



**Bharat Sanchar Nigam Limited**  
(Electrical Wing)

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**E-TENDER DOCUMENT**

**Name of work:** Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area

**NIT No.:** 70/BSNL/EDT/2023-24 DT 13.03.2024

This tender document contains **pages (37: Thirty Seven)** pages only

**For E Tender Helpdesk Pls Contact: [https:// etenders.gov.in](https://etenders.gov.in).**

**Ph: 0120-4200462/4001002/4001005/6277787**

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**CHECK LIST FOR THE TENDERER**

**IMPORTANT NOTE:** Before on line submission of tender document, contractor must verify the check list properly.

<b><u>Technical &amp; Commercial Bid/Financial Bid</u></b>			
<b><u>NAME OF THE VENDOR</u></b>			
<b><u>Sl. No</u></b>	<b><u>Description</u></b>	<b><u>Submitted/Uploaded Yes/No</u></b>	<b><u>Detail of document Submitted/Uploaded</u></b>
1.	The intending bidder has to fill all the details such as Banker's name, Demand Draft/Fixed Deposit Receipt /Pay Order/ Banker's Cheque /Bank Guarantee number, amount and date		
	a)Cost of Bid Document: Demand draft amounting to Rs. 590/- (inclusive of GST) drawn in favour of " <b>Accounts Officer (Cash), O/o GM, BSNL, Nellore</b> " payable at <b>Nellore</b> , (Demand Draft only). The same shall be scanned & uploaded in the e-tendering website within the period of tender submission. The validity of the tender cost in the form of DD shall be 60 days from the date of opening		
	<b>b) EMD</b> -amounting <b>Rs. 10,989/-</b> in the form of demand draft/FDR/ BG (As per format at Annexure-I) (BG is only for Air Conditioning, Diesel Engine Alternator, Lifts, and Sub Station works wherever the amount of EMD is more than Rs.20,000)/ CDR of a nationalized/scheduled bank guaranteed by the Reserve Bank of India, drawn in favour of " <b>Accounts Officer (Cash), O/o GM, BSNL, Nellore</b> " The same shall be scanned & uploaded in the e-tendering website within the period of tender submission. The validity of the EMD in the form of DD shall be 60 days from the date of opening. If the EMD is in the form of CDR/FDR/BG, the validity shall be <b>120 days</b> from the <b>date of opening</b> . In case of L1 bidder, the validity of CDR/FDR/BG is to be extended up to the observation period as that of the Performance guarantee / Security deposit. <b>c) Exemption from payment of Tender Fee, Earnest Money and Security Deposit by any other unit/ department shall not hold good for BSNL.</b>		
2	Self-attested Copy of PAN card.		
3	Self-attested Copy of valid GST registration		
4	Self-attested Copy of CA certificate with proper UDIN Number for turnover.		
5	Self-attested copy of EPF Registration certificate		
6	Self-attested copy of ESI Registration certificate		
7	Self attested copy of BSNL enlistment memorandum		

8	Self attested copy of electrical license		
9	The tenderer should give a certificate that none of his/her relative is employed in BSNL units.(In the format as given in Form D)		
10	Duly filled and signed undertaking regarding EPF and ESI Provisions (In the format as given in Form B)		
11	Duly filled and signed Undertaking and to abide by EW6 and EW 8 (In the format as given in Form A).		
12	Deviation if any in Technical & Commercial Bid of NIT will be given by the firm on its letter head duly signed & same shall be uploaded. In the absence of such letter it will be assumed that there are no deviations.		
13	Undertaking that I have read/Understood all the terms and conditions as mentioned in bid Document and accept the same unconditionally. It is certified that the Tender Document i/c all credentials has been re uploaded with Digital Signature.		
14	Compliance Statement as per page no.34		
<p>• <b>Tender Document should be downloaded and Uploaded again with Digital Signature.</b>  <b>For E Tender Helpdesk Pls Contact: <a href="https://etenders.gov.in">https:// etenders.gov.in</a>.</b>  <b>Ph: 0120-4200462/4001002/4001005/6277787</b>  <b>Mail id:support-eproc@nic.in</b></p>			

**Scope of work:**

- 1) BSNL is going to install 4G equipment in different existing mobile sites replacing the old equipment. The existing equipment earthing connected to mobile equipment, tower body and tower lightning conductor needs to be improved and to be brought below one ohm value.
- 2) This has to be achieved by providing additional single plate GI earthing or 4 plate GI earthing or Chemical earthing as per individual site soil condition/ space availability/ existing earth value. This additional earthing provided is to be connected in parallel to the existing earthing in the site to bring down the value to below one ohm. The decision on the type of earth electrode to be provided at each site will be taken by the Engineer in Charge
- 3) The improved earth values are to be measured by the vendor in the presence of designated BSNL officers initially. At a later date (within the period of one to 12 months) the earth readings will be verified by the 4G mobile equipment supplier and the earthing Vendor has to offer the earth reading measurement again at his own cost. Watering of earth pits as per site requirement at the time of second measurement has to be arranged by the vendor at his own cost.
- 4) The list of sites is likely to change as per BSNL commissioning schedule. The new locations are likely to be situated within the same Business Area or Operational Area / Adjacent Operation Area within the same Business Area. The Bidder has to carry out the work at the new locations at the same rates / terms and conditions of the agreement.

Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR E-TENDERING FORMING  
PART OF NIT AND TO BE POSTED ON WEBSITE**

The **Executive Engineer (Electrical), BSNL Electrical Division , Tirupati** on behalf of the CMD, BSNL invites online Item rate bids from eligible bidders in Single bid system for the following work:

1	Name of work	<b>Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur &amp; DE Sullurpeta Area</b>
2	Estimated cost put to tender	<b>Rs 5,49,467/-</b>
3	Earnest Money	<b>Rs 10,989/-</b>
4	Period of completion	<b>One Month.</b>
5	Tender Fee(Non-refundable)	<b>Rs.590/-</b>
6	Bid validity	<b>90</b> days
7	Last date & time for online submission of tender	<b>Up to 15.00 Hrs. On 23.03.2024</b>
8	Date and time for opening of tender	<b>15.30 Hrs. On 25.03.2024</b>
9	Time allowed for submission of hard copies of Tender cost and EMD instruments & eligibility criteria	Bidders have to furnish hard copies to O/o Executive Engineer(E).within <b>3</b> days after the “Last date & time for online submission of tender” .

### **ELIGIBILITY CRITERIA**

**The bidders satisfying the following conditions shall be eligible to bid:**

- ❖ **Financial : Average annual turnover during the last 3 years, ending 31st March of the previous financial year, should be at least 30% of the estimated cost put to tender.**

**And**

- ❖ **Physical:**

1. **BSNL Enlisted contractors in Electrical category.**

**Or**

2. **Experience of having successfully completed similar works (Similar work stands for Supplying, installation, testing, commissioning of Earthing and Connected works in Central Government /State Government /Central Autonomous Body/Central Public sector undertaking during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following**

- a) **Three similar completed works each costing not less than the amount equal to 40% of the estimated cost.**

**OR**

- b) **Two similar successfully completed works each costing not less than the amount equal to 60% of the estimated cost put to tender**

**OR**

- c) **One similar successfully completed work costing not less than the amount equal to 80% of the estimated cost put to tender.**

**Note: The tenderer has to upload satisfactory work completion certificates signed by an officer not below the rank of Executive Engineer. "Schedule of work" of all such works are also to be uploaded to indicate the inclusion of "Earthing works" in their executed scope of works.**

### **IMPORTANT NOTE:**

1. **Tender Document should be downloaded and Uploaded again with Digital Signature.**
2. **The self-attested copies of the following documents shall be scanned and uploaded to the e-tendering website within the period of tender submission.**
  - a. Tender Fee in the prescribed format
  - b. EMD in the prescribed format
  - c. Certificate of Financial Turnover from Chartered Accountant
  - d. Documents fulfilling Eligibility criteria as per form-C
  - e. Enlistment certificate issued by BSNL
  - f. Electrical license issued by state Govt.
  - g. GST Registration details
  - h. PAN Card
  - i. EPF and ESI Registration certificate
  - j. Undertaking to abide by EW-6 and EW-8 (Form 'A')
  - k. Undertaking regarding EPF and ESI provisions (Form 'B')
  - l. Undertaking regarding No Near relative working certificate (Form 'D')
  - m. **Self declaration** that I have read/Understood all the terms and conditions as mentioned in bid Document and accept the same unconditionally. It is certified that the Tender Document i/c all credentials has been re uploaded with Digital Signature.
  - n. **Compliance Statement as per page no.34**

