioning shall be carried out strictly in accordance with the approved make and the work order issued by SPM-NIWAS.
- e) Billing shall be based on the actual quantities supplied and executed.

All such alternatives shall be subject to strict scrutiny and evaluation. Any deviation or mismatch with the required specifications shall be summarily rejected.

- 5.6. All such alternatives shall be subject to strict scrutiny and evaluation. Any deviation or mismatch with the required specifications shall lead to be summarily rejected.
- 5.7. The bidder shall be responsible for configuring all VoIP Telephony equipment, devices, and software, and ensuring seamless integration with the existing Campus LAN infrastructure, including but not limited to existing switches, access points, Enterprise Wireless Controller policies, and Access Control Lists (ACLs), as per the directions and technical requirements of SPM-NIWAS.
- 5.8. The bidder should note that the existing Campus LAN operates on Cisco active network devices and associated solutions. Therefore, the proposed VoIP solution **must be fully interoperable with the current Cisco based campus LAN Switching environment** and comply with all applicable industry standards and protocols. It may be noted that *proposed solution shall interoperate with Cisco-based LAN using applicable open standards (SIP, IEEE, RFC). Proprietary dependence shall not be mandatory.*
- 5.9. Bidders are strongly advised to **inspect and study the existing Campus LAN infrastructure** prior to designing, proposing, or conceptualizing the VoIP Network architecture for SPM-NIWAS, which is envisaged to be plug & play on top of existing LAN infrastructure.

**5.10. Laying of UTP Cables (CAT6A):**

- 5.10.1. Laying of CAT-6A cables through PVC pipe as per site requirement.
- 5.10.2. Wherever Road crossing is needed GI Conduits needs to be used.



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5.10.3. In case any part of road, building or any structure within the campus is damaged due to laying of CAT6A cables or any other activities in connection with execution of work as per this bid document, the damaged part shall be restored to its original condition by the agency itself at their own cost.

**5.11. Wall Clamping:**

5.11.1. Proper clamping should be provided wherever required, for the cable running on the wall and the cable should run through pipe or conduit. Clamping should be made at every 1 meter of distance by "U" clamp pipe at duct /trench inserting point should be properly fixed/ grouted, wherever needed.

**5.12. Route Markers /Cable dressing/ markers:**

5.12.1. Dressing up of UTP Cables shall be done where they run as bunch.

5.12.2. Integration with Existing LAN Infrastructure:

The scope of CAT-6A cable laying shall also include the integration of the existing LAN segments, active/passive devices, and network endpoints with the proposed VoIP LAN infrastructure at no additional cost to SPM-NIWAS. All activities required to ensure seamless interoperability, continuity of services, and functional alignment between the existing and proposed LAN components shall be deemed to be included in the bidder's quoted rates.

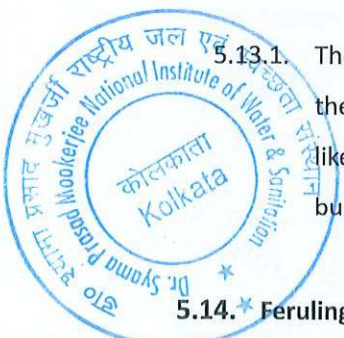
Bidders are advised to adequately factor all such integration-related costs and efforts into their financial bid.

**5.13. Documentation:**

5.13.1. The bidder should submit a Blueprint & CAD document after completion of installation indicating the layout of VoIP Telephony structured Cabling positioning and installation of various devices like IO boxes etc. for the locations as specified. Separate drawings for each floor of the individual buildings and an overall VoIP Telephony network drawing needs to be submitted.

**5.14. \* Ferruling and Labelling:**

5.14.1. The bidder should make sure that all the cables are properly ferruled with identification



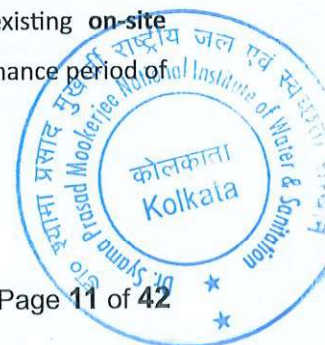
numbers. Panduit labels to be used for labelling the patch cords. Faceplates to have neatly printed labels.

#### 5.15. Warranty:

- 5.15.1. Three year OEM warranty to be provided for all Passive and Active components including associated items in the bill of materials (Annexure - I).
- 5.15.2. The bidder shall provide a total comprehensive OEM warranty-cum-comprehensive AMC period of 36 months from the date of commissioning, inclusive of OEM and SI support. DLP shall be co-terminus with this period. (This will start after expiry of Initial three years of warranty period. Initial three years of warranty period will start after successful commissioning and handing over of project). It would be the sole responsibility of the L1 bidder to ensure OEM support to ensure the SLA 95.5 % uptime requirement. The System Integrator (SI) shall keep spares to fulfill SLA requirement. Please note :
- OEM warranty: 36 months from commissioning
  - Comprehensive AMC (SI + OEM support): 4th year and 5th year (24 months thereafter)
  - Warranty Support period: 36 months from commissioning
  - 4th and 5th Year CAMC shall start after 36 months of initial OEM Warranty.
- 5.15.3. The bidder shall provide on-site comprehensive (materials, fixing & labour) (1+2) 3-year standard OEM warranty cum CAMC for the VoIP Telephony Network from the date of commissioning of the VoIP Network.
- 5.15.4. It shall be mandatory for the bidder to extend CAMC services for an additional period of two years (4th and 5th year) at the discovered rates, upon placement of a CAMC Work Order by SPM-NIWAS, on the same terms and conditions.
- 5.15.5. The complete system including of hardware, networking, software, firmware, UTP, Power cables, hubs, switches etc. will be under **comprehensive maintenance with bidder for three years** after successful completion of installation, Commissioning and date of handing over the site to institute and extendable for another two years. The defect liability period will be counted from date of handing over the completed project to SPM-NIWAS and issuing project completion certificate to 03 Years (36 Months). The successful bidder should train existing **on-site manpower for troubleshooting** during the comprehensive warranty cum maintenance period of 36 months.

