

~ A ~

Office of the
Sub Divisional Engineer (Electrical),
BSNL Electrical Sub Division-I
CTTC Complex (1st Floor),
Sunder Nagar -175002 (H.P.)
Phone : 01907-265188



भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)
BSNL 3G))) BSNL LIVE
Faster than your thoughts 2014

| | | |
|-------------------------|----|--|
| Name of Work | :- | Provision of AFDDA system for New rented TE Building at PADHAR under SSA Mandi. |
| Estimated Cost | :- | Rs.40,724.00 |
| Cost of Tender Document | :- | Rs.177.00 i/c GST (Non-refundable) |
| EMD | :- | Rs.814.00 |
| Date of Opening | :- | 20.05.2019 |

UNDERTAKING

It is undertaken that we have gone through all the clauses /sub-clauses & terms & conditions of the BSNL EW-6 & BSNL EW -8 forms. We abide by that & we understand that the same shall be part & parcel of the agreement.

Signature of Contractor

Sub-Divisional Engineer (E)
BSNL, Electrical Sub-Division-1
Sundernagar.

Name of Agency :-

Tender Cost :- vide DD NO. :- _____ Dated _____ of _____

EMD :- vide DD/FDR/BG NO. :- _____ Dated _____ of _____

Contractor

SDE (E)

Name of Work: - Provision of AFDEFA system for New rented TE Building at PADHAR under SSA Mandi.

INDEX

| S. No | DETAILS | PAGE |
|--------------|--|-------------|
| 1 | Correction Slip. | 1 |
| 2 | Tender Notification | 2-3 |
| 3 | NIT (Form BSNL-6) | 4-6 |
| 4 | TENDER (Form BSNL 8) | 7-12 |
| 5 | Important note for contractors | 13-16 |
| 6 | Important Conditions for tenders applicable from GST perspective | 17 |
| 7 | Abstract of Cost & Schedule of Work | 18-19 |
| 8 | Specification, Drawing & Approved Make | 20-34 |
| 9 | CONTACT DETAIL FOR REDRESSAL OF COMPLAINTS | 35 |
| 10 | Model Form of B.G. PG (ANNEXURE – ‘I&II’) | 36-38 |
| 11 | Performa for Undertaking regarding EPF/ESI provisions-Annexure-III | 39 |
| 12 | VENDOR GSTIN DETAIL – ANNEXURE-IV | 40 |
| 13 | Declaration to be given by the Contractor EW-3 & EW-8 (ANNEXURE-V) | 41 |
| 14 | No Relative Certificate-(Annexure-VI) | 42 |
| 15 | Affidavit Regarding GST Registration- (Annexure-VII) | 43 |
| 16 | BSNL GSTIN Details | 44 |

This is certified that this NIT contains 44 (Forty Four) pages excluding pages A & B.

Contractor

SDE (E)

CORRECTION SLIP

Addendum/Modification to CPWD-8 & CPWD-6 Forms Conditions of contract-Definitions:-

All reference to:-

- i) CPWD / Public work department / P&T Department / D.O.T. / B.S.N.L
- ii) D.G. works/ Additional Chief Engineer CPWD / Chief Engineer of Zone.
- iii) Administrative Head of CPWD/P&T Department.
- iv) CPWD Circles / Civil Circle.
- v) Ministry of works, Housing & supply.
- vi) Government.

(a) In various clauses shall be taken to mean:-

- i) Bharat Sanchar Nigam Limited.
- ii) Chief Engineer (E), Bharat Sanchar Nigam Limited.
- iii) Administrative Head of Bharat Sanchar Nigam Limited.
- iv) Bharat Sanchar Nigam Limited Electrical Circle.
- v) Bharat Sanchar Nigam Limited (Ministry of Communications)
- vi) Bharat Sanchar Nigam Limited

SHORT TERM TENDER NOTIFICATION

The Sub-Divisional Engineer (E) B.S.N.L., Electrical, Sub-Division-1, CTTC Complex, Vill. Ropa, Sundrnagar, Distt Mandi H.P-175002 invites on behalf of Bharat Sanchar Nigam Limited sealed item rate tenders for the work from the eligible contractors satisfying the following conditions as given below :-

| Name of Work:- | Estimated Cost (Rs) | EMD (Rs) | Last Date Of Receipt of Application (upto 5PM) | Last Date & Time Of Sale (upto 4PM) | Last Date & Time of Tender | | Time for Completion |
|---|---------------------|------------------|--|-------------------------------------|----------------------------|-----------------------|---------------------|
| | | | | | Receipt (upto 3PM) | Opening (upto 3.30PM) | |
| Provision of AF DFA system for New rented TE Building at PADHAR under SSA Mandi. | Rs.40,724.00 | Rs.814.00 | 16.05.2019 | 17.05.2019 | 20.05.2019 | 20.05.2019 | 01 Month |

A) Eligibility Conditions

The Contractors satisfying the following conditions:-

1. The Average annual turnover during last 3 years, Ending 31st March of previous financial year should be at least **Rs.12,217/-**

AND

2. Experience of having successfully completed similar works (SITC of AF DFA System) in Central Government/ State Government / Central Autonomous Body/ Central Public sector Undertaking during last 7 years ending last day of month previous to the one in which applications are invited, should be either of the following :-

➤ Three similar successfully completed works costing not less than the amount equal to **Rs.16,290/-**

OR

➤ Two similar successfully completed works costing not less than the amount equal to **Rs.24,434/-**

OR

➤ One similar successfully completed work costing not less than the amount equal to **Rs.32,579/-**

Note :- Bidder have to submit self attested copies of completion certificate. The certificate should have been issued by officer not below the rank of Executive Engineer for Govt./PSU/CPSU.

The contractor shall also submit and confirm:

- Documentary proof of satisfying the eligibility conditions as per “A” above , copy of PAN card, Original authorization of person quoting the tender from Directors/ Proprietor of the company, Near relative certificate from or on behalf of Directors/ Proprietor of the company.
(All the documents shall be self attested / certified by any BSNL Executive /Notary /Gazetted Officer of Central Govt).
- The firm should have Himachal Pradesh GST registration certificate.
- The contractors who are not registered under Himachal Pradesh GST, may bid for the contract however such contractors will have to get themselves registered within 15 days from the date of issue of intimation from BSNL regarding intent to accept the tender, else their EMD shall be forfeited absolutely and the firm shall not be allowed to participate in the next tender for the same work. If the firm fails to produce Himachal Pradesh GST registration certificate on more than one occasion, the firm shall be barred from participating in all future tenders. The firm shall give an affidavit as per **Annexure-VII on page no.43** in this regard.
- The Firm should have ESI & EPF registration certificate . The firms who claim to be exempted from the ESI & EPF registration need to submit an affidavit on Non-Judicial stamp paper for the same as per Performa at **Annexure-III on page no.39**
- If the firms do not have ESI & EPF registration, they will though be allowed to participate in the bid process, but they will have to get the ESI & EPF registration within 15 days from the date of issue of intimation from BSNL regarding intent to accept the tender, else their EMD shall be forfeited absolutely and the firm shall not be allowed to participate in the next tender for the same work. If the firm fails to produce ESI & EPF registration certificate on more than one occasion, the firm shall be barred from participating in all future tenders.
- **Declaration of EW-6 / EW-8, Relative Certificate & Undertaking -I by contractors. (As per Annexure-IV, V, VI on Page no.40, 41, 42).**

Contractor

SDE (E)

The tenderer shall submit the tenders in 2 sealed covers marked as cover 1st and 2nd. The first cover should contain the earnest money deposited in the shape of FDR/CDR/Demand Draft/ Pay order/BG from the scheduled Bank or Nationalized Bank/State Bank guaranteed by Reserve Bank of India drawn in favour of **ACCOUNTS OFFICER (Cash), O/o GMTD B.S.N.L., Mandi** and the second cover should contain the tender documents. In case 1st cover is not annexed or earnest money is not in proper form, the 2nd cover containing tenders will not be opened at all.

- ◆ The tender documents and all other relevant information/condition can be had on all working day on payment of Rs. 177/- (Rs. One hundred and seventy Seven only) i/c taxes in DD (non refundable).
- ◆ In case Holiday is declared on the opening date tender will be opened at 3.30 P.M. on next working day.

Note:- Tender documents can also be downloaded from the web site www.hp.bsnl.co.in The firm to quotes on the tender downloaded from web site shall strictly adhere to following procedure :-

1. The tender shall be submitted in two envelope system.
 - A. First envelope shall contain tender application (if tender downloaded from WEB), tender fee, attested documents proving fulfillment of eligibility criteria as per the tender notice and EMD in proper form. DD should be attached for tender fee, & BG/DD/FDR for EMD on Nationalized bank.
 - B. Second envelope shall contain duly filled tender documents.
The same shall be clearly written on the envelopes

2. The 1st envelope containing tender fee, attested documents providing fulfillment of eligibility criteria and EMD in proper shall be opened first.

In case if:-

- i) Tender fee is not submitted in proper form.
- ii) EMD is not in proper form.
- iii) Firms fail to fulfill eligibility criteria on the basis of documents submitted in envelope.

The second envelope shall not be opened.

3. If any difference /discrepancies found between downloaded. Tender form, Viz a Viz, hard copy issued from Division office / the contents in Draft NIT issued form Div./Circle/CE (E)'s the hard copy /Draft NIT shall be final & binding. Documentary proof of satisfying eligibility conditions and valid Income Tax clearance certificate or Chartered Accountant Certificate is to be furnished along with the application on printed letter /heads. The tenders of contractors who do not deposit earnest money in the prescribed manner are liable to be rejected.