**Not uploading the above documents in CPPP, (even if the documents are submitted physically) shall lead to disqualification.**

The original instruments for Tender Fee, EMD, (the scanned copies of which are uploaded) shall be submitted to the office of tender opening authority, by all the bidders **within 3 days** of bid submission end date failing which, the tender bid (if already opened on basis of scanned copies uploaded in 1st electronic Envelope i.e. Technical Envelope), shall be rejected

## **BSNL EW-6**

Bharat Sanchar Nigam Limited  
Electrical Wing

Electrical Division: **TIRUPATI**

Sub Division: **NELLORE**

1. Item rate tenders on single bid system are invited on behalf of CMD,BSNL for the work **“Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area”** from the eligible bidders as per NIT notification.
2. Intending bidder is eligible to submit the bid provided that he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority as per the eligibility conditions mentioned in the NIT notification page.
3. The work is estimated to cost **Rs 5,49,467/-**
4. Agreement shall be drawn with the successful bidder on prescribed form as amended up to the date of opening of tender. Bidder shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
5. The time allowed for carrying out the work will be **One Month** from the 10<sup>th</sup> day after the date of written order to commence the work.
6. The site for the work is available / or the site for the works shall be made available in parts. The successful bidder shall execute the work in coordination with other agencies working in the campus.
7. The bid documents consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website **<https://etenders.gov.in/eprocure/app>** free of cost. Standard BSNL EW-6/8 form is available on BSNL website.
8. After submission of the bid, the bidder can revise the bid any number of times but before last time and date of submission of tender as notified. While submitting the revised bid, bidder can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items)
9. The Tender Fee in the form of Demand Draft issued by the Nationalized / Scheduled bank authorized by the Reserve Bank of India, drawn in favour of **Accounts Officer (Cash), O/o GMTD, BSNL, Nellore** payable at **Nellore**. The same shall be scanned & uploaded in the e-tendering website within the period of tender submission. The validity of the tender cost in the form of DD shall be **60 days** from the date of opening.
10. The Earnest money deposit (EMD) in the form of Demand Draft / FDR / BG (BG is only for Air Conditioning, Diesel Engine Alternator, Lifts, and Sub Station works wherever the amount of EMD is more than Rs.20,000)/ CDR of a nationalized / scheduled bank authorized by the Reserve Bank of India, drawn in favour of **Accounts Officer (Cash), O/o GM, BSNL, Nellore** payable at **Nellore** shall be scanned & uploaded in the e-tendering website within the period of tender submission. The validity of the EMD in the form of DD shall be **60 days** from the date of opening. If the EMD is in the form of CDR/FDR/BG, the validity shall be **120 days** from the date of opening. In case of L1 bidder, the validity of CDR/FDR/BG is to be extended up to the observation period as that of the Performance guarantee / Security deposit. Exemption from payment of Tender Fee, Earnest Money and Security Deposit by any other unit/ department shall not hold good for BSNL.
- ~~11. Interested bidder who wishes to participate in the bid shall pay the e tender processing fee to M/s. ITI Limited through their e gateway by credit/debit card/ internet banking/ RTGS/NEFT facility. (Clause Deleted)~~
12. All the documents as specified in the tender document shall be scanned and uploaded to the e-Tendering website within the period of bid submission.



13. The last date for online submission of bid is **23.03.2024**-up to **15.00 Hrs.** and the bid submitted shall be opened at **25.03.2024** on **15.30** Hrs If a holiday is declared on the tender opening day, the tender will be opened on the next working day.
14. The tender cost is non-refundable.
15. **Performance Guarantee:** The bidder is required to furnish Performance guarantee for an amount equal to **5%** of the contract value in the form of bank guarantee/CDR/FDR/DD (of a Nationalized/ Scheduled Bank in a standard format) within **ten days** from the date of issue of acceptance letter ( **APO-Advance purchase order** ). This period can be further extended by the Engineer-in-charge up to a maximum period of two weeks on written request of Bidder. **The validity period of the performance security in the form of performance bank guarantee/CDR/FDR shall be: Three Months from the date of actual completion of work, for AMC works; and One year from the date of actual completion of work for all other works.** The award letter (PO) shall be issued only after receipt of the performance guarantee. In case the bidder fails to deposit the said performance guarantee within the stipulated period, including the extended period if any, BSNL will be at liberty to disqualify the bidder from bidding for any contract with BSNL for a period of one year from the date of disqualification as may be notified by BSNL (without Prejudice to BSNL's rights to claim damages or any other legal recourse).
16. **Security Deposit:** In addition to Performance guarantee stated above, a sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum is deducted with the sum already deposited as earnest money, will amount to security deposit of 5% of the contract value of the work. **The security deposit shall be released after an observation period as follows: Three Months from the date of actual completion of work, for AMC works; and One year from the date of actual completion of work for all other works.**
17. In case any discrepancy is noticed in the documents as uploaded at the time of submission of the bid online, then the bid submitted shall become invalid and the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further, the bidder shall not be allowed to participate in the retendering process of the work.
18. Intending bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders, the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the BSNL and local conditions and other factors having a bearing on the execution of the work.
19. The competent authority on behalf of the CMD does not bind himself to accept the lowest or any other tender and reserves to himself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected. The competent authority on behalf of CMD reserves to himself the right of accepting the whole or any part of the tender and the bidder shall be bound to perform the same at the rate quoted.
20. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the bidders who resort to canvassing will be liable to rejection.

21. Agreement shall be drawn with the successful bidder on prescribed form. Bidder shall quote his rates as per various terms and conditions of the said form, which will form part of the agreement.
22. The bidder should give a certificate as per the following that none of his/her relative is employed in BSNL units as per **Form 'D'**. In case of proprietorship firm, certificate will be given by the proprietor. For partnership firm certificate will be given by all the partners and in case of limited company by all the Directors of the company excluding Government of India/ Financial institution nominees and independent non-Official part time Directors appointed by Govt. of India or the Governor of the state and full time Directors of PSUs both state and central. Due to any breach of these conditions by the company or firm or any other person the tender will be cancelled and Bid Security will be forfeited at any stage whenever it is noticed and BSNL will not pay any damage to the company or firm or the concerned person.
  - a. Near relatives of all BSNL employees either directly recruited or on deputation are prohibited from participation in tenders and execution of works in the different units of BSNL. The near relatives for this purpose are defined as:
    - i. Members of a Hindu Undivided family.
    - ii. They are husband and wife.
    - iii. The one is related to the other in the manner as father, mother, son(s) & son's wife(daughter-in-law), Daughter(s) & daughter's husband(son-in-law), brother(s) & brother's wife, sister(s) & sister's husband(brother -in-law).
  - b. The company or firm or any other person is not permitted to tender for works in BSNL unit in which his near relative(s) is(are) posted. The unit is defined as SSA/Circle/Chief Engineer/Chief Archt./Corporate office for non-executive employees and all SSA in a circle including circle office/Chief Eng./Chief Archt./Corporate office for executive employees (including those called as Gazetted officers at present). The bidder should give a certificate that none of his/her such near relative is working in the units as defined above where he is going to apply for tender/work, for proprietorship, partnership firms and limited company certificate shall be given by the authorized signatory of the firm. Any breach of these conditions by the company or firm or any other person, the tender/work will be cancelled and earnest money/performance guarantee will be forfeited at any stage whenever it is so noticed. BSNL will not pay any damages to the company or firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.
  - c. No employee in BSNL/ Govt. of India is allowed to work as a contractor for a period of two years of his retirement from service without the prior permission. The contract is liable to be cancelled if either the bidder or any of his employees is found at any time to be such a person who had not obtained the permission as aforesaid before submission of tender and engagement in the bidders service.
23. The tender for the work shall remain open for acceptance for a period of **Ninety(90) days** from the date of opening of tenders. If any bidder withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the BSNL, then the BSNL shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
24. The agency has to comply with the provisions of EPF and miscellaneous provisions Act-1952 and employees provident fund scheme-1952 as amended up to date in respect of labours/employees engaged by them for this work. Any consequence arising due to non-complying of provisions as specified above shall be the sole responsibility of the firm only. The agency shall give an undertaking to this effect as per **Form 'B'**.