#### 6. TENDER SUBMISSION PROCESS



- 6.1. Interested bidder may submit their bids by giving all the necessary documents in English or Hindi as specified. **The tender must be submitted online through Central Public Procurement Portal e-procurement application only through URL: <http://eprocure.gov.in/eprocure/app> only.** No manual bids will be entertained under any circumstances.
- 6.2. The Tender document attached must be direct, concise, and complete and arranged in an organized and structured manner.
- 6.3. To participate in online bidding process, Bidders must procure a Digital Signature Certificate as per Information Technology Act-2000 using which they can digitally sign and encrypt their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, Safecrypt, Ncode, eMudhra etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC.
- 6.4. SPM-NIWAS will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid proposal well advance in time so as to avoid issues like slow speed, choking of web site due to heavy load or any other unforeseen problems.
- 6.5. Bidders are also advised to refer visit any local NIC office or call CPPP 24x7 toll free number 1800-3070-223 for further details about the e-tendering / bidding process.
- 6.6. **Procedure for e-payment:** EMD of Rs. 73,470/- should be paid online through NEFT or RTGS in SPM-NIWAS account and payment receipt to be uploaded with technical bid. Technical bids without EMD shall not be considered for further evaluation. SPM-NIWAS Bank details are as follows:

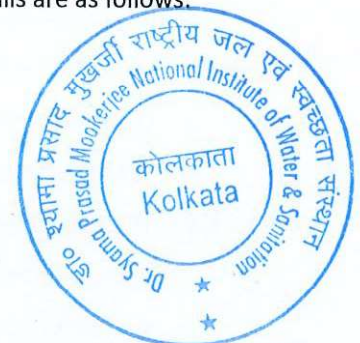
**Account Name:** DR Syama Prasad Mookerjee NIWAS

**A/C No.33602394940**

**Name of Bank:** State Bank of India (SBI)

**IFS Code:** SBIN0006210

**Branch Code:** IIM Calcutta (6210)



- 6.7. **Caution:** Please ensure that you need to mention the correct beneficiary account number and IFSC code as mentioned above while making payment via RTGS / NEFT. **In the event of funds remitted to wrong beneficiary account number, SPM-NIWAS, Joka, Kolkata or its Bank would not responsible for the same. In case of physical EMD in the shape of Demand Draft or BG, original copies must be submitted or delivered before bid submission date besides uploading scan copies.**
- 6.8. Micro, Small and Medium Enterprises (MSMEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) are exempt from submission of EMD

and Tender fee. MSME certificate should be submitted to avail this exemption. The MSME certificate should be in the same field.

## 7. Special Terms & Conditions:

7.1. The bidder should have successfully executed work of Supply, Installation & Commissioning of Local Area Network (LAN) / WAN / WLAN / VoIP/ Passive Networks. Experience of having successfully completed similar works during last 5 years ending last day of month previous to the one in which applications are invited should be either of the following: -

7.1.1. One similar completed works costing not less than the amount equal to Rs. 29,00,000 (Rupees Twenty Nine Lakhs Only) of the estimated cost.

or

7.1.2. Two similar completed works costing not less than the amount equal to Rs. 18,00,000 (Rupees Eighteen Lakhs Only) of the estimated cost.

or

7.1.3. Three similar completed work costing not less than the amount equal to Rs. 14,50,000 (Rupees Fourteen Lakh Fifty Thousand Only) of the estimated cost.

Proof of payment certificate/work completion certificate/performance certificate/CRAC/Duly signed supply and installation report to be uploaded with the Technical Bid.

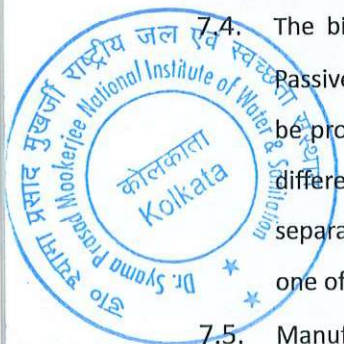
7.2. The applying Firm/ Company must have an average annual turnover of last 03 financial years not less than Rs. 20 Lakhs per year. (i.e. FYs 2022-23, 2023-24 & 2024-25). Proof of certificate for turnover is required to be uploaded with the tender (CA attested certificate and copy of the balance sheet with profit and loss account should be uploaded with technical bid.)

7.3. The applying firm must be registered with GST and the supporting proof for the same is to be uploaded.

7.4. The bidder shall submit the Manufacturer Authorization Form (MAF) for VoIP System as well as Passive, Active and other components as enclosed in the bill of materials (Annexure - I). MAF should be provided only in the attached Format in Annexure - III in the OEM's letter head. Separate MAF for different OEM. Any changes to the format may be considered invalid. MAF should be provided separately for VoIP system, Passive items category wise or as applicable and if not provided for any one of the component types, then the bid may be summarily rejected.

7.5. Manufacturer Authorisation Form to be submitted for the bid published with OEM Designation, Phone no and address details. Submitted MAF will be validated with the OEM for its genuineness.

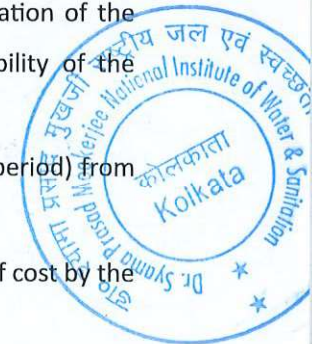
7.6. The bidder must quote for all the items/services mentioned in the tender BOQ Item Rate Schedule,



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Part/incomplete quotes shall be summarily rejected.

- 7.7. The bidder shall mandatorily have a functional office in Kolkata or adjoining areas for at least three (3) years, supported by documentary evidence, to ensure immediate on-call support. Proof of local presence shall be uploaded. The Institute shall verify the declared Kolkata address, and any discrepancy may lead to disqualification at the technical evaluation stage. Details of service centres to be attached with technical bid.
- 7.8. All active items like VoIP devices/items, Passive items etc., OEMs should have ISO 9001:2015 & ISO 14001:2015. Documentary proof to be attached/ uploaded into Bid submission document.
- 7.9. VoIP devices/ items, Passive items should have Toll-Free number to provide immediate on- call support in case of any issues to be explicitly mentioned in MAF.
- 7.10. The OEM(s) for VoIP devices and passive components, or their OEM-authorized channel partners, shall mandatorily maintain a functional service centre in Kolkata or adjoining areas for a minimum period of three (3) years, supported by documentary evidence, to ensure immediate on-call support. Details of such service centre(s) shall be submitted with the technical bid, failing which the bid may be liable for rejection.
- 7.11. For ensuring seamless integration and interoperability, it is preferred that VoIP components and passive network components, within each category/type, are sourced from a single OEM, wherever applicable.
- 7.12. The bidder shall mandatorily submit item-wise compliance to the technical specifications outlined in Annexure-II. The make and model of each quoted item must be explicitly specified, failing which the bid may be liable for rejection.**
- 7.13. The bidder shall mandatorily deploy qualified VoIP/network specialists for installation, commissioning, and configuration of all VoIP devices, network equipment, and associated software in line with SPM-NIWAS requirements. The bidder shall also provide comprehensive on-site training to nominated SPM-NIWAS staff, covering operational procedures, technical aspects, system configuration, and troubleshooting. Adequate knowledge transfer shall be ensured for independent operation of the system. However, any maintenance support or troubleshooting is the sole responsibility of the selected bidder where SLA is applicable as per bid clause.
- 7.14. Bidder should complete the work in all respect within the committed period (contract period) from the date of issuing work order.
- 7.15. Any equipment found defective will be rejected and the same shall be replaced at free of cost by the supplier. In case of any dispute, SPM-NIWAS decision shall be final.
- 7.16. Special Tools/equipment required for successful installation & commissioning of the VoIP Network/



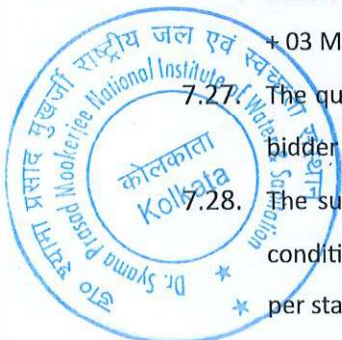
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LAN Network system shall be in the scope of the bidder including drilling equipment & machineries to cross wall or underneath of blacktop road.

