



BHARAT SANCHAR NIGAM LIMITED

(A Govt of India Enterprise)

(Electrical Wing)

O/o The Executive Engineer (E)

BSNL Electrical Division-III

No.22, Kellys Road,

Chennai - 600010.

Office: 044-26478616, 26474545 Fax: 044-2647 6292

E-mail: eedn3@gmail.com

E-TENDER DOCUMENT

Name of work: Comprehensive maintenance of Engine Alternator set and associated services of USOF sites for 6 Sites under ED-III, CHTD (For the year 18-20)

NIT no: 195/EE E / ED III/CH/2017-18

This tender document contains **46pages (Forty Six)**pages only

For E Tender Helpdesk Pls Contact M/s ITI LTD :Ph:91-80-40482000 &

Mail Id :twhelpdesk399@gmail.com, bsnlthelpdesk@gmail.com

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

The Executive Engineer (Elect), BSNL,**ED-III, Chennai** 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	Comprehensive maintenance of Engine Alternator set and associated services of USOF sites for 6 Sites under ED-III, CHTD (For the year 18-20)
2	Estimated cost put to tender	Rs. 15,69,024/- Excluding GST
3	Earnest Money	Rs.31,380/-
4	Period of completion	24 months
5	Last date & time for downloading of tender document by bidder	Up to 14:55 Hrs. on 11 - 04 - 2018
6	Last date & time for online and physical submission of tender	Up to 15:00 Hrs. on 11 - 04 - 2018
7	Last date & time for submission of original EMD	Up to 15:00 Hrs. On 11- 04 - 2018
8	Date and time for opening of tender	15:30 Hrs. on 11 – 04 – 2018
9	Tender Fee(Non-refundable)	Rs 500/- + 18% GST
10	E-tender Processing fee (Non-refundable)	0.05% of estimate cost subject to the minimum of Rs.500/- and Maximum of Rs. 5000/- plus GST as applicable.

ELIGIBILITY CRITERIA

The bidders satisfying the following conditions:

1.1 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

1.2 The manufacturer / authorized dealer/ OEM of any of the makes of major equipment included in the NIT. The letter of authorization from manufacturer in original/Photo copy attested by BSNL executive will be submitted.

OR

Experience of having successfully completed similar works in BSNL comprising of either substation or air conditioning service as part of scope of work during last 7 years ending last day of month previous to the one in which applications are invited, should be either of the following :

- **Three similar successfully completed works costing not less than the amount equal to 40% of the estimated cost put to tender.**
OR
- **Two similar successfully completed works costing not less than the amount equal to 60% of the estimated cost put to tender.**
OR
- **One similar successfully completed work costing not less than the amount equal to 80% of the estimated cost put to tender.**
OR
- **BSNL enlisted contractors in Electrical category of class I/II/ III**

NOTE: The estimated cost of one year shall be considered to evaluate the eligibility criteria.

IMPORTANT NOTE:

1. The self-attested copies of the following documents shall be scanned and uploaded to the e-tendering website within the period of tender submission. Online bid documents submitted by intending bidders shall be opened only of those bidders, who have scanned and uploaded the following documents (and whose uploaded documents are found to be in order), otherwise the bid will not be opened and shall lead to disqualification.
 - a. Tender Fee in the prescribed format
 - b. EMD in the prescribed format
 - c. Certificate of Financial Turnover from Chartered Accountant, if applicable
 - d. Documents fulfilling Eligibility criteria (Please note that in case the bidder is authorised by the manufacturer, the original authorisation letter is to be scanned and uploaded)
 - e. Enlistment certificate issued by BSNL if applicable
 - f. Electrical license issued by TN Govt. if applicable
 - g. GST Registration Number details
 - h. PAN Card
 - i. EPF and ESI Registration certificate (if applicable)
 - j. Undertaking to abide by EW-6 and EW-8 (Form 'A')
 - k. Undertaking regarding EPF and ESI provisions (Form 'B')
 - l. Certificate of work experience issued by client department (Form 'C') if applicable
 - m. Undertaking regarding No Near relative working certificate (Form 'D')

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

2. **The Physical Tender Fee, EMD, and if applicable the original authorisation letter by the manufacturer, (the scanned copies of which are uploaded) shall be deposited in the tender box available in the office of tender opening authority, by all the bidders before 3:00 PM on the tender opening date, failing which the tender shall not be opened.**

BSNL EW-6

Bharat Sanchar Nigam Limited
Electrical Wing

Electrical Division: Division-III, Chennai.

Sub Division: VIII, Chennai.

1. Item rate tenders on single bid system are invited on behalf of CMD,BSNL for the work **Comprehensive maintenance of Engine Alternator set and associated services of USOF sites for 6 Sites under ED-III, CHTD (For the Year 18-20)** from the eligible bidders as per NIT notification. The enlistment of the bidders should be valid on the opening date of tender. In case the date of opening of tender is extended, the enlistment of bidder should be valid on the original date of opening of tender.
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.15,69,024/- Excluding GST.**
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 **24 Months** from the 10th 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 **www.tenderwizard.com/BSNL** at free of cost. The BSNL EW-8 document can be seen from the web site **www.chennai.bsnl.co.in** at free of cost.
8. After submission of the bid, the bidder can re-submit revised 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) but before last time and date of submission of tender as notified.
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 **BSNL, Chennai Telephones** payable at **Chennai** 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 **BSNL, Chennai Telephones** payable at **Chennai** 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 **180 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.
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 **11-04-2018** up to 3:00 PM and the bid submitted shall be opened at 03:30 PM on the same day. If a holiday is declared on the tender opening day, the tender will be opened on the next working day.
14. The e-Tender processing fee and tender cost are 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 two weeks from the date of issue of acceptance letter. 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 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. **In case the bidder fails to deposit the said performance guarantee within the stipulated period, including the extended period if any, the Earnest Money deposited by the bidder shall be forfeited automatically without any notice to the bidder and the bidder will not be allowed to participate in the re tendering for the same work.**
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 be 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 and for partnership firm certificate will be given by all the Directors of the company.
 - 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-8 form

General Instructions to the Bidders

1. The intending bidder must read the terms and conditions of BSNL-EW 6 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. On opening date, the bidder can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
6. Bidder can upload documents in the form of JPG format or / and PDF format.
7. 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)
8. 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.
9. 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.
10. 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.
11. **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.