25. **Extension of Validity of tender:** In case, where the letter of award of work cannot be placed within the validity period of the tender, the BSNL can request the bidder to extend the validity of their respective tenders and the Earnest Money deposit by a reasonable period. In such cases, extension of validity of Earnest Money deposit by 30 days beyond the extended validity date of tender should also be asked for. While BSNL can make the request for extension, the tenderer is free to either extend the validity or refuse the request to extend the validity.
26. Rates quoted by the contractor shall be firm and shall be valid for the currency of contract. No cost escalation shall be permitted during the currency of contract.
27. This notice inviting tender shall form a part of the contract document. The successful bidder, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
  - a. The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender, subsequent amendments issued and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
  - b. Standard BSNL EW-6/8 form is available on BSNL website.

## **General Instructions to the Bidders**

1. The intending bidder must read the terms and conditions carefully. He should only submit his bid, if he considers himself eligible and he is in possession of all the documents required.
2. Information and instructions for bidders posted on website shall form part of bid document.
3. Applicants are advised to keep visiting the above mentioned website from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.
4. Those bidders not registered on the website mentioned above, are required to get registered themselves beforehand. The intending bidder must have valid class-III digital signature to submit the bid.
5. Tender bidding methodology:- “ **Single bid system** ”
6. On opening date, the bidder can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
7. Bidder can upload documents in the form of JPG format or / and PDF format.
8. Bidder must ensure to quote rate of each item. The column meant for quoting rate in figures appears in yellow colour. In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as “0”. Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as “0” (ZERO)
9. Even though any bidder may satisfy the above requirements, he would be liable to disqualification if he has:
  - a. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
  - b. Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.
10. If any information furnished by the bidder is found incorrect at a later stage, he shall be liable to be debarred from tendering/taking up of works in BSNL. The BSNL reserves the right to verify the particulars furnished by the applicant independently.
11. GST and any other tax applicable in respect of this contract shall be borne by the bidder himself. The bidder shall quote his rates considering all such taxes. The TDS as per the Govt. regulations will be recovered from the contractor.
12. **Tender Evaluation :**
  - (a) The evaluation and comparison of responsive bids shall be done on the basis of **Net cost to BSNL** on the prices offered inclusive of packing, forwarding, freight and insurance charges etc, but excluding GST. The bid with lowest net cost as elaborated above will be the L1 bidder.
  - (b) Vendors should furnish the correct GST Rate in the price schedule. If the Input Tax Credit is found to be not admissible at any stage subsequently owing to wrong furnishing of GST Rate, then the vendors will be liable to refund such non-admissible amount, if already paid, along with penalty if charged by the concerned authority.

13. However, pursuant to the constitution (Forty-sixth amendment) act, 1982, if any further tax or levy is imposed by statute, after the last date of receipt of tenders, and the contractors there upon necessarily and properly pays such taxes/ levies, the contractor shall be reimbursed the amount so paid, provided such payment, if any, is not in the opinion of Superintending engineer (whose decision shall be final and binding) be attributable to delay in execution of work within the control of contractor.
14. The Contractor shall, within a period of 30 days of imposition of any further tax or levy in pursuant to the constitution of (Forty sixth amendment) act 1982 give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

**15. Bye laws Indemnity against liabilities:**

- a. The bidder shall comply with all bylaws and regulations of the local and statutory authorities having jurisdiction over the works and shall be responsible for payment of all fees and other charges and giving and receiving all necessary notices and keep the Engineer –in-charge informed about the notices issued and received.
- b. The bidder shall indemnify the department against all claims in respect of patent rights design, trademark or name of other protected rights in respect of any plant, machine, work or materials used for or in connection with the works or temporary works and from and against all claims demands, proceedings, costs, charges and expenses whatsoever in respect of or in relation thereto.
- c. The bidder shall defend all actions arising from such claims and shall himself pay all royalties, License fees, damages, costs and charges of all and every sort that may be legally incurred in respect hereof shall be borne by the bidder.
- d. All liabilities / penal recoveries on matters arising out of tax /levies such as incorrect deductions, discrepancies in the filing of returns, revised assessments by the concerned authorities etc., shall be borne by the bidder.

**16. Termination of contract on death of contractor :**

Without prejudice of any of the rights or remedies under this contract, if the contractor dies, the Engineer in charge on behalf of the BSNL shall have the option of terminating the contract without compensation to the contractor.

**17. Indulging of contractor in criminal /antisocial activities and cases under investigation/charge sheeted by CBI or any other government agencies etc. :**

If the CBI/Independent External Monitor (IEM) /Income tax/ Sales Tax /GST/ Central Excise/Custom Departments recommend such a course - Action will be taken as per the directions of CBI or concerned department.

18. As a general notion, the terms and conditions/instructions contained in various pages of this document are addressed assuming the bidder as 'Male'. However, the same shall remain and assumed to be addressed in case of 'Female' bidder also, except for the gender centric words, which shall be 'female' centric at appropriate places.

**FORM 'A'**

**Undertaking to abide by EW 6 & EW 8**

"I.....Son/Daughter of .....  
.....Resident of .....  
..... hereby give an undertaking that I have read the complete bid document and I am aware of all the clauses and sub clauses of BSNL EW 6 & 8 forms and I confirm that I will abide by all the terms and conditions available in BSNL EW 6 & 8 forms.

(Seal of the firm)

(Signature of Bidder)

**FORM 'B'**

**Undertaking regarding EPF provisions**

"I..... Son/daughter of  
..... Resident of  
..... hereby give an undertaking that

\* I/ We have registered as per the EPF and Miscellaneous provisions Act, 1952 and our registration no.\*\* is .....We undertake to keep it valid during the currency of contract.

In case at any stage, it is found that the information given by me is false / incorrect, BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me".

\*\*Attach a self-attested photo copy of the above said EPF registration certificate.

**(Seal of the firm)**

**(Signature of Bidder)**

**Undertaking regarding ESI provisions**

"I.....Son/daughter of  
..... Resident of  
..... hereby give an undertaking that

\* I/ We have registered as per the ESI and Miscellaneous provisions Act, 1948 and our registration no. \*\* is ..... We undertake to keep it valid during the currency of contract.

In case at any stage, it is found that the information given by me is false / incorrect, BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me".

\*\*Attach a self-attested photo copy of the above said ESI registration certificate.

**(Seal of the firm)**

**(Signature of Bidder)**

**FORM 'C'**

**Experience / Performance report of works by Other Departments.**

(Note: The following items shall generally form part of the report by other department in token of experience certificate).

1. Name of Agency
2. Name of work
3. Agreement no.
4. Final Value of Work Done
5. Date of start of work
6. Actual date of completion
7. Performance: Satisfactory / Not Satisfactory

Dated:

Executive Engineer or Equivalent

**FORM 'D'**

**No Near relative working certificate**

I..... Son/daughter of Shri/Smt  
..... Resident of.....hereby certify  
that none of my relative(s) as defined in the tender document is/are employed in BSNL  
unit as per details given in tender document. In case at any stage, it is found that the  
information given by me is false/incorrect, BSNL shall have the absolute right to take any  
action as deemed fit/without any prior intimation to me.

(Seal of the firm)

(Signature of Bidder)



**Annexure I**  
**MODEL FORM OF BANK GUARANTEE FOR EMD**  
**(For submitting EMD for Air Conditioning, Diesel Engine Alternator, Lifts, and Sub Station Works wherever the amount of EMD is more than Rs.20,000/-)**

Whereas \_\_\_\_\_ (hereinafter called "the bidder(s)") has submitted its Tender dated \_\_\_\_\_ for the work \_\_\_\_\_  
\_\_\_\_\_  
KNOW ALL MEN by these presents that WE \_\_\_\_\_ OF \_\_\_\_\_ having our registered office at \_\_\_\_\_ (hereinafter called "the Bank") are bound unto \_\_\_\_\_ (hereinafter called "the BSNL") in the sum of \_\_\_\_\_ for which payment will and truly to be made of the said BSNL, the Bank binds itself, its successors and assigns by these presents.

THE CONDITIONS of the obligation are:

1. If the Bidder(s) withdraws its Tender during the period of Tender validity specified on the Tender Form: or
2. If the Bidder(s) having been notified of the acceptance of its Tender by the BSNL during the period of Tender validity.
  - (a) Fails or refuses to execute the Contract.
  - (b) Fails or refuses to furnish security Deposit in accordance with the conditions of Tender document.