- 7.17. The System Integrator (SI) should observe all safety rules and regulations in force and ensure that all necessary safety precautions are followed up strictly for the safety of workers engaged in the work.
- 7.18. The System Integrator (SI) should engage adequate man power having appropriate skills with the approval of the SPM-NIWAS officials to carry out and complete the works. Any extra time / over time engagement of the man power shall be the SI's responsibility.
- 7.19. All pages of the tender papers should be signed, stamped and dated including the annexures and submitted online through scanned copies. Make and Model of the all-quoted items to be clearly mentioned and uploaded for technical bid evaluation.
- 7.20. The tender received through fax / e-mail or received by post etc. will not be accepted. The parties have to ensure the uploading of bids well in time. Any specification compliance mis-match shall be liable for disqualification.
- 7.21. The total cost quoted should be exclusive of taxes. Tax applicable at the time of invoice will be paid as per actual.
- 7.22. The supply order quantities for all active and passive components shall be finalized jointly with the selected bidder/contractor based on a detailed site survey prior to execution as per site requirements which may vary during execution or commissioning time.
- 7.23. The price quoted should be valid for the Contract period as mentioned. SPM-NIWAS, may increase or decrease the estimated Quantity and scope of work based of its requirement.
- 7.24. SPM-NIWAS reserves the right to accept / reject any bidder and to annul the bidding process of any or all bids at any time prior to award of contract without thereby incurring any liability to the affected bidders.
- 7.25. The tender will be appraised by a committee formed by SPM-NIWAS.
- 7.26. The successful bidder will be required to execute a performance security. A sum of 5% of the work order value will have to be deposited in the form of Bank Guarantee / NEFT/RTGS on award of the tender by SPM-NIWAS, Joka, Kolkata as performance security for a period of Contract liability period + 03 Months).
- 7.27. The quality should be maintained strictly. Any deviations in the materials supplied after inspection the bidder is liable to be debarred/blacklisted from future participation in SPM-NIWAS tenders.
- 7.28. The supply and installation of products shall be carried out strictly in accordance with the terms & conditions and specifications as stipulated in the tender, in the approved workman like manner and as per standard practice. Materials supplied shall be of high quality.



- 7.29. Payment shall be released within thirty (30) working days from the date of successful installation, commissioning, testing, and formal handover of the project at SPM-NIWAS, Joka, Kolkata campus, duly certified by the competent authority and in accordance with the payment schedule. No advance payment shall be made under any circumstances.
- 7.30. The statutory deductions like TDS etc., as per standard norms will be made from the bills.
- 7.31. SPM-NIWAS shall without prejudice to its other remedies under the contract, deduct from the Contract price, as Liquidated Damages a sum equivalent to 0.5% of the price of delayed Goods or unperformed services for delay of each week until actual delivery or performance, up to a maximum deduction of 10% of the contract price. Once the maximum is reached, SPM-NIWAS may consider termination of the contract and can forfeit the Performance Guarantee amount.

## 8. Payment Schedule

Payment will be released after the successful installation, commissioning & handing over the project to SPM-NIWAS, Joka, Kolkata and certification by the concerned authority at SPM-NIWAS and no advance payment will be entertained.

Payments will be released only on satisfactory completion of entire work as per the following schedule:

Sl. No.	Milestone	Percentage of total work (excluding 4th and 5th year of AMC ) value
1	After Supply, installation , commissioning of work	70%
2	After Successful PAT	15%
3	After completion of 1 Year Warranty	5%
4	After completion of 2nd year	5%
5	After completion of 3rd year	5%
	On completion of (1+2) years.	100%
7	After completion of 4th year	As per bid amount / yearly on satisfactory CAMC services
	After completion of 5th year	As per bid amount/ yearly on satisfactory CAMC services
7	BG will be released on completion of 3rd year / 5th	-



	year + 3 months as applicable.	

We agree to all terms and conditions as mentioned above including the validity of the offer.

Name, Designation & Signature of the bidder with the seal



**TECHNICAL BID**  
(To be uploaded)

Name and address of the bidder:

Name of the bidder :

Legal Status : Limited / Private Limited / Partnership / Sole proprietor / Others (Strike-off not applicable; others please specify)

Full postal address :

Email address :

Contact number :

Website :

Total annual turn-over (value in Rupees) (Last three FYs.):

(Copy of Balance Sheets Audit Statement / profit loss statement/IT returns, etc. to be attached as proof)

Financial Year	Annual Turn-over (in lacs)
FY 2022-23	
FY 2023-24	
FY 2024-25	

Past supply details (as per clause 1 of Special Terms & Conditions):

(Copy of Work order and Completion/Experience certificate to be attached as proof)

Customer Name	Order Value	Year



**FINANCIAL BID**

(No price to be filled here for reference purpose only).

**BOQ available in excel sheet in e-tender to be filled up carefully and uploaded for:**

Extension works of existing Structured Campus LAN Cabling System, along with associated supplies and installation works, for VoIP Network Deployment across the SPM-NIWAS campus interconnecting buildings, including Admin Block, Training halls, hostels, residential flats, guest house, and Director's bungalow in SPM-NIWAS, Joka, Kolkata.

