



**भारत संचार निगम लिमिटेड**  
( भारत सरकार का उपक्रम )

**BHARAT SANCHAR NIGAM LIMITED**  
(A Govt. of India Enterprise)

**E- Tender Document**

**EOI for Node B/BTS Installation & De-Installation and other GSM allied works, in Chennai Telephones Area(Chennai, Kancheepuram, Thiruvallur and chengalpet districts)**

**Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

**Single stage bid  
(Two stage opening –Technical & Financial Bid)**

**O/o DGM ( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,  
CHENNAI - 600 028.  
Tel: 044-24957700/9444964140/9444989978**

**Visit us at: [www.chennai.bsnl.co.in](http://www.chennai.bsnl.co.in)**

**CHENNAI TELEPHONES DISTRICT TELECOM CIRCLE**

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**TENDER FORM**

**EOI for Node B/BTS Installation & De-Installation and other GSM allied works, in Chennai Telephones Area(Chennai, Kancheepuram, Thiruvallur and chengalpet districts)**

**E-Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

**Cost of the Tender Form: Rs.2000/-+ GST 18%**

**Tender document can be downloaded from the web site  
[www.chennai.bsnl.co.in](http://www.chennai.bsnl.co.in) or e-tender web site [www.tenderwizard.com/bsnl](http://www.tenderwizard.com/bsnl)**

<b>Sale of Bid Documents(Online only)</b>	<b>: From 03.05.2021 to 23.05.2021</b>
<b>Last date for submitting Queries</b>	<b>: 11.05.2021</b>
<b>Date of Bidders Meeting</b>	<b>: 12.05.2021</b>
<b>Last Date for Submission of Tender</b>	<b>: 11.30 hrs of 24.05.2021</b>
<b>Due Date /Time of Opening bids</b>	<b>: 12.00 hrs of 24.05.2021</b>

**Due Date &Time of Tender Opening: 12.00 Hrs on 24-05-2021**

**at**

**at the O/o DGM(INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,  
CHENNAI - 600 028.**

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( भारत सरकार का उपक्रम )

**BHARAT SANCHAR NIGAM LIMITED**

(A Govt. of India Enterprise)

**CHENNAI TELEPHONES**

**EXPRESSION OF INTEREST NOTICE through E-tendering**

**Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

**EOI for Node B/BTS Installation & De-Installation and other GSM allied works, in Chennai Telephones Area(Chennai, Kancheepuram, Thiruvallur and chengalpet districts)**

**through E -tendering .**

**Last Date for Submission of Tender 11.30 hrs of 24.05.2021**

**Tender forms Available :**

[www.chennai.bsnl.co.in](http://www.chennai.bsnl.co.in) "Link for E-tenders by Chennai Telephones"

<https://www.tenderwizard.com>

**from : 10.00 hrs on 03.05.2021 to 16.00 hrs of 23.05.2021**

For further details, visit our website:

**[www.chennai.bsnl.co.in](http://www.chennai.bsnl.co.in) & <https://www.tenderwizard.com>**

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**Bharat Sanchar Nigam Limited**  
**(A Govt. of India Enterprise)**  
O/o DGM( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,CHENNAI - 600 028.

**SECTION-I**

**NOTICE INVITING EXPRESSION OF INTEREST**

**Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

Digitally sealed tenders on Rupee payment basis are invited through E-tendering process for the Expression of Interest (EOI) on behalf of General Manager CM ,R.K.Mutt Rd, Chennai Telephones from interested parties for Node B/BTS Installation & De-Installation and other GSM allied works, in Chennai Telephones and adjoining areas under Kancheepuram, Thiruvallur and chengalpattu districts.

1	Area of Work	Area under the jurisdiction of the GM - CM, Chennai Telephones – Chennai License Area (Chennai, Kancheepuram , Thiruvallur and chengalpattu districts)
2	Technical Specifications, Guidelines and Schedule of Requirements	As per Section V
3	Estimated Tender Value	Rs. 1.97 crores (including GST)
4	Cost of the Bid Document	Rs 2,000 /-+ GST 18% (Rupees Two thousand + 18% GST only) nonrefundable
5	Bid Security / Earnest Money Deposit	BID SECURITY DECLARATION to be submitted in lieu of EMD
6	Bidders Eligibility	Bidders with minimum 2 years of relevant experience and other conditions as per clause 5 of section II
7	Sale of Bid Documents(Online only)	From : 03/05/2021 To: 23/05/21
8	Last date for submitting Queries	11/05/2021
9	Place of Submission of tender & Venue for tender opening	O/o DGM INST- CM, BSNL, CHENNAI TELEPHONES  2ND FLOOR, R K NAGAR TELEPHONE EXCH , R K MUTT ROAD CHENNAI -28

10	Last Date & Time of Submission of Bids	11.30 hrs of 24.05.2021
11	Date & Time for Opening of Bids	12.00 hrs of 24.05.2021

1.1. The application for Expression of Interest must be submitted in two sealed envelopes separately, super scribing one envelope as “Technical Bid for EOI for GSM BTS Inst & Deinst and Other Allied Works” and second Envelope as “Financial Bid for GSM BTS Inst & Deinst and Other Allied Works”. Both the sealed envelopes should be placed in another sealed envelope super scribed “EOI for GSM BTS Inst Deinst and Other Allied Works”. The offline(self attested hardcopy of tender bids) can be submitted in person in the tender box placed at below address or sent by post addressed to:

O/o DGM( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,CHENNAI - 600 028.