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

This guarantee will remain in force as specified in the Tender Document up to and including Thirty (30) days after the period of the Tender validity and any demand in respect thereof should reach the Bank not later than the specified date/dates.

**Signature of the Bank**

**Signature of the Witness**  
**Name of Witness**

**Address of Witness:**

**ANNEXURE II**  
**PERFORMANCE SECURITY GUARANTEE BOND**

In consideration of the CMD, BSNL (hereinafter called 'BSNL') having agreed to exempt \_\_\_\_\_ (hereinafter called 'the said bidder(s)') from the demand under the terms and conditions of an agreement/Advance Purchase Order No \_\_\_\_\_ dated \_\_\_\_\_ made between \_\_\_\_\_ and \_\_\_\_\_ for the supply of \_\_\_\_\_ (hereinafter called "the said agreement"), of security deposit for the due fulfilment by the said bidder (s) of the terms and conditions contained in the said Agreement, on production of the bank guarantee for \_\_\_\_\_ we, (name of the bank) \_\_\_\_\_ ( hereinafter refer to as "the bank") at the request of \_\_\_\_\_ (bidder(s)) do hereby undertake to pay to the BSNL an amount not exceeding \_\_\_\_\_ against any loss or damage caused to or suffered or would be caused to or suffered by BSNL by reason of any breach by the said Bidder(s) of any of the terms or conditions contained in the said Agreement.

2. We (name of the bank) \_\_\_\_\_ do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the BSNL by reason of breach by the said bidder(s)' of any of the terms or conditions contained in the said Agreement or by reason of the bidders(s)' failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of BSNL in these counts shall be final and binding on the bank. However, our liability under this guarantee shall be restricted to an amount not exceeding \_\_\_\_\_.

3. We undertake to pay to the BSNL any money so demanded notwithstanding any dispute or disputes raised by the bidder(s)/supplier(s) in any suit or proceeding pending before any court or tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the bidder(s)/supplier(s) shall have no claim against us for making such payment.

4. We(name of the bank) \_\_\_\_\_ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the BSNL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till \_\_\_\_\_ (office/BSNL) BSNL certifies that the terms and conditions of the said Agreement have been fully or properly carried out by the said bidder(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the expiry of TWO/TWO AND HALF/THREE YEARS (as specified in P.O) from the date hereof, we shall be discharged from all liabilities under this guarantee thereafter.

5. We (name of the bank) \_\_\_\_\_ further agree with the BSNL that the BSNL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said bidder(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the BSNL against the said Bidder(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Bidder(s) or for any forbearance, act or omission on the part of the BSNL or any indulgence by the BSNL to the said Bidder(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.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Bidder(s)/supplier(s).

7. We (name of the bank) \_\_\_\_\_ lastly undertake not to revoke this guarantee during its currency except with the previous consent of the BSNL in writing.

Dated the \_\_\_\_\_ day of \_\_\_\_\_

for \_\_\_\_\_ (indicate the name of bank)

### **SPECIAL CONDITIONS OF THE CONTRACT**

Please note that the offers, which do not comply with the following, will not be considered and will be totally rejected. These instructions supersede the BSNL / EW6 and EW 8 clauses, or any other clauses/conditions appearing elsewhere in the tender, in case of any Disparity.

- 1) Tenders with any condition including that of conditional rebates shall be rejected forthwith summarily.
- 2) Insurance, loading, unloading, transportation etc. should be included on works contract basis. The rates shall be firm and final.
- 3) The price shall be firm and fixed during the currency of the contract. No cost escalation is permitted. Clause 10CC is not applicable.
- 4) The Extension of time for completion of the works is governed by clause 2 of EW8.
- 5) No advance payments can be made. The payment is governed by the normal department practice and stipulations like levy of interest if payment is not made in a specified time are not acceptable.
- 6) The firm should deposit EMD before submission of their offer. The EMD of other works returnable to them cannot be adjusted against this work. The firm's offer shall be liable for rejection without fresh EMD for this particular work.

#### 1. CURRENCY OF CONTRACT: -

- a. The contract shall be valid till the Time of completion stipulated, including 25% deviation if any, after the date of its acceptance.
- b. BSNL does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the quoted rates during the currency of contract.

#### 3 INCREASE /DECREASE OF TENDERED QUANTITY

- a) BSNL will have the right to increase or decrease up to 25% of the Contract value depending upon the requirement of goods and services specified in the schedule of items without any change in the unit price or other terms and conditions at the time of award of contract.
- b) In exceptional situation where the requirement is of an emergent nature and it is necessary to ensure continued supplies from the existing vendors, the purchaser reserves the right to place repeat orders upto 50% of the quantity of goods and services contained in the running tender/contract during the currency of contract at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

#### 4. COMPLETION OF WORK:-

At the time of issuing NIT for a particular work, the time allowed for completion of work consistent with magnitude and urgency of work is specified. The time allowed for carrying out the work as entered in the contract is reckoned from the tenth day after the date on which the orders to commence the work are given to the Contractor.

The value of earth shall be measured at site after giving sufficient curing time. The value thus measured with date shall be written with legible paint on the back of the earth cover. The GPS enabled photo of earth measurement shall be forwarded to the SDE Incharge / Site In charge.

#### 5. TERMS OF PAYMENT:

- (I) No advance payment will be made. Stipulations like levy of interest if payment is not made in specified time are not acceptable to the BSNL.
- (II) No payment will be made for goods rejected at the site on testing. Payment, if made, for such items shall be recovered from subsequent bills or other bills.
- (III) The Bill will be processed in BSNL both at O/o Executive Engineer(E) , Tirupati and at MM cell of BSNL AP Circle Office, Vijayawada. The payment will be released by BSNL AP Circle Office based on ERP Workflow and as per the fund allotment process.

#### 6. EPF PROVISIONS:-

The agency has to comply with the provisions of EPF and miscellaneous provisions Act-1952 and employees provident fund scheme-1952 as amended up to date in respect of labours /employees engaged by them for this work. Any consequence arising due to non-complying of provisions as specified above shall be the sole responsibility of the firm only.

Agency has to observe all the labour rules & regulation in force. Agency shall be fully responsible for any violation observed at any time.

#### 7. EARNEST MONEY DEPOSIT

The firm should deposit EMD in proper form. The EMD of other works refundable to them cannot be adjusted against this work. The firm's offer shall be liable for rejection without EMD for this particular work. Firm has option to deposit earnest money in the form of Bank guarantee in BSNL's attached format and manner.

#### 8. PROGRAMME FOR EXECUTION

The List of sites will be given to the successful Bidder at the time of award of work. The firm shall supply detailed programme to Engineer in charge for execution of contract within **7 days** of award of work.

#### 9. STORES AND SAFETY

All the stores and materials required for the satisfactory completion of the work shall be arranged at work site by the contractor from his own source. Space for storing the same materials may be provided on request from the contractor. However safe custody of the material stores at site will be responsibility of the contractor.

#### 10. CO-ORDINATION AT SITE

At the site of work more than one agency may be working. Full cooperation shall be extended to other agencies during the progress of work. Further work shall be carried out in such a way so that it may not cause abnormal noise and hindrance to the officers of the BSNL engaged in erection as well as to normal routine work.

#### 11. COMPLETION DRAWINGS

The firm shall supply three sets of drawings/documents after completion of the work at each site. The Drawing shall indicate the location of Earth pit and the route of Earthing conductor to the Earth Bar.

#### 12. GUARANTEE & DEFECT LIABILITY

(a) The Guarantee shall be valid for a period of twelve months from the date of completion (not applicable for AMC work). The contractor shall guarantee that all equipments shall be free from any defect due to the defective materials and bad workmanship and that equipment shall work satisfactory and that the performance and the efficiencies of the equipments shall be not less than guaranteed values. Any parts found defective during the guarantee period shall be replaced without any charge whatsoever. The services of the contractor's personnel, if requisitioned during this period for such work, shall be made available free of any cost to the department.

(b) The contractor shall depute his representative to the site within 24hrs of notification of defects by the department.

(c) A joint inspection report will be made by the departmental representative and representative of the firm regarding the nature of defects and remedial action required in time schedule for the rectification/remedial action.