Structured LAN Cabling and Associated Supplies and Installation for VoIP Network Deployment				
S. No	Description	Qty.	Rate	Amount
1	Category-6A 4 pair UTP Cable 305m/box as per technical specification	10 Box		
2	Category 6A Information outlet for Field Side as per technical specification	140 Nos		
3	Category 6A UTP Patch Cord 1 Meter as per technical specification	140 Nos		
4	Category 6A UTP Patch Cord 2 Meter as per technical specification	140 Nos		
5	Category 6A 24 Port Unloaded Patch Panel as per technical specification	12 Nos		
6	Category 6A Information outlet for Rack Side as per technical specification	140 Nos		
7	Dual Face Plate with Back Box as per technical specification	70 Nos		

No price to be filled up here.  
Price to be filled up  
in excel BOQ available with  
e- tender



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8	25mm PVC pipe with required bends and accessories	50 Mtrs
9	32mm PVC pipe with required bends and accessories	50 Mtrs
10	32mm casing capping with required accessories	1500 Mtrs
11	25mm casing capping with required accessories	2000 Mtrs
12	<b>IP Telephony Core Infrastructure</b> (supporting SIP-based call processing, minimum 256 user/device licenses) all inclusive for on-premise appliance based / server based deployment. *Licensing shall be perpetual / enterprise-grade with full features enabled and all inclusive.	1 Unit
13	<b>Voice Gateways &amp; PSTN Integration</b> (VoIP Voice Gateway / Session Border Controller supporting SIP trunking, 100 concurrent session, PSTN/VoIP interworking, and enterprise telephony features- all inclusive for on premise appliance based / server based deployment.	1 Unit
14	<b>Softphone Licenses( as required/ bundled)</b>	50 nos
15	<b>SIP-Enabled IP Phone (Executive-Class Model)</b> with display, full-duplex speakerphone, and enterprise provisioning support	05 nos
16	<b>SIP-Enabled General IP Phone</b> with display, full-duplex speakerphone, and enterprise provisioning support	50 nos
17	<b>Operator/ Reception Console</b>	1 nos
18	<b>Project Testing, Management, comprehensive Maintenance for (1+2) 3 years.</b>	1 LS
19	PoE+ Enabled Access Switch (VoIP-Dedicated) SIP-Compatible SFP/Uplink Modules (As required) 24 ports, PoE+ budget $\geq$ 370W, LLDP-MED, QoS Standards-compliant 1G/10G. <ul style="list-style-type: none"> <li>This item is <b>optional</b> and shall be considered only if required after site assessment. Existing Cisco switches shall be primarily used.</li> </ul>	4 nos.



Installation & Commissioning Charges				
S.No	Description	Qty.	Rate	Amount
1	Category 6A 4 pair UTP Cable 305m Laying	10 Box		
2	Category 6A Information Outlet for Field Side Fixing	140 Nos		
3	Category 6A 24 Port Patch Panel Termination	12 Nos		
4	Dual Face Plate With Back Box Fixing	70 Nos		



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5	25mm PVC Pipe Laying	50 Mtrs	<p>No price to be filled up here. Price to be filled up in excel BOQ available with e- tender</p>
6	32mm PVC Pipe Laying	50 Mtrs	
7	32mm Casing Capping Laying	1500 Mtrs	
8	25mm Casing Capping Laying	2000 Mtrs	
9	<b>Installation, configuration and operationalising Enterprise IP Telephony Core Call Control Manager Platform Infrastructure</b> (supporting SIP-based call processing, minimum 256 user/device licenses)- all inclusive for on-premise appliance based/ server based deployment; *Licensing shall be perpetual / enterprise-grade with full features enabled.	1 Nos	
10	<b>Installation, configuration and operationalising Voice Gateways &amp; PSTN Integration</b> (VoIP Voice Gateway / Session Border Controller supporting SIP trunking, 100 concurrent session/ PSTN/VoIP interworking, and enterprise telephony features-all inclusive for on premise appliance based / server based deployment.	1 Nos	
11	<b>Installation, configuration and operationalising Softphone Licenses</b>	50 nos	
12	<b>Installation, configuration and operationalising SIP-Enabled IP Phone (Executive-Class Model)</b> with display, full-duplex speakerphone, and enterprise provisioning support	05 Nos	
13	<b>Installation, configuration and operationalising SIP-Enabled General IP Phone</b> with display, full-duplex speakerphone, and enterprise provisioning support	50 Nos	
14	<b>Installation, configuration and operationalising-Operator/ Reception Console</b>	1 nos	
15	Comphrenshive AMC - 4th Year	1 LS	
16	Comphrenshive AMC - 5th Year	1 LS	



Signature and seal of the bidder

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Eligibility Criteria  
CHECK LIST

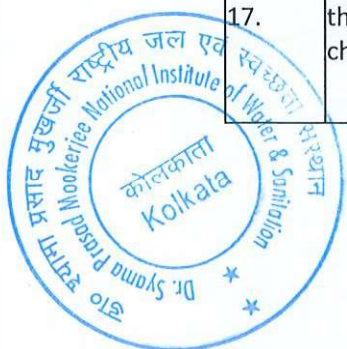
**The Technical Bid shall be summarily rejected, if these documents are not uploaded.** Documents must be uploaded in following serial order only. All Documents must be signed and sealed by the Authorized person of the bidder.

S. No.	Particulars	Type of document	Yes/No
2.	Authorization letter with Name, designation, address & telephone number of the authorized person	Certification Letter	
3.	Name, address & telephone number of Directors / Partners, e-mail address	Certification Letter	
4.	Receipt of EMD payment of Rs. 73,470/- (Rupees Seventy three thousand four hundred and seventy Only) to be uploaded. (attach MSME certificate for exemption. MSME should be in the similar field or work).	Proof	
5.	Firm / Company Registration certificate (Copy to be uploaded)	Proof	
6.	Undertaking by the bidder to be uploaded stating that the firm / company has not been black listed by any Central Govt. / State Govt. / PSU agencies.	Undertaking Letter	
7.	Undertaking by the bidder to be uploaded that they have read and understand all the term and conditions mentioned in the tender document.	Undertaking Letter	
8.	Copy of appropriate PAN Card and GST Registration	Proof	
10.	Certified copies of balance sheets along with profit & loss account of the bidder in support of 3 years annual financial turnover, The applying Firm/ Company must	Proof	



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	have an annual turnover of last 03 financial years (Annually) not less than 20 Lakhs (i.e. FY 2022-23, FY 2023-24, FY 2024-25).		
11.	<p>Experience of having successfully completed similar works during last 5 years ending last day of month previous to the one in which applications are invited should be either of the following: -</p> <p>a) One similar completed works costing not less than the amount equal to Rs. 29,00,000 (Rupees Twenty Nine Lakhs Only) of the estimated cost.</p> <p>Or,</p> <p>b) Two similar completed works costing not less than the amount equal to Rs. 18,00,000 (Rupees Eighteen Lakhs Only) of the estimated cost.</p> <p>Or,</p> <p>c) Three similar completed work costing not less than the amount equal to Rs. 14,50,000 (Rupees Fourteen Lakh Fifty Thousand Only) of the estimated cost.</p> <p>Proof of payment certificate/work completion certificate/performance certificate/CRAC/Duly signed supply and installation report to be uploaded with the Technical Bid.</p>	Proof	
12.	Proof for Bidder's 3 years presence in Kolkata- Any Government issued document	Proof	
13.	Proof of OEMs service Centers in Kolkata	Proof	
14.	Manufacturer Authorization Form (MAF) for <u>items</u> strictly in the format mentioned in Annexure – III in OEM's letterhead. (Any changes to the format will be considered invalid)	Certification Letter	
15.	Manufacturer Authorization Form (MAF) for <u>Passive components</u> (CAT6A / Fiber related components) strictly in the format mentioned in Annexure – III in OEM's letterhead. (Any changes to the format will be considered invalid)	Certification Letter	
16.	Manufacturer Authorization Form (MAF) for various items strictly in the format mentioned in Annexure – III in OEM's letterhead. (Any changes to the format will be considered invalid)	Certification Letter	
17.	Manufacturer Authorization Form (MAF) for <u>Switches</u> strictly in the format mentioned in Annexure – III in OEM's letterhead. (Any changes to the format will be considered invalid)	Certification Letter	