12. 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.
13. 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.

14. 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.

15. 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.

16. 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.

17. 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)

Undertaking regarding EPF provisions

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

* I/We have employed only ----- persons in our establishment and hence the EPF and Miscellaneous provisions Act, 1952 is not applicable to my / our establishment.

* 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".

* strike out whichever is not applicable

**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 of
.....Resident of
..... hereby give an undertaking that

* I/We have employed only ----- persons in our establishment and hence the ESI and Miscellaneous provisions Act,1948 is not applicable to my / our establishment.

* 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".

* strike out whichever is not applicable

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

(Seal of the firm)

(Signature of Bidder)

Performance report of works

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

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 _____
_____ KN
OW 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)

Schedule of Quantities

Name of Work: Comprehensive maintenance of Engine Alternator set and associated services of USOF sites for 6 Sites under ED-III, CHTD (For the year 18-20)

SI N	Description of Items	Qty	Unit	Rate / Mont /unit excluding GST	CGST		SGST		IGST		Rate /unit including GST	Total Amount excluding GST	Total Amount including GST	HSN/ SAC Code
					% Rate	Rate per unit	% Rate	Rate per unit	% Rate	Rate per unit				
1	2	3	4	5	6	7=6x5	8	9=8x5	10	11=1	12=5+(7+9) 11	13=3x5	14=3x12	15
1	Providing round the clock site caretaking & comprehensive maintenance of electro-mechanical services viz. electrical fittings, lamps, switches, aviation light with control gear, earthing, compound lights, fire extinguisher, electrical panels, cables lightning conductor, energy meters, supplying of all required material for proper upkeep of equipment, painting, etc. as required as per inventory of installation, up time mentioned in the special conditions and specifications attached along with regulating the entries of the visitors (IP's and TSP's and their authorized representatives).	1 month	Month											

UNPRICED SCHEDULE

SI N	Description of Items	Qty	Unit	Rate / Month /unit excluding GST	CGST		SGST		IGST		Rate /unit including GST	Total Amount excluding GST	Total Amount including GST	HSN/ SAC Code	
					% Rate	Rate per unit	% Rate	Rate per unit	% Rate	Rate per unit					
2	Comprehensive maintenance of E/A set, AMF panel, canopy, servicing as per manufacturers recommendation including supply of lub oil, filters, coolant,etc. complete as required as per inventory of installations, up time mentioned in the special conditions and specifications attached. Note: Cost of Diesel not included	1 Month	Month												
3	Transportation of diesel from diesel outlet & filling of diesel, making arrangement for storage of diesel complete as required as per inventory of installations	60	Hours of DG usage												
TOTAL FOR 1 Site															
TOTAL FOR 6 Sites															
Grand Total Amount excluding GST for 24 Months (Net Cost)															
Grand Total Amount including GST for 24 Months															

UNPRICED SCHEDULE

Contractor

Executive Engineer(E)

Contractor

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EE(E)

Important Note:	
1	The uptime of the each USO BTS site should be more than 98.50 %
2	Refer Annexure – III for list of USO BTS sites & E/A set details and Annexure – IV for Inventory of installation in a USO BTS site.
3	If any levy/duty is not payable or documentary proof is not produced the amount for the same shall be deducted.
4	All liabilities /penal recoveries on matters arising out of tax/excise/levies such as incorrect deductions, discrepancies in the filing of returns revised assessments by the concerned authorities etc shall be borne by the contractor .It is the responsibility of the firm to meet the liabilities/penal recoveries as mentioned above and nothing extra will be paid by BSNL on this account .
5	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.
6	Tax Invoice /Bill of supply should be pre-printed with all the details as per the requirement under GST Act.
7	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 .
8	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.
9	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.
10	Bidder must mandatorily quote for all GST components (CGST,SGST,IGST) as applicable.
11	Bidder must mandatorily mention correct HSN/SAC codes.

CONDITIONS OF THE CONTRACT :

1. The cost for Top over haul (after every 7000 hours of DG usage from its date of commissioning and major overhaul (after every 10000 hours of DG usage from the date of commissioning) of the DG sets. (to be carried by authorized service dealers / OEM) shall be reimbursed as per actual.
2. The contractor , if required shall replace the set of batteries during the currency of contract after completion of not less than three years from its date of installation and the cost of replacing shall be reimbursed to the contractor. Necessary certificate in this effect should be furnished by the JTO(E) and SDE(E) concerned.
3. The life expired / used Fire Extinguisher shall be refilled by the contractor and the cost of refilling shall be reimbursed to the contractor. Necessary certificate in this effect should be furnished by the JTO(E) and SDE(E) concerned.
4. For the replacement of batteries , refilling of used / life expired Fire Extinguisher, Top & Major Overhaul the contractor shall furnish the invoice clearly indicating the taxes correctly as per the GST rules. The correct HSN code shall be furnished along in the invoice.
5. The contractor shall be responsible for collecting of diesel from diesel / petrol pump and transportation, filling, making arrangement for storage of fuel etc. The cost of the diesel shall be paid by BSNL to the Petrol pump directly on fortnightly / monthly basis, subject to the maximum amount based upon the following table or as per the actual diesel consumption whichever is lower. If any conflict arises for the diesel consumption the actual diesel consumption will be taken after testing at site by a committee constituted by the SE(E) and order will be issued accordingly which is binding by all for the concerned site. However the maximum consumption of diesel will not be permitted beyond the CPH mentioned below.
6. The **consumption of fuel site wise as per the Diesel statement as per para** above will only be allowed to the agency. Actual fuel consumption statement as per the attached Annexure shall be submitted to SDE (E) concerned on or before 5th of every month. Actual consumption shall not exceed the maximum permitted limits as given below.