(d) In case the contractor fails to depute his representative within 24hrs of notification of defect(s) or fails to cause remedial action within a reasonable time as decided in the joint inspection, the Department may proceed to do so at the contractors' risk and expenses without prejudice to any other rights.

### 13. CHANGES IN SPECIFICATIONS

The BSNL reserves the right to make changes in respect of specifications of work if in its opinion same is found necessary. However such alterations shall be made after mutual discussions and agreement between the BSNL and the contractor. Any price implications in this regard shall be mutually discussed and agreed up on in terms of clause 12 of EW 8 form. The BSNL as matter of principle will not permit modifications by the contractor in design /specifications of any document /material. However the same can be agreed upon by the BSNL under exceptional circumstances where

a) The same is necessitated due to non-availability of material / components of certain specifications / make.

Or

b) Such alterations constitute an improvement in the opinion of BSNL.

Prior approval is necessary before undertaking any alteration/modification in the specifications of the equipment.

### 14. Packing, Forwarding, Storage at site.

Before dispatch to the site, the equipment /components/materials shall be properly packed so as to afford protection against transit damages and damage against storage in open areas either at transporters premises or at work site. Special care shall be taken in respect of sensitive items. When storage in open areas is inevitable, proper water proof covering shall be provided to protect damages on account of rain water etc. However damaged items should be replaced as per the directions of the Engineer -in-charge.

### 15 Inspection Of Site & Contract Documents

For the purpose of inspection of site and relevant documents, the contractor is required to contact E.E.(Elect) concerned who shall give reasonable facilities for inspection of the same. The contractor shall inspect and examine the site and its surroundings and shall satisfy himself commencement of work as to the form and nature of the site, the quantities and nature of work, materials necessary for completion of the works, the means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect his work. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

### 16 I.S. Standards:

The entire system shall conform to relevant BIS including safety standards as amended up to date. Where IS standards are not available the British standard(s) shall be followed. In case of conflict, the requirements of these specifications shall be given over-riding priority. The electrical and earthing work shall be carried out as per CPWD specifications for electrical works (internal) and electrical works (external) as amended up to date. A list of relevant standards, approved makes of equipment is furnished and forms part of the tender document.

### 17. SUFFICIENCY OF TENDER

The contractor shall be deemed to have satisfied himself before entering into the contract as the correctness and sufficiency of his offer for the work and of the rates and prices quoted in the schedule of works and items/quantities or in bills of quantities for the contract period. These rates and prices shall except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for proper completion of works.

No additional conditions shall be stipulated by the tenderer.

### 18. Test Certificate of materials and installed earth

The firm shall arrange for testing as and when required and final test certificate/report to be submitted with signature of the TEAM.

For chemical earthing materials, certificates as per RDSO specifications shall be supplied immediately after award of work but before delivery of material at site.

Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

19. Set off clause:

Only those payments due to Government against a particular contract agreement shall be deducted from the bills of the same work and not deductible from other works.

20. Inspection at Contractor's Premises

The Department's authorized representative shall have full powers to inspect drawings of any portion of the work or examine the materials and workmanship of the plant at the contractor's works or at any other place from where material or equipment is obtained. Acceptance of any materials or equipment shall in no way, relieve the contractor of his responsibility for meeting the requirement of the specifications but shall have to be replaced free of cost by the contractor in case the equipment of work is found defective or of inferior quality.

21. The Department / BSNL also reserve the right to enforce curtailment in the quantities of work, if the contractor defaults in regard to works contract execution and Specification

Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

**Schedule of Quantities**

<b>Tender Inviting Authority: Executive Engineer (E),ED, Tirupati</b>														
<b>Name of Work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur &amp; DE Sullurpeta Area</b>														
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )														
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	CGST (%)	CGST in Rs. P	SGST / UTGST (%)	SGST / UTGST in Rs. P	IGST (%)	IGST in Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT With Taxes	TOTAL AMOUNT In Words	HSN / SAC code
1	2	4	5	13	14	15	16	17	18	19	53	54	55	
	<b>SH1- Earth Reconditioning work</b>													
1	Arranging service personel at site for clearing the vegetation/debris for clear identification of existing earth pits, Improving of earth continuity from existing earth electrode upto to the earth bus/ earth terminations by making good of loose connections, removal of rust from joints including providing missing bolts/nuts,spring washers, adding water for earth improvement, measurement of earth values etc.,as reqd	5	Jobs			0.00		0.00		0.00	0.00	0.00	INR Zero Only	
2	Providing and fixing of the 300mm x 50mm x 10 mm G.I bus bar on surface of wall on suitable insulator as main earth bus bar having required no of holes for connections complete as reqd	5	Jobs			0.00		0.00		0.00	0.00	0.00	INR Zero Only	
3	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for interconnection of earth pits/replacement of rusted/damaged/broken G.I strip connections as reqd.	80	Mtrs			0.00		0.00		0.00	0.00	0.00	INR Zero Only	
4	Providing and fixing 32 mm X 6 mm G.I. strip on surface or in recess for interconnection of earth pits/replacement of rusted/damaged/broken G.I strip connections as reqd.	30	Mtrs			0.00		0.00		0.00	0.00	0.00	INR Zero Only	

**UNPRICED SCHEDULE**

Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

5	Providing and fixing 50 mm X 3 mm G.I. strip on surface or in recess for interconnection of earth pits/replacement of rusted/damaged/broken GI strip connections as reqd	10	Mtrs			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
6	Restoration/reconstruction of damaged masonry enclosure of existing earth pit after raising the level as per the site conditions including white washing etc as required	2	Pits			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
<b>SH II Single plate Earthing ( additional earth for value improvement)</b>												
7	Providing Earthing with G.I. earth plate of 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. without charcoal/ coke and salt as required.	5	Sets			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
8	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.					0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
9	Supplying and laying of 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm) (For interconnection of existing earthings)	125	Mtrs			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
10	Supplying and laying of 25 mm X 5 mm G.I strip in 40 mm dia GI Pipe at 0.50 metre below ground / on surface with suitable accessories as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.	10	Mtrs			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
11	Supplying and laying of 40 mm dia rigid 2mm thickness PVC pipe for protection of strip/cable on surface with suitable clamping as per site requirements as required.	10	Mtrs			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only
<b>SH-III GI Four plate Earthing</b>												
12	Earthing with 4 Nos. GI plates for Tower body earthing / Lightning protection earthing / Equipment earthing etc. by observing the following procedure.(A) Digging of earth pit of Min size 2mtr x 2mtr x 6 feet deep (for installing GI Earth plates at the corners) and refilling the same after installing the earth plate system.(B) Supplying and installing 4 Nos. hot dip GI earth plates of size 600mm x 600mm x 6 mm at the corners of the Earth pit, drilling holes to the plates,	5	Jobs			0.00	0.00	0.00	0.00	0.00	0.00	INR Zero Only

UNPRICED SCHEDULE



Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

	making connections to all the four plates for extending earth using GI bolts & nuts, washers, lead washers etc. (C)Providing masonry enclosure for the earth pit with Cast Iron/MS hinged / Cement concrete cover plate and making sign writing .												
13	Extra for excavation of above earth pit for each one feet additional depth & refilling as required.	4	Jobs			0.00		0.00		0.00	0.00	0.00	INR Zero Only
14	Extra for Supplying & Filling the earth pit with soft/red soil in place of excavated soil for better earthing including transportation & disposal of excavated remaining sand/soil to a distant location as required	1	Job			0.00		0.00		0.00	0.00	0.00	INR Zero Only
15	Providing and fixing 50mm x 3mm G.I. strip on surface or in recess for connections etc. as required.	50	Mtrs			0.00		0.00		0.00	0.00	0.00	INR Zero Only
16	Supplying and fixing 40mm dia B class GI pipe for watering arrangement in earthing system as required	3	Mtrs			0.00		0.00		0.00	0.00	0.00	INR Zero Only
	<b>SH-IV Chemical Earthing</b>												
17	Supply and installation of Maintenance free Chemical Earthing with following components complete with excavation, civil works, including Labor Charges for completing the process,Installation, commissioning & Testing of earthing pits etc.,as required. (Note;work has to be carried out as per RDSO specification NO. RDSO/SPN/197/2014 and materials supplied shall be as per the specifications attached.) i) A hole of 100mm to 125mm dia shall be augered /dug to a depth of about 2.8 meters. ii) Earthing electorde shall be made of high tensile low carbon steel circular rod ,molecularly bonded with copper with minimum thickness 250 Microns of 17 mm dia 3m long with UL Certified. iii) Back filled component of Non-bentonite chemical i.e.earth enhancement material (Minimum approximate 30-35 KGs). iv) Copper strip of 150x25x6 mm, to terminate earth rod - 1 no (To be exo thermally welded to earth electrode) v) Construction of earth pit cover with heavy duty FRP Material of suitable size.	10	Jobs			0.00		0.00		0.00	0.00	0.00	INR Zero Only