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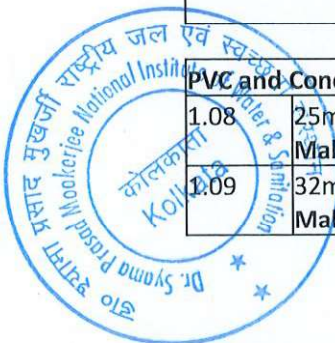
18.	Provide proof for 3 years' Service center presence in Kolkata for the Switch, Passive OEMs or OEM channel partners presence	Proof	
19.	Copy of ISO 9001:2015 & ISO 14001:2015 for the Switch, Passive OEMs (individually)	Proof	
20.	Signed and sealed copy of the Technical Specification with compliance details filled for all the line items (as mentioned in Annexure - II section)	As per format	
21.	Copy of NIT duly signed and stamped by the bidder on all pages must be uploaded as agreement of understanding of all the terms and conditions mentioned in NIT.	Signed & Sealed Document	
22.	Any other document, information, deceleration, or undertaking asked in NIT (Pl. read the NIT document carefully. Non submission of information asked in NIT may lead to rejection of bid.)	Proof	



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ANNEXURE – I

Bill of Materials			
9. Structured Cabling (LAN) Supply			
S. No.	Description	Qty.	UOM
* Technical specifications provided in Annexure II **Preferred makes indicated for benchmark purposes only. Equivalent or superior makes meeting Annexure-II specifications shall be permitted.			
All components shall be Category 6A end-to-end compliant with ANSI/TIA-568.2-D and ISO/IEC 11801.			
Key Requirements:			
- Appliance-based IP PBX with 256 users (includes softphone)			
- SIP, SRTP, TLS supported			
- Integrated or standalone SBC mandatory			
- Existing Cisco LAN & PoE switches shall be reused			
- No new switches unless required( shall be provisioned, if needed by SPM-NIWAS).			
Passive components			
1.01	Category 6A 4 pair UTP Cable 305m as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	10	Box
1.02	Category 6A Information outlet for Field Side as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	140	Nos
1.03	Category 6A UTP Patch Cord 1 Meter as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	140	Nos
1.04	Category 6A UTP Patch Cord 2 Meter as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	140	Nos
1.05	Category 6A 24 Port Unloaded Patch Panel as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	12	Nos
1.06	Category 6A Information outlet for Rack Side as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	140	Nos
1.07	Dual Face Plate With Back Box as per technical specification <b>Make: D-Link, CommScope, SYSTIMAX, AMP, R&amp;M, AKSH</b>	70	Nos
PVC and Conduits			
1.08	25mm PVC pipe with required bends and accessories <b>Make : ISI Branded</b>	50	Mtrs
1.09	32mm PVC pipe with required bends and accessories <b>Make : ISI Branded</b>	50	Mtrs



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1.10	32mm casing capping with required accessories Make : ISI Branded	1500	Mtrs
1.11	25mm casing capping with required accessories Make : ISI Branded	2000	Mtrs



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VoIP Components			
1.12	<b>Enterprise IP Telephony Core Call Control Manager Platform Infrastructure</b> (supporting SIP-based call processing, minimum 256 user/device licenses)- all inclusive for on-premise appliance based/ server based deployment solution *Licensing shall be perpetual / enterprise-grade with full features enabled. <b>Make: Cisco / Avaya / ALE / NEC or equivalent/ similar</b>	1	Nos
1.13	<b>Voice Gateways &amp; PSTN Integration</b> (VoIP Voice Gateway / Session Border Controller supporting SIP trunking with 100 concurrent sessions, PSTN/VoIP interworking, and enterprise telephony features-Appliance/ server-based solution includes everything applicable. Gateway + SBC . SBC may be integrated or standalone. All inclusive for on-premise appliance based/ server based deployment solution <b>Make: Cisco / Avaya / ALE / NEC or equivalent/ similar</b>	1	Nos
1.14	<b>Softphone Licenses (as required / bundled)</b>	50	Nos
1.15	<b>SIP-Enabled IP Phone (Executive-Class Model)</b> with display, full-duplex speakerphone, and enterprise provisioning support <b>Make: Cisco / Avaya / ALE / NEC or equivalent/ similar</b>	05	Nos
1.16	<b>SIP-Enabled General IP Phone</b> with display, full-duplex speakerphone, and enterprise provisioning support <b>Make: Cisco / Avaya / ALE / NEC or equivalent/ similar</b>	50	Nos
1.17	<b>Operator/ Reception Console</b> <b>Make: Cisco / Avaya / ALE / NEC or equivalent/ similar</b>	1	No
1.18	Project Testing, Management, comprehensive maintenance for 3(1+2) years	1	LS
1.19	PoE+ Enabled Access Switch (VoIP-Dedicated) SIP-Compatible SFP/Uplink Modules (As required) 24 ports, PoE+ budget ≥ 370W, LLDP-MED, QoS Standards-compliant 1G/10G. <ul style="list-style-type: none"> <li>This item is optional and shall be considered only if required after site assessment. Existing Cisco switches shall be primarily used.</li> <li>Includes installation &amp; configuration</li> </ul>	4	Nos



2. Installation & Commissioning Charges			
S. No.	Description	Qty.	UOM
<b>CAT6A and Rack side components wherever applicable</b>			
2.01	Category 6A 4 pair UTP Cable 305m Laying	10	Box
2.02	Category 6A Information Outlet for Field Side Fixing	140	Nos