The method of testing is given below

The batteries of all TSPs shall be discharged for four hours and the DG set will be started and allowed to run for three hours. The measurement of average consumption of diesel per hour of the site is taken when the batteries are being charged and site is radiating. The contractor should depute an authorized representative for the above load testing on prior written intimation. If the agency fails to depute, the test measurements recorded by the BSNL officers will be final and binding.

Sl.No	No of TSPs in the USO site	Maximum allowed CPH of DG set (Litres per hour)
1	1 TSP	2.3
2	2 TSP	2.6
3	3 TSP	3.1

- i) The agency shall co-ordinate in collection of EB bill and depositing the payment to the EB office within the due date as per the para below. The agency shall collect the petro card for purchase of diesel for the individual site from the O/o SDE (E) and collect the diesel from the petrol bunk , transport to the BTS site, fill the diesel tank at site of work. Quantity of diesel required for generating maximum electrical loads at site from DG sets shall be as per Table above. The contractor will be required to operate the DG set at the peak efficiency so as to minimize the diesel consumption and the contractor may note that consumptions of diesel more than specified as per Table above shall be on his account and shall be recovered from his bills. It is the responsibility of the contractor to provide necessary containers to carry the diesel. Necessary accounting shall be maintained by the contractor for the usage of diesel and periodical statements should be submitted to the SDE(E) through the respective JTO(E). If any pilferage on diesel / other electro mechanical accessories is noticed it is the responsibility of the contractor to bear the cost.
- ii) For payment to the petrol bunk , on fortnight / monthly basis, the department (BSNL) will make arrangement with the petrol bunk owners and authorize the contractor for taking the diesel from the petrol bunk on the basis of this arrangement through petro-card or authorization letter etc, etc.,
7. The required manpower for operation, all material required for comprehensive maintenance, caretaking, proper upkeep etc. shall be arranged by the contractor without extra cost.
8. By provision of caretaking it is meant that a person shall be available locally who shall be responsible for taking care of the site, including operating the DG set in manual mode in case AMF panel fails to work, and including reporting/attending of faults in any of the equipments, and giving timely advise for diesel filling. He can be called to site at any time, and shall be responsible for maintaining visitors' logbook as per Annexure-X and DG set daily log book as per Annexure-VII attached. The contractor shall be also responsible for up keep and safety of IP equipment. Contractor shall be overall in charge of the site and shall be responsible for any theft / losses.
9. The respective SDE(E) will periodically observe the electricity billing and communicate to the EE(E) / AO Electrical through E- mail. The EE (E) and AO Electrical will make necessary EB payment through on line within the due date. However if any difficulty is experienced on making the above on line payment for certain un avoidable circumstances the contractor shall collect the electricity bill from Supply Company and necessary DD/ Cheque will be drawn in the name of supply company by the EE (E) and may be remitted to the respective EB office within the due date with an extra cost of Rs.50/- for each remittance.
10. The firm should make their own arrangement for sanitary facility and water supply.
11. The firm shall bear any consequential losses due to theft etc occurring due to negligence in security of the site.
12. The daily maintenance schedules are not prescribed. However the contractor shall ensure by daily check that all the electrical installations, fitting, aviation lamp, DG Set, compound lighting, Fire extinguisher, etc. are in clean and working condition. Any leakage of the diesel or any other discrepancy at site shall be attended immediately. The contractor is responsible for the operation of DG set (including all associated electro-mechanical services) in case of EB supply fails so as to keep up the BTS above the stipulated up time (**more than 98.5% in each site**)
13. The agency shall keep the premises clean including cutting the vegetation periodically (Not more than 6 Months.) and shall be free from the debris/ wastages / reptiles without any extra cost.

Important Note: Along with the monthly bill, the contractor shall submit the following Performa by 7th of every month

READINGS OF ELECTRICAL AND DIESEL CONSUMPTION IN USO SITES FOR THE MONTH ENDING.....

S. No	Name of site	DETAILS FROM EB BILL				TSP No.	Name of TSP	EB& DG OMR in Units	EB& DG CMR in Units	EB&DG Total Units (10)-(9)	DG usage OMR in Hrs	DG usage CMR in Hrs	Nett DG usage in Hours (13)-(12)	Cost of Diesel in Rs./ litre
		Period of the Bill		Total EB consumption in units	Total EB bill amount in Rs.									
		From	To											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1						TSP – 1								
						TSP – 2								
						TSP – 3								
						Common								
2						TSP – 1								
						TSP – 2								
						TSP – 3								
						Common								
3						TSP – 1								
						TSP – 2								
						TSP – 3								
						Common								
4						TSP – 1								
						TSP – 2								
						TSP – 3								
						Common								
5						TSP – 1								
						TSP – 2								
						TSP – 3								
						Common								

OMR – Opening Meter Reading

CMR – Closed Meter Reading **SIGNATURE & SEAL OF THE CONTRACTOR**

Contractor

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EE(E)

SPECIFICATIONS

Sections Description of Sections.