- ◆ **TENDER DOCUMENTS SHALL NOT BE SENT BY POST/COURIER.**
- ◆ **TENDERS RECEIVED BY POST/COURIER SHALL NOT BE OPENED /ENTERTAINED.**
- ◆ **CONDITIONAL TENDERS OR TENDERS WITH CONDITIONAL REBATES SHALL BE SUMMARILY REJECTED.**

Validity of tender shall be for 90 days from the date of opening of tender.

**Sub-Divisional Engineer (E)
BSNL, Electrical Sub-Division-1
Sundernagar, Mandi (HP)**

No. : - 3(07)/SDE(E)/BSNL/ESD-1/NIT/2019-2020/04

Dated:-09.05.2019

Copy for information and wide publicity to: -

- 1) Web site www.tenderwizard.com/BSNL or www.hp.bsnl.co.in
- 2) The GMTD, BSNL, Mandi SSA.
- 3) Vigilance Officer, O/o CGMT, Shimla.
- 4) The SDE (EP) in division office.
- 5) Notice Board then NIT File.
- 6) Contractors.

Sub-Divisional Engineer (E)

Contractor

SDE (E)

Bharat Sanchar Nigam Limited

(A Government of India Enterprise)

Electrical Wing

Division: **SUNDERNAGAR**

Sub-Division: **SUNDERNAGAR**

NIT No. :- 3(07)/SDE/E/BSNL/ESD-1/SNR/NIT/2019-20/01

SHORT TERM NOTICE INVITING TENDER

(As per Tendering procedure in BSNL revised up to date)

Item rate tenders are invited on behalf of the **Bharat Sanchar Nigam Limited** from eligible contractors for the work: - **Provision of AFDDFA system for New rented TE Building at PADHAR under SSA Mandi.**
Work is estimated to cost **Rs.40,724.00**

This estimate however is given merely as a rough guide.

- 1- Tenders will be issued to eligible contractors, provided they produce definite proof from the appropriate authority of having completed work of magnitude as specified in Tender notification at page No.____2____.
- 2- Agreement shall be drawn with the successful tenderer on prescribed Form No. 8 which is available as a Govt. of India Publication, Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 3- The time allowed for carrying out the work will be **One month** reckoned from the **10th day after** the date of award.
- 4- The site for the work is available.

OR

The site for the work shall be made available in parts:-

- 5- Receipt of applications for issue of forms will be stopped by **17:00Hrs.** on **16.05.2019**. Issue of tender forms will be stopped by 16:00 Hrs. on **17.05.2019**.

Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary document can be seen in the office of the **B.S.N.L., E.S.D.-1, Sundernagar** between hours of 11.00 A.M. & 04.00 P.M. every day except on 2nd Saturday, Sunday and Public Holidays. Tender documents, excluding standard form, will be issued from this office, during the hours specified above on payment of **Rs.177.00 inclusive of GST** (non- refundable) in cash/DD.

Note: - Tender documents can also be downloaded from the web site [http://www. hp.bsnl.co.in](http://www.hp.bsnl.co.in).

- 6- The tenderers must produce a Chartered Accountant certificate in the revised form as modified under Ministry of Finance CBDT circular No. 153/191/2002-TPL dated 13-02-2003 as amended from time to time before papers can be sold to him.

Contractor

SDE (E)

7- Tenders, which should always be placed in sealed envelope with the name of work and due date written on the envelopes, will be received by the **S.D.E (E), B.S.N.L ELECTRICAL SUB-DIVISION-1, Sundernagar** upto 03.00 P.M. on **20.05.2019** and will be opened by him or his authorised representative in his office on the same day at 03.30 P.M.

8- The tender shall be accompanied by earnest money of **Rs.814.00 (Rs. Eight hundred and Fourteen only)** in the shape of DD/FDR/CDR/B.G in prescribed form from the scheduled Bank or Nationalised Bank / State Bank guaranteed by Reserve Bank of India drawn in favour of **ACCOUNTS OFFICER (Cash), O/o GMTD B.S.N.L., Mandi** the amount being credited to Nationalized Bank.

9- The description of the work is as follows: - Provision of AF DFA system for New rented TE Building at PADHAR under SSA Mandi.

Copies of other drawings and documents pertaining to the work will be open for inspection by the tenderers at the office of the above mentioned officer. Tenderer are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plants, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

10- The competent authority on behalf of the **B.S.N.L.** does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all the tenders received without the assigning any reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.

Conditional tenders or tenders with conditional rebate shall be summarily rejected.

11- Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.

12- The competent authority on behalf of the **B.S.N.L.** reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.

- 13-** The contractor shall not be permitted to tender for works in the B.S.N.L Unit , in which his near relative is posted in any capacity in BSNL in that zone. He will also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any person employed in BSNL, in that zone. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of BSNL.
- 14-** No Engineer of gazetted rank or other gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as contractor for a period of two years after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractors service.
- 15-** The tender for the works shall remain open for acceptance for a period of ninety days from the date of opening of tenders. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to the B.S.N.L., then the B.S.N.L. shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid.
- 16-** The Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the accepting authority, shall within 7days from the stipulated date of start of the work sign the contract consisting of :-
- (a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
 - (b) Standard B.S.N.L. Form-8

BHARAT SANCHAR NIGAM LIMITED

STATE : **Himachal Pradesh** **CIRCLE** : **Shimla**
ZONE : **Shimla** **BRANCH** : **Electrical**

Percentage Rate Tender/Item Rate Tender & Contract for Works

(A)Tender for the work of: - **Provision of AFDDFA system for New rented TE Building at PADHAR under SSA Mandi.**

- (i) To be submitted by **15.00** hours on **20.05.2019** to **O/o.Sub-Divisional Engineer (E), BSNL, Electrical Sub-Division-1, Sundernagar-(HP)175002**
- (ii) To be opened in presence of tenderers who may be present at **15.30** hours on **20.05.2019** in the office of **O/o. Sub-Divisional Engineer (E), BSNL, Electrical Sub-Division-1, Sundernagar-(HP)175002**

Issued to : _____

(contractor)

Signature of officer issuing the documents _____

Designation **Sub-Divisional Engineer (E)**

Date of issue : _____

T E N D E R

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 Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the B.S.N.L. within the time specified in Schedule 'F', viz. schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and a Clause 11 of the Conditions of contract and with such materials as are provided for by and in respects in accordance with, such conditions as far as applicable.

We agree to keep the tender open for Ninety (90) days from the due date of submissions thereof and not to make any modifications in its terms and conditions.

A sum of **Rs.814.00** is hereby forwarded in the shape of DD/FDR/CDR/B.G. in prescribed form from the scheduled Bank or Nationalized Bank / State Bank guaranteed by Reserve Bank of India as earnest money.. If I/we fail to commence the work specified I/we agree that the said B.S.N.L. or his successors in office shall without prejudice to any other right or remedy be at liberty to forfeit the said earnest money absolutely otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained In Clause 12.2 and 12.3 of the tender form.

Contractor

SDE (E)

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 a person to whom I/We am/are authorised to communicate the same or use the information in any manner prejudicial to the safety of the State.

I/We agree that should I/we fail to commence the work specified in the above memorandum, an amount equal to the amount of the earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the B.S.N.L. and the same may at the option of the competent authority on behalf of the B.S.N.L. 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.

Dated

Signature of Contractor

Witness :

Postal Address-----

Address :

Occupation :

ACCEPTANCE

The above tender as modified by you (contractor) and as provided in the letters mentioned hereunder is accepted by me for and on behalf of the Bharat Sanchar Nigam Limited for sum of Rs. _____

(Rupees _____)

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

- a)
- b)
- c)

For & on behalf of the B.S.N.L.

Signature _____

Dated.....

Designation _____

Contractor

SDE (E)

PROFORMA OF SCHEDULES
(Operative Schedules to be supplied separately to each intending tenderer)

SCHEDULE 'A'

Schedule of quantities (as per PWD-3) As Per Page No. **18-19**

SCHEDULE 'B'

Schedule of material to be issued to the contractor.

| S.No. | Description of item | Quantity | Rates of figures & works 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

| S.No. | Description | Hire charges per day | Place of issue |
|------------------------|-------------|----------------------|----------------|
| 1 | 2 | 3 | 4 |
| ----- NIL ----- | | | |

SCHEDULE 'D'

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

----- **NIL** -----

SCHEDULE 'E'

Schedule of component of Materials, Labour etc. for escalation.

CLASUE 10CC

Component of materials expressed as percent of total value of work. "X" = N/A .

Component of labour expressed as percent of total value of work. "Y" = N/A

Component of P.O.L.expressed as percent of total value of work. "Z" = N/A .

SCHEDULE “F”

Reference to General Conditions of contract.

Name of work: - Provision of AFDDFA system for New rented TE Building at PADHAR under SSA Mandi.

Estimated cost of work : **Rs.40,724.00**

Earnest money : **Rs.814.00**

Performance guarantee: 5% of Contract Value in the form of bank guarantee (of a Nationalized / Schedule 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 bank guarantee shall be One Year from the date of actual completion of work. [Applicable in respect of works with estimated cost put to tender exceeding Rs, 6 Lacs.]

Security Deposit: In addition to performance guarantee 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 Contract value of the work. The amount shall be refunded after Twelve Months from the actual date of completion of work.

GENERAL RULES & DIRECTIONS : Officer inviting tender Sub-Divisional Engineer (E)
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3. See below.