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2.03	Category 6A 24 Port Patch Panel Termination	12	Nos
2.04	Dual Face Plate With Back Box Fixing	70	Nos
<b>PVC and Conduits</b>			
2.05	25mm PVC Pipe Laying	50	Mtrs
2.06	32mm PVC Pipe Laying	50	Mtrs
2.07	32mm Casing Capping Laying	1500	Mtrs
2.08	25mm Casing Capping Laying	2000	Mtrs
<b>Others</b>			
2.09	<b>Enterprise IP Telephony Core installation and configuration etc.</b>	1	Nos
2.10	<b>Voice Gateway &amp; PSTN integration etc installation and configuration</b>	1	Nos
2.11	<b>Softphone Licenses installation, configuration and operationalising</b>	50	Nos
2.13	<b>SIP enabled IP Phone (Executive Class Model) installation, configuration etc</b>	5	Nos
2.14	<b>SIP enabled General IP Phone installation. Configuration etc</b>	50	Nos
2.10	Comprehensive Annual maintenance Support for 4th year	1	Year
2.11	Comprehensive Annual maintenance Support for 5th year	1	Year



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Annexure – II

**Technical Specifications / Compliance**

(The following Technical Specifications Compliance shall be furnished and signed copy to be submitted by all bidders. Preferred makes indicated for benchmark purposes only. Equivalent or superior makes meeting Annexure-II specifications shall be permitted.)

**Category-6A\* 4 pair UTP Cable 305m \* ( All passive components including cable, IO, patch cords, patch panels shall be Category-6A end-to-end.)**

**Make:** D-Link, CommScope, SYSTIMAX, AMP, R&M, AKSH

**Quoted Make & Model :** \_\_\_\_\_

S.No	Description	Minimum Specification	Compliance (Yes/No)
1	Features	Category 6A Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1 Class E with 4-connector Channel	
2		Category 6A UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.	
3		Third party verified by Intertek Testing Services (ETL) ETL verified electrical transmission performance to the requirements of ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1Class E with 4-connector channel	
4		All Category 6 cables shall meet or exceed the following characteristics:	
<b>Mechanical Characteristics</b>			
5	Construction	4 twisted pairs separated by internal X shaped, 4 channel, full separator. Half shall not be accepted.	
6	Conductor diameter	23 AWG	
7	Insulation	High density Polyethylene	
8	Pairing	Twisted into two core	
9	No. of Pair	4 Pair twisted together	
10	Jacket Material	FR-PVC	
11	Color of sheath	Grey	



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S.No	Description	Minimum Specification	Compliance (Yes/No)
12	Rip Cord	Yes	
13	Sequential meter marking	Yes	
14	Temperature Rating	(- 20 to +70 C)	
15	Filler Required	Yes	
16	Packing	305 Mtrs.	
17	Flame Properties	Flammability Test – IEC 60332-1	
18	Certification	UL Listed & ETL verified electrical transmission performance to the requirements of ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1Class E with 4-connector channel	

\*Category 6a 4 pair UTP cable 305m as per ISO/IEC 11801-1:2017, IEC 61156-5 and ANSI/TIA-568.2-D. All passive components including cable, IO, patch cords, patch panels shall be Category-6A end-to-end.

**Category 6A Information outlet for Field Side**

**Make:** D-Link, Commscope, Systimax, AMP, R&M, AKSH

**Quoted Make:** \_

S.No	Description	Minimum Specification	Compliance (Yes/No)
1	RJ 45 Jack	Housing: Polycarbonate, UL94V-2 rated With Optional Color	
2		Contact Material: Phosphor Bronze with Nickel plated	
3		Contact Plating: 50 micro-inch Gold plated on plug contact area	
4		Insertion Cycle: Minimum 750 insertion Cycles	
5	IDC Connector	Housing: Polycarbonate, UL94V-2rated	
6		IDC Contact Plating: Phosphor bronze with tin plated	
7		IDC CAP: Polycarbonate, UL 94V-2	
8		IDC Life: 200-times min.	
9		Wire Accommodation: 22-24 AWG standard and solid wire	
10	Standards	ISO/IEC 11801, ANSI/TIA-568. C. 2, ISO/IEC 60603-7	
11	Temperature Range	Operating Temperature: -10°C to 60°C	
12		Storage Temperature: -40°C to 70 °C	
13	Certification	UL Listed & ETL verified electrical transmission performance to the requirements of ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1Class E with 4-connector channel	



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**Category 6A UTP Patch Cord 1 Meter**

**Make:** D-Link, CommScope, SYSTIMAX, AMP, R&M, AKSH

**Quoted Make:** \_

S.No	Description	Minimum Specification	Compliance (Yes/No)
1	Features	Category 6A Equipment cords – 1Mtr	
2		Patch cord should be ETL VERIFIED TO ANSI/TIA-568.2-D CATEGORY 6a	
3		Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.	
4	Mechanical Characteristics	Conductor size: 24 AWG stranded bare copper	
5		Outer diameter: 6.0mm+/-0.2mm nominal	
6		Jacket: FR-PVC	
7		Operating life: Minimum 750 insertion cycles	
8		Contact blade: Copper Alloy	
9	RJ-45 Plug and Boot Material	Clear Polycarbonate for RJ-45 plug & Clear PVC for Boot	
10	Flame Properties	Flammability Test – IEC 60332-1	
11	Bending Radius	4 X Cable Diameter	
12	Certification	ETL verified electrical transmission performance to the requirements of ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1Class E with 4-connector channel	

**Category 6A UTP Patch Cord 2 Meter**

**Make:** D-Link, Commscope, Systimax, AMP, R&M, AKSH

**Quoted Make:** \_

S.No	Description	Minimum Specification	Compliance (Yes/No)
1	Features	Category 6A Equipment cords – 2Mtr	
2		Patch cord should be ETL VERIFIED TO ANSI/TIA-568.2-D CATEGORY 6A	
3		Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.	



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S.No	Description	Minimum Specification	Compliance (Yes/No)
4	Mechanical Characteristics	Conductor size: 24 AWG stranded bare copper	
5		Outer diameter: 6.0mm+/-0.2mm nominal	
6		Jacket: FR-PVC	
7		Operating life: Minimum 750 insertion cycles	
8		Contact blade: Copper Alloy	
9	RJ-45 Plug and Boot Material	Clear Polycarbonate for RJ-45 plug & Clear PVC for Boot	
10	Flame Properties	Flammability Test – IEC 60332-1	
11	Bending Radius	4 X Cable Diameter	
12	Certification	ETL verified electrical transmission performance to the requirements of ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1Class E with 4-connector channel	