- A. General
1. EI & Fans, Aviation Lights & Fire Extinguisher.
 2. Compound Lighting
 3. Lightning Conductor
 4. Diesel Generator Sets
 5. Fault Booking

SECTION A– GENERAL

1. The firm should make necessary arrangement for organizing the system to receive the complaints effectively and preparing the necessary records for maintaining the logs of all the Electrical / Electro – mechanical services , and down time of the site/ cluster i/c the data received from various sites via remote communication.
2. For the purpose of calculation of down time the following parameters should be clearly documented.
 - a) Time during (start & stop time) which BTS site is powered by State Elect. Board.
 - b) Time during (start & stop time) which BTS site is powered by D.G. sets.
 - c) Time during (start & stop time) which BTS site is powered by Battery.
 - d) Time during (start & stop time) which BTS site is remained as without power.

EMF signage should be maintained properly (The EMF signage board will be provided by BSNL).

The contractor shall attend all critical alarms/faults which can lead to outage within a maximum time 2 ½ hrs + travelling time maximum 2 hrs between 6.00 am and 10.00 pm, 3 ½ hrs + travelling time of 2 hrs between 10.00 pm and 6.00 am.

3. The firm shall also make necessary arrangement for receiving complaints and attending them properly on 24x7 basis. The documents having the details regarding date and time of occurrence of fault and removal of fault should be clearly mentioned. The firm should also intimate the concerned TSP/ IP's (BSNL) after rectification of fault.
4. The firm should submit all the documents relating to calculation of down time and fault attendance latest by 5th of every month to the concerned officer. (JTO(E)/ SDE(E))
5. The firm shall also be responsible for collecting of EB bill from supply company and submit the same at earliest to division office (It should be submitted at least ten days before the last due date of payment without any late fees charges). The firm will also collect the payment from the Division office and deposit the same to the Supply company.
6. The firm shall also submit the actual meter reading of state electricity board, units generated by the D.G. sets on monthly basis and the individual reading of the TSP's meter by fifth of every month to concerned Sub Division / Division office.
7. Monthly reports to be submitted to the EE(E) through the SDE(E) for the fuel and electricity on or before 5th day of the respective calendar month.
8. During the entire contract period of 2 years, the contractor will be required to paint the Electrical installations such as, compound lighting brackets and canopies, EA set , panels etc., at least once on completion of the first year.
10. It is the responsibility of the SDE(E)/JTO(E) to coordinate between previous AMC agency to New agency for handing over of all the electromechanical services /equipments in full working

conditions and copy of the handing over note to be pasted in the original agreement. The copy of handing over note is to be forwarded to SE(E)/CE(E).

Note - The periodicity for compilation of various reports / meter reading are indicative only. The same can be altered by Engineer-In-charge as per the requirement. The firm shall complete the information / data as per format decided by Engineer-In-charge.

SECTION – I

EI & FANS, FIRE EXTINGUISHERS AND AVIATION LIGHTS

Part 1 :Scope of maintenance

1. Ensuring that EI installation feeder pillar / meter panel and aviation light & other appliances are always kept in clean and healthy working condition.
2. Attending day to day routine complaints in a prompt and satisfactory manner.
3. Ensuring that no breakdown in power supply takes place and in case it happens, to take all required steps including contacting Supply Co. for earliest restoration.
4. Maintaining the installation i.e. fans, fittings, fire extinguishers and other components of the installation in clean condition including proper sign writing.
5. Fire detection and fire extinguisher provided are to be maintained as per the fire safety norms.
6. Checking all appliances before the onset of summer/winter season as required.
7. Ensuring that there is no wastage of electrical energy. Details of steps to be taken in this regard to be worked out in consultation with the Engineer-in-charge.
8. Carrying out minor additions and alterations ordered by Engineer-in-charge.
9. Maintaining LED Aviation light and associated control system in working condition.
10. Maintaining earth resistance for entire electrical installations, DG Set, compound light / ring earth etc. below 2 Ohms.
11. Maintenance and calibrations of all electrical meters as required.
12. Conducting insulation test and maintenance of cables as required.
13. Topping up of Fire Extinguisher's gas as and when required.

Part II. Tasks To Be Performed within first 15 days

1. All measurement of the resistance of Earth stations and checking of continuity of earth conductor results to be recorded .
2. Prepare an inventory of spares and maintenance material be kept ~~as-site~~ for prompt maintenance in consultation with Engineer in-charge .Materials for all the services to be considered for preparation of inventory.
3. Inspection of main board and SDB's for (a) any loose/improper connection (No strand cutting for making connection to be allowed), (b) improper rating of switches/fuse/ (c) Cleanliness.

4. General inspection of EI system & other appliances to identify shortcoming. Any other relevant aspect which may come in the way of proper maintenance should be recorded in register and also brought to the notice of Engineer-in-charge.
5. Insulation Test.

Part-III.Maintenance schedule to be followed.

Monthly :

Inspection of MB & SDB, Fire Extinguisher.

Quarterly:

Cleaning of fans, fittings etc.....(January, April, July, October)

Half yearly:

Testing of Earthing system for earth resistance and continuity and recording the test results.....(April & October)

Yearly:

Greasing and oiling of fans in winters(February)

Testing:

Detailed Testing of the installation shall be done once in a year to find out capacity and efficiency of various equipment with respect to their rating. The testing procedure shall be same as adopted at the time of original testing.

PART IV: MATERIALS.

- i. All the materials required for carrying out maintenance with the exception of following shall be arranged by the contractor at his own cost.
 - a. Replacement of complete Fans & Fittings and aviation lights fittings with control gear.
- ii. Any other materials / spares shall be arranged by the contractor to avoid down time of power supply.