UNPRICED SCHEDULE

Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

18	Providing and fixing 50mm x 3mm G.I. strip on surface or in recess for connections etc. as required.	10	Mtrs			0.00		0.00		0.00	0.00	0.00	INR Zero Only
19	Breaking of cement concrete flooring for digging of earth pit of size approximate 1.5 feet x 1.5 feet and upto 1 feet depth including making good to original finish after earthing as reqd	6	Jobs			0.00		0.00		0.00	0.00	0.00	INR Zero Only
20	Supplying and Laying of 35 Sqmm single core PVC insulated multistrand copper cable with suitable lugs in existing pipe/in soil 0.50 metre below ground/on surface with suitable accessories as per site requirements as required.	5	Mtrs			0.00		0.00		0.00	0.00	0.00	INR Zero Only
<b>Total in Figures</b>										<b>0.00</b>	<b>0.00</b>		INR Zero Only
<b>Quoted Rate in Words</b>		<b>Net Cost</b>	<b>INR Zero Only</b>										
<b>Quoted Rate in Words</b>		<b>Total cost i/c GST</b>	<b>INR Zero Only</b>										

1	The firm shall be responsible to ensure that GST shown in the above columns is correct & Input Tax Credit for the amount shown above is admissible as per GST Act as amended up to date.
2	Tax Invoice / Bill of supply should be pre-printed with all the details as per the requirement under GST Act.
3	The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, materials and other inputs involved in the execution of the terms as specified in the scope of work.
4	No advance payments can be made. Stipulations like levy of interest if payment is not made in a specified time are also not acceptable and the payment is governed by the normal BSNL practice.
5	Bidder must mandatorily quote for all GST components (CGST, SGST, IGST) as applicable.
6	Bidder must mandatorily mention correct HSN / SAC codes.
7	Bidder must quote the rate excluding GST, GST percentage (IGST ,CGST , SGST as applicable).
8	The evaluation and comparison of responsive bids shall be done on the basis of Net cost to BSNL on the prices offered inclusive of packing, forwarding, freight and insurance charges etc., but excluding GST.
9	In case of ambiguity, between schedule and specifications, schedule shall prevail. If there is ambiguity between “schedule and specification” verses IS / BS standards, “schedule and specification” shall prevail
10	List of sites and location etc will be supplied to the successful bidder along with award letter or by the Engineer in Charge concerned.

## **I. SPECIFICATIONS**

### **GENERAL SPECIFICATION**

#### **1. WORKS TO BE DONE BY THE CONTRACTOR**

Unless and otherwise mentioned in the tender documents, the following works shall be done by the contractor, and therefore their cost shall be deemed to be included in their tendered cost:-

- (i) Foundations for equipment and components where required, including foundation bolts.
- (ii) Cutting and making good all damages caused during installation and restoring the same to their original finish.
- (iii) Sealing of all floor openings provided by him for pipes and cables, from fire safety point of view, after laying of the same.
- (iv) Painting at site of all exposed metal surfaces of the installation other than pre-painted items like fittings, fans, switchgear/ distribution gear items, cubicle switch board etc. Damages to Finished surfaces of these items while handling and erection, shall however be rectified to the satisfaction of the Engineer-in-charge.
- (v) Temporary shed if required over the storage space and locking arrangement thereof, and watches and ward of the materials and completed installation till completion of the work.
- (vi) Testing and commissioning of completed installation.

#### **2. TOOLS FOR HANDLING AND ERECTION**

All tools and tackles required for handling of equipment and materials at site of work as well as for their assembly and erection and also necessary test instruments shall be the responsibility of the contractor.

#### **3. CO-ORDINATION WITH OTHER AGENCIES**

The contractor shall co-ordinate with all other agencies involved in the building work so that the building work is not hampered due to delay in his work. Recessed conduit and other works which directly affect the progress of building work should be given priority.

#### **4. CARE OF BUILDINGS/EQUIPMENTS**

Care shall be taken by the contractor to avoid damage to the building during execution of his part of the work. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of his work from the site.

Care shall be taken such that there is no harm to the telecom equipment installed or being installed at site.

#### **6. STRUCTURAL ALTERATIONS TO BUILDINGS**

- (i) No structural member in the building shall be damaged/altered, without prior approval from the competent authority through the Engineer-in-charge.
- (ii) Structural provisions like openings, cutouts, if any, provided by the department for the work, shall be used. Where these require modifications, or where fresh provisions are required to be made, such contingent works shall be carried out by the contractor at his cost.
- (iii) All such openings in floors provided by the Department shall be closed by the Contractor after installing the cables/ conduits/ rising Mains Etc. as the case may be, by any suitable means as approved by The Engineer-in-charge without any extra payment.
- (iv) All chases required in connection with the electrical works shall be provided and filled by the contractor at his own cost to the original architectural finish of the buildings.

#### **7. WORK IN OCCUPIED BUILDINGS**

(i) when work is executed in occupied buildings, there should be Minimum of inconvenience to the occupants. The work shall be programmed in consultation with the Engineer-in-charge and the occupying department. If so required, the work may have to be done even before and after office hours.

- (ii) The contractor shall be responsible to abide by the regulations or restrictions set in regard to entry into, and movement within the premises.
- (iii) The contractor shall not tamper with any of the existing installations including their switching operations or connections there to without specific approval from the Engineer-in-charge.

### TECHNICAL SPECIFICATIONS

1. The works shall be done as per (a) current CPWD Specifications of Electrical Works as amended from time to time , (b) Specification of RDSO/SPN/197/2014, (c) Indian Electricity rules as amended up to date and (d) BSNL Engineering Instructions no: Protection Earthing I-001 Issue Iii Dt30.04.2005 of BSNL Inspection Circle as applicable to the relevant portion of the work.(e) Relevant BIS Standards applicable for the Materials to be used for the work.
2. The work shall be supervised by qualified Electrical staff.

#### I. SPECIFICATIONS FOR MAINTENANCE FREE CHEMICAL EARTHING:-

The work shall be carried out as per the Specification of RDSO/SPN/197/2014 a brief of the same is indicated as follows: The material supplied by the vendor shall conform to the following requirements.

#### **1 Design of Earthing & Bonding system**

##### **1.1 Earth Electrode:-**

- The earth electrode shall be made of high tensile low carbon steel circular rods, molecularly bonded with copper on the outer surface to meet the requirements of Underwriters Laboratories (UL) 467-2007 or latest or IEC 62561. Such copper bonded steel core rod is preferred due to its overall combination of strength, corrosion resistance, low resistance path to earth and cost effectiveness.
- The earth electrode shall be UL listed and of minimum 17.0mm diameter and minimum 3.0mtrs. long.
- The minimum copper bonding thickness shall be of 250 microns.
- Marking: UL marking, Manufacturer's name or trade name, length, diameter, catalog number must be punched on every earth electrode.
- Earth electrode can be visually inspected, checked for dimensions and thickness of copper coating using micron gauge. The supplier shall arrange for such inspection at the time of supply, if so desired.

##### **1.2 Earth enhancement material:-**

Earth enhancement material is a superior conductive material that improves earthing effectiveness, especially in areas of poor conductivity (rocky ground, areas of moisture variation, sandy soils etc.). It improves conductivity of the earth electrode and ground contact area. It shall be tested and confirm to the requirements of IEC 62561-7 having following characteristics:-

- Shall mainly consist of graphite. Bentonite content shall be negligible.
- Shall have high conductivity, improves earth's absorbing power and humidity retention capability.
- Shall be non-corrosive in nature having low water solubility but highly hygroscopic.
- Shall have resistivity of less than 0.2 ohms-meter.
- Shall be suitable for installation in dry form or in a slurry form.
- Shall not depend on the continuous presence of water to maintain its conductivity.
- Shall be permanent & maintenance free and in its "set form", maintains constant earth resistance with time.
- Shall be thermally stable between -10 Deg C to +60 deg C ambient temperatures.
- Shall not dissolve, decompose or leach out with time.