**Category 6A Information outlet for Rack Side**

**Make:** D-Link, CommScope, SYSTIMAX, AMP, R&M, AKSH

**Quoted Make:** \_

S.No	Description	Minimum Specification loop	Compliance (Yes/No)
1	RJ 45 Jack	Housing: Polycarbonate, UL94V-2 rated With Optional Color	
2		Contact Material: Phosphor Bronze with Nickel plated	
3		Contact Plating: 50 micro-inch Gold plated on plug contact area	
4		Insertion Cycle: Minimum 750 insertion cycles	
5	IDC Connector	Housing: Polycarbonate, UL94V-2rated	
6		IDC Contact Plating: Phosphor bronze with tin plated	
7		IDC CAP: Polycarbonate, UL 94V-2	
8		IDC Life: 200-times min.	
9		Wire Accommodation: 22-24 AWG standard and solid wire	
10	Standards	ISO/IEC 11801, ANSI/TIA-568. C. 2, ISO/IEC 60603-7	
11	Temperature Range	Operating Temperature: -10°C to 60°C	
12		Storage Temperature: -40°C to 70 °C	
13	Certification	UL Listed & ETL verified electrical transmission performance to the requirements of ANSI/TIA-568.2-D CAT6A and ISO/IEC 11801-1Class E with	



*[Handwritten signatures and marks]*

		4-connector channel	
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**Dual Face Plate With Back Box**

**Make:** D-Link, CommScope, SYSTIMAX, AMP, R&M, AKSH

**Quoted Make:** \_

S.No	Description	Minimum Specification	Compliance (Yes/No)
1	Features	Square plate, 86mmx86mm, Port - Single / Dual / Quad as per req.	
2		Write on labels in transparent plastic window – supplied with plate	
3		Screw hole covers – to be supplied with plate	
4		Face Plate with shutter	
5		Face Plate material: ABS with white Color	
6		Should be able to support variety of jacks – UTP	

**Enterprise Call Control Server / Unified Communications Manager Platform (On premise Appliance / server based EPBX solution)**

**Make:**

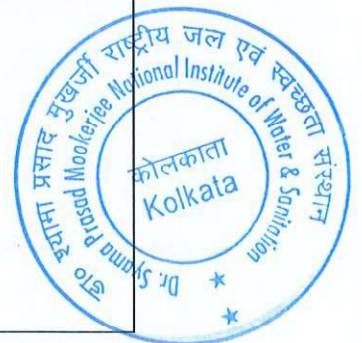
**Quoted Make:**

Description:

An enterprise-grade IP Telephony Call Control platform capable of managing SIP-based unified communications for a minimum of 256 users/devices. Initially it is estimated that 256 licenses will be required.

**A. Enterprise IP Telephony Core Infrastructure**

Sl. No.	Item Description	Minimum Technical Specifications	Compliance (Yes/No)
1	<b>Enterprise IP Telephony Core Call Control Manager Platform Infrastructure</b> (supporting SIP-based call processing, minimum 256 user/device licenses)- all inclusive for <b>on-premise</b> appliance based/ server based deployment solution;	SIP PBX; supports ≥ 256 extensions; clustering; voicemail; IVR; SRTP/TLS security;	



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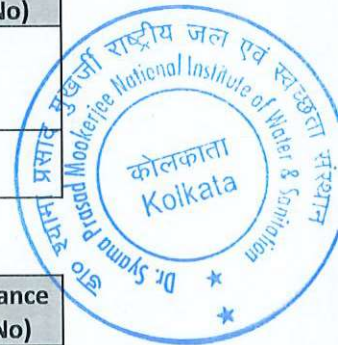
	*Licensing shall be perpetual / enterprise-grade with full features enabled.		
2	<b>Voice Gateways &amp; PSTN Integration</b> (VoIP Voice Gateway / Session Border Controller supporting SIP trunking with 100 concurrent sessions, PSTN/VoIP interworking, and enterprise telephony features-Appliance/ server-based solution includes everything applicable. Gateway + SBC . SBC may be integrated or standalone. All inclusive for on-premise appliance based/ server based deployment solution; *Licensing shall be perpetual / enterprise-grade with full features enabled.  * Including VoIP Monitoring Tool (MOS, jitter etc.) as applicable.	SIP-based unified communication license pack; includes Call Control, Voicemail, IVR; min. 256 user extension support	
3	Softswitch / Call Manager Application	SIP proxy, registrar, presence server; supports IP Phone Directory, LDAP/AD integration; codec support (G.711, G.722, Opus) as per requirements.	

**B. Voice Gateways & PSTN Integration**

Sl. No.	Item Description	Minimum Technical Specifications	Compliance (Yes/No)
4	Enterprise Voice Gateway	Supports SIP Trunk + FXO/FXS; min 4 FXO/FXS; TLS, SRTP; failover routes	
5	Analog Phone Adapter (If Required)	2-4 port FXS gateway, SIP enabled	

**C. IP Phones (User Endpoints)**

Sl. No.	Item Description	Minimum Technical Specifications	Compliance (Yes/No)



*[Handwritten signatures and initials]*

6	Executive IP Phone	≥ 4 line keys; color display; Gigabit Ethernet; PoE; HD Voice	
7	General User IP Phone	≥ 2 line keys; monochrome display; Gigabit Ethernet; PoE	
8	Operator / Reception Console	≥ 8 line keys; expansion module support	

**D. SIP Soft Clients**

Sl. No.	Item Description	Minimum Technical Specifications	Compliance (Yes/No)
9	Softphone Licenses (As required) *Licensing shall be perpetual / enterprise-grade with full features enabled. Softphone licenses (as required / included in solution quote)	Windows/Android/iOS; presence, video calling, chat; SRTP enabled	

**E. Networking Components for VoIP (This item is optional and shall be considered only if required after site assessment. Existing Cisco switches shall be primarily used.)**

Sl. No.	Item Description	Minimum Technical Specifications	Compliance (Yes/No)
12	PoE+ Enabled Access Switch (VoIP-Dedicated)	24 ports, PoE+ budget ≥ 370W, LLDP-MED, QoS	
13	SIP-Compatible SFP/Uplink Modules (As required)	Standards-compliant 1G/10G	

**F. Security, Monitoring & Management**

Sl. No.	Item Description	Minimum Technical Specifications	Compliance (Yes/No)
14	Session Border Controller (SBC) – includes Software, Hardware *SBC may be integrated or standalone, provided all listed security and interworking features are met.	TLS/SRTP termination; SIP normalization; DoS protection for VoIP	
15	VoIP Call Quality Monitoring Tool	MOS scoring, jitter/packet loss analysis; dashboard reports	



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ANNEXURE – III

**Manufacturer Authorization Form**

(To be individually provided for Switch, Passive OEMs in its letter head)

To,  
Director & Head  
SPM-NIWAS, D.H. Road,  
Joka, Kolkata-700 104

Tender No: A-39022/26/2026-SPM-NIWAS-DDWS (31482)

Subject: Manufacturer Authorization Form for <Active/Passive Components/Switches>

Dear Sir,

We, M/s \_\_\_\_\_ an established and reputable manufacturer of **<Active/Passive Components/ Switches/ VoIP Devices/ VoIP Call Manager and associated components>** (strike-off not applicable items) having its office at \_\_\_\_\_ do hereby authorize M/s \_\_\_\_\_ registered at \_\_\_\_\_, hereinafter, the "Bidder" to the offer their quotation, negotiate and conclude the contract with you against the above tender.