Direction :
2(v) Engineer-in-Charge Sub-Divisional Engineer (E)
2(viii) **Accepting Authority** **Sub-Divisional Engineer (E)**
B.S.N.L. Electrical Sub-Division-1, Sundernagar.
2(x) Percentage on cost of materials and labour to cover all overheads and profits. 10%
2(xi) Department Bharat Sanchar Nigam Ltd.
2(xii) Standard Schedule of Rates DSR-2018 (Internal and External)
9 (ii) Standard CPWD Contract form CPWD form 7/8 as modified & corrected upto

(b) Clause 2
Authority for fixing Compensation under clause 2. Executive Engineer (E.)

Clause 5
Time allowed for execution of work. **One Month.**
Authority to give fair and reasonable extension of time for completion of work. Executive Engineer (E)

Contractor

SDE (E)

Clause 7

Gross work to be done together with net payment/ adjustment of advance for materials collected, If any, since the last such payment for being eligible to interim payment.

FIVE THOUSAND

Clause 11

Specifications to be followed for execution of work.

AS PER SPECIFICATION ATTACHED

Clause 12

12.1(ii)

Schedule of rates for determining rates for additional, altered or substituted items that cannot be determined under 12.1(i) & (ii)

DSR-2018 for Internal } for scheduled items
DSR-2018 for External }

Market rate for Market items

12.1 (iii)

Plus/minus the % over the rate entered in the schedule of rates.

-----do-----

12.1(v) A

Deviation Limit beyond which sub-clauses (i) to (v) shall not apply and clauses 12.2 & 12.3 shall apply

As per **Clause -9** of important note for contractors.

12.1(vi) B(a)

Limit for value of any item of any individual trade beyond which sub-clauses (i) to (v) shall not apply and clauses 12.2 & 12.3 shall apply

-----do-----

Clause 16

Competent Authority for deciding reduced rates.

Executive Engineer (E)

Clause 36(i)

Minimum Qualification & experience required for Principal Technical Representative.

(a)

For works with estimated cost put to tender more than
(i) Rs. 10 Lacs for Civil work
(ii) Rs. 5 Lacs for Elect./Mech. Works

Graduate or retired AE possessing at least recognised diploma.

(b)

For works with estimated cost put to tender
(i) More than Rs. 5 Lacs but less than Rs. 10 Lacs for Civil Works.
(ii) More than Rs. 1 Lacs but less than Rs. 5 Lacs for Elect./Mech. Works.

Recognised Diploma holder.
Elect / Mech

(c)

Discipline to which the Principal Technical Representative should belong.

Elect./ Mech.

Contractor

SDE (E)

- (d) Minimum experience of works. 3 years.
- (e) Recovery to be effected from the contractor in the event of not fulfilling provision of clause 36(i) Rs. 4,000/- p.m. for Graduate
Rs. 2,000/- for diploma holder

Clause 42

- (i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates ___ printed by C.P.W.D. -----N.A.-----
- (ii) Variations permissible on theoretical quantities.
- (a) i) Cement for works with estimated cost put to tender not more than Rs. 5 Lacs. -----N.A.-----
- ii) for works with estimated cost put to tender more than Rs. 5 Lacs. -----N.A.-----.
- (b) Bitumen all works. -----N.A.-----
- (c) Steel Reinforcement and structural steel sections for each diameter, section and category. -----N.A.-----
- (d) All other materials. Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

| Sl. No. | Description of item | Rates in figures and words at which recovery shall be made from the Contractor | |
|---------|---|--|---|
| | | Excess beyond permissible variation | less use beyond the permissible variation |
| 1. | Cement | | |
| 2. | Steel Reinforcement | | |
| 3. | Structural Sections | ----- N.A. ----- | |
| 4. | Bitumen issued free | | |
| 5. | Bitumen issued at stipulated fixed price. | | |

IMPORTANT NOTE FOR CONTRACTORS

1.0 Tax and Duties:-

- 1.1** All taxes, Levies, duties etc. in respect of this contract payable by the vendor & BSNL will not entertain any claim in respect of the same *except GST*.
- 1.2** BSNL shall deduct statutory taxes and duties like income tax, etc. from payment due to the firm as per rule of the State, Central Government. The Accounts Officer of the concerned SSA shall issue certificates for such deductions to the firm.

2.0 Octroi Certificate:-

“No octroi exemption certificate will be issued by the department”.

3.0 Department reserves the right to accept the quantities in full or in parts.

4.0 SPLITTING OF WORKS:- Nil

100 % work shall be awarded to lowest tenderer.

5.0(a) “TAXES”

Tendered rates are inclusive of taxes and statutory levies payable under the respective statutes *except GST*. However pursuant to the constitution (Forty Six Amendment) Act 1982, if any further tax or levy is imposed by statute after the date of receipt of tenders and the contractor (s) thereupon necessarily and properly pays taxes or levies the contractor (s) shall be reimbursed the amount also paid provided such payment if any is not in the opinion of SE (whose decision shall be final and binding) attributable to delay in execution of work within the control of the contractor (s).

5.0(b) The contractor (s) shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorised representative of Government and shall furnish such other information/documents as the Engineer-in -charge may require.

5.0(c) The contractor (s) shall within a period of 30 days of imposition of any further tax or levy pursuant to the constitution (Forty Six Amendment) Act 1982 give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition together with all necessary information relating thereto.

NOTE:- No additional condition whatsoever will be accepted for turnover tax/sales tax on works contract . In case of additional conditions for the payment of such claims by the contractor the tender may be liable to be summarily rejected by the accepting authority. (Standing order No. 258)

6. EARNEST MONEY:- Firm has option to deposit earnest money in the of demand draft/pay order of schedule bank of nationalized bank /state bank guaranteed by reserve bank of India drawn in favour of **ACCOUNTS OFFICER (Cash), O/o GMTD B.S.N.L., Mandi.**

7. 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.

Contractor

SDE (E)

8. TERMS OF PAYMENT:-

- a) 80% of prorate of the approved price break-up of contract value on receipt of equipment at site.
- b) 10% of prorate of the approved price break up of contract value after successful installation.
- c) 10 % of the approved contract value after successful completion of the testing and commissioning

9. DEVIATION:-

- a) The ordering quantity can be increased/decreased up to the extent of 25%(deviation limit) without the consent of the firm within the currency of contract. The firm shall execute such quantities at the rate quoted in the tender without any change in terms and conditions of the contract.
- b) In exceptional situation where the requirement is of an emergent nature and it is necessary to ensure continued supplies from the existing vendors, the purchaser reserves the right to place repeat order up to 50% of the quantities of goods and services contained in the running tender/contract within a period of twelve months from date of award of work at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

10. Guarantee & Defects Liability Period

The guarantee shall be valid for 12 (Twelve) months after successful performance testing. The contractor shall guarantee that all the equipment shall be free from any defect due to the defective materials and/ or bad workmanship and also the equipment shall work satisfactorily with performance and efficiencies not less than the guaranteed values.

- a) Any parts found defective during the guarantee period shall be replaced free of cost by the contractor. The services of the contractors personnel, if required during this period shall be made available free of cost to the department.
- b) The contractor shall depute his representative to the site within 36 (thirty six) hours of notification of defects by the department.
- c) The representative of department and firm shall prepare a joint report regarding the nature of defect and remedial action required. Time schedule for such action shall be also finalised.
- d) In case the contractor fails to depute his representative within 36 (thirty six) hours of notification of defects or fails to cause remedial measure within a reasonable time as decided during joint inspection, the department may proceed to do so at the contractor's risk and expenses without prejudice to any other right.

11. COMPENSATION FOR DELAY

If the contractor fails to maintain the required progress or complete the work and clear the site on or before the contract or extended date of completion, he has to pay the compensation for delay which is limited to **0.5% per week of work order value for the first 10 weeks and 0.7% per week for next 10 weeks and thereafter subject to a maximum of 12%** of the work order value for the location where the work is delayed and the firm is found responsible for the same. **Flow chart of the procurement process/contract shall be supplied by the contractor and approved by Executive Engineer concerned.**

12. Participation of near relatives of the BSNL employees

All near relatives of 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 detailed guidelines in this regard are given in the following paragraphs :-

I) 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).

II) As per Government of India's CCS Conduct rule 4, no Government servant shall in the discharge of his official duties deal with any matter or sanction any contract to any company or for any other person if any member of his family is employed in that company or firm or under that person or if he or any member of his family is interested in such matter or contact to his official superior. This clause is applicable to all BSNL employees and in view to this as soon as any BSNL employee becomes aware of the above aspect, he must intimate this to the prescribed authority.

For non executive employees this authority is SSA Head/Circle Head/Chief Engineer Chief Archt./

Corporate office under whom he is posted. For executive employees (at present some of them are called as Gazetted officers) the prescribed authority for this purpose is Circle Head/Chief Engineer/Chief Archt. Corporate office under whom he is posted.

III) (a) The company or firm or any other person is not permitted to tender for works in BSNL Units

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 Engineer/Chief Architect/Corporate office for executive employees (those called as Gazatted officers at present). Therefore, it has been decided by the competent authority that a clause must be added in the tender and other related documents that 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. In case of

Contractor

SDE (E)

proprietorship firm certificate will be given by all the partners and in case of limited company by all the Directors of the company. Any breach of these conditions by the company or firm or any other person, the tender/work will be cancelled and earnest money/security deposit will be forfeited at any stage whenever it is so noticed. The department 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.