- Shall not require periodic charging treatment nor replacement and maintenance.
- Shall be suitable for soils of different resistivity.
- Shall not pollute the soil or local water table and meets environmental friendly requirements for landfill.
- Shall not be explosive.
- Shall not cause burns, irritation to eye, skin etc.
- Marking: The Earth enhancement material shall be supplied in sealed moisture proof bags. These bags shall be marked with Manufacturer's name or trade name, quantity etc.

### **1.3 Backfill material**

The excavated soil is suitable as a backfill but should be sieved to remove any large stones and placed around the electrode taking care to ensure that it is well compacted. Material like sand, salt, coke breeze, cinders and ash shall not be used because of its acidic and corrosive nature.

### **1.4 Earth Pit**

- Construction of unit earth pit: Refer typical installation drawing indicated at page-3 below.
- A hole of 100mm to 125mm dia shall be augered /dug to a depth of about 2.8 meters.
- The earth electrode shall be placed into this hole.
- It will be penetrated into the soil by gently driving on the top of the rod. Here natural soil is assumed to be available at the bottom of the electrode so that min. 150 mm of the electrode shall be inserted in the natural soil.
- Earth enhancement material (minimum approx. 30-35 kg) shall be filled into the augered/dug hole in slurry form and allowed to set. After the material gets set, the diameter of the composite structure (earth electrode + earth enhancement material) shall be of minimum 100mm dia covering the entire length of the hole.
- Remaining portion of the hole shall be covered by backfill soil, which is taken out during auguring /digging.
- A copper strip of 300mmX25mmX6mm shall be exothermically welded to main earth electrode for taking the connection to the main equi-potential earth busbar in the equipment room and to other earth pits, if any.
- Exothermic weld material shall be tested as per provisions of IEEE 837 by NABL/ILAC member labs.
- The main earth pit shall be located as near as possible to the main equi-potential earth busbar.

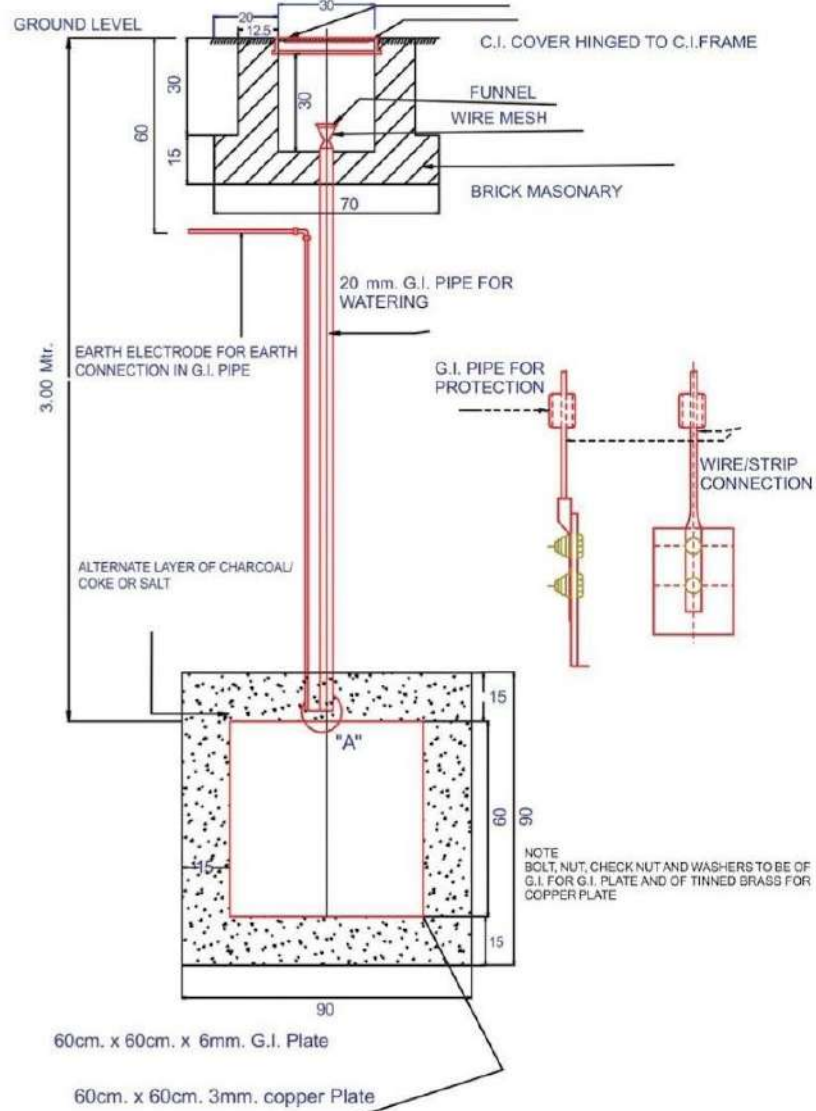
## **II. GI PLATE EARTHING (Single Plate Earthing)**

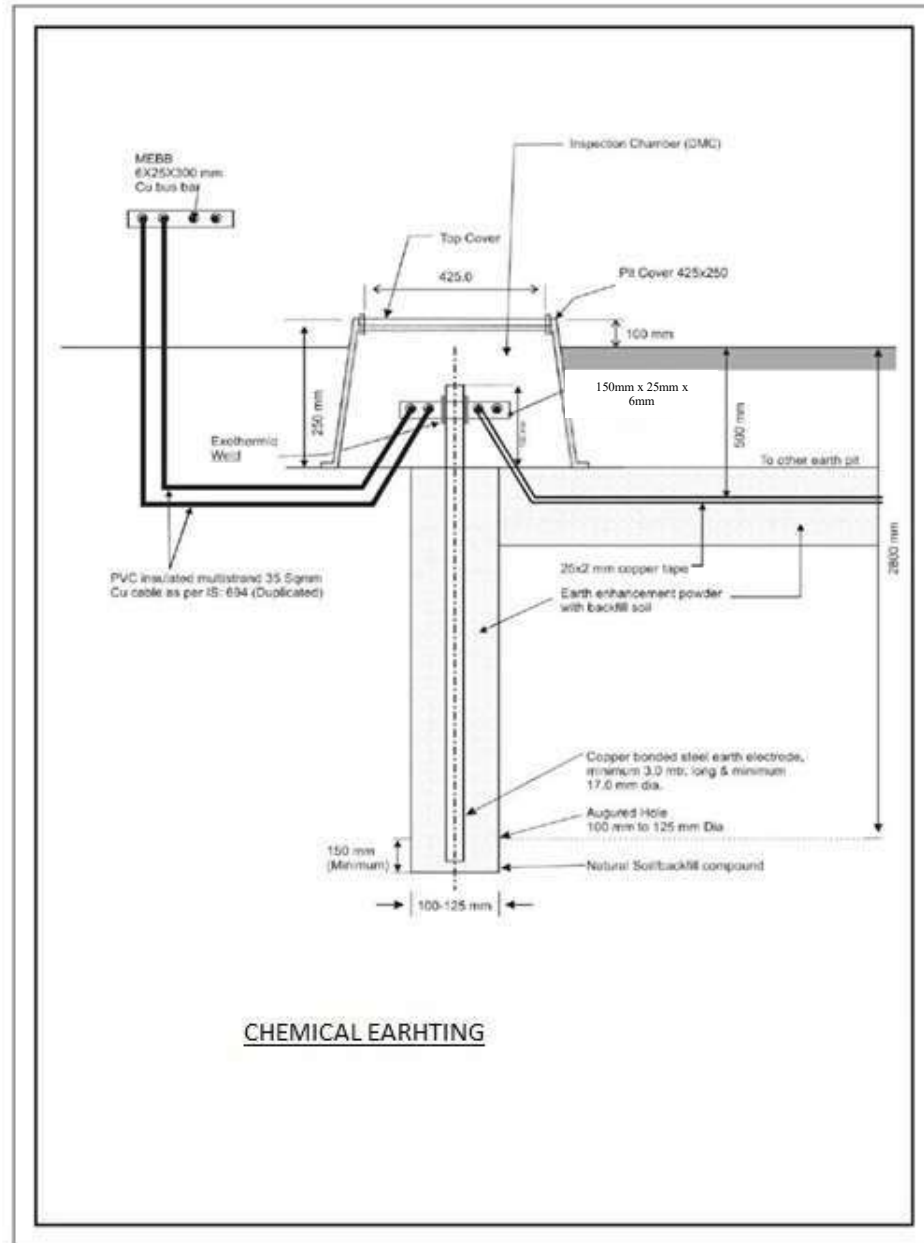
Works shall be carried out as per the latest CPWD internal specifications for Electrical Works.