NOTE:-

1. The replacement of material shall be with the same rating and make as that of the original. However, in case of non-availability of a particular make, the Engineer-in-charge will approve the alternate make.
2. The material required for major addition & alteration shall be supplied by the BSNL

Part V: Special Conditions Relevant to Particular Job/Particular Site.

Contractor shall keep adequate stock of daily use items like CFL tubes, chokes, starters, switches, sockets etc.

SECTION – 2

COMPOUND LIGHTING

Part – 1 Scope of Maintenance

1. Ensure that the compound lighting installation is always kept clean, and in healthy working condition.
2. Attending day to day routine complaints in prompt and satisfactory manner.
3. Ensure that there is no wastage of electrical energy and lights do not remain switched on when not needed. Setting of timer control as and when required.
4. Carrying out various maintenance routine tests as stated in part III.

Part II Tasks to be performed within first 15 days.

1. Inspecting the entire installation comprising control switches, cable, poles, fitting, lamp for any short comings. Recording the same and bringing it to the notice of Engineer-in-charge.
2. Checking the connections for any loose/improper connection (no strand cutting for making a connection to be allowed).

Part:- III Maintenance schedule to be followed.

Monthly.

Check that all lights are working properly and its distribution boxes close properly.

Half yearly

Checking for proper electrical connections..... (February &August)

Part-IV:-MATERIAL

All the materials required for carrying out maintenance with the exception of following shall be arranged by the contractor at his own cost.

1. Replacement of complete Pole & Fitting.

Note:- The replacement of material shall be with the same rating and make as that of the original. However, in case of non-availability of a particular make, the Engineer-in-charge will approve the alternate make.

SECTION-3
LIGHTNING CONDUCTOR

Part-1 - Scope of maintenance.

1. To ensure that entire system is in proper shape.
2. To carry out testing/inspection as per part-III.

Part –II - Tasks to be performed within 15 days.

To inspect the complete system for continuity, proper contacts.

Part-III – Maintenance schedule to be followed.

Weekly:

Inspect the entire installation comprising of finials, earthing strips,earthing terminals for any shortcomings and bring it to the notice of the Engineer-in-charge

Monthly:

Inspect installation for continuity and proper contacts.

Testing: Detailed Testing of the installation shall be done once in a year. The testing procedure shall be same as adopted at the time of original testing

Part IV:-MATERIAL:-

1. All the material required are to be arranged by the firm.

SECTION-4

1. DIESEL GENERATOR SETS

Part- I Scope of maintenance

1. Ensuring that the DG set installation is kept in clean and healthy working condition.
2. Testing the system every day for operating fitness.
3. Carrying out various maintenance activities and test as stated in part-III.
4. The contractor shall arrange, inspection of installation by authorized service dealer and shall submit its health
5. check report to BSNL based on run hour and standard practice.
6. The contractor, shall replace the set of batteries after completion of not less than three years from its date of installation. Necessary certificate in this effect should be furnished by the JTO(E),SDE(E) and EE(E) combinedly. The cost of the battery shall be reimbursed by the agency as approved by the Engineer in Charge.
7. Ensuring proper functioning and operation of AMF panel .
8. Servicing of DG set on the basis of hour meter / log book reading shall be done by the contractor including material and DG set servicing through authorized service dealers as per manufacturer recommendation.
9. **The scope of work includes replacement of Engine , Alternator if it is necessary due to unavoidable circumstances. However the cost shall be reimbursed as per actual.**
10. The scope of work shall include Top over haul (after every 7000 hours of DG usage) and major overhaul (after every 10000 hours of DG usage) of the DG sets. (to be carried by authorized service dealers / OEM).However the cost shall be reimbursed as per actual.

Part –II Tasks to be performed within 15 days

1. Inspect the installation for any shortcoming which is to be recorded and brought to the notice of Engineer in charge.
2. Check the safety devices as well as operating switches for their proper functioning.
3. The persons(s) should familiarize themselves with the installation, load distribution and working of DG set.
4. Need for watch to keep various parameters in permissible limits and responding to various alarms should be clearly understood.
5. Checking of AMF panel

Part III – Maintenance schedule to be followed.

Weekly.

1. Check Air line connection and filter.
2. Check fan belt and its tension.
3. Check all Safety, indications, alarms, interlocking & Voltage Regulation

Fortnightly.

1. Check Battery voltage, Terminals, Electrolyte level (Top up if necessary).
2. Check Specific Gravity of Electrolyte.(After the above checks, start the engine for No load/ Connected Load and test for 10 minutes the following)
3. Check for any abnormal noise. Shut down the DG set immediately and cause be examined.
4. Check frequency & output voltage.
5. Check the colour of Exhaust gas.
6. Check working of the Indication lamps.
7. Check working of Dynamo and Auto Cut off of the battery charger.
8. Check for any Exhaust gas restriction.
9. Check manual/ auto-changeover from commercial supply on connected load

Monthly

1. Check for tightness of connections in engine and control panel.
2. Check functioning of safety devices.
3. Check belt tensions.
4. Check battery charger.
5. Check for leakage of fuel line.
6. Check for leakage of exhaust pipes.

Half yearly

1. Cleaning and tightening of nut bolts..... (Feb & Aug)
2. Checking of MCCB tripping mechanism (Feb & Aug)
3. Meggering of alternator..... (April & Oct)
4. Relays and other protection devices working properly (April & Oct)
5. Checking of Canopy.

Oil servicing of DG set on the basis of hour meter/log book reading shall be done by the contractor i/c material and DG set servicing shall be done through authorized dealer as per manufacturer's recommendation or Once in every six month whichever is earlier.

Yearly.