We hereby extend our warranty as per the terms and conditions of our offer to Bidder for the Hardware/ Software related supply, installation, commissioning, services and support against above referred tender.

We also undertake the below mentioned Toll-free number is available for SPM-NIWAS to contact and get the required technical support.

Toll-Free Number: \_\_\_\_\_

Details of OEM representative providing the MAF:

Name: \_ Designation: \_\_\_\_\_ Contact No.: \_\_\_ Address: \_\_\_\_\_

Thanking You,

For <OEM Name>,

Sign and Seal



To be filled by Bidder- sign, scan in pdf format and upload the same in the portal

*[Handwritten signatures and marks]*

Annexure – A

DECLARATION

I/we .....

have gone through carefully all the Bid conditions and solemnly declare that I / we will abide by any penal action such as disqualification or black listing or termination of contract or any other action deemed fit, taken by, the SPM-NIWAS/ Department against us, if it is found that the statements, documents, certificates produced by us are false / fabricated.

I / we hereby declare that, I / We have not been blacklisted / debarred / Suspended / demoted in any department / organization of Government of India or in any State of India due to any reasons.

Signature of the Bidder with seal



*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

Annexure-B

Format for EMD Bank Guarantee

To  
The Director  
Dr. Syama Prasad Mookerjee - National Institute of Water and Sanitation (SPM-NIWAS)  
Diamond Harbour Road, Joka  
Kolkata - 700 104

Date: ..... [ Date of issue of BG] (To be filled by issuing bank) .....

BANK GUARANTEE No.: .....[ guarantee number] (To be filled by issuing bank)

BANK GUARANTEE Amount: Rs .....

Bid /RA No.:

Applicant / Bidder:

Guarantor: .... [ name and address of the issuing Bank] (To be filled by issuing bank)

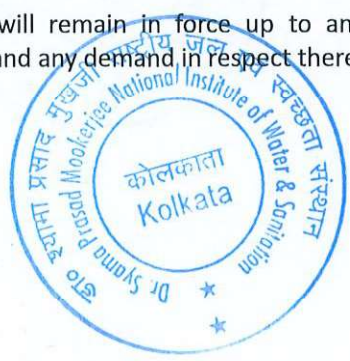
Whereas Applicant / Bidder is willing to submit its bid against above referred Bid / RA by the Beneficiary on behalf of The Director, SPM NIWAS (Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation), an autonomous institution under the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Ministry of Jal Shakti, Government of India for the supply of Goods and / or Services and as per Bid / RA conditions, Applicant is required to submit a Bank Guarantee as EMD.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of Rs. ....

1. If the Bidder withdraws or amends, impairs or derogates from the bid in any respect within the period of validity of this bid.
2. If the Bidder having been notified of the acceptance of his bid by the Purchaser during the period of its validity.
  - If the Bidder fails to furnish the Performance Security for the due performance of the contract.
  - Fails or refuses to execute the contract.

We undertake to pay the Beneficiary up to the above amount upon receipt of its first written demand, without the Beneficiary having to substantiate its demand, provided that in its demand the Beneficiary will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of bid validity up to Rs..... and any demand in respect thereof should reach the Bank not later than the above date.



Dated .....

For.....  
(Indicate the name of the Bank)

Signature.....

Name of the Officer.....

*[Handwritten signatures]*

Designation of the officer .....  
Code no .....  
Name of the Bank and Branch.....



*Handwritten signature*

*Handwritten signature*

*Handwritten signature*

Annexure-C

Bank Guarantee Format for Performance Security

To  
The Director  
Dr. Syama Prasad Mookerjee - National Institute of Water and Sanitation (SPM-NIWAS)  
Diamond Harbour Road, Joka  
Kolkata - 700 104

Date: ..... [ Date of issue of BG] (To be filled by issuing bank) .....

PERFORMANCE BANK GUARANTEE No.: .....[ guarantee number] (To be filled by issuing bank)

PERFORMANCE BANK GUARANTEE Amount: Rs .....

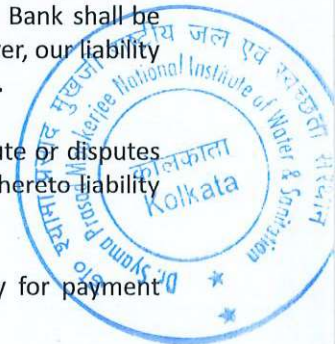
Contract No.:

Bid Number:

Applicant / Seller:

Guarantor: .... [ name and address of the issuing Bank] (To be filled by issuing bank)

1. The Applicant / Seller named above has entered into above referred contract with the Beneficiary on behalf of The Director, SPM NIWAS (Dr. Syama Prasad Mookerjee National Institute of Water and Sanitation), an autonomous institution under the Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Ministry of Jal Shakti, Government of India, for the supply of Goods and / or Services as defined in the said contract. According to the conditions of the Contract, a performance security is required to be furnished by the Seller to the Beneficiary for due performance of the contract.
2. At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of Rs....., upon receipt by us of the Beneficiary's demand stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.
3. We do hereby undertake to pay the amount due and payable under this Guarantee without any demur, merely on a demand from the Beneficiary / Government. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. ....
4. We undertake to pay the Government any money so demanded not withstanding any dispute or disputes raised by Seller(s) in any suit or proceeding pending before any Court or Tribunal relating thereto liability under this present being absolute and unequivocal.
5. The payment so made by us under this Bond shall be a valid discharge of our liability for payment thereunder and the Seller (s) shall have no claim against us for making such payment.



6. We further agree that the Guarantee here in contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract including Guarantee/Warranty period and for a further period of three months thereafter and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.
7. We further agree with Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and condition of the said Contractor to extend time of performance by the said Seller(s) from time to time or to postpone any time or from time to time powers exercisable by the Government against the said Seller(s) and to forbear or enforce any of the terms and condition relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or only extension being granted to the said Seller(s) or for any forbearance, act or omission on the part of the Government or any indulgence by the Government to the said Seller(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
8. Notwithstanding anything contained herein above our liability under the Guarantee is restricted to **Rs.** ..... and shall remain in force until.....(the date of expiry of the guarantee).
9. This Guarantee will not be discharge due to be change in the constitution of the Bank or the Seller (s).
10. We lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Government in writing.

Dated .....

For.....  
(Indicate the name of the Bank)

Signature.....

Name of the Officer.....

Designation of the officer .....

Code no .....

Name of the Bank and Branch.....