## **III. Specifications for 4 PLATE EARTH – BSNL Engineering Instructions No : PROTECTION EARTHING I-001 ISSUE III dt 30.04.2005 of BSNL Inspection Circle**

1. For BTS sites –Earthing shall be done as per the departmental standards.
2. The contractor shall excavate a pit of size as per schedule of work (all types of soil) for BTS sites. The size of the hot dip G.I. plate shall be 600 mm x 600 mm x 6 mm.
3. Hot Dip G.I. Plates and hot dip GI strips of 50 mm X 3 mm are connected by nuts and bolts.
4. To prevent ingress of moisture and soil, the joint is made watertight by covering with Bitumen.

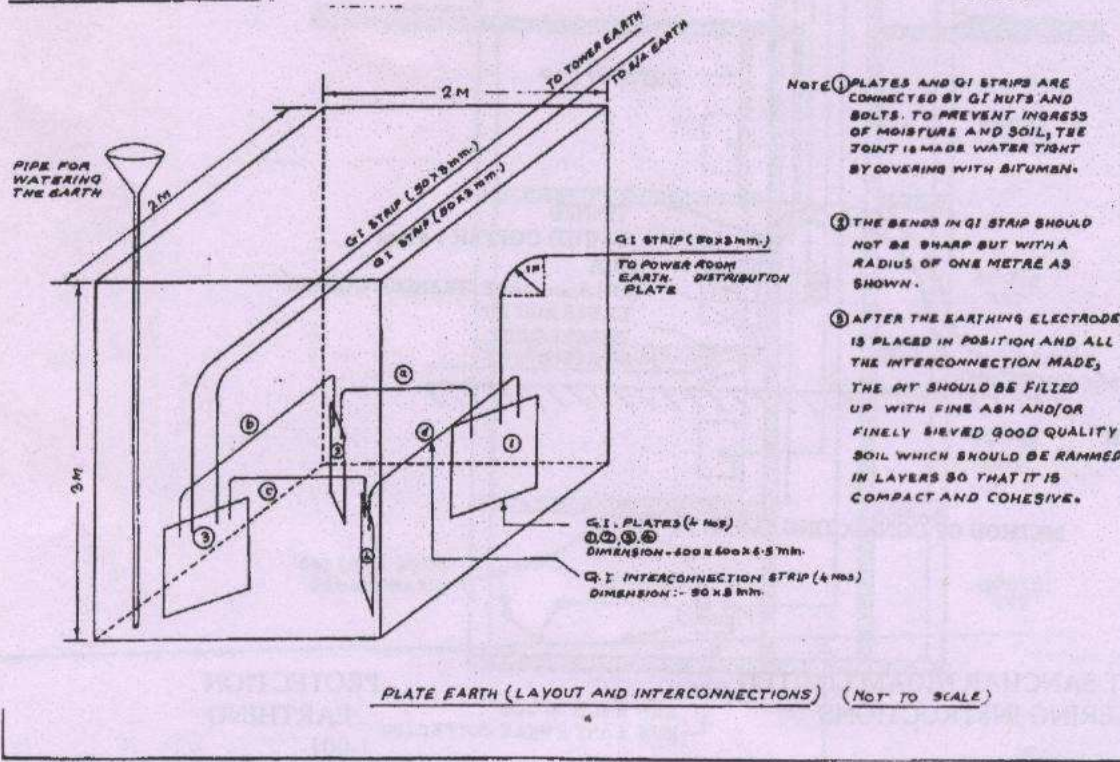
NOT TO SCALE





**BHARAT SANCHAR NIGAM LIMITED  
 ENGINEERING INSTRUCTIONS**

**PROTECTION  
 EARTHING  
 I-001**





**LIST OF APPROVED MAKES OF BSNL ELECTRICAL WING**

<b>S. No.</b>	<b>Item</b>	<b>Makes</b>
1	Chemical Earthing	Firms meeting the specification or better than indicated specifications
2	PVC insulated copper conductor wire/cable	ISI mark
3	GI/MS Pipe	ISI mark, B class
4	PVC pipe	Rigid PVC pipe with ISI mark

**NOTE:**

1. Any other make approved by BSNL EW, corporate office till the last date of opening of tender is also acceptable.

Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

**COMPLIANCE STATEMENT**

We..... (name of the firm) state to comply in full manner with all the General, Commercial, Technical, Operating, financial conditions of the Tender Document for the work of **“Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area”** without any reservation and deviation.

For and on behalf of (Name of Firm)

**(Seal of the contractor /Company /Firm)**

**(Signature of contractor/Authorized Signatory)**

(Postal address)

Dated.....

**PROFORMA OF SCHEDULES**

(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities : Attached

SCHEDULE 'B'

Schedule of materials to be issued to the bidder: ---Nil---

SCHEDULE 'C'

Tools and plants to be hired to the bidder: Nil

SCHEDULE 'D'

Extra schedule for specific requirements/documents for the work, if any: Nil

SCHEDULE 'E'

Schedule of components of Materials, Labour etc. for escalation: Nil

SCHEDULE 'F'

Reference to General Conditions of contract :

Name of work:	As per NIT notification page
Estimated cost of work:	
Earnest money:	
Security Deposit and performance Guarantee	

General Rules & Directions:Officer inviting tender: **Executive Engineer (E),  
Electrical Division  
Tirupati**

**Definitions:**

2(v) **Engineer-in-Charge** **Executive Engineer (E), Electrical Division, Tirupati**

2(vi) **Accepting Authority** **Executive Engineer (E), Electrical Division, Tirupati**

CLAUSE 5

Time allowed for execution **1 Month**  
Authority to give fair and reasonable extension of time for completion of work: SE (E), Electrical Circle, **Vijayawada**  
Competent Authority for deciding reduced rates : SE (E), Electrical Circle, **Vijayawada**

Clause 25

Competent authority for conciliation: SE (E) not in-charge of the work.

**BSNL EW-8**  
**Bharat Sanchar Nigam Limited**  
**Electrical Wing**

**Electrical Division: Tirupati**

**Sub Division: Nellore**

1. I/we have read and examined the notice inviting tender, schedule, specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, special conditions, Schedule of Rates and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.
2. I/We hereby tender for the execution of the work specified for BSNL within the time specified, schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.
3. I/We agree to keep the tender open for **Ninety (90) days** from the due date of submission thereof and not to make any modifications in its terms and conditions.
4. If I/We, fail to commence the work specified, I/We agree that the said BSNL shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely and the same may at the option of the competent authority on behalf of BSNL be recovered without prejudice to any other right or remedy available in law out of the deposit in so far as the same may extend in terms of the said bond and in the event of deficiency out of any other money due to me/us under this contract or otherwise.
5. Should this tender be accepted, I/We agree to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered upto maximum of percentage mentioned in clause 12.3 of the tender form and those in excess of that limit at rates to be determined in accordance with provisions contained in clause 12.2.
6. I/we agree to furnish to BSNL, Deposit at Call receipt/DD/FDR/ Bank guarantee of a Nationalized/ Scheduled Bank for an amount equal to **5%** of the contract value in a standard format within **10 days** from the date of issue of award letter. I/We agree to keep the performance bank guarantee valid as per the BSNL terms and conditions.
7. I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety or interest of BSNL.

Signature of Witness (required in the case of bidder's thumb impression is given by the bidder in place of signature) Occupation of Witness:	(Signature of bidder) (Name & Postal address)  Seal of Bidder Date:
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Name of work: Restoration of Earthing at priority RAN sites under Phase IX.2 4G project under Nellore BA Area of BSNL (Phase II) SH: Restoration of Earthing works under DE Gudur & DE Sullurpeta Area.

**Acceptance of Tender**

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of BSNL for a sum of Rs. \_\_\_\_\_  
(Rupees \_\_\_\_\_)

The letters referred to below shall form part of this contract Agreement

- a)
- b)

For & on behalf of BSNL

Dated

Signature:  
Designation: