

## INDEX

<b>Name of Work:</b>	<b>General comprehensive maintenance of electro-mechanical services for Palace Compound staff quarter complex - Imphal.</b>	
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STANDARD EW 6 & 8 IS NOT ENCLOSED HERE. REFER EW-8 AVAILABLE IN WEBSITE (IN PDF FORMAT) FOR FULL DETAILS

This N.I.T. contains 51 pages only.

**BHARAT SANCHAR NIGAM LIMITED**  
**(A GOVERNMENT OF INDIA ENTERPRISE)**  
**NOTICE INVITING e- TENDER (EW-6)**

The Executive Engineer [E], BSNL Electrical Division, Dimapur on behalf of BHARAT SANCHAR NIGAM LIMITED invites ON LINE BIDS FOR THE RATE CONTRACT from the Firms / Contractors for the following work -

1. The Executive Engineer (Elect.), BSNL Electrical Division, Dimapur invites item rate e-tenders on behalf of Bharat Sanchar Nigam Limited (A Government of India Enterprise) from eligible contractors for the following work:-

NIT No.	<b>69/EEE/BSNL/DMP/2017-18 dtd 20.02.2018</b>
Name of Work	<b>General comprehensive maintenance of electro-mechanical services for Palace Compound staff quarter complex- Imphal.</b>
Estimated Cost put to tender	<b>Rs. 3,78,108.00 (Rupees Three Lac Seventy Eight Thousand One Hundred and Eight only)</b>
Earnest Money	<b>Rs. 7562/- (Rupees Seven Thousand Five Hundred and Sixty Two only)</b>
Cost of Bid Document	<b>Rs. 590.00 (Rupees Five Hundred Ninety only) (Non-Refundable)</b>
E-tendering Processing Fee	<b>Rs. 590/- (Rupees Five Hundred and Ninety only)</b>
Period of completion of work	<b>12 months from the date of issue of Award Letter.</b>
Last date & Time of on line submission of Technical & Financial Bid	<b>09/03/2018. up to 15.00 Hrs.</b>
Period during which EMD, Cost of Bid Document, and other documents shall be submitted in Division	<b>09/03/2018. up to 15.00 Hrs.</b>
Time & Date of opening of hard copies of documents of intending bidders	<b>09/03/2018 at 16.00 Hrs.</b>
Time & Date of Opening of Technical Bid	<b>09/03/2018 at 16.00 Hrs.</b>
Time & Date of Opening of Financial Bid	<b>09/03/2018 at 16.30 Hrs.</b>

2. The Firms who fulfill the following requirements shall be eligible to bid.

2.1 ELIGIBILITY CRITERIA :-

Sl. No	Description	Submitted/Uploaded Yes/No	Detail of document Submitted/Uploaded
1	The Firms who fulfill the following requirements shall be eligible to bid		
A	Average annual turnover during the last three years ending 31st March 2017 should be at least 30% of the Estimated cost put to tender.		
	AND		
B	BSNL enlisted contractors in Electrical category of Class-I/II/III.		
	OR		
C	Three similar completed works costing not less than the amount equal to 40% of the estimated cost.		
	OR		
D	Two similar completed works costing not less than the amount equal to 60% of the estimated cost.		
	OR		
E	One similar completed work costing not less than the amount equal to 80% of the estimated cost.		
NB:	<b>SIMILAR WORK:</b> - Operation and maintenance of EI, Sub-stn, AC pkg plant, DEA sets etc . Firm has to attach copy of completion work certificate for requisite amount issued by concerned department /PSU .Without which tender will not be opened at all. In completion certificate scope of work shall also be shown or copy of schedule is also to attached along with completion certificate.		
2.	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.	<b>Cost of Bid Document:</b> Demand draft amounting to Rs. 590/- (inclusive of GST) drawn in favour of "Account Officer (cash ), O/o the GMTD, BSNL, Imphal" payable at Imphal. (Demand Draft only)		
b.	<b>b) E-Tender Processing Fee - Rs. 590/-</b> (inclusive of GST) To be paid online "ITI Limited" payable at Kolkota. (only)		
c.	<b>c) EMD</b> - amounting <b>Rs. 7562/-</b> in the prescribed form as above. Earnest Money should be in the form of demand draft/FDR/ BG (As per format at Annexure) / CDR of a nationalized/scheduled bank guaranteed by the Reserve Bank of India, drawn in favour of "Account Officer (cash ), O/o The GMTD, BSNL, Imphal " must accompany each tender. The Validity period of EMD is 120 days, from the date of opening of tender.		

3.	Copy of PAN card.		
4.	Copy of valid GST registration		
5.	Copy of CA certificate for turnover ( all documents shall be self attested )		
6.	The tenderer should give a certificate that none of his/her relative is employed in BSNL units. 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.( As per the format given)		
7.	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.		
8.	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.		
9	Have you downloaded and uploaded complete tender document with digital signature		
10	Have you uploaded undertaking and declaration as in page 14 and 15 duly signed.		
<ul style="list-style-type: none"> <li>• <b>Tender Document should be downloaded and Uploaded again with Digital Signature Or they have to submit signed copy of tender document at the time of agreement formation. But in all cases they have to submit declaration and undertaking duly signed in hard copy at the time of tender opening or they may upload online.</b></li> <li>•</li> </ul>			

2.2 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 as given below:

2.2.1 **Cost of Bid Document** - Demand draft amounting Rs.590/- (inclusive of GST) drawn in favour of "Account Officer ( cash ), O/o The GMTD, BSNL, Imphal."

2.2.2 **E-Tender Processing Fee @0.04% plus GST on estimated cost Rs. 590/- (Rupees Five Hundred and Ninety only)** through e-payment only.

2.2.3 **EMD - amounting Rs. 7562/- (Rupees Seven Thousand Five Hundred and Sixty Two only)** in the prescribed form as above. Earnest Money should be in the form of demand draft/FDR/ BG (As per format at Annexure)/ CDR of a nationalized/scheduled bank guaranteed by the Reserve Bank of India, drawn in favour of "Account Officer (Cash ), O/o The GMTD, BSNL, Imphal must accompany each tender. The Validity period of EMD is 120 days, from the date of opening of tender.

2.3 Documentary proof of satisfying the eligibility conditions as per 2.1 above, copy of PAN card, Copy of valid service tax registration, copy of CA certificate for turnover (all documents shall be self attested).

- 3 The Bid documents consisting of the detailed plans, complete specifications, the schedule of quantities of the various classes of works to be done and the set of conditions of contract to be complied with and other necessary documents, can be seen and downloaded from website [www.ne2.bsnl.co.in](http://www.ne2.bsnl.co.in) and [www.tenderwizard.com/BSNLKOL](http://www.tenderwizard.com/BSNLKOL)
- 4 But the Bid can only be submitted after uploading the following scanned documents -
- a) Documentary proof of satisfying eligibility conditions as per 2.1 above.
  - b) Copy of PAN card, GST Registration, CA certificate for turnover.
  - c) Demand draft of cost of tender documents and e-tender processing fees online only
  - d) EMD in prescribed form.
- 4.1 The contractor shall submit the documents as per 2.1 above and cost of Bid documents & EMD in the prescribed form, in a sealed envelope with mention of Name of work, date & time of opening of bids in a sealed bid box in the office of Executive Engineer (Electrical), BSNL Electrical Division, Dimapur before last date & time of submission of bid and up to Above time/ate and shall be opened on the same day at 4.00 PM in presence of AO/SDE [E-P]/EE(E) and contractors present.
- 4.2 Online bid documents submitted by intending bidders shall be opened only of those bidders, whose Earnest Money Deposit, Cost of Bid Document and other documents placed in the envelope are found in order.
- 4.3 After submission of the bid online the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
- 4.4 While submitting the revised bid, contractor 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 bid as notified.
- 4.5 The bid submitted shall become invalid and cost of bid & e-tender processing fees shall not be refunded if:
- (i) The bidder is found ineligible.
  - (ii) The bidder does not upload all the documents (including PAN No. / CA Certificate for turnover) as stipulated in the bid document.
  - (iii) Any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.

- 4.6 General conditions of contract for works in BHARAT SANCHAR NIGAM LIMITED are available on BSNL website [www.ne2.bsnl.co.in](http://www.ne2.bsnl.co.in) or <http://www.tenderwizard.com/BSNLKOL> as well as in the Division Office.
- 4.7 For e-Tendering of this tender BSNL has engaged e-portal maintained by **M/S ITI, Kolkata**. The agency intending to participate in tendering process shall have to register with **ITI, New Delhi/ Kolkata**. For details kindly visit website <http://www.tenderwizard.com/BSNLKOL>
- 4.8 The intending bidders must have Class-III digital signature to submit the bid.
- 4.9 On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheet.
- 4.10 Contractor can upload documents in the form of JPG format, PDF format and any other format as permissible by the e- tendering portal.
- 4.11 Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and moment rate is entered, it turns sky blue. 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}.
- 4.12 **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.**
- 5.1 Before e- tendering, the contractor shall inspect the site and fully acquaint himself about the condition with regard to accessibility of site and site nature and the extend of grounds, working condition, including stocking of materials, installation of T&P etc., and conditions affecting accommodation and movement of labour etc., required for the satisfactory execution of the contract. No claim whatsoever on such account shall be entertained by the BSNL in any circumstances.
- 6.0 Agreement shall be drawn with the successful Tenderer on prescribed Form No. **BSNL EW-7/8**, which is available on BSNL website [www.ne2.bsnl.co.in](http://www.ne2.bsnl.co.in) or <http://www.tenderwizard.com/BSNLKOL>. Tenderer shall quote his rates as per various terms and conditions of the said form.
- 7.0 The time allowed for carrying out the work will be as mentioned above.
- 8.1 The EMD of all the unsuccessful tenderers shall be released on issue of award letter to the successful tenderer. This shall be done within one week of award letter.
- 8.2 Exemption from payment of earnest money and security deposit by any other unit/

department shall not hold good for BSNL.

- 8.3 The EMD of the successful tenderer will be returned to the contractor without interest only after submission of performance guarantee of last LOI. The successful tenderer has to extend the validity of EMD as per BSNL requirements.
- 9.0 In case the eligibility credentials are not found in order at any stage i.e. before award of work or during execution of the work or after completion of the work, the contractor will be debarred from tendering in BSNL for three years including any other action under the contract or existing law.
- 10.0 The tender will be submitted in two parts - **Part -1: TECHNICAL AND COMMERCIAL BID.** Part - 2: **PRICE BID.**
- 10.1 The technical & commercial bid will be opened first at the first instance and evaluated by the Committee. At the second stage financial bids of only the technical & commercially accepted offer will be opened for further evaluation and ranking before awarding the contract. *The financial bid shall be opened subsequently on a date and time to be notified by BSNL.*
- 10.2 The technical & commercial bid shall be evaluated by the tender evaluation committee and if necessary clarifications / confirmation , for deviations ( if any ) shall be taken from the eligible bidders so as to evaluate their bids as per terms and conditions of the tender documents to decide the technically & commercially responsive / non responsive bidder.
- 10.3 The bidders shall not be at any stage allowed to revise / modify the price bid after the opening of Technical and Commercial Bid.
- 11.1 **Performance Guarantee (PG):** The Firm shall have to furnish Performance guarantee @ 5% of the contract value of the individual contract within two weeks of the issue of commencement letter in the form of Bank guarantee on a Nationalized/Scheduled bank in standard format (Annexure B)/ CDR/ FDR/ DD. *This performance guarantee shall be submitted in the Electrical Division in the name of concerned Accounts Officer and shall be valid for 15 months from the date of issue of commencement letter.*
- 11.2 **Security deposit:** A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum will amount to security deposit of 5% of the Tendered value of the work. This Security Deposit shall be released after an observation period of 12 months after the date of completion of work.
- 12.0 The acceptance of a tender will rest with the **Executive Engineer (E), BSNL, Electrical Division, Dimapur** who does not bind himself to accept the lowest tender or any other tender and reserves to himself the Authority to reject lowest or all the tenders received without assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.

- 13.0 Canvassing in connection with tender is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable for rejection.
- 14.0 The BSNL reserves itself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
- 15.1 The tenderer should give a certificate that none of his/her relative is employed in BSNL units. 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.
- 15.2 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:
  - a) Members of a Hindu Undivided family.
  - b) They are husband and wife.
  - c) 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).
- 15.3 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 tenderer 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. The format of the certificate to be given is enclosed.
16. 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 contractor 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 contractors' service.
17. The tender for the works shall not be witnessed by the contractor who himself/themselves has/ have tendered or who may and has/have tender for the same work. Failure to observe this condition would render tenders of the contractors tendering as witnessing the tender is/are liable for summarily rejection.



18. The tenders for the work shall remain open for acceptance for a period of 90 days from the date of opening of the tenders. If any tenderer withdraws his tender before the said period or makes any modification in the terms and conditions of the tender which is not acceptable to the BSNL shall, without prejudice to any other right of remedy be at liberty to forfeit 50% (fifty percent only) of the said earnest money absolutely
19. **Extension of validity:** In case, where the letter of award of work cannot be placed within the validity period of the tender, the BSNL can request all tenderers 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.
20. The contractor should read the tender documents carefully before submitting the tender.
21. This Notice Inviting Tender shall form part of the Contract document. The successful tenderer/contractor 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 forms the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
  - b) Standard BSNL EW-8 form.

Executive Engineer (E)  
For and on behalf of BSNL

## **E-Tendering Instruction to Bidders**

### **General**

#### **Submission of Tender through online process is mandatory for this e-tender**

e-Tendering is a new technology for conducting Public Procurement in a transparent and secured manner. For conducting electronic tendering, BSNL Electrical North East Zone has decided to use the portal <http://www.tenderwizard.com/BSNLKOL> through M/s ITI, A Govt of India Undertaking. It supports all the activities of tendering based on proactive work flow concept. Fine details of tendering like vendors registration, tender announcement and corrigendum, tender form processing, opening, negotiation and tender awarding are supported in a real time interactive environment.

#### **1. Tender Bidding Methodology:**

Electronically sealed bid system- "Two stage-two envelopes electronic system"

In case of two electronically sealed envelopes system Techno-Commercial and price Bid shall be submitted by the bidder at the same time.

#### **2. Broad outline of activities from bidder prospective:**

Procure a Digital Signing Certificate (DSC)

- i. Register on tender Wizard sites of M/s ITI (e-Tender).
- ii. Create Users and assign roles on e-tender.
- iii. View Notice Inviting Tender (NIT) on e-tender.
- iv. Download official copy of tender documents from e-tender.
- v. Clarifications to Tender Documents on e-tender.
- vi. Query to BSNL (Optional).
- vii. View response to queries posted by BSNL, as addenda.
- viii. Bid submission on e-tender.
- ix. Attend Public Online Tender Opening Event (TOE) on e-tender Opening of Techno-commercial Part.
- x. View/Post-TOE clarification posted by BSNL on e-tender (Optional). Respond to BSNL post TOE queries.
- xi. Attend public Online Tender Opening (TOE) on e-tender Opening of Price Bid Part (Only for Technically Responsive bidders)

For participating in this tender online, the following instruction needs to be read carefully. These instructions are supplemented with more with more detailed guidelines on the relevant screens of the e-tender.

#### **3. Digital Certificate:**

For integrity of data and its authenticity/non-repudiation of electronic records, and be compliant with IT Act 200, it is necessary for each user to have a digital Certificate (DC), also referred to as Digital Signature (DSC), of clause 3, issued by a certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) (refer <http://www.cca.gov.in>).

#### **4. Registration:**

To use the electronic portal <http://www.tenderwizard.com/BSNLKOL>, vendor needs to register on the portal (if not registered earlier). Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tender activities. In e-tender terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit <http://www.tenderwizard.com/BSNLKOL> and click on the "super organization" link under registration (on the Home page), and follow further instruction as given on the site.

**5. Bid related Information for this tender (Sealed tender bid):**

The entire bid submission would be online on e-tender. Broad outline of the submission are as follows:

- Submission of Bid Security/Earnest Money Deposit (in prescribed form EMD and -tender Processing Fee online,
- Submission of digitally signed copy of the tender documents/addendum/addenda two envelopes. (1) Techno-commercial Bid-Part-I; (2) Price bid-Part-II.
- Each of the above envelopes consists of Main Bid and electronic form (both mandatory) and bid annexure (optional).

**NOTE:** Bidder must ensure that after following the above, the status of bid submission must become-"**complete**".

**6. Offline Submissions:**

The contractor shall submit the DD for the cost of bid documents & e-tender processing fees and EMD in the prescribed form, in a sealed envelope with mention of Name of Work, date & time of opening of bids in a sealed bid box in the office of the Executive Engineer (E), BSNL Electrical Division, Dimapur up to **3:00PM on (date given above )** and shall be opened on the day given above **at time given above** in presence of contractors present.

**7. Public Online Tender Opening Event (TOE):**

E-tender offers a unique facility for "Public Online Tender Opening Event (TOE)". Tender opening officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event from the comfort of their offices. For this purpose, representatives of bidders (i.e. Supplier Organization) dully authorized are requested to carry a Laptop and Wireless Connectivity to Internet.

The following KEY INSTRUCTIONS for BIDDERS must be assiduously adhered to:

- a. Obtained individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on M/s ITI e-tender site.
- b. Register your organization on M/s ITI e-tender site well in advance of your first tender submission deadline on M/s ITI e-tender site.
- c. Get your organization's concerned executives trained on M/s ITI e-tender site well in advance of your first tender submission on M/s ITL e-tender sites.
- d. Submit your tender well in advance of tender submission deadline on M/s ITI e-tender site as there could be last minute problems due to timeout, breakdown, etc. while the first three instruction mentioned above are especially relevant to the first-time users of M/s ITI e-tender site, the fourth instruction is relevant at all time.

### TENDER SUBMISSION FORMAT (For e-Tender)

**IMPORTANT NOTE:** Before submitting the tender documents, bidder must verify the check list properly as per given below:

To

**The Executive Engineer (E)  
BSNL Electrical Division  
Dimapur**

**IMPORTANT NOTE:** Before submitting online tender documents, bidder must verify the check list properly for office submission of required documents & uploading of their scanned copies as per 2.1 of NIT (e-tender).

**Sub:** Submission of e-tender for the work of **Name of Work: General comprehensive maintenance of electro-mechanical services for Palace Compound staff quarter complex - Imphal.**

."As per tender publication, advertised by your office and display of Notice Inviting Tender on web portal site [www.ne2.bsnl.co.in](http://www.ne2.bsnl.co.in). and <http://www.tenderwizard.com/BSNLKOL> We are hereby submitting the following documents duly attested.