- (b) In respect of case where the tender notice /work related orders have been issued and are waiting for submission the concerned unit should issue corrigendum for inclusion of above clause. However, where tender/work related documents have been opened and are waiting for finalisation the certificate may be taken from the company or firm or any other concerned person giving details of the relatives employed in the jurisdiction of the tender. The company or firm or the person concerned will not be debarred in this case but his work will be kept under proper watch to avoid any further complaint. Further, the relative will not be involved in the decision making and execution of the work.
- (c) Where the tenders or the work are already in operation (or awarded) the tenderer may be requested to give details of relatives employed in the jurisdiction of the tender in such cases the tenderer will be allowed to continue the work but special watch may have to be kept about his performance to avoid any complaint. The concerned relative will not be involved in execution and settlement of claims of the contractor.

13. TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR :

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

14. INDULGING OF CONTRACTOR IN CRIMINAL/ANTISOCIAL ACTIVITIES AND CASES UNDER INVESTIGATION / CHARGE SHEETED BY CBI OR ANY OTHER GOVERNMENT AGENCIES ETC.

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

Important Conditions for tenders applicable from GST perspective

- 1.1 BSNL reserves the right to ask the bidders to submit documentary proof confirming the correct HSN or SAC classification/ Customs Tariff Head from the CGST/SGST/IGST officer or Customs authority where the HSN or SAC classification/ Customs Tariff Head furnished against the particular tendered item by different bidders, differs from each other or the same is found apparently not furnished in accordance with GST Act/Customs Tariff notifications.
 - 1.2 If the contractor fails to furnish necessary supporting documents i.e. Tax invoices / Customs invoices etc. in respect of the Duties ,Taxes and Cesses which are eligible for input tax credit, the amount pertaining to such Duties ,Taxes and Cesses will be deducted from the payment due to the firm.
 - 1.3 If the contractor fails to perform necessary compliances which would any manner restrict BSNL to claim input tax credit, then the amount pertaining to such Duties ,Taxes and Cesses will be deducted from the payment due to the contractor.
 - 1.4 If the contractor does not disclose the correct details on the invoice or on the GSTN viz. GSTIN, Place of Supply, etc. which restricts BSNL to claim input tax credit, then the amount pertaining to such Duties ,Taxes and Cesses will be deducted from the payment due to the supplier.
2. **Tax Indemnity clause** : BSNL has the right to recover Input Tax Credit loss suffered by it due to any mis-declaration on invoice by the supplier.
- 3. Documents required for claiming the payment:-** For claiming the payment, the supplier has to submit the following documents to the paying authority:-
(a) Invoice clearly indicating break up details of composite price i.e. Basic, GST, any other Duties,Taxes and Cesses, Freight/Packing Charges, etc.
(c) GST invoice or equivalent document, if applicable.

Note-01: If the supplier fails to furnish necessary supporting documents i.e. GST/Customs invoices etc. in respect of the Duties/taxes/Cesses which are creditable to BSNL, the amount pertaining to such Duties/Taxes/Cesses will be deducted from the payment due to the firm.

Payment against GST credit will be made only when GST compliant invoice is submitted by the supplier.

Note-02: Submitting fake / forged documents towards meeting eligibility criteria such as experience capability, supply proof, registration with Goods and Services Tax, Income Tax departments etc and as supporting documents towards other terms & conditions with the bid to meet terms & condition of tender.

Schedule of Work

Name of work:- **Provision of AFDDFA system for New rented TE Building at PADHAR under SSA Mandi.**

| S. No. | Description of Item | Qty | | Rate | Unit | Amount |
|--------|--|-----|------|------|------|--------|
| 1 | Supplying, Installation, Testing and Commissioning of following detectors complete with base of detector etc. as required as per specification attached. The base shall be of same make as that of detector. | | | | | |
| (a) | Photo Electric Smoke Detector | 3 | Nos. | | Each | |
| 2 | Supplying, Installation, Testing and Commissioning of Electro-pneumatic type dual heat cum rate of rise in temperature heat detector complete with base of detector etc as required (resettable type) and as per specification attached. The base shall be of same make as that of detector. | 1 | No. | | Each | |
| 3 | Supplying, Installation, Testing and Commissioning of electronic hooter cum speaker enclosed in 16 SWG MS/ Aluminium enclosure of suitable size painted with fire red shade etc. and compatible with the Fire Panel and as per specifications attached. | 1 | No. | | Each | |
| 4 | Supplying, Installation, Testing and Commissioning of response indicators with GI box of thickness not less than 16SWG MS sheet .The response indicator box should have a provision for conduit entry from one side and terminal strip fitted for connection. The response indicator shall lit by means of twin LEDs in Red colour. The indicator should have a screw type cover and suitable for operation loaded lamps etc. as required and entire unit of the same make as of control panel . | 3 | Nos. | | Each | |
| 5 | Supplying, Installation, Testing and Commissioning of manual call point (pillbox) using push button in red colour. The box made of thickness not less than 16SWG CRCA sheet of size 100mmx100mmx55mm deep with fire red finishing the front should be sealed by means of breakable glass and should be dust & vermin proof. The push button should have a pair of NO/NC contract and provision for twin LEDs in Red colour. | 1 | No. | | Each | |
| 6 | Supplying, Installation, Testing and Commissioning of 2 zone micro processor based Fire MAIN Control Panel suitable for wall/floor mounting fabricated from CRCA sheet along with sealed maintenance free battery as secondary power source, power supply & battery charger etc. of 2 nos. x 7AH capacity to take care of standby power supply without PA system i/c necessary hardware & software etc as required. | 1 | No. | | Each | |
| 7 | Supplying and fixing of 6Kg capacity ABC type ISI mark fire extinguisher with hose of suitable length and normally charged and ready for use, fixing the same on wall, testing etc. as required. | 3 | Nos. | | Each | |

Contractor

SDE (E)

| | | | | | |
|-----|--|----|-------|-------------------|------|
| 8 | Supplying & fixing of unarmoured Copper control Cables of following sizes on surface/ existing cable tray etc. i/c testing commissioning complete as reqd. | | | | |
| (a) | 2x1.5sqmm | 50 | Mtrs. | | Mtr. |
| (b) | 3x1.5 sqmm | 5 | Mtrs. | | Mtr. |
| 9 | Supplying & fixing of Computerised laminated floor plan of size 400mm x 250mm, mounted on hard board showing area(s) covered by each zone along with each control panel. | 1 | Job | | Each |
| | | | | Total= Rs. | |

Amount in words Rs

(Signature with Seal of Firm)

Sub Divisional Engineer(E)

Contractor

SDE (E)

SECTION-1

GENERAL DESCRIPTION OF WORK

1.0 SCOPE:

This section indicates general description of work and various design parameters for the automatic smoke detection and alarm system.

2.0 DRAWINGS:

The building drawings giving necessary details regarding the areas to be protected and any other particular information, if required, may be seen from the Executive Engineer (E) concerned.

3.0 DESIGN AND SELECTION:

3.1 Detectors which are normally used are broadly covered in two categories viz. Heat and Smoke type. Smoke type is again of two type viz. Photo Electric & Ionisation.

3.2 Ionisation and photoelectric detector shall be provided in the areas which are normally free from smoke. Heat detectors shall be provided for the areas like kitchen, battery room etc. which are prone to smoke.

3.3 The area to be protected by ionization and photo electric detector shall be generally in accordance with the Standards lay down below. Additional detectors if any shall be provided as per user's requirement.

(a) Each detector shall cover an area not exceeding 25 sqmtr . In case of air conditioning equipment rooms.

(b) Each detector shall cover an area not exceeding 40 sqmtr . In case of non air conditioning equipment technical rooms.

(c) Each detector shall cover an area not exceeding 50 sqmtr . In case of rooms having no equipment.

(d) Each detector shall cover an area not exceeding 10 sqmtr . When provided above false ceiling or below false flooring or over fully covered cable network.

(e) Area separated by beams having depth of minimum 450 mm shall have separate detector irrespective of area.

(f) Maximum horizontal distance between centre to centre of heat detector and smoke detector when provided in corridor shall not exceed 10 meters and from any end walls the distance of heat detectors shall not exceed 5 mtrs.

(g) Ionisation or photoelectric detector shall be installed above the racks at a distance not exceeding 4.0 meter between detectors in case of electronic exchange.

(h) Ionisation or photoelectric type detectors shall be provided in the ratio 1 : 1 for mixed monitoring purpose

(i) Each heat detector shall cover an area not exceeding 40 sqmtrs. and heat detectors shall be provided for areas which are prone to smoke.

3.4 Each return air opening in the weather maker room shall be provided with one duct detector. The detector shall be ionization type smoke detector fitted inside the sampler box.

3.5 Each room including electrical rising main room shall necessarily be provided with at least one detector irrespective of its area.

3.6 Signal from detectors which are normally not visible shall be extended in the shape of response indicator to a suitable location which is easily accessible.

- 3.7 Local control panel shall be provided at the respective floors at easily accessible areas like corridors etc. where the same can be properly monitored. The main control panel shall be installed preferably at the ground floor at the fire control room. Standby batteries for power supply to the panels shall be provided near the panel.
- 3.8 A minimum of two speakers for audible alarm and or public announcement shall be provided on each floor and at least one speaker shall be provided on terrace.
- 3.9 The response indicator shall be lit by means of twin LEDs in red color and shall be housed in MS box.
- 3.10 The response indicators for the detectors below the false floor, shall be installed with top at 300 mm above false floor at nearby wall/column or directly on false floor by making suitable cut out and covered with thick glass for detectors above false ceiling, the response indicators shall be installed either right below on the false ceiling or on the near by wall / column with bottom 300 mm below false ceiling. Alternatively all response indicators shall be located at convenient places as approved. The cover plate of the response indicators shall also boldly display the detectors number to which they correspond.
- 3.11 Each detector shall be numbered zone wise such as Z09/N-10 , wherein Z09 indicates zone number nine and N-10 indicates number 10 in that zone.
- 3.12 All the cables and wires shall be tagged or labelled with ferrules for proper identification at the termination end.
- 3.13 The specification of different types of detectors selected shall conform to the detailed specifications issued by the Department.