1. Tighten all mounting, nut and bolt.....(March)
2. Check crankshaft and float..... (Oct)
3. Check injector inlet screen.(Oct)
4. Clean and calibrate all injectors..... (Nov)
5. Check fuel pump calibration..... (Nov)
6. Replace fuel pump filter screen and magnet.....(Nov)
7. Complete health check of each set through Authorized dealer.....(March)

Testing

Detailed Testing of the installation shall be done once in a year to find out capacity and efficiency of various equipment with respect to their rating. The testing procedure shall be same as adopted at the time of original testing.

Part-IV : Material

All the materials required for carrying out maintenance with the exception of following shall be arranged by the contractor at his own cost:-

1. **Replacement of complete Engine, Alternator, Canopy and AMF control panel.**
2. Top over haul (after every 7000 hours of DG usage) and major overhaul (after every 10000 hours of DG usage) of the DG sets. (to be carried by authorized service dealers / OEM)
The contract is for the comprehensive maintenance as such the firm shall arrange all materials at his own cost including rewinding of Alternators from authorized dealers.
3. In the event of top/major overhauling or replacement of EA set or rewinding of alternator or any other major servicing which requires removing of Engine/alternator / control panel from the site, the agency shall make alternate arrangement for EA supply by providing/hiring trolley mounted EA set for which department shall reimburse Rs.1000/- per day (including transportation, cabling , testing etc.,) for a maximum of 4 days in addition to diesel/hourly DG usage as per item no 2 of schedule of work.

NOTE:-

The faulty parts of the equipments shall be replaced with new one of the Original Equipment Manufacturer (OEM) make only. In case a particular item has become obsolete or changed its brand name due to a strategic partnership/ merger with another firm or the product is out of the manufacturing range etc. the same shall be brought to the notice of Engineer-in-charge. The alternate makes can be approved by the Engineer-in-charge and the proposed item should be of equivalent or higher configuration which is compatible with the system.

The replacement of material shall be with the same rating and make as that of the original. The firm may also replace an item with energy efficient item wherever the same is available, upon intimation to JTO (E). However, in case of non-availability of a particular make, Engineer-in-charge will approve the alternate make.

SECTION-5
FAULT BOOKING

1. The contractor shall provide the contact numbers for fault booking on 24 / 7 basis.
2. In event of emergency, the contractor shall take necessary action for rectification of fault and necessary detail entries are to be entered in the log book site wise.

ANNEXURE – III

List of USO sites under Electrical Division – I, Chennai.

S.No.	Cluster No.	District	Name of Tower site	DG sets details	
				Engine make	Alternator make
1	67	Kanchipuram	Agaram	M/s.MAHINDRA& MAHINDRA	KIRLOSKAR
2	67	Kanchipuram	Puthirankottai		
3	67	Kanchipuram	Nerumbur		
4	67	Kanchipuram	Perumbakkam		
5	67	Kanchipuram	Nandimanthangal		
6	67	Kanchipuram	Thachur		

ANNEXURE- IV

INVENTORY OF INSTALLATION

Description		
S.No	Items	Qty.
1	1X11W CFL	1 No.
2	Cabin fan (12")	1No.
3	Plug/switches etc.	01 lot
4	Cables	
	(a) 2X1.5 sq.mm copper cable	60 meters
	(b) 4X16 sq.mm Al. Cable	20 meters.
5.	Compound Light Fixtures (1 X 18 W CFL)	1No.
6.	Energy meter panel	1No.
7.	Earth Stations / Earth leads	8 sets.
8.	LED based Aviation light	1No.
9.	20 KVA DG set with AMF panel in acoustic enclosure with GSM modem	1 No.
10	4.5 Kg CO2 type fire Extinguisher	1 No
11	EB Service connection cable with stay wire	20 meters.

Where ever the BSNL also is one of the TSP the following additional inventory are to be maintained.

Description		
Sr. No.	Items	Qty.
1.	4X16sq mm Al. cable	50 mtrs.
2.	32 A TP MCB	1 No.

NOTE: The above quantities are approximate and indicative only. Any variation will be absorbed within the accepted price.

ANNEXURE-V

DETAILS TO BE DISPLAYED AT SITE

1. Details to be displayed before starting the work. These details shall be printed on A3 size paper / Flexi sheet and affixed on a hard board which shall be displayed at site in a proper manner.

1 Name of Agency (With Office Address)				
2. Name of proprietor				
3. Telephone No. (s) of the firm				
4 Name & Address of the supervisor				
5 24 hours contact No.				
6.Details of Security/Caretaker at Site				
Name	Contact No.	Local Address		
7.Details of Departmental Staff				
S.No.	Officer	Name	Telephone No. Office	Mobile No.
1.	JTO(E)			
2.	SDE(E)			
3.	EE(E)			
8.Tower Lighting, Earthings, and Lightning conductor				
Checked On				
Next Due On				

Annexure-VI

COMPLAINT REGISTER

Complaint no	Date	Time	Nature of Fault	Reported by	Cleared On		Mode of reply to TSP SMS/Email
					Time	Date	
XX-000-000							

XX=TSP CODE , BS-BSNL,VF-VODAFONE,AC-AIRCELL,RC-RELIANCE

000-SITE SR NO

000-SR NO OF THE COMPLAINT

Register to be closed monthly.

**ANNEXURE-VII
LOG BOOK OF GENERATOR SET**

	Name of Work							
	Name of Agency							
	Agreement No.							
Date	Time	Hour meter reading	Supply voltage	Current	KWH	Water Temp	Oil pressure	Battery

The readings as above shall be taken only once during the day, every day, when the DG set is running. If the DG set does not run on a particular day, it shall be so mentioned.

Account of fuel						
Date	Opening Balance	Fuel added	Total	Consumed	Balance	Remarks

Total No of hours Running: Total Fuel Consumed: Liters:

No of KWH Generated-

Average Fuel Consumption (i).....Ltrs/Hr, (ii).....KWH/Ltr

Firm **JTO(E)** **SDE(E)** **SDE(Bldg. I/C)**

ANNEXURE - VIII

PROGRAMME FOR PERIODICAL MAINTENANCE FOR THE MONTH OF _____

To be submitted to the EE, To programme for the next month along with the monthly bill for the current month.

Name of contractor: _____.

Agreement No. : _____.

Name of Sub Division : _____.

S. No	Location	Name of service	Action for Monthly/Quarterly/ Half yearly /Yearly Mtce.	Remarks

Signature of contractor

JTO (E)

SDE (E)

ANNEXURE –IX

ACTUAL PERIODICAL MAINTENANCE CARRIED OUT IN THE MONTH OF ____
(To be submitted to the EE along with the monthly bill)

Name of contractor : _____.

Agreement No. : _____.

Name of Sub Division : _____.

S. No	Location	Name of service	Periodical Mtce Actually carried out	Remarks

Certified that we have carried out maintenance properly as per schedule of work and as per terms and condition of the agreement and testing/drills etc. required during the period has been performed.

Signature of contractor

JTO (E)

SDE (E)

Annexure -X

VISITORS' LOG BOOK

<u>Date</u>	Name of Visitor	Company represented	Purpose of visit	Time of Arrival	Time of Departure	Remarks	Signature of the visitor	Signature of the caretaker

SPECIAL CONDITIONS

THE FOLLOWING CONDITIONS SUPERCEDES THE CONDITIONS / CLAIMS WHEREVER ELSE DESCRIBED IN THE NIT IN THIS REGARD.

1. DETERMINATION OF UPTIME

(a) Quality of service (up time availability) should not be less than 98.5% per site for normal cluster measured on monthly basis

- a. If IP fails (BSNL) to make up time continuously for 3 months, the TSP will have the option to exit or vacate from the site by giving one month notice and if any liquidate damage claimed it will be recovered from the contractor.
- b. Period during which electric supply either from Electric Supply Co. or DG set is not available will be termed as DOWN TIME.

The UP Time shall be calculated on a monthly basis based on formulae mentioned below:-

Uptime Availability = $100 \times \left\{ \frac{\text{Number of Hours in the month} - (\text{Downtime in Hours of the Site})}{\text{Number of Hours in the Month}} \right\}$

Down time period is calculated as far as IP's (BSNL) concern the power from either EB or DG is not available ie power outages which have resulted in to mobile service discontinuity shall only be considered for the down time calculation.

To account for the battery backup provided by the TSP, four hours per day shall be deducted from the total time when AC power is not available for the working out the down time calculation.

The failure of telecom equipments such as micro wave, antenna, RF cable, BTS, TRS etc., will not fall within the scope of down time.

2. PENALTY

For every month of operation of a site the power outage duration beyond down time, the TSP shall be entitled to claim penalty as below.

- (a) Uptime **98.5%** (per site) or above - No penalty .
- (b) **For up time less than 98.5% the penalty will be levied as below:**
 - i. At a rate of Rs.200/- per hour per TSP for the down time up to 24 hrs beyond prescribed limit in a month.
 - ii. For the down time beyond 24 hrs, beyond prescribed limit in a month proportionate IP fee per TSP for the month to be deducted for the remaining period. subject to minimum penalty as mentioned in (i) above and limited to the one month IP fee.
 - iii. If any site remains down for more than 240 hrs in a month for consecutive 4 months and TSP does not opt to exit, the TSP shall be entitled to recover liquidated damage at the rate of 10% of outage penalty in addition to the above recoveries mentioned in i) and ii.

- iv. All the penalties imposed by the TSPs on account of outages will be recovered from the contractors. Apart from the above 10% over head charges also will be levies in addition to the penalties imposed will be recovered from the contractors
- (c) For the duration during which commercial supply is available from Electricity Supply Co. and DG set is run due to any fault in electrical system, the difference in the cost of KWH units generated by DG set and the electricity charges for the corresponding units as per the Electric Supply Co. charges per unit shall be recovered from the contractor.

3. **TERMS OF PAYMENTS:**

The following terms of payment shall be adopted:

- a) Payment shall be made in once in three months (Quarterly)
- b) 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.
- c) The cost implications arising due to variation in the readings of Electric Supply Co. Meter / KWH units generated by DG set vis-a-vis the meter readings of TSPs, shall be borne by the contractor.

4. **STORES AND SAFETY**

The contractor shall be responsible for watch and ward, maintenance and operation of infra and its passive infra.

The contractor from his own sources shall arrange all the stores and materials required for the satisfactory completion of the work at site. Safe custody of the material stored at site will be the responsibility of the contractor till the completion/ handing over of the site.

5. **CORDINATION AT SITE**

At the site of work more than one agency may be working. Full cooperation shall be extended to other agencies during 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 Department engaged in installation as well to normal routine work.

- 6. i) The BSNL reserves the right to preclose the agreement with one month notice without assigning any reason.
- ii) The BSNL reserves the right to curtail any quantity during the currency of contract without assigning any reason.

LIST OF APPROVED MAKES- BSNL ELECTRICAL WING
(AS ON 29.02.2016)

S. No.	Item	Makes
1	Engine	Ashok Leyland /Cummins/ Cater pillar / KOEL/ Volvo Penta / Mahindra & Mahindra (up to 200 KVA) /Escorts (up to 30 KVA)/ Eicher (up to 35 KVA)
2	Alternator(Brushless)	Crompton Greaves (AL. series) / KEC / Leroy Somer / Stamford/Jyoti Ltd
3	Battery (Lead Acid / Mntc. Free)	Amara Raja / AMCO / Farukawa / Hitachi / Exide/ Prestolite / Standard
4	HV Switchgear (Vacuum Circuit Breaker/SF6)	Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd
5	Transformer (Oil filled / Dry type)	ABB / Schneider Electric /Andrew Yule / Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens
	a) Above 400 KVA	
	b) Up to 400 KVA	In addition to above makes, Uttam/ Patson/Rajasthan Transformer and Switchgear
6	Air Circuit Breaker	L&T/ Schneider Electric / Siemens
7	MCCB(Ics=Icu)	L&T/ Schneider Electric / Siemens
8	SDF units	L&T/ Schneider Electric / Siemens/ HPL/Havells
9	Power Contactors	L&T/ Schneider Electric / Siemens/ Lakshmi(LECS)
10	Change Over Switch	HPL / Havells / H-H Elcon
11	Intelligent APFC Relay	L&T/EPCOS(Siemens)/ Schneider Electric / Neptune Ducati/Syntron/ABB
12	Bus Bar Trunking/ Sandwiched Bus Duct	Moeller/L&T/Schneider Electric/ABB/Legrand/Zeta
13	Power Capacitors (MPP/APP)	L&T/EPCOS(Siemens)/ABB/Crompton/ Schneider Electric/Neptune Ducati
14	Digital/ KWHr meter	Schneider Electric/ AE/ Digitron / IMP/ Meco / Rishabh / Universal/HPL/L&T/ABB/Yokins
15	Cold shrink HT/LT Cable Joint	Denson / 3M(M-Seal)/ Raychem
16	Rubber Matting	ISI mark

17	MCB/ Isolator /ELCB/RCCB/ Distribution Board	Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/ Siemens / Standard/ABB/HPL
18	MS/ PVC Conduit	ISI mark
19	Cable Tray	MEM/Bharti/Ratan/Slotco/Profab
20	HT/LT Cables	ISI mark
21	PVC insulated copper conductor wire	ISI mark
22	Centrifugal Pump	Amrut / BE / Beacon / Batliboi / Crompton / Jyoti / Kirloskar / KSB / Mather & platt / WASP/Grundfos
23	Submersible Pump	Crompton/Amrut / BE / Calama / Kirloskar / KSB
24	Motors	ABB/ Bharat Bijlee / Crompton Greaves / Schneider Electric / HBB / KEC / Siemens/Jyoti Ltd
25	Fresh Air Fans	GE / Khaitan/Almonard/Crompton
26	Starter	ABB / BCH / Schneider Electric / L&T / Siemens /
27	Single Phase Preventer	L&T / Minilec / Siemens / Zerotrip
28	GI/MS Pipe	ATC / ATL / BST / GSI / ITC / ITS / IIA / JST / Jindal / TTA / Tata/Zenith
29	Foot Valve	ISI mark
30	Gate Valve	Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain / Kirloskar / Leader / Sant / Trishul
31	Compressors	Carrier/Emerson copeland/York/Danfoss (for chillers only)
32	Resin Bonded Glass wool	Fibre Glass / Pilkington / UP Twiga
33	Expanded Polystyrene	BASF(India) Ltd.
34	Gauge	Feibig / H.Guru / Pricol
35	Controls	FLICA / Honeywell / Indfoss / Penn-Danfoss / Ranco / Ranutrol / Sporland
36	Fine Filters	Anfiltra Effluent / ARW / Athlete/ Airtake/ Dyna / Kirsloskar/ Puromatic/ Purafill/ Purolator / Tenacity
37	GI Sheet	HSU Jindal / National / Nippon Denro / Sail / Tata
38	Heat Detector	Appollo / Chemtron/ Edward / Fenwal/ Hochiki / Nitton /System Sensor/ Wormald/Honeywell Essar/Notifier
39	Ionization Detector	Appollo / Cerebrus / Edward/ /Fenwal / Hochiki / Nitton / System Sensor / Wormald

40	Photo Electric Smoke Detector	Appollo / Cerebrus / Edward / Fenwal / Hochiki / Nitton / Wormald /System Sensor
41	Fire Panel (Microprocessor based)	Agni Instruments / Agni Devices/ Aruna Agencies/ Carmel Sensor / Ravel Elect./Honeywell Essar/Notifier/Navin Systems
42	Sprinkler/ Hose Reel & Hose Pipe	ISI mark
43	Fire Extinguisher	ISI mark
44	Lift	OTIS, Kone, Mitsubishi , Schindler, Johnson, Thyssenkrupp Elevator(India)

NOTE:

1. In case of External / PMC works, the list of approved makes may be modified as per client's requirement.
2. The accessories such as CT/PT/measuring instrument/relays provided by approved make in respect of Transformer/HT Panel/DG /AC Package Units as supplied by approved manufacturer along with the equipments are also acceptable in addition.
3. Any additional makes may be approved by concerned PCEs/Sr CEs/CEs(Elect) for the work under his jurisdiction as already accorded vide letter no. 3-2-5/EW/VEP-1/2007 dated 05-07-2007.

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 -III/Chennai.

Definitions:

2(v) Engineer-in-Charge **Executive Engineer (E), ED –III, Chennai.**

2(vi) Accepting Authority **SE (E), BSNL Electrical Circle-II, Chennai**

2(x) Percentage on cost of materials and labour to cover all overheads and profits
10%(TEN)

CLAUSE 5

Time allowed for execution 24 months.

Authority to give fair and reasonable extension of time for completion of work: SE (E), EC- II, Chennai.

Competent Authority for deciding reduced rates: SE (E), EC-II, Chennai.

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: **ED-III, Chennai.**

Sub Division: **VIII, Chennai**

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/FDR/ Bank guarantee of a Nationalized/ Scheduled Bank for an amount equal to 5% of the contract value in a standard format within two weeks 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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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 :