#### ENVELOPE-I (model SAMPLE FOR SUBMISSION)

Sl. No.	DOCUMENTS	DETAILS
1	Tender COST SUBMISSION In favour of	Account officer (cash) office of the GMTD BSNL, Imphal
2	Earnest Money Deposit	<b>Rs.7562.00 (Rupees Seven Thousand Five Hundred and Sixty Two only)</b>
a	DD/FDR/CDR/BG No.	
2B	Emd In favour of	Account officer (cash) office of the GMTD BANL, Imphal
6	Tender processing Fee	
c	Amount Rs. <b>590.00</b> Only Online	M/S ITI Limited Payable On Line
7	Name of proprietor/Firm/Company	
G	Electrical Contractor's License No.	
H	Issuing authority, date of issue & letter No.	
I	Class of Registration	
8	Income Tax Returns / Chartered Accountant Certificate Date	
9	Works Contract Registration No. & Date Valid up to	
10	GST Registration No. & Date	
11	EPF Registration No.(Optional)	
12	ESI Registration No.(Optional)	

14. **List of works carried out satisfactorily** (Certified Officer not below the rank of Executive Engineer) to be issued by the user on his printed letterhead to the tenderer as per the sample format given below:

This is to certify that the work has been completed satisfactorily as per details given in tender document / P. O.

Sl. No.	Name of work	Date of start	Date of completion	Amount of work done	Department and P.O. / Agreement No.
1.					
2.					
3.					

15. **Annual Turn Over: (To be issued by Chartered Accountant on his letter head including following)**

Sl. No.	Year	Annual Turn Over
1.		Rs.
2.		Rs.
3.		Rs.

**Declaration By Contractor**

1. I / we do hereby undertake to have gone through the terms & conditions / clauses of all the tender documents including Form EW-6, EW-8 being adopted by the BHARAT SANCHAR NIGAM LIMITED (Electrical Wing) & agree to abide by the same.
2. I / We hereby declare that no addition / deletion / correction have been made in the tender document submitted and is identical to the tender document appearing on website.
3. I, ..... proprietor / duly authorized representative of M/s ..... hereby certify that the information given above is true to the best of my knowledge and belief. I have been duly authorized to sign and certify the documents. I understand that any wrong information / suppression of facts will disqualify us from being considered for the tender participation. In case of failure to comply as above, our offer will stand withdrawn and the decision of tender opening officer in this regard shall be final & binding on me.

**Signature of Contractor / Authorized representative**

**With seal of the firm**

**UNDERTAKINGS**

**UNDERTAKING - A TO ABIDE BY EW-6 & EW-8**

"I ..... Son of .....  
 Resident of.....  
 hereby give an undertaking that I have read and I am aware of all the Clauses and sub-clauses of BSNL EW-6 & EW - 8 forms and I confirm that I will abide by all the terms and conditions available in original standard BSNL EW-6 & EW-8 forms.

(Seal of the firm)  
Contractor)

Dated          Signature          of

**The format of the certificate as per clause 14.3 of EW-6**

I....., Son of Shri .....  
 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 Contractor)**

**UNDERTAKING REGARDING EPF PROVISION**

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

- I / We have employed on ..... persons in our establishment and hence the EPF and miscellaneous provision 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

**(Seal of the firm)**

**(Signature of Contractor)**

**In case any undertaking the same shall be submitted at the time of agreement formation. Certificate submitted may be self certified and BSNL reserve right to ask for original document , in case quoting contractor fails to submit within time it will be treated as wrong information submitted by contractor and tender will be rejected /terminated and further legal action will be taken.**

**Important Notes:**

1. The item rates quoted shall be inclusive of all taxes / duties but excluding GST/SGST/IGST.
2. The rates for all items of work, shall, include cost of all labour, materials and other inputs involved in the execution of the item as specified in the scope of work.
3. Contractor shall mention his "GST Registration" details, surcharge etc. if any and CESS will be deducted from the contractor's bill as per the GST Act & Rules as applicable from registered and unregistered contractors at the time of deduction and TDS certificate will be issued.
5. Tenders with conditional rebate offer will be summarily rejected. However any unconditional or voluntary rebate shall be considered.
6. Any additional condition will not be accepted and in case of such an event, the tender is liable for rejection.
7. Rates may be quoted in the schedule only and if quoted elsewhere the same shall not be considered.
8. The tenders those which are having more corrections/over writing in the Schedule/ using white fluid shall be liable to be rejected.
9. All materials used should be of BSNL approved make as per List of approved makes.
10. Determination of Contract: The Engineer-in-charge may determine the contract in respect of any delay, inferior workmanship as per clause 3 of PWD - 8 contract conditions.

**CONTRACTOR**

**ENGINEER-IN-CHARGE**



BSNL FW

8

## BHARAT SANCHAR NIGAM LIMITED

*(A Government of India Enterprise)*CIRCLE - NE-II  
DIVISION - DimapurBRANCH : EW  
SUB DIVISION -ImphalTender for the work of :- **General comprehensive maintenance of electro-mechanical services for Palace Compound staff quarter complex - Imphal.**

(A)

(B)

(C) (contractor) \_\_\_\_\_

(i) Tender Cost \_\_\_\_\_

(ii) Receipt No. \_\_\_\_\_

(iii) Date of application \_\_\_\_\_

(iv) Date of issue \_\_\_\_\_

(v) Signature of officer issuing the documents \_\_\_\_\_

(vi) Designation \_\_\_\_\_

(B) (i) **To be submitted by** (time) \_\_\_\_\_ hours on (date)

\_\_\_\_\_ to \_\_\_\_\_

(ii) To be opened in presence of tenderers who may be present at \_\_\_\_\_ hours on \_\_\_\_\_ in the office of \_\_\_\_\_

**T E N D E R**

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. A sum of **Rs. 7562/- ( Seven Thousand Five Hundred and Sixty Two only )** is hereby forwarded in the form of Deposit at call receipt/FDR//Bank guarantee of a Nationalised/Scheduled Bank as earnest money. 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 up to 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 Nationalised/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 for one year from the date of actual completion of work.
- 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  
 contractor's thumb impression  
 is given by the contractor in place  
 of signature)  
 (Name & Postal address)

(Signature of contractor)  
 Seal of Contractor

Occupation of Witness

**ACCEPTANCE**

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)

Date.....

For & on behalf of BSNL  
 Signature  
 Designation

**PROFORMA OF SCHEDULES**

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

**SCHEDULE 'A'**

Abstract of Cost and Schedule of requirement: Appended on page - 51

**SCHEDULE 'B'**

Schedule of materials to be issued to the contractor.

Sl. No.	Description of item	Quantity	Rates in figures and words at which the material will be charged to the contractor	Place of Issue
1	2	3	4	5
NIL				

**SCHEDULE 'C'**

Tools and plants to be hired to the contractor

Sl. No.	Description of item	Hire charges per day	Place of Issue
1	2	3	4
NIL			

**SCHEDULE 'D'**

Extra schedule for specific requirements/document for the work, if any.

- I. Model form of Bank Guarantee: Appended on page .....
- II. Performance Security Guarantee Bond: Appended from pages .....
- III. Additional Conditions Of Contract For DEA set : Appended from pages .....
- IV. Specification for DEA Works: Appended from pages .....
- V. ANNEXURE - B & ANNEXURE - C: Appended from pages.....
- VI. STANDARDS FOR EQUIPMENTS/COMPONENTS ( ANNEXURE D)- .....
- VII. ANNEXURE - E & ANNEXURE - F: Appended from pages .....
- VIII. IMPORTANT NOTES-Page .....

**SCHEDULE 'E'**

Schedule of component of materials, Labour etc for escalation:

Clause 10 CC

Not applicable.

<b>SCHEDULE 'F'</b>	
Reference to General Conditions of contract.	
1.(i) Name of work:	<b>General comprehensive maintenance of electro-mechanical services for Palace Compound staff quarter complex - Imphal.</b>
(ii) Estimated cost of work:	<b>Rs. 3,78,108.00 (Rupees Three Lac Seventy Eight Thousand One Hundred and Eight only)</b>
(iii) Earnest money :	<b>Rs. 7562.00 ( Rupees Seven Thousand Five Hundred and Sixty Two only )</b>
(iv) Performance Guarantee :	As per Sl. No. 5(i) of the NIT.
(v) Security Deposit :	As per Sl. No. 5(ii) of the NIT.
<b>GENERAL RULES and DIRECTIONS :</b>	
Officer inviting tender :	EE (E), BSNL Electrical Division, Dimapur
<b>Definitions:</b>	
2(i) Engineer-in-Charge	Executive Engineer (E), BSNL Electrical Division, Dimapur
2(ii) Accepting Authority	Executive Engineer (E), BSNL Electrical Division, Dimapur
2(iii) Percentage on cost of materials and labour to cover all overheads and profits.	10%
<b>Clause 5</b>	
(i) Time allowed for execution of work :	<b>i) 12 Month after issue of award letter</b>
(ii) Authority to give fair and reasonable extension of time for completion of work :	(i) SE(E) BSNL Electrical Circle, Shillong
<b>Clause 12</b>	
12.2(iii) Schedule of rates for determining the rates for additional, altered or substituted items that cannot be determined under 12.2(i) and (ii).	: NA for this work.
12.2(iii) Plus / minus the % over the rate entered in the schedule of rates.	: NA.
<b>Clause 25</b>	
Competent authority for conciliation :	: SE (E), not in-charge of the work.

**SCHEDULE "D"**

**SECTION-I:**

**MODEL FORM OF BID SECURITY FOR (Bank Guarantee)**

Whereas ----- (hereinafter called "The Bidder") has submitted its bid dated ----- for the supply of -----  
----- vide Tender No. ----- dated -----  
-- KNOW ALL MEN by these presents that WE ----- OF -----  
-----having our registered office at -----(hereinafter called "the Bank") are bound unto Bharat Sanchar Nigam Limited. (Hereinafter called "The Purchaser") in the sum of Rs. ----- for which payment will and truly to be made of the said Purchaser, the Bank binds itself, its successors and assigns by these present.