4.0 STANDARDS

The entire system shall conform to I.S.2189 as amended up to date, where IS standard is not available the BS 5839 standard shall be followed. In case of conflict the requirements of these detailed specifications shall be given over riding priority. The wiring work shall be carried out conforming to C.P.W.D. specifications for electrical works (Internal) as amended upto date.

5.0 APPROVAL OF DRAWINGS:-

The contractor shall get the following drawings approved before start of the work.

- Floor plans showing location of detector indicating the proposed distances between the detectors.
- Floor plans indicating the location of main control panels, local control panels, manual call points response indicators etc.
- Conduit/cable layout diagram clearly indicating details of detectors and other devices connected in a particular Zone.
- Drawing showing general arrangement of main control panel and local control panels.

The approval of drawing by the department shall not absolve the firm of their responsibility for supplying and installing the system conforming to relevant standards and specifications.

6.0 TEST AT SITE:-

6.1 After physical completion of the installation functional testing shall be conducted by the firm in the presence of Engineer-In-charge or any representative of the department. Functional tests on the following items shall be conducted for this purpose.

- a. Smoke detectors both ionization and photo electricity.
- b. Response indicators.
- c. Duet detectors.
- d. Heat detectors.
- e. Hooters.
- f. Standby battery.
- g. Fire control panels.
- h. Public address system.

6.2 Subsequently acceptance testing of the system will be conducted after successful completion of above test by the Engineer-In-charge or his representative and representative from the T&D circle of the department. Following procedure shall be followed for this purpose.

6.3 TESTING OF DETECTORS:

6.3.1 OPEN CIRCUIT TEST:

(a) All the ionization/photo electric smoke detectors of a zone are looped and are terminated on PCB card in the control panel. Remove one terminal of detector to make open circuit in the detectors loop a corresponding fault indication of an open circuit will be displayed as on audible and visual alarm (amber) on the control panel. The audible alarm should be distinct from the fire alarm, trace the faulty detector in the Zone to check the faulty detector.

(b) Open circuit conditions is created - at the last detector of individual zone.

6.3.2 SHORT CIRUCIT TEST:

Short the terminals of detector one by one **in last detector** of each zone to create a short circuit in the detector circuit in such a way so that every individual zone is checked for visual (amber) and a distinct audible alarm.

6.3.3 CLOSED CIRCUIT TEST:

By putting a cigarette smoke or allowing smoke of four incense stick in to the chamber of detectors just about a distant feel apart, the detector senses the smoke within 10 to 15 second and the red LED on the body of the detector glows permanently giving an audio visual alarm on the control panel and distant hooters also gives audio signal. The audible alarm continues to operate until silenced manually. After pressing the alarm cancel push button on the control panel, the audio signal silenced respective zone is to be surveyed to plot the source of smoke conversely.

6.3.4 RESPONSE INDICATORS:

Similarly test smoke detectors installed in the false floor and false ceiling, and simultaneous operation of respective response indicators are also ensured.

Testing of smoke detection by ionization type smoke detectors will be followed by photo electric smoke detectors. The time taken by each detector is 10-30 seconds for its activation but never more than 60 seconds.

6.3.5 DUCT DETECTOR IN THE RETURN AIR PATH:

Operation of duct detectors is also checked as per above procedure if these detectors operates before the blower getting shut off indicated that the condition has much aggravated.

HEAT DETECTORS:

These are suitable for use in situation where sufficient heat is likely to be generated (for example, kitchen and pantry etc.). These are not suitable for fire protection of places where larger losses can be caused by small fire and where safety of life is involved. Hence used in closets or other unsupervised spaces.

For testing of restorable type detectors a heat source, such as heat of soft coke burnt with smokeless a hair dryer or a shielded heat lamp is used unit if respond, making sure that the sensing element is not damaged. After each heat test, the detector is reset.

A heat detector with replaceable fusible alloy is tested first by removing the element to see whether contacts operate properly and then re-inserting them in proper position.

6.3.7 MANUAL CALL POINTS:

Inspect that on each floor, one or more manual call points are installed, preferably on the exit routes. It is installed at a height of 1.4 meters above the floor. Check that its housing is dust proof and moisture proof properly sealed with rubber lining red painted instructions given to break the glass with hammer provided in case any fire is observed.

For testing unscrew the outer cover the respective LED in the control panel will flash along with audible alarm to attract the attention of the exchange staff.

6.3.8 ALARMS

Ensure that:-

- a. The whole exchange area is covered by the audio visual alarm system.
- b. Electronic hooter provided in switch room, exploitation room and lobbies of each floor.
- c. Alarm signal actuated as soon as the artificially created smoke density rises in the area of detector installed.
- d. Alarm signal is extended in OMC room so that the fire signal & time of detection of smoke gets printed.

6.3.9 FAULT SIGNALS:

An immediate fault warning is checked by (c) visual indicators (amber) on the zone control panel and audible alarm and visible indicator (amber) on main control panel. The audible alarm should be distinct from the fire alarm.

Check warning alarm in the following occurrences by: -

- a) Removing the fuse of main power supply.
- b) Disconnecting the stand by power supply.
- c) Disconnecting the battery charging equipment.

Nothing shall be paid extra for arranging Tests/Material as reqd. (Aggarbatti etc.) for performance test & A/T thereafter.

6.3.10 TAKING OVER OF INSTALLATION

After the installation has been completed in all respects and acceptance tested successfully as per the procedure laid down above, this shall be taken over by the department for beneficial use. The minor defects and discrepancies which might be noticed during acceptance testing shall be attended by the contractor with in a fortnight from the date of acceptance test.

SECTION -II

PHOTO ELECTRIC SMOKE DETECTOR & IONSATION SMOKE DETECTOR OPERATING PRINCIPLE :

1.0 OPERATING PRINCIPLE

(A) PHOTOELECTRIC SMOKE DETECTORS

The operation of detector is based on light scattering principle. Under normal conditions, light pulses are separated at such a rate that photo diode is not able to detect them, because of its position being outside the light path. When the smoke enters the chamber. The light would be scattered off by the smoke and sufficient quantity of light would be detected by the diode resulting in activating an alarm on counting of six consecutive pulses on account of continued existence of smoke with in the sensing chamber. External LED also glow in alarm actuation.

(B) IONIZATION SMOKE DETECTOR

The ionization smoke detector shall consist of two ionisation chambers i.e inner and outer, both containing a sealed radiation source. The air inside the chamber is ionized by the radical rays emitted from the radiation source. The two chambers are connected in series.

At the time of fire the smoke would enter into the outer chamber and due to the smoke, the current in the ionization chamber is reduced. This effect is taken note of by the controls and signals are given accordingly. External LED also glow on alarm activation.

2.0 GENERAL FEATURES

- 2.1 The detector shall be plug in type facilitating easy removal and installation of detector with hand while base is permanently installed.
- 2.2 The detector shall operate at 24 V (MAX) D.C. and shall be of low voltage type.
- 2.3 The detector shall be cent percent solid state using field effect transistors, integrated circuits, transistors technology.
- 2.4 The detector shall have L E D indicators for quick identification of location of fire/smoke.
- 2.5 The detector shall have provision for connecting response indicator.
- 2.6 The detector should have necessary protection against reverse polarity of incoming supply.
- 2.7 The detector shall be self hold type capable of maintaining the alarm signal until the system is reset at the control unit.

SECTION-III

HEAT DETECTOR OPERATING PRINCIPLE

1.0 OPERATING PRINCIPLE:-

The detector function with a dual action using two distinct method of fire detection i.e. rate of rise and fixed temperature.

The rate of rise element consists of an air chamber, a flexible metal diaphragm, a moisture proof trouble free vent which is carefully calibrated at the factory. Air expands as it is heated and contract as it is cooled. For normal day to day fluctuations the expansion and contraction of the air with in the chamber is automatically compensated by the breathing action of vent. However, when fire occurs air temperature is raised very rapidly and the air in the chamber expands faster than it can be vented. This creates a pressure which distorts the diaphragm and closes the electrical contracts. The rate of rise actin is not related to any fixed temperature when the rate of temperature rise is very fast.

If the heat is subsequently removed the air within the chamber contracts relieving the pressure and the detector automatically restores itself to the normal open circuit position.

In the instance of a very slow smoldering fire where the temperature do not increases, rapidly enough to operate the rate of rise element, the fusible solder melts at a predetermined temperature and release the spring which closes the electrical contracts.

2.0 FEATURES

- 2.1 The heat detectors shall act as on open circuit device and designed to close an electrical circuit upon being activated.
- 2.2 The fixed temperature-sensing feature shall be entirely independent of rate of temperature rise sensing feature.
- 2.3 The detector shall have phosphor bronze spring held under tension by fusible soldered link in order to achieve fixed temperature sensing feature.

SECTION-IV

1.0 HOOTERS AND MANUAL CALL POINTS

1.1 HOOTERS –

- a) The hooter shall be suitable for wall mounting and shall incorporate hooter card and speaker inside a metallic box.
- b) The hooter shall be mounted at about 2.4 meter above floor level.
- c) The hooter shall be actuated by the control panel. PA system shall have separate speaker.
- d) The hooter shall be totally electronic solid state type speaker cum siren having interrupted tone for alert and continuous tone for evacuation alarm. The interrupted tone shall be ON for 3 seconds and OFF for one second.
- e) The hooter shall operate on designed operating voltage.
- f) The hooter shall be suitable for an audible range of 80db at 1 m with a frequency range of 500 HZ to 1000 HZ.

1.2 MANUAL CALL POINT OR PILL BOX –

- a) The manual call point shall be aluminium or MS construction painted with fire red.
- b) The box shall be provided with front glass (minimum 30 sq cm.) and gasket to make it completely vermin and dust proof with hammer and chain. Those shall be so located to ensure that one or the other call box shall be readily accessible to all occupants without having to travel more than 22.5 meters.
- c) The glass front cover shall have written up – **“BREAK GLASS IN CASE OF FIRE”**.
- d) The box shall be suitable for wall mounting and shall be mounted at 1.2 meters above floor level.

SECTION V

SPECIFICATION OF MICROPROCESSOR BASED CONTROL PANEL FOR FIRE DETECTION SYSTEM

INTRODUCTION - The purpose of introducing microprocessor based control panel in fire detection system is to make the panel more compact by reducing the number of components , minimizing false alarms and the qty of cable required , better reliability and making it more user friendly . However the essential features of local control panel have been included in the microprocessor based panel.

GUIDELINES FOR DESIGN -

1. The transistor used in the circuits shall be derated by as much as 50% and shall operate at only 25% of their wattage to safeguard against thermal run away.
2. No resistance shall be working at more than 1/3rd of its rated wattage and shall give good stability and resistance to moisture, vibration, temperature and dust.
3. The stand by power supply should be capable of maintaining the system in normal operation for a period of not less than 48 hours after the failure of normal mains supply after which sufficient capacity would remain to provide full load operation for at least 1 hour. The full load would be defined as that caused by the operation of all the alarm sounders operating simultaneously, operation of a detector in at least 25 percent of zones (with a minimum of two zones) and the operation of the fault indicator. The operation of trigger devices in further zones should not result in cancellation of fire alarms existing at that time.
4. The power supply unit shall have solid state battery charger circuit for charging of sealed maintenance free battery whenever the battery is discharged below the predetermined level. The rate of battery charging should be such that, having discharged to its final voltage, the battery can comply the recommendations of Para 2 above after a charging period of 24 hours. The charger shall sufficiently charge the battery in 8 hours so as to supply the the maximum system load at an adequate voltage for at least 2 hours.
5. The printed circuit board and all the components in the panel shall be suitably protected against Atmospheric corrosion.
6. Circuit and design of the panel shall be such that the operation (or) failure of one indicator does not prevent the proper and independent operation of other indications.

ADDITIONAL DESIGN FEATURES -

1. All the devices in a zone viz. detector, sounders, manual call points shall be operated on same two wires of zone.
2. Where the panel is used with conventional system , the microprocessor based control panel must be compatible with conventional main control panel as well as local control panel and detectors of approved makes.

GENERAL -

1. The panel shall be fabricated from 16 gauge (1.6 mm) CRCA sheet , completely dust and vermin proof with Neoprene gasket, wall mounting and front open able type with hinged door.
2. The panel shall have glass door enclosure with lock and key arrangement.
3. Suitable knockouts shall be provided for termination of conduits and cable glands.
4. The panel shall be powder coated with approved colour and finish.
5. All components and their wiring shall be arranged so as to be conveniently attended to from the front of the panels.

6. All indicating lamps shall be LED type and of the following colours. The zone indicators indicating FIRE should consist of two LEDs –
 - a. FIRE warning indicator should be clearly labelled and coloured red.
 - b. FAULT warning indicator should be clearly labelled and coloured amber with provision for identifying open / short separately.
7. The feather touch switches and indicating lamps shall be located in the front fascia of the panel and shall be unambiguously labelled.
8. The primary alarm circuit shall be solid state.
9. The PCBs shall be easily removable. The connections of The PCBs shall be through interface cord of plug – in – type.
10. An audible signal along with its silencing switch shall be provided on the control panel.
11. The Earthing terminal shall be provided on the frame of the control panel.
12. The panel shall have ventilating louvers with wire mesh.
13. Laminated wire diagram shall be pasted at a suitable place inside the panel.

FEATURES –

1. The control panel shall continuously monitor OPEN / SHORT leads in each zone, fire detectors / manual call points with audio alarm distinct the for FIRE and FAULT and shall visually indicate FIRE / FAULT in corresponding zone.
2. For multi-storeyed building separate panels may be installed on each floor with individual power supply and batteries to reduce the interdependence of one panel over the other panel. However a repeater panel may be provided at the ground floor with sounder to indicate the FIRE/FAULT condition at various floors.
3. The manual controls for switching OFF/ON, MAINS/STANDBY power provided shall not be accessible to outsiders.
4. The panel shall have the following visual indications for –
 - a. System on – green
 - b. Stand by on – green
 - c. Charger on – green
 - d. Isolation of a zone for testing purpose.
5. Audio – Visual indication shall be provided for the following –
 - a. The operation of fire detector in any zone.
 - b. Short circuit or disconnection of leads in any zone.
 - c. Failure or disconnection of normal power supply.
 - d. Failure or disconnection of stand by power supply.
 - e. Failure or disconnection of battery charging equipment.
 - f. Battery voltage low.
 - g. Common indication for earth fault in the panel / zone.
6. The panel shall have the following supervisory facility –
 - a. Switch for acknowledgement.
 - b. Switch for manual reset of panel after normal of fire condition.

7. Means shall be provided in the panel to prevent battery from discharging through the charging equipment in the event of its breakdown or failure.
8. Facilities shall be provided to test the zones individually by simulating fire and fault condition. On test mode the panel shall automatically reset after a predetermined time, once the fault or fire is cleared. The testing authority shall be able to test continuously all the zones without the necessity of resetting the panel every time.
9. Each zone shall be capable of isolation for maintenance or test purposes leaving the remaining zones in healthy condition so that fire and fault detection in other zones is not effected.
10. Facility for testing all the LEDs shall also be available.
11. Fuses shall be provided for AC, DC and charger circuit close to the source of supply in an easy accessible place.
12. The user shall be able to acknowledge the fire / fault audio visual alarm and reset the panel directly without the use of any password or key.
13. Only on test condition, Fire and Fault shall reset automatically. On actual conditions, any audio alarm in the panel due to fault condition (except fire), if not acknowledged within two minutes, should be made to stop automatically by providing a timer.
14. Silencing the sounder shall not prevent fire alarm being activated in any other zone simultaneously.
15. Any fault signal including fault testing which the panel might be experiencing shall not prevent the fire alarm being given if any detector activates at the same time in other zone.
16. When fire is detected, the corresponding zone LEDs shall flash when the alarm is first signalled and will glow steadily after the silence button is pressed.
17. Three NO and NC contacts shall be provided for remote monitoring.
18. When a fire is detected, all alarms in all zones will give continuous dual tone for evacuate condition.
19. It shall be possible to program on the panel for isolating the power supply to zones for maintenance purpose.

POWER SUPPLY -

1. The entire system shall be suitable to operate on 230 + 10 % , 50 HZ single phase AC supply with 12/24 V sealed maintenance free battery as secondary source.
2. The power supply unit shall consist of solid state power rectifier of adequate capacity so as to provide 12/24 V stabilized DC power as output while receiving 230 V \pm 10% , 50 HZ single phase AC supply.
3. Battery voltage low alarm shall be activated at 10.5 V for 12 V battery and 21V FOR 24V BATTERY.
4. The unit shall have automatic change over facility from mains to battery and vice versa.
5. The battery shall be housed in the control panel itself.
6. Battery charging voltage shall not be greater than 13.6V for 12V battery and 27.2 V for 24 V battery.
7. The battery shall be isolated from MS sheet enclosures by means of rubber pad.

IMPORTANT NOTE:

The above general specifications are for reference as the prototype of the microprocessor based fire control panel has been approved in respect of different manufacturers and the firm shall supply the microprocessor based panel as per approved prototype. Wherever the prototype approved specification of the individual manufacturer are silent then above specifications shall prevail to that extent. (Further in respect of panels for more than 8 Zones wherein prototype is not approved therein the above specifications shall prevail in totallity.

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

| S. No. | Item | Makes |
|--------|--|---|
| 1 | Engine | Ashok Leyland /Cummins/ Cater pillar / KOEL/ Volvo Penta / Mahindra & Mahindra (up to 200 KVA) /Escorts (up to 30 KVA)/ Eicher (up to 35 KVA) |
| 2 | Alternator(Brushless) | Crompton Greaves (AL. series) / KEC / Leroy Somer / Stamford/Jyoti Ltd |
| 3 | Battery (Lead Acid / Mntc. Free) | Amara Raja / AMCO / Farukawa / Hitachi / Exide/ Prestolite / Standard |
| 4 | HV Switchgear (Vacuum Circuit Breaker/SF6) | Biecco Lawrie / Crompton / Kirloskar / MEI / Jyoti Ltd |
| 5 | Transformer (Oil filled / Dry type) | ABB / Schneider Electric /Andrew Yule / Bharat Bijlee / Crompton / EMCO / Kirloskar / Siemens |
| | a) Above 400 KVA | |
| | b) Up to 400 KVA | In addition to above makes, Uttam/ Patson/Rajasthan Transformer and Switchgear |
| 6 | Air Circuit Breaker | L&T/ Schneider Electric / Siemens |
| 7 | MCCB(Ics=Icu) | L&T/ Schneider Electric / Siemens |
| 8 | SDF units | L&T/ Schneider Electric / Siemens/ HPL/Havells |
| 9 | Power Contactors | L&T/ Schneider Electric / Siemens/ Lakshmi(LECS) |
| 10 | Change Over Switch | HPL / Havells / H-H Elcon |
| 11 | Intelligent APFC Relay | L&T/EPCOS(Siemens)/ Schneider Electric / Neptune Ducati/Syntron/ABB |
| 12 | Bus Bar Trunking/ Sandwiched Bus Duct | Moeller / L&T / Schneider Electric /ABB/Legrand/Zeta |
| 13 | Power Capacitors (MPP/APP) | L&T/EPCOS(Siemens)/ABB/Crompton/ Schneider Electric/Neptune Ducati |
| 14 | Digital/ KWHr meter | Schneider Electric/ AE/ Digitron / IMP/ Meco / Rishabh / Universal/HPL/L&T/ABB/Yokins |
| 15 | Cold shrink HT/LT Cable Joint | Denson / 3M(M-Seal)/ Raychem |
| 16 | Rubber Matting | ISI mark |
| 17 | MCB/ Isolator /ELCB/RCCB/ Distribution Board | Crompton / Havells / Indokopp / MDS Legrand/ L&T / Schneider Electric/ Siemens / Standard/ABB/HPL |
| 18 | MS/ PVC Conduit | ISI mark |
| 19 | Cable Tray | MEM/Bharti/Ratan/Slotco/Profab |
| 20 | HT/LT Cables | ISI mark |
| 21 | PVC insulated copper conductor wire | ISI mark |
| 22 | Centrifugal Pump | Amrut / BE / Beacon / Batliboi / Crompton / Jyoti / Kirloskar / KSB / Mather & platt / WASP/Grundfos |
| 23 | Submersible Pump | Crompton/Amrut / BE / Calama / Kirloskar / KSB |
| 24 | Motors | ABB/ Bharat Bijlee / Crompton Greaves / Schneider Electric / HBB / KEC / Siemens/Jyoti Ltd |

| S. No. | Item | Makes |
|--------|-----------------------------------|--|
| 25 | Fresh Air Fans | GE / Khaitan/Almonard/Crompton |
| 26 | Starter | ABB / BCH / Schneider Electric / L&T / Siemens / |
| 27 | Single Phase Preventer | L&T / Minilec / Siemens / Zerotrip |
| 28 | GI/MS Pipe | ATC / ATL / BST / GSI / ITC / ITS / IIA / JST / Jindal / TTA / Tata/Zenith |
| 29 | Foot Valve | ISI mark |
| 30 | Gate Valve | Advance/Audco/Johnson Controls/Zoloto/Annapurna / Fountain / Kirloskar / Leader / Sant / Trishul |
| 31 | Compressors | Carrier/Emerson copeland/York/ Danfoss (for chillers only) |
| 32 | Resin Bonded Glass wool | Fibre Glass / Pilkington / UP Twiga |
| 33 | Expanded Polystyrene | BASF(India) Ltd. |
| 34 | Gauge | Feibig / H.Guru / Pricol |
| 35 | Controls | FLICA / Honeywell / Indfoss / Penn-Danfoss / Ranco / Ranutrol / Sporland |
| 36 | Fine Filters | Anfiltra Effluent / ARW / Athlete/ Airtake/ Dyna / Kirsloskar/ Puromatic/ Purafill/ Purolator / Tenacity |
| 37 | GI Sheet | HSU Jindal / National / Nippon Denro / Sail / Tata |
| 38 | Heat Detector | Appollo / Chemtron/ Edward / Fenwal/ Hochiki / Nitton /System Sensor/ Wormald/Honeywell Essar/Notifier |
| 39 | Ionization Detector | Appollo / Cerebrus / Edward/ /Fenwal / Hochiki / Nitton / System Sensor / Wormald |
| 40 | Photo Electric Smoke Detector | Appollo / Cerebrus / Edward / Fenwal/ Hochiki / Nitton / Wormald /System Sensor |
| 41 | Fire Panel (Microprocessor based) | Agni Instruments / Agni Devices/ Aruna Agencies/ Carmel Sensor / Ravel Elect./Honeywell Essar/Notifier/Navin Systems |
| 42 | Sprinkler/ Hose Reel & Hose Pipe | ISI mark |
| 43 | Fire Extinguisher | ISI mark |
| 44 | Lift | OTIS, Kone, Mitsubishi , Schindler, Johnson, Thyssenkrupp Elevator(India) |

NOTE:

1. Items which are approved from O/o PGM(E) BSNL New Delhi till last date of sale of tender, shall also be accepted.
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.

Contractor

SDE (E)

ADDITIONAL SPECIFICATIONS FOR THE WORK (E.I. & FANS)

1. The work shall be done as per CPWD specifications for electrical works as amended from time to time and Indian Electricity Rules as amended up to date
2. The work shall be supervised by a qualified over-sear.
3. The layout of the work will be given by the Engineer-in charge or the duly authorised representative, at the site work.
4. The following wiring shall be done in separate circuits.
 - A) Power plug wiring.
 - B) Light and fan point wiring.
 - C) Emergency light and fan point wiring.
 - D) Telephone wiring.
 - E) Circuit wiring.
 - F) Sub main wiring.
5. The number of power plug points shall be one per ckt. As in H.P. heater are used on each ckt.
6. The earthing sets shall be provided in the presence of the Engineer-in-charge or his authorised representative.
7. The contractor will have to submit the completion plan to scale in triplicate in ammonia printed i.e. Blue prints before finally paid, failing which 2.5% of the value of work subject to a ceiling of Rs. 2500/- will be recovered from his final bill.
8. The contractor will have to give the following tests at his cost and intimate test results before final bills are paid. Nothing extra will be paid to him on this accounts.
 - A) Earth Test.
 - B) Polarity Test.
 - C) Insulation Test.
 - D) Earth continuity test of the recessed conduit pipes.
9. Any damage done to the building by the contractor during the execution of work shall have to made good at his cost and risk. If he does not do it himself within a reasonable time determined by the Executive Engineer (Elect) then the same will be get done at his cost departmentally after giving notice to him.

10. The outlet box is for switches and pipes or conduits etc. For different categories of conduits runs catering for different type of electric wiring as mentioned in clause(4) above shall be painted inside with different colors each signifying the different categories mentioning so as to avoid mixing of various circuits and their wiring and nothing extra will be paid for this account.
11. At the time of laying conduit pipe in the slab and in recess the contractor will keep fish wire of 14 S.W.G. (G.I.) wire through conduit/pipe and will have to take special care so that the conduits do not pass through air conditioning nuts grills, columns, beams etc. If any such necessity is foreseen special written permission of E.E. (Elect) will be obtained before such work is carried out, in case of failure the contractor will not be paid this account. Successful tenderer should recess the conduit in the walls before they are plastered and in collaboration with the cost of the contractor. The conduit/pipes should be mechanically and electrically continues.
12. The Bakelite covers of the tumbler switches, plug & sockets etc. shall not be removed or broken for taking connections. It shall be done at their backs by providing suitable wooden rider in the I.C. boxes, where found necessary. All I.C. boxes for switches, plugs and regulators etc. shall be provided with thick bakelite sheet covers.
13. The runs of various circuits wiring at various places shall be kept minimum by taking the runs on walls, where crossing column is not necessary. This has to be decided before the casting of slab, so that unnecessary length of conduits is not laid therein.
14. All the I.C. distribution boards, sub main boards and their complete fittings shall be sign written, clearly indicating the number of distribution boards, the socket load it is serving and the number of circuits contained in the distribution box.
15. Underground cables both of 220v and 1.1kv grade should be subjected to pressure/insulation tests before and after laying the same in the ducts. In case of unsatisfactory tests, the cost of all repairs and replacements and all extra work of removal and relaying will have to be done by the contractor at his own risk and cost.
16. The contractors will have to use metal clad witches/MCB's/Isolators/MCB distribution boxes and metal clad distribution as given in the schedule of work.
17. A termination of all connections of main boards/sub-main boards/sub-distribution boards will be done by crimping and nothing extra will be payable on this account.
18. Inter-connection between bus-bars and switches i/c and above 100Amps. sub main boards connections, will be done with solid copper conductor with PVC sheathing.
19. For the conduit already laid, recovery shall be made on the basis of DSR-2012 rates plus abatement of this tender on linear basis.

20. The Department shall not supply any tools and plants .
21. The work is to carry out according to the drawings issued, kept in the office of Engineer-in-charge who reserves the right to change the layout as and when required according to changed site conditions at any stage .The wiring and conduit routes are to be marked at site first and got approved by the Engineer-in-charge for commencement of actual work. No extra payment shall be made on this account.
22. The electrical works shall be carried out in close with the civil work in such a way that at no stage the electrical works lacs behind the civil works.
- 23 . No compensation shall be payable to the contractor for any damage caused by rain, fire, wind, storm. flood, or otherwise and no claim on this account shall be entertained.
24. The contractor shall maintain in good condition all work executed till the completion of work allotted to him.
25. No sharp edges of conduit shall be left unrounded.
26. The 5A/15A sockets should be multiple pin type
27. All the material to be used on the work shall be (S) marked and if ISI marked is not manufactured the confirmation to ISS shall be used. The same shall be approved by Engineer-in-Charge before use .All rejected material is to be removed from the site of work immediately at contractor's on cost.

FOLLOWING OFFICERS MAY BE CONTACTED FOR REDRESSAL OF COMPLAINTS

| Sr. No. | NAME OF OFFICE | POSTAL ADDRESS | Telephone Numbers | Fax Number |
|---------|---|--|-------------------|--------------|
| 1 | CGMT, HP Circle | O/O the Chief General Manager BSNL, HPTC, Block No. 11, SDA Complex, Kasumpti, Shimla 171 009 (HP) | 0177-2620220 | 0177-2625325 |
| 2 | The Chief Engineer (Elect) | Third Floor, Block no. 5, Sector 6, Phase-III, New Shimla-171009 | 0177-2673701 | 0177-2673211 |
| 3 | The Vigilance officer HP Telecom Circle | O/O the Chief General Manager BSNL, HPTC, Ground Floor, Block No. 9, SDA Complex, Kasumpti, Shimla 171 009 (HP) | 0177-2621213 | 0177-2622213 |

ANNEXURE-I
MODEL FORM OF BANK GUARANTEE

Whereas _____ (hereinafter called “the Contractor(s)
”has submitted its Tender dated _____ for _____)
(Name of Work) _____

KNOW ALL MEN by these presents that WE _____

_____ of _____ having our registered office at
_____ (hereinafter called “the Bank”) are bound unto _____
_____ (hereinafter called “the B.S.N.L.”) in the sum of
_____ for which payment will and truly to be made of the said B.S.N.L., the Bank binds itself, its
successors and assigns by the these presents.

THE CONDITIONS of the obligation are:

- 1- If the Contractor(s) withdraws its tender during the period of _____ Tender validity specified on the Tender Form, or**
- 2- If the Contractor(s) having been notified of the acceptance of its Tender by Bharat Sanchar Nigam Limited during the period of Tender validity.**
 - a) Fails or refuses to execute the Contract.
 - b) Fails or refuses to furnish Security Deposit in accordance with the conditions of Tender document.

We undertake to pay to Bharat Sanchar Nigam Limited upto the above amount upon receipt of its first written demand, without B.S.N.L. having to substantiate its demand, provided that in its demand B.S.N.L. 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. The guarantee will remain in force as specified in the Tender Document upto and including Thirty (30) days after the period of the Tender validity, and any demand in respect thereof should reach the Bank not later than the specified date/dates.

Name of witness

Signature of the Bank

Address of witness

Signature of the Witness

Contractor

SDE (E)

ANNEXURE-II

MODEL FORM OF PERFORMANCE GUARANTEE

I) BANK GUARANTEE BOND FOR PERFORMANCE GUARANTEE FOR ELECTRICAL INSTALLATION/O & M/ AIR CONDITIONING, DIESEL ENGINE ALTERNATOR, LIFTS AND SUB-STATION WORKS etc.

_____for_____ (Name of work) and _____

Whereas ----- (here in after called" the Contractor(s)" has submitted its Tender dated _____for_____ (Name of work) and

Whereas----- (here in after called" the Contractor(s)" has been communicated the acceptance of its tender dated _____for_____ (Name of work)vide letter No. _____dated _____BSNL.

KNOWN ALL MEN by these presents that We _____of _____having our registered office at _____(here in after called "The bank")are bound up to _____(here in after called "the BSNL") in the sum of _____for which payment will and truly to be made of the said BSNL,the Bank binds itself, its successors and assigns by these presents.

- i) 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_____.
- ii) 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.
- iii) 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 the agreement) from the date hereof, we shall be discharged from all liabilities under this guarantee thereafter.

- iv) We (name of the bank)_____further agree with the BSNL that the BSNL shall have the further 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 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 the 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.
- v) This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s)/supplier(s).
- vi) We (name of the bank)_____lastly undertake not to revoke this guarantee during its currency expect with the previous consent of the BSNL in writing .

Dated _____ day of _____

For _____
(Indicate the name of bank)

ANNEXURE-III

PROFORMA FOR UNDERTAKING REGARDING EPF/ ESI PROVISIONS

(To be submitted with Eligibility conditions in envelope – 1)

I.....son of.....

Resident of hereby give an undertaking that:

(I) * EPF and Miscellaneous provisions Act, 1952 (amended upto date) 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.

* I / We shall produce EPF registration certificate within 15 days, from the date of issue of intimation from BSNL regarding intent to accept the tender. In case I / We fail to produce the said document within the prescribed time frame, BSNL shall have the right to forfeit the whole Earnest Money and cancel the tender and further I / We will not participate in the next tender for the same work.

(II) * ESIC Act, 1948 (amended upto date) is not applicable to my / our establishment.

* I / We have registered as per the ESIC Act, 1948 (amended upto date) and our Registration no. is We undertake to keep it valid during the currency of contract.

* I / We shall produce ESIC registration certificate within 15 days, from the date of issue of intimation from BSNL regarding intent to accept the tender. In case I / We fail to produce the said document within the prescribed time frame, BSNL shall have the right to forfeit the whole Earnest Money and cancel the tender and further I / We will not participate in the next tender for the same work.

In case at my 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)

(Dated Signature of contractor)

(Seal of the firm)

ANNEXURE-IV
UNDERTAKING- I
(To be submitted with Eligibility conditions)
VENDOR GST DETAILS

| Sr. No. | Description | Details to be filled in by contractor |
|---------|--|---------------------------------------|
| A | Vendor Name | |
| B | Type of vendor i.e. whether registered or unregistered | |
| C | State wise registration address of the vendor (In case vendor has presence in multiple states) | |
| D | State of registration along with PIN code | |
| E | PAN No. of vendor | |
| F | GSTIN No. of registered vendor (If registered in multiple states, then listing all GSTINs) under which invoices are raised by vendor | |
| G | Status of vendor i.e. SEZ, EOU, DTA, Government, Local authority | |
| H | List of goods and services provided by vendor | |
| I | HSN code for goods/SAC for services supplied by vendor | |
| J | GST compliance rating (Optional) | |
| K | Whether supply is exempt/non taxable | |
| L | Whether reverse charge scheme is applicable. (Yes/No) | |
| M | Whether compounding scheme applicable (Yes/No). In case purchase is from dealers under composition scheme GST cost will be inbuilt in supply and vendor will not charge GST separately. | |
| N | Whether TDS applicable (Yes/No) | |
| O | Email address of vendor | |
| P | Phone Nos. of vendor | |

(Seal of the firm)

(Dated Signature of Contractor)

Contractor

SDE (E)

ANNEXURE-V

Declaration by Contractor for BSNL EW-6 & EW-8

(To be submitted with Eligibility conditions)

I / We do hereby undertake to have gone through the terms & conditions / clauses of all the tender documents including Form EW-06, EW-08 being adopted by the BHARAT SANCHAR NIGAM LIMITED (Electrical Wing) & agree to abide by the same.

In case of failure to comply as above, our offer will stand withdrawn and our tender documents would not be opened by the tender opening officer. 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

ANNEXURE-VI

“NO RELATIVE WORKING IN BSNL” CERTIFICATE
(To be submitted with Eligibility conditions)

I _____ S/o _____

R/o _____

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

(i) 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)

(i) 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.

(Dated Signature of contractor)

(Seal of the firm)

ANNEXURE-VII

(To be submitted with Eligibility conditions)

PROFORMA FOR AFFIDEVIT REGARDING registration under Himachal Pradesh
GST ON NON- JUDICIAL STAMP PAPER OF Rs. 100/-

I.....son of.....

Resident of hereby give an undertaking that:

I / We shall get registered under the Himachal Pradesh GST in the prescribed format within 15 days, from the date of issue of intimation from BSNL regarding intent to accept the tender. In case I / We fail to produce the said document within the prescribed time frame, BSNL shall have the right to forfeit the whole Earnest Money and cancel the tender and further I / We will not participate in the next tender for the same work.

In case at my 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.

(Dated Signature of contractor)

(Seal of the firm)

GSTN DETAILS OF BSNL
Form GST REG-25

| Sr. No. | Description | Details |
|---------|---|--|
| A | Legal & trade Name | Bharat Sanchar Nigam Limited |
| B | Type of vendor i.e. whether registered or unregistered | Registered |
| C | State wise registration address of the vendor (In case vendor has presence in multiple states) | O/O the Chief General Manager BSNL, HPTC, Block No. 11, SDA Complex, Kasumpati, Shimla 171 009 (HP) |
| D | State of registration along with PIN code | Himachal Pradesh 171009 |
| E | PAN No. of vendor | AACB5576G |
| F | GSTIN No. of registered vendor (If registered in multiple states, then listing all GSTINs) under which invoices are raised by vendor | 02AACB5576G3ZV |
| G | TIN under VAT | 02011200359 |
| H | Service Tax Registration No. | AACB5576GSD816 |
| I | Corporate Identity Number (CIM) | U74899DL2000GOI107739 |
| J | Status of vendor i.e. SEZ, EOU, DTA, Government, Local authority | Public Sector Undertaking |
| K | List of goods and services provided by vendor | Telecommunication services |
| L | HSN code for goods/SAC for services supplied by vendor | HSN CODE 85176230, 85235210 SAC CODES 00440398, 00440229, 00440406 |
| M | GST compliance rating (Optional) | |
| N | Whether supply is exempt/non taxable | No |
| O | Whether reverse charge scheme is applicable. (Yes/No) | No |
| P | Whether compounding scheme applicable (Yes/No). In case purchase is from dealers under composition scheme GST cost will be inbuilt in supply and vendor will not charge GST separately | No |
| Q | Whether TDS applicable (Yes/No) | No |
| R | Email address of vendor | bsnlgst.hp@gmail.com |