THE CONDITIONS of the obligation are:

1. If the Bidder withdraws his bid during the period of bid validity specified by the Bidder on the Bid form or
2. If the Bidder, having been notified of the acceptance of his bid by the Purchaser during the period of bid validity.
  - (a) fails or refuses to execute the Contract., if required; or fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand, the Purchaser 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 Bid Document up to and including THIRTY (30) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the specified date/dates.

Signature of the Bank Authority  
Name

Signed in Capacity

Name & Signature of witness  
Address of witness

Full address of Branch  
Tel No. of Branch

**SCHEDULE "D"**

**SECTION-II**

**MODEL FORM OF PERFORMANCE SECURITY GUARANTEE BOND**

In consideration of the CMD, BSNL (hereinafter called 'BSNL') having agreed to exempt -----  
----- (hereinafter called 'the said contractor(s)) from the demand under the terms and  
conditions of an agreement/Advance Purchase Order No. ----- dated ----  
----- made between ----- and ----- for the supply-----  
----- (hereinafter called 'the said agreement') of security deposit for the due fulfillment  
by the said contractor(s) of the terms and conditions contained in the said agreement, on production  
of the bank guarantee for -----

1. we, (name of the bank) ----- (hereinafter refer to as 'the bank' ) at the request of ----- (contractor (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 Contractor(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 demure, merely on a demand from the BSNL by reason of breach by the said contractor(s) of any of the terms or conditions contained in the said agreement or by reason of the contractor(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 contractor(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 contractor(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/Department) BSNL certifies that the terms and conditions of the said Agreement have been fully or properly carried out by the said contractor(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 contractor(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 Contractor(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 Contractor(s) or for any forbearance, act or omission on the part of the BSNL or any indulgence by the BSNL to said Contractor(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 Contractor(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)

**(III) SCHEDULE "D"**  
**ADDITIONAL CONDITIONS OF CONTRACT**

**1. PAYMENT TERMS:**

Payment shall be paid preferably quarterly. Firm has to submit following documents:

1. Test report of performance of the AC, UPS.
2. Diesel consumption verses engine running details along with power consumption report.
3. Failure of electromechanical items and report if any.
4. Details of person employed during the last months along with change report if any.
5. Undertaking that all dues of EPF/ESI compliance/other statutory taxes duties paid.
6. Any other information requested by engineer in charge.

**2. ITC & MISC. ITEMS**

The equipment are installed and handed over to firm in good condition and firm will indicate the defect if any while taking over. BSNL will take over installation after completion of work in good condition. Any defect found at time of taking over by BSNL will be got repaired at the cost of firm.

The contract include round the clock operation including setting of equipment , temperature setting of AC , setting and reseating all switches of panel to ensure round the clock availability of power to all equipments. The maintenance for EI and fans , AC & DG is comprehensive and no payment shall be made for replacement of fittings, fixtures, wires switches etc.

**COMPREHENSIVE MAINTENANCE ITEMS and scope of work- EI, Inverters, AC & DG items are under comprehensive maintenance.**

The person deployed at site shall make themselves aware to operation of all sophisticated equipment, their setting, contact details of original supplier, maintenance schedule, helpline, protocols, operating parameters etc. The deployed person should be able to independently handle all the operational requirement, change over to standby equipments etc. He will indicate the any abnormality in operation to engineer in charge.

Keeping the equipments clean and healthy condition, restart the equipments in case of tripping in proactive manner, keep the temperature and ambient condition in recommended limits, The belt tension in DG set, adequate coolant and lubrication level in DG set shall be checked on daily basis, ensure that safety equipments are in working condition and no tampering is done , ensure that adequate spares , fuel, refrigerant and coolant , fire quenching gas is available to meet urgency. Deployed person will ensure that energy conservation is one and no leakage of refrigerant, fire quenching gas is happening due to faults in package or fire detection system, daily recording the parameters of all equipments as directed by engineer in charge, reporting the small function of deviation to engineer in charge in writing shall be responsibility of person deployed at site .

**2. BID PRICES: (Sl. No. 14A, 14B & 14C of General Rules & Directions of Standard Tender Form BSNL EW-8 stands modified as below)**

- (i) The bidder shall give the total composite price inclusive of all levies, packing, forwarding, freight and insurance as applicable etc but exclusive of GST/SGST/IGST. The basic unit price and all other components of the price need to be individually indicated against the goods it proposes to supply under the contract as per the given price schedule. Price of incidental services should also be quoted. The offer shall be in Indian Rupees. No Foreign Exchange will be made available by the purchaser.
- (ii) Prices indicated in the Price schedule shall be entered in the following manner:
  - (a) The supplier / contractor shall quote as per price schedule for all the items given in the schedule of quantities.
- (iii) The contractor/supplier shall submit to BSNL documents/proof of payment of all taxes/ levies along with exemption certificate, if any, to avail CENVAT/GST benefits by BSNL. The invoice favouring BSNL shall be issued by the supplier.



- (iv) A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
  - (v) The price quoted by the bidder shall be in sufficient detail to enable the Purchaser to arrive at the price of equipment/ system offered.
  - (vi) "DISCOUNT" if any, offered by the bidders shall not be considered unless specifically indicated in the price schedule. Bidders desiring to offer discount shall therefore modify their offers suitably while quoting and shall quote clearly net price taking all such factors like Discount, free supply etc. into account.
  - (vii) The price approved by BSNL for services will be exclusive of all levies and taxes.
3. **EVALUATION AND COMPARISON OF SUBSTANTIALLY RESPONSIVE BIDS:**  
(Sl. No. 14A, 14B & 14C of General Rules & Directions of Standard Tender Form BSNL EW-8 stands modified as below)
- The evaluation and comparison of responsive bids shall be done on the basis of **Net cost to BSNL** on the prices of the goods offered inclusive of all Duties and taxes but excluding GST/SGST/IGST as applicable.
- a) (i) Duties & Taxes for which the firm has to furnish Invoices will be indicated separately in the Work Order.
  - (ii) Vendors should furnish the correct HSN/SAC numbers in the price bid. If the credit for the Duties and Taxes under GST Act is found to be not admissible at any stage subsequently owing to wrong furnishing of Tariff Head, then the vendors will be liable to refund such non-admissible amount, if already paid, along with penalty if charged by the concerned authority.
  - (iii) In case the Duties & Taxes which are non ITC as per the quotes indicated in the price schedule by the vendors and subsequently at any stage it is found that Credit for such Duties & Taxes is admissible as per GST Act then the vendors will be liable to refund the amount equivalent to such Duties & Taxes if already paid to them. However, the purchaser may allow the supplier to submit necessary documents in this regard which may enable the purchaser to avail the GST credit provided such credit is still available for the amount so paid as per GST Act.
4. The firm shall read carefully the following conditions and shall quote accordingly confirming all the points in their offer.
- (a) Department reserves the right to accept the quantities in full or in parts.
  - (b) Clause 10(CC) will not be applicable.

**5. WORK / QUANTITY DISTRIBUTION**

- (a) 100% Work shall be awarded to first lowest tenderer.

**6. 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 10<sup>th</sup> day after the date on which the orders to commence the work are given to the contractor.

**7. GUARANTEE AND DEFECT LIABILITY: -**

- 1. The guarantee shall be valid for a period of 12 months after provisional take over. The Firm shall guarantee that all equipments/ materials supplied shall be free from any defect due to the defective materials and bad workmanship and that the equipment shall work satisfactorily and that the performance and efficiencies of the equipments shall be not less than the guaranteed values. Any parts found defective during the guarantee period shall be

replaced by the Firm without any charge whatsoever. The services of the Firm's personnel, if requisition during this period for such work, shall be made available free of any cost to the dept.

2.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 and time schedule for the rectification/remedial action.

**8. SPECIAL CONDITIONS:**

- i) The firm should note that offers with condition and / or conditional rebates will be summarily rejected.
- ii) The layout of the work will be given by the Engineer-in-Charge or his duly authorized representative at site of works.
- iii) Any damage done to the building during the execution of work will have to make good at the entire satisfaction of Engineer-in-Charge.
- iv) Items which are not included in the "**List of Approved Makes**" only ISI marked material shall be used. In case ISI marked is not available in particular item, material conforming to BS, shall be provided.

**13. QUALIFICATION OF PERSONS POSTED AT SITE:**

- For all services including Air-Conditioning.  
Electrical workman permit/workman's competency certificate/Electrical workman's License(Certificate of competency class-II) with at least 2 years experience in reputed organisation/ Diploma in electrical / Mechanical/ electronic/instrumentation or higher education in engineering stream.

OR

Any other equipment certificate with at least two year experience in the line issued by any government enlisted contractor .Decision of executive engineer concerned will be final and binding for adequate experience.

OR

- Since Air-conditioning is also included person may have following qualifications :
  1. Pass in Matriculation.
  - Must have undergone 18 months refrigerator Mechanic or equivalent course in a recognized technical Institute, One year apprenticeship in a reputed firm or organization of Air conditioning and Refrigeration Engineers and one year experience in Air conditioning/Refrigeration in skilled capacity OR Two years apprenticeship in a reputed firm or organization of Air conditioning and Refrigeration engineers and one year experience in air conditioning/refrigeration in skilled capacity OR Five years experience in air conditioning/refrigeration in skilled capacity.

Since this is very vital installation , the deployed staff shall be required to keep very disciplined behavior and no information of work area shall be shared outside and any violation of these instruction shall be treated as default and necessary action will be taken including closing the contract without any further information, If any staff activities are not satisfactory/is involved in sharing the information to outside , leaking details / taking pictures without permission shall be treated as misconduct an under this circumstances contractor will immediately remove the person from site without any further communication and suitable substitute shall be arranged immediately.

- Since Air-conditioning is also included at least one person should have following qualifications :
  2. Pass in Matriculation.
  - Must have undergone 18 months refrigerator Mechanic or equivalent course in a recognized technical Institute, One year apprenticeship in a reputed firm or organization of Air conditioning and Refrigeration Engineers and one year experience in Air conditioning/Refrigeration in skilled capacity OR Two years apprenticeship in a reputed firm or organization of Air conditioning and Refrigeration engineers and one year experience in air conditioning/refrigeration in skilled capacity OR Five years experience in air conditioning/refrigeration in skilled capacity.

•

14. POLICE VERIFICATION FOR PERSONS POSTED AT SITE:

- For all personnel ( skilled/semi skilled/unskilled), a certificate from police station shall be submitted before deploying at site that there is no adverse remark/complaint filed against the person employed in the police station as on date of and the conduct of the personal employed is GOOD .

**ANNEXURE-III LIST OF APPROVED MAKES OF BSNL ELECTRICAL WING**

S. No.	Item	Makes
1	Engine	Ashok Leyland /Cummins/ Cater pillar / KOEL/ Volvo Penta / Mahindra & Mahindra (up to 40 KVA) /Escorts (up to 30 KVA)/ Eicher (up to 20 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/Automatic Electric Gear(AEG)/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
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/ C&S/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 / Kirloskar/ 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
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
45	UPS	Numeric/Emerson/Mitsubishi/APC(Schneider)/GE/Gutor

**NOTE:**

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

**SCHEDULE "D"**  
**IMPORTANT NOTE FOR CONTRACTORS**

**1. EARNEST MONEY:**

**1.1 VALUE:**

The amount of Earnest Money to be deposited with each tender is 2% of the estimated cost put to the tender **subject to a maximum of Rs. 2 crores**. Earnest money will be acceptable in the form of CDR / FDR / DD / BG.

**1.2 VALIDITY PERIOD:**

The validity period of the Earnest Money Deposit is kept 30 days beyond the tender validity period.

**1.3 EXTENSION OF VALIDITY:**

In case, where the award of work cannot be placed within the validity period of the tender, the BSNL can request all tenderer 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.

**1.4 RELEASE OF EARNEST MONEY DEPOSIT:**

Earnest Money Deposit of all unsuccessful tenderer should be released on issue of award letter to the successful tenderer. This should be done within one week of issue of award letter.

In case of successful tenderer, the Earnest Money deposit is released on their submitting Performance Bank Guarantee.

Where the BSNL requests the tenderer to extend the validity of the tender beyond the stipulated period given in the tender documents, and the tenderer refuses to extend the validity of his tender, the Earnest Money deposit of such tenderer is returned forthwith.

**2. PERFORMANCE BANK GUARANTEE & SECURITY DEPOSIT:**

(i) **Performance Guarantee:** The contractor is required to furnish Performance Guarantee for an amount equal to 5% of the contract value in the form of Bank Guarantee (of a Nationalized/Scheduled Bank in a standard format) /CDR/FDR/DD within two weeks from the date of issue of award letter. The validity period of the performance security in the form of performance bank guarantee shall be one year from the date of actual completion of work.

(ii) **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 along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of work.

**3. TELEPHONE NO.:-**

**In all cases firm should have round the clock contact Telephone number(s).**

**4. QUANTUM OF WORKS:-**

**Before tendering, the contractor has to assess the quantum of maintenance work involved by physical inspection at site with SDE-In- Charge or authorized representative. In first 15 days firm shall arrange specialized agency/labour to maintain the installations in running and fit condition. Material required for initial repairs shall be given either by the department or agency have to arrange from authorized dealers for which he should produce original vouchers. Payment for these materials shall be made, but no installation, commissioning charges shall be paid. In case of specialized repair like rewinding, repair of pumps, which are to be carried out side the premises; actual cost of repair will be reimbursed. However EE(E) has the discretion to get such work carried out through other agency as he deems fit, for which firm shall have no claim. Before carrying out the repair work, firm shall list-out the items & approximate cost involved. The same shall be submitted to EE (E) for his final decision.**

**5 TAXES AND DUTIES:-**

**The firm shall quote rates for all the items inclusive of all taxes, duties etc. and nothing extra shall be paid on any account. However tender will be decided on the basis of net cost to BSNL i.e. total cost (-) CENVAT able taxes.**

**7. CURRENCY OF CONTRACT:-**

**The contract shall be valid for 12 months after the date of its award.**

**SPECIAL CONDITIONS OF CONTRACT**

**1. General**

The special conditions shall be read in conjunction with general conditions of contract and amendments/corrections thereto. If there are any provisions in these special conditions, which are at variance with the provision in the above-mentioned documents; the provisions in these special conditions shall take precedence.

**2. Inspection of site and contract documents**

(1) For the purpose of inspection of site and relevant documents, the contractor is required to contact Executive Engineer (Electrical) 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 as to the form and nature of the site, the quantities and nature of work, materials necessary for completion of the work, the means of access to the site, the accommodation he may require and in general shall himself obtain all necessary information as to the risks, contingencies and other circumstances which may influence or effect his work. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

(2) Variation in quantities in respect of unit rated items be governed by unit rates in the agreement. For any item of work not covered by the schedule of work clause 12 of EW-8 shall apply.

**3. Sufficiency of Tender**

The contractor shall be deemed to have satisfied himself before entering to the contract as to 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 bill of quantities. These rates and prices shall except otherwise provided, cover all his obligations under the contract and all matter and things necessary for proper completion and maintenance of the work.

**4. Stores & Materials**

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 sources/open market. It should be clearly understood that no claim whatsoever should be entertained by the department on this account. Lockable space for storing of materials shall be provided. However safe custody will be the contractor's responsibility.

The contractor has to maintain an inventory of total electrical points & fixtures of the building and a minimum of 5% of the total consumption( to be assessed on average basis) of materials to be kept as stock for immediate replacement.

**5. I.S. Standard**

All the electrical works shall confirm to various standards amended up to date wherever applicable.

**6. Co-ordination**

**Sometime other works of installation etc are carried out by other agencies; it should be the aim of different agencies that on their account the work of other agency/agencies is not delayed. Full co-operation and full co-ordination is to be extended during progress of work to all the agencies.**

**7. Terms of payment**

**Payment will be made on bi- monthly basis.**

**8. Bye-laws indemnity against Liabilities**

**(1) License fees, damages, cost and charges of all and every sort that may be legally incurred in respect thereof shall be borne by the contractor.**

**(2) All liabilities/panel recoveries on matters arising out of tax/excise/levies such as incorrect deductions, discrepancies in the filling up returns, revised assessments by the concerned authorities etc. shall be borne by the contractor.**

**(3) It is contractor's liability to follow all safety procedures in accordance with relevant I.S. amended up to date during execution of work at site.**

9. Change in specifications

- (1) The department deserves the right to make changes in the specifications of the work if in its opinion the same is found necessary. However such alterations shall be made after mutual discussion and agreement between the department and the contractor. Any price implication in this regard shall be mutually discussed and agreed upon, in terms of clause 12 of EW-8.**
- (2) Modification or alterations by the contractor in the design/specifications of any equipment/material will not be permitted by the department as a matter of principle. However the same can be agreed by the department under the exceptional circumstances where**
  - a) The same is necessitated due to non-availability of material/component of certain specification or make.**
  - OR**
  - b) Such alterations constitute an improvement in the opinion of the contractor and department.**
- (3) Prior written approval of the department is necessary before undertaking any alteration/modification in the specifications of the equipments.**



**SCHEDULE “D”**

**(IV) GENERAL CONDITION**

**1. SCOPE OF MAINTENANCE**

**a) GENERAL:-**

Electrical maintenance of the Technical/administrative/residential buildings are applied in our cases means that all electro-Mechanical services included in the schedule of work are kept in healthy and clean condition and wherever operation is called for the same is also carried out. Specific details of maintenance activities with regard to each service are detailed under sections pertaining to that service.

**Addition of Electromechanical Service:-**

Any additional Electro-mechanical Service added during the currency of contract shall be operated without any extra payment.

**2. METHODOLOGY**

It is presumed that contractor will provide minimum qualified staff at the site, which will be adequate to perform routine maintenance and operation functions. For optimum utilization one person can be responsible for number of services. Also maintenance staff has to be available round the clock the year even on holidays., However strength may vary during day and night shifts. Scheme for staff employed shall be got approved from the Engineer-in-Charge.

In case of faults beyond the capacity of the staff provided as above, contractor should immediately provide extra-specialized work force so as to attend the fault in minimum reasonable time.

**I. MINIMUM STAFF REQUIRED.**

<b>Skilled Staff</b>	<b>Unskilled /Semi Skilled Staff</b>
<b>(One shifts per day)</b>	<b>One Shifts per day</b>

**The wages paid by the agency to the staff employed shall be according to minimum wages fixed in the Central Sphere since the rates fixed in the Central Sphere are applicable to establishments under Central/CPSUs in various states including Delhi.**

However it is the firm’s responsibility to carry out proper work as per agreement and if more persons are required, it is to be arranged by the firm at no extra cost. Duty chart, with name of operator, for round the clock operation is to be made by the agency and displayed at site.

**II. QUALIFICATION OF PERSONS POSTED AT SITE:**

- For all services except Air-Conditioning.

Electrical workman permit/workman’s competency certificate/Electrical workman’s License(Certificate of competency at least two year experience in the line.

- If Air-conditioning is also included at least one person should have following qualifications :
  3. Pass in Matriculation.
  - Must have undergone 18 months refrigerator Mechanic or equivalent course in a recognized technical Institute, One year apprenticeship in a reputed firm or organization of Air conditioning and Refrigeration Engineers and one year experience in Air conditioning/Refrigeration in skilled capacity **OR** Two years apprenticeship in a reputed firm or organization of Air conditioning and Refrigeration engineers and one year experience in air conditioning/refrigeration in skilled capacity **OR** Five years experience in air conditioning/refrigeration in skilled capacity.

**III. Generally materials needed for maintenance have to be arranged by the firm at own cost. Materials arranged by the firm shall be of makes already existing at site. If any change is required, the same shall be approved by the EE(E) based on approved product list of department given in relevant sections/ISI mark. For specific details in this regard refer sections relevant to service.**

### 3. TOOLS AND PLANTS

All tools and plants required for carrying out various tasks relevant to operation and maintenance has to be arranged by the agency at its own cost. The following minimum T & P are required to be kept at site.

Sl.No.	Tools required to be kept at site	Qty	Tools required to be kept at office	Qty.
1.	Crimping machine suitable for 6 sq. mm. To 300 sq. mm. cable	1no.	Megger for insulation resistance	1no.
2.	Ring & adjustable spanner	1 set	Earth Tester for earth resistance	1no.
3.	Pipe wrench	1 set	Required size ladder/ ladders	1 set
4.	Emergency light	2Nos.	Anemometer	1no.
5.	Torch, test lamp	1 No	Lux meter	1no.
6.	Clip on meter for measuring Voltage, Current	1no.	Load analyser	1 set
7.	Hand gloves	1 set		
8.	Sling psychometer	1no.		

### 4. COMMERCIAL

1. The workers engaged by firm should maintain proper discipline and good behavior with occupants.
2. The firm shall remove such workers from the site whose behavior is found improper. Executive Engineer's decision shall be final.
3. Any damages to the installations building during the maintenance period due to the carelessness on the part of maintenance staff shall be the responsibility of firm and be replaced/ rectified without any extra cost.
4. The agency will provide the workers with necessary T&P, Testing and safety equipments.
5. Any accident or damage during maintenance/operation will be the responsibility of the agency and the department will not entertain any claim, compensation, penalty etc. on this account or on account of non-observance of any other requirement of law relevant to this work.
6. Agency has to observe all the labour rules and regulations in force.
7. The agency has to supply details as per Annexure-I of all the workers likely to be engaged by him before start of work and get it approved by Executive Engineer. The details as per Annexure-I shall also be displayed in Sub-Station/J.T.O.(E) room at site.
8. The agency should also supply three-passport size photograph for issuing identity cards to the workers. It is responsibility of the firm to ensure good character and antecedents of the workers before employing.
9. Dismantled materials shall be returned to the department except those items for which the replacement is supplied by the agency.
10. The department reserves the right to carry out any work at the risk and cost of the agency, if the agency fails to perform any duty as per the contract.
11. The tenderer must obtain himself at his own expense all the information necessary for the purpose of tendering.
12. Inspect the site and acquaint him with all the local conditions, means of access to work and nature of work etc. No claim shall be entertained on these accounts.
13. The contractor shall not sublet the work or part thereof, however services of specialized agencies for specific work can be obtained.
14. The firm shall maintain the installation in such a way as to provide uninterrupted power supply to the campus/buildings. In case of power failure for more than Four hours in a day, the firm can be penalized, if this is on account of carelessness on the part of the contractor. The decision of EE (E) shall be final.
15. The sitting arrangement for the staff engaged by the agency should be arranged by the firm at its own cost. The space, water, Telephone and electricity shall be made available by the department free of cost.
16. The contractor has to keep all the Electro-Mechanical equipments and site neat and clean to avoid any accident and or fire hazards.

17. Since the firm will be doing the maintenance and /or operation of critical services like Standby power etc. responsible and trained persons should be placed round the clock at site who could take initial steps under emergency situation.
18. Firm should have round the clock contact telephone number. In case of emergency contractor and authorized Engineer supervisor shall be available at site on short notice from Engineer-in-Charge and make all efforts to make the situation normal at the earliest.
19. A complaint book as Annexure-II shall be kept up-to-date at site (separate for each component of work) by the firm and the same shall be available for checking and verification.
20. The staff engaged by the firm shall bear I-Card on duty
21. After the contract period is over the installation has to be duly handed over to the Department. The contractor shall be responsible for any discrepancies vis-a-vis the status of installation at the start of work plus any modification carried out during the currency of the contract.
22. Any defect/shortcoming brought to the notice of the department within the first 15 days shall be the responsibility of the department.
23. The firm will arrange training of its operators from A/C & EA set manufacturer or their dealers within one month of taking over the maintenance, any of the staff deputed for the maintenance have not undergone such training earlier. Payment will only be released after attested training certificate is submitted to the Engineer-in-Charge. If there is any change of operator, the firm shall ensure that the operator possess necessary training in A/C,EA set or ensure that operator undergoes training within one month. The attested certificate shall be submitted to the Engineer-in-Charge before release of next payment, but in any case not later than three months.
24. Minimum inventory for spares i/c critical parts shall be kept at the site of work to reduce the time for procurement.
25. Minimum two services per year i/c checking of all specified controls by the manufacturers/authorized dealers/specialized agency shall be ensured for A/C Package, Fire Detection panel & EA sets and certificate of SDE-in-Charge shall be produced.(Please see Para-IV o f respective section).However if the firm carry out the maintenance itself is a manufacturer/authorized dealer/specialized agency/OEA, it need not engage any other agency for this purpose. The firm shall get the approval of EE (E) well in advance in this regard.  
The Department reserves the right to terminate the contract by giving show cause notice of one-month duration at any time during the currency of the contract without assigning any reasons.
26. The department reserves the right to extend the contract at the same terms and conditions for a period of three months.

**WORKING CONDITIONS:**

1. The agency will maintain register of preventive maintenance work undertaken and get signed from JTO (E)/SDE (E)-in-Charge.
2. The logbook must be maintained for DEA sets and various readings must be noted in it according to the instruction of the Engineer-in-Charge.
3. Watch and ward the installation at the site covered in section –I, shall be the responsibility of the contractor during contract period.
4. Shutdown for maintenance shall be taken with prior approval of the department.
5. The work shall be carried out as per current CPWD specifications and as per schedule of maintenance indicated under each section.
6. The checklist and test requirement are general and any other requirements for smooth operation and maintenance of plant shall be contractor's responsibility and shall not claim anything extra on this account.
7. No rewiring of motors of condensers/ blowers shall be used in AC units. The same are to be replaced by make of existing motors or any of the makes of product directory without any cost to the department.
8. For faulty compressors, replacement by new or original company repaired, compressor is acceptable for which proper gate pass is to be produced before replacement.
10. Complaint lodged in Register/ intimation given to agency for any fault in services/ equipment not covered under penalty clause shall be treated as notice. If agency will fail to rectify the fault within 7 days the same will be attended at risk & cost of the agency without any further notice. The failure will be treated as poor performance.

**PENALTY CLAUSE**

1. For absence of worker from the duty following recovery shall be made:  
(i) Rs.300/- per day per shift (Staff employed of less than the prescribed qualifications shall be treated as absent).
2. In case normal power supply is not restored within a maximum period of four hours due to any fault caused other than power failure from Supply Company, agency shall be penalized at Rs.500/-- per hour excluding major fault in HT side for which a maximum period of 24 hours is allowed. The contractor shall ensure continuous supply by running Engine Alternator in case of power failure.
3. In case of unsatisfactory performance during maintenance period one percent of bill amount shall be imposed.
4. In case of major accident/loss on account of negligence on the part of the contractor the contract shall be terminated and 10% of the estimated cost shall be recovered.
5. E/A set :-
  - a) If Standby E/A set faulty recovery should be done Rs. 250.00 per day after 3 days.
  - b) Both E/A sets faulty or EA set faulty, in case single set exists at site and/ or EA supply not available to load and no action is taken immediately by the firm recovery should be done Rs. 600.00 per day after 4 hrs. from breakdown.

**10. WINDOW A.C.'s/SPLIT A.C.'s/ PACKAGE A.C.'s**

- a) WAC, SAC, for all room shall be kept in healthy condition on top priority. If any WAC/ SAC remain faulty for more than 48 hours, recovery shall be done @ Rs. 100/- per day per WAC/SAC unit. After seven days Engineer-in-Charge shall rectify the defect at the risk and cost of agency without further notice, considering the fault intimation as notice.
- b) However, if two or more WAC/ SAC A.C. become faulty simultaneously in air conditioned area, actions to be taken by the agency on same day to restore temperature conditions to the satisfaction of the departmental representative by any alternative means. In case of failure to attend fault and /or doesn't make alternative arrangements, the same shall be done by Engineer-in Charge at the risk & cost of agency without further notice considering the fault intimation as notice.



**SCHEDULE "D"**  
**(V) SIZE OF VARIOUS SERVICES**  
**SECTION-1**  
**SIZE OF VARIOUS SERVICES**

(The Details in this section are approximate to give an idea of services to be maintained).

**1. E.I. & FANS of :- PALACE COMPOUND STAFF QUARTERS, IMPHAL**

Size of building	STAFF QUARTERS
Approximate Number of	Per Qtrs
1. Light point, wall/Ceiling Fan point, Exhaust Fan Point	(Ty-I - 9 Points) (Ty-II - 12 Points) (Ty-III - 14 Points)
2. Plug point 5A	(Ty-I 2Nos) (Ty-II 3Nos) (Ty-III 4Nos)
3. Plug point 15A	(Ty-I 2Nos) (Ty-II 3Nos) (Ty-III 4Nos)
4. SDB	(Ty-I 1No) (Ty-II 1No) (Ty-III 1No)
5. Main Switch	<b>32 AMP 01 No</b>

2. Ty-I = 08 Qtrs, Ty-II = 32 Qtrs, Ty-III = 16 Qtrs.

3. Feeder Panels:- 02 Nos

**4. COMPOUND LIGHTING**

- No. of Poles / Mast Arm : 9 Nos. (Roof Top)

**5. PUMP(S)**

- Water supply pump

1.	No. of pumps	2 Nos
2.	Capacity of pumps	5 HP
3.	No. of pumps	Centrifugal.

6. LT Panel:- 09 Nos

7. Earth Stations:- 07 Nos

## **SCHEDULE "D"**

### **SECTION-II - E.I. & FANS**

#### ***I.: SCOPE OF MAINTENANCE.***

1. Ensuring that EI installation is always kept in clean, 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 supply Co. for earliest restoration.
4. Maintaining the installation i.e. fans, fittings, and other components of the installation in clean condition including proper sign writing.
5. 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 maintenance-in-charge.
6. Carrying out minor additions and alteration ordered by Engineer –in-charge. (Materials required shall be supplied by the Department).
7. Carrying out various maintenance routines and tests as stated in para-III.
8. Maintaining registers for complaints (Annexure-II) and test results.

#### ***II.: TASKS TO BE PERFORMED WITHIN FIRST 15 DAYS..***

1. Establish an enquiry office and organize a system with the approval of Engineer-in-Charge so that complaints can be received & attended properly.
2. Preparing inventory of materials to be kept at site for prompt maintenance in consultation with Engineer-in-Charge. Materials for all the services to be considered for preparation of inventory.
3. Measurement of the resistance of Earth stations of EI system and checking of the continuity of earth conductor. Results to be recorded.
4. Inspection of main Board & SDBs :  
(A)Any loose/improper connection(no strand cutting for making connection to be allowed).  
(B)Improper rating of switches/fuses.  
©Cleanliness.

General inspection of EI system to identify shortcoming. Also any other relevant aspect, which may come in the way of proper maintenance, should be recorded in register and brought to the notice of the Engineer-in-Charge.

Insulation Test.

#### ***III. Maintenance schedule to be followed.***

As per the Form-1A/ Form-1B/ Form-1C/ Form-2A/ Form-3A/Form-4A/ Form-5A/ Form-5B/ Form-6A/Form-21A/ Form-22A

#### ***IV. MATERIALS:***

All materials required for maintenance including Fluorescent tubes, bulbs, starters, chokes, Fan capacitors, LED Lamps, CFL Lamps, tube holders, batten holders, sockets, switches, MCBs & Isolators of DBs and copper conductor cable, aluminium conductor cable and all other items connected with EI maintenance are included.

Exceptions:

Material required for minor addition and alteration.

Additional fittings and fans if required.

#### ***V. APPROVED MAKES OF MATERIAL:***

Fluorescent lamps—Philips, Bajaj, GE, Surya, OSRAM, Ceema (ISI) marked.

Bulbs -- Philips, Bajaj, GE, Surya, OSRAM, Ceema, Crompton (ISI) marked.

Batten/tube holder- Antex, Anchor, Havells or any ISI marked.

Switch/Sockets—Any ISI marked.

Ceiling rose – Emperor, Kinjal, Aristo, Antex.  
Phenolic laminated sheet – Hylam  
PVC insulated Aluminium conductor—Any ISI Marked.  
PVC insulated Copper conductor—Any ISI Marked.  
MS conduit – Any ISI marked.  
MCB, Isolators, DBs-Havells,L&T,Bentex,Linger,Clariton,Indokopp,Standard,  
Crompton, MDS.  
Piano switches – Any ISI marked.  
ELCB –Havells, Standard, MDS, Datar, Siemens, GE Power control.  
Chokes/Starter—Reputed makes only.

#### **SECTION-IV**

#### **SPLIT TYPE AIR CONDITIONING UNITS**

##### **I. SCOPE OF MAINTENANCE:**

1. The regular maintenance of AC units will be comprehensive. It includes day to day maintenance.
2. Ensure operation , keeping installation clean and parameters of temperature and humidity within the stipulated limit.
3. Carrying out maintenance tasks as mentioned in para-III & responding to alarm to avoid serious damages.
4. Contacting air conditioning agency in case of breakdown/trouble & if fault rectification is not within their competency.

##### **II. TASKS TO BE PERFORMED WITHIN FIRST 15 DAYS:**

1. Inspect all the units for proper electrical connection and installation etc. Any shortcoming to be recorded and brought to the notice of Engineer-in-Charge.
2. Make note of recommended parameters during operation.

##### **III. MAINTENANCE SCHEDULE TO BE FOLLOWED**

As per the following forms attached.

Form- 13A/ Form-13B , also :

1. In consultation with the maintenance in-charge ensure that maintenance obligations are duly carried out.
1. When fault is attended by any other specialized air-conditioning agency, ensure that it has been properly attended before the maintenance staff leaves the site.

##### **IV. PERIODICAL MAINTENANCE BY SPECIALISED AGENCY:**

All controls, safety shall be got checked once in six months from authorized dealer in that region or specialized agency approved by the EE(E), and obtain certificate. The same shall be submitted to SDE(E) & acknowledgement obtained. The subsequent payment after the due date of such checking will be made only after this is completed. Failure to comply with this condition will attract penalty of **Rs. 5000/-** on each occasion in addition to any other action as per contract.

##### **V. MATERIALS:**

All items including refrigerant, rewinding/replacement of compressor, blower fan & condenser fan, filters & grills ,thermostat etc and all electrical components including relays etc. are required to be supplied by the contractor at his own cost with following exceptions.

##### **Exceptions: -**

2. Replacement of compressor/ Batteries if it has outlived its life.

**NOTE:** - All the parts shall be purchased from authorized dealers of the manufacturers in that region & certified cash memo/vouchers shall be submitted to Engineer-in-Charge.



**VII. APPROVED MAKES OF MATERIAL:**

3. Motor – GE, Crompton Greaves, Siemens, Bharat Bijlee, ABB, MEI, KEC, HBB, NGEF, Sparton.
4. Compressor – Voltas, Kirloskar Copland, Batliboi, Carrier, KPC, Copland.,
3. Starter – L&T, Siemens, BCH, MEI, ABB, GE Power control.
4. MCB, isolators  
Havells, L&T, Bentex, Clariton, Indokopp, Standard, Crompton, MDS, Siemens.
5. GI/MS pipe – BST, TATA, ATL, ATC, IIA, JST, JINDAL, ZENITH, GSI, TTA
6. Cable – ISI marked.
7. GM Valves – Sant, Fountain, Trishul, Leader, Annapurna.
8. SSP/Overload – L&T, Siemens, Minilac, Zerotrip
9. Gauges – Fiebig, H-Guru, Pricol.
10. Controls – Infoss, Honeywell, Sporland, Ranco, Ranutrol, Penn-Danfoss, FLICA.
11. Fresh Air Fans – GE, Khaitan
12. Filters – Dyna, Tenacity, Kirloskar, Puromatic, Airtech, Purafill, ARW, Athelete, Purolator Anfiltra Effluent.
13. CT-AE, IMP, Marshal, Pactil, Kappa, L&T, Ashmor, Indcoil, Waco, Meco.
14. Ammeter/Voltmeter - AE, IMP, Universal, Reshabh, Kaycee, Meco, Enecrom.
15. Selector switch – L&T, AE, IMP, Kaycee, Enecrom, Thakoor, Reco, Vaisno, Selzer, Rasscontrol
5. Indicating Lamp – L&T, AE, IMP, Kaycee, Vaishno, Rasscontrol, Siemens, Crompton, Teknic.

**NOTE :** - Replacement of main items like compressor, controls, safeties shall be of same make as existing to ensure system matching.

**FORM-18A**  
**MAINTENANCE SCHEDULE --DISPLAY BOARD/CHART & SIGN BOARD**  
 FREQUENCY --QUARTERLY(JAN/APRIL/JULY/OCT)

Location	Fixing arrangement	Cleaning & updating	Replacement of faulty tubes/lamps of	Connections	Alignment	Sign.of AWM/WM / operator	Sign . Of JTO

NOTE : 1.While checking the item I.e. Display Board in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc. are generally in proper working condition or not.If not initiate action.

1. we expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather information for improving our maintenance quality & make it full proof.
3. Abnormalities or shortcomings, if any should be recorded in the remarks column. Initiate prompt corrective action and record the clearance of shortcomings with date in the remarks column.

**FORM-1A**  
**MAINTENANCE SCHEDULE --CEILING FAN**  
 FREQUENCY--YEARLY(FEB.)

Location	Hanging arrangement I/c hook safety pins check nuts etc.	Check greasing(If reqd.apply)	Painting sign writing reqd.or not	Fans working OK/Not OK	Sign of AWM/WM	Sign of occupant	Sign of JTO

**Note :-**

While checking for this item I.e. ceiling fan in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc are generally in proper working condition or not .If not initiate action.

We expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather the information for improving our maintenance quality & make it full proof.

**FORM-1B**  
**MAINTENANCE SCHEDULE --WALL MOUNTED FAN**  
 FREQUENCY--YEARLY(FEB.)

Location	No of Fans	Check mounting arrangement for soundness	Painting sign writing reqd.or not	Fans working OK/Not OK	Sign of AWM/WM	Sign of occupant	Sign of JTO

**Note : -**

While checking for this item I.e. wall mounted fan in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc are generally in proper working condition or not .If not initiate action.

We expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather the information for improving our maintenance quality & make it full proof.

**FORM-1C**  
**MAINTENANCE SCHEDULE --EXHAUST FAN**  
 FREQUENCY-- HALF YEARLY(FEB./AUG.)

Location	No of Exhaust Fans	Mounting arrangement	Condition of Louvers OK/not OK	Painting is reqd. or not	Fans working or not	Sign of AWM/WM	Sign of occupant	Sn of JTO

**Note : -**

While checking for this item I.e. Exhaust fan in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc are generally in proper working condition or not .If not initiate action.

We expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather the information for improving our maintenance quality & make it full proof.



**FORM-4A**

**MAINTENANCE SCHEDULE - SWITCH BOARD**

FREQUENCY--HALF YEARLY (FEB./AUG.)

Location	Cleaning the switch board & ensure that all connections are tight I/c earth and also plate is properly fixed.	Checked & attended all items	Items to be attended	Remarks	Checked by

Note : -

1. While checking for this item I.e. Switch Board in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc are generally in proper working condition or not .If not initiate action.
2. We expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather the information for improving our maintenance quality & make it full proof.
3. Abnormalities or shortcomings, if any should be recorded in the remarks column. Initiate prompt corrective action and record the clearness or shortcomings with date in the remarks column.

**FORM-6A**  
**MAINTENANCE SCHEDULE - L.T.PANEL/ SDFs/ Changeovers**  
 FREQUENCY—YEARLY for LT Panel & Quarterly for SDFs & Changeovers.

Sl.No.	Description of Item				Remarks
01	Inspection & checking of operation & tripping mechanism.				
02	Inspection & checking of visual indication and meters.				
03	Inspection & checking of TPN switch/MCB for operation, tightness of connection.				
04	Opening the cover and cleaning the panel and surrounding area.				
05	Cleaning of contactors and ARC chutes.				
06	Checking safety mat and its condition.				
07	Cleaning and lubricating of operating mechanism.				
08	Cleaning of isolating contacts and checking for tightness.				
09	Cleaning, lubricating and checking operation of all inter locking devices and shutters.				
10	Checking and cleaning of bus bars.				
11	Measuring insulation resistance between phase and earth.				
12	Checking earth connection.				

Note : -

1. . While checking for this item I.e. SDB in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc are generally in proper working condition or not .If not initiate action.

2. We expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather the information for improving our maintenance quality & make it full proof

3. Abnormalities or short comings, if any should be recorded in the remarks column. Initiate prompt corrective action and record the clearness or shortcomings with date in the remarks column.

**Recorded by**  
**(WM)**

**Checked by**  
**JTO(E)**

**FORM-10C  
MAINTENANCE SCHEDULE - FIRE BUCKET**

FREQUENCY--  
QUATERLY(FEB./MAY./AUG./NOV.)

Location	No. of Buckets	Condition satisfactory or not	Filled with sand or not. Fill/replace if necessary	Painting & sign writing satisfactory or not Paint if necessary	Remarks	Sign. Of AWM/WM	Sign. Of JTO

**Note : -** 1. Please report any missing or misuse case to the concerned caretaker on the same day and record in the remarks column.

**FORM-21A  
MAINTENANCE SCHEDULE -EARTHING SYSTEM**

FREQUENCY --HALF YEARLY( JUNE/DEC.)

Location	No. of Earth electrode	Earth pit chamber condition	Earth Resistance	Recorded by AWM/WM/	Checked by JTO	Remarks

**FORM-22A  
MAINTENANCE SCHEDULE -EMERGENCY LIGHT**

FREQUENCY --MONTHLY

Location	Working OK or not OK	Check battery leakage/ pitting	Check Electrolyte Sp. Gravity acidity(take corrective measures if reqd.)	Remarks	Sign. of AWM/W M/	Sign.of JTO

**FORM-5A****MAINTENANCE SCHEDULE - SDB's**

FREQUENCY--HALF YEARLY (APRIL/OCT.)

Location	Cleaning and tightening connections	Replacement faulty MCBs, Fuse/Fuse Base grip (if any)	Painting and sign writing if reqd.	Remarks	Sign of AWM/WM	Sign of Occupant	Sign of JTO

Note :-

1. While checking for this item i.e. SDB in a particular room/area please look around and see whether other electrical items like fittings, switch board, sockets etc are generally in proper working condition or not .If not initiate action.
2. We expect you to be responsible for all electrical items & visit for a particular activity should be utilized to gather the information for improving our maintenance quality & make it full proof.
3. Abnormalities or short comings, if any should be recorded in the remarks column. Initiate prompt corrective action and record the clearness or shortcomings with date in the remarks column.

**FORM--23A****MAINTENANCE SCHEDULE -EA SET**

FREQUENCY--DAILY

Sl.No	Description of Item	Work done	Sign.of JTO	Sign.of SDE	Remarks
<b>1.</b>	<b>BEFORE STARTING THE ENGINE</b>				
	(a) Check and correct cooling water level.				
	(b) Check and correct belt tension.				
	( c) Check and correct lub. Oil level.				
	(d) Check and ensure sufficient quantity of fuel in the tank.				
	(e)Check battery terminal and connections for proper tightness top-up electrolyte if required.				
	(f) Check and correct leakage if any.				
<b>2.</b>	<b>AFTER STARTING THE ENGINE</b>				
	(a) Check lub oil pressure.				
	(b) Check and correct leakage, if any.				
	( c) Check all meters, engine noise etc. and correct abnormalities, if any.				
	(d) Check engine protection system.				

Note :-

Run the Engine for almost 15 minutes every day to ensure proper working of the engine.



**FORM--23B**  
**MAINTENANCE SCHEDULE -EA SET**  
**FREQUENCY—DAILY**

Sl.No	Description of Item	Work done	Sign.of JTO	Sign.of SDE	Remarks
1.	Checking and cleaning control panel.				
2.	Checking protective devices.				
3.	Checking of tools.				
4.	Checking of Earths-watering earth pits.				
5.	Checking of E/A room lights & ventilations..				
6.	Checking of Battery charger.				
7.	Clean radiator fins by blowing air in the opposite direction.				
8.	Check oil level and clean air cleaner.				
9.	Check and correct loose clamps.				
10	Drain 200ml of Diesel from bottom of fuel in tank				
Monthly : Proper working of safety devices and alarms.					

**Note :**

Oil changes and filters changes to be done as per manufacturer recommendation & if required by engaging specialized agency(SDE Mtce. should provide this schedule)-

**FORM-13A**  
**MAINTENANCE SCHEDULE--WINDOW /SPLIT A.C.UNITS**  
**FREQUENCY--MONTHLY (III WEEK)**

Location	No. of A/Cs	Check condition & performance of fan low cool/high cool mode satisfactory or not	Cleaning of filters & Ventilating	Remarks	Sign. Of AWM/WM	Sign. Of JTO

**Note :-**

- 1.While checking for this item I.e. AC unit in a particular room/area please look around and see whether other electrical items like fittings, switche board, socket etc are generally in proper working condition or not. If not initiate action.
2. We expect you to be responsible for all the electrical items & visit for a particular activity should be utilized to gather information for improving our maintenance quality & make it full proof.

**FORM-13B**  
**MAINTENANCE SCHEDULE--WINDOW /SPLIT A.C.UNITS**  
FREQUENCY--YEARLY (FEBRUARY)

Location	No. of A/Cs	Check condition & performance of fan low cool/high cool mode satisfactory or not	Cleaning of filters & Ventilating	Remarks	Sign. Of AWM/WM	Sign. Of JTO

**Note:**

1. While checking for this item I.e. Window / Split unit in a particular room/area please look around and see whether other electrical items like fittings,switch board,sockets etc are generally in proper working condition or not. If not initiate action.
2. We expect you to be responsible for all the electrical items & visit for a particular activity should be utilized to gather information for improving our maintenance quality & make it full proof.

**SCHEDULE OF WORK**

**Name of work : General comprehensive maintenance of electro-mechanical services for Palace Compound staff quarter complex - Imphal.**

Sl. No.	Description of items	Quantity	Per unit rate including all taxes and duties excluding GST	Unit	GST	Net Cost to BSNL	Total Cost including all taxes and duties
1.	Providing comprehensive maintenance of electro-mechanical services as per details given below :						
	1) E.I & Fans in the entire complex						
	2) Water pumps						
	3) Compound light, gate lamp, etc.						
	4) Feeder panels & LT Panel						
	<b>Complete as above</b>	<b>12 Months</b>		<b>Month</b>			
<b>Total</b>							

**Important note :-**

1) The prices shall be quoted after taking into account the entire credit on inputs as per existing GST rules along with their amendments.

2) The firm shall be responsible to ensure that GST shown in the above column are correct and Input tax credit for the amount shown above are admissible as per existing GST rules along with their amendments.

3) Invoice / bill should be printed with serial number and GST registration number. Invoice / bill favoring BSNL shall issued by the supplier / contractor indicating the amount of GST etc.

4) The evaluation and comparison of responsive bids shall be done on the basis of Net cost to BSNL on the prices offered inclusive of duties and taxes etc. as indicated in the price schedule and GST to be quoted separately.

5) If any levy/duty is not payable or documentary proof is not produced, the amount for the same shall be deducted.

6) 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 items as specified in the scope of work under various item of works.

Executive Engineer (E)  
BSNL Electrical Division  
Dimapur