1.2. EOI document submitted without bid security declaration (proforma annexure-M)and the cost of EOI document will summarily be rejected.

1.3. The General Manager NWO/R.K. Mutt Road, Chennai Telephones reserves the right to reject any or all of the EOI without assigning any reason whatsoever.

2.1. BSNL, Chennai Telephone District has decided to use the process of e-tendering for inviting this tender and thus the physical copy of the tender would not be sold.

2.2 . The Prescribed EOI document may be obtained from [www.chennai.bsnl.co.in](http://www.chennai.bsnl.co.in) following “Link for E-tenders by Chennai Telephones” <https://www.tenderwizard.com/bsnl>.

2.3. Bidders must register on the e-tender portal, if not already registered earlier and follow all instructions for participating in bidding for the tender.

- The bidders cannot participate in the tender without downloading official copy of the tender document.
- The Tender document shall not be available for download on its submission/closing date.

2.4. Cost of EOI document shall be drawn as DD from any of the Nationalised Bank in favour of the **AO (CASH), HQ, BSNL, Chennai Telephones payable at Chennai**. The cost of Tender Document is free to MSE bidders on production of requisite proof in respect of valid certification from MSME or NSIC for the Tendered works.

3. In case the date of submission (opening) of bid is declared to be a holiday, the date of submission (opening) of bid will get shifted automatically to next working day at the same scheduled time.

4. Any change in bid opening date due to any other unavoidable reason will be notified in the website.

**5. TOE : BSNL has adopted e-tendering process which offers a unique facility for 'Public Online Tender Opening Event (TOE). BSNL's Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices.**

**6. However if required, authorized representatives of bidders (i.e. Supplier organization) can attend the TOE at the Opening Venue .**

**7. Tender bids received after due time & date will not be accepted.**

**8. Incomplete, ambiguous, Conditional, tender bids are liable to be rejected.**

**9. CGM , CHTD reserves the right to accept or reject any or all tender bids without assigning any reason. He is not bound to accept the lowest tender.**

**10. The bidder shall furnish a declaration(annex-O) under his digital signature that no addition / deletion / corrections have been made in the downloaded tender document being submitted and it is identical to the tender document appearing on E-tender Portal <https://www.tenderwizard.com>). In case of any correction/ addition/ alteration/ omission in the tender document, the tender bid shall be treated as non-responsive and shall be rejected summarily.**

**11. For further instructions regarding submission of bids online the bidder shall visit the homepage of the portal (<https://www.tenderwizard.com>).**

**12. All documents submitted in the bid offer should be preferably in English. In case the certificate viz experience, registration etc. is issued in any language other than English, the bidder shall attach an English translation of the same duly attested by the bidder & the translator to be true copy in addition to the relevant certificate. All computer generated documents should be duly attested/ signed by the issuing organization. .Signed Tender document should be uploaded in Online portal without fail.**

**13. AS per the GST Act 2017, the firm has to furnish Cenvatable Challans/ Invoices will be indicated separately in the PO/APO.**

**14. Vendors/Bidders should furnish the correct GST Head in the price Schedule. If the credit for the GST under CENVAT Credit Rules, 2004 is found to be not admissible at any stage subsequently owing to wrong furnishing of Tariff Head, then the vendors will be liable to refund such non-admissible amount, if already paid, along with penalty if charged by the concerned authority.**

**\*\* End of Section-I \*\***

## **SECTION-II**

### **Instructions to Bidders and Terms & Conditions**

#### **1.Introduction**

**1.1** Bharat Sanchar Nigam Limited (BSNL), 100% owned by Government of India, with the dominant market share in the Wire line Telephony, Wireless Telephony, Broadband & Internet services besides other data services like MPLS- VPN, Leased circuits etc. BSNL is the largest Internet Service Provider (ISP) of India. As a leading telecom player, BSNL controls a wide range of telecom infrastructure such as Main Exchange Buildings, RSU Exchange Buildings, Transmission Centre Buildings, BTS sites, billing centres, customer care centres ...etc.

#### **2 DEFINITIONS**

**"The Purchaser"** means the BSNL, Chennai Telephones acting on behalf of the BSNL.

**"The Bidder"** means the individual or firm who participates in this and submits its bid.

**"The Contractor/Supplier"** means the individual or firm installing the goods under the contract.

**"The Goods"** means all the equipment, machinery, and/or other materials which the Installer is required to install and commission to the Purchaser under the contract.

**"The Work Order"** means the order placed by the Purchaser on the Contractor by reference therein. The Work order shall be deemed as "Contract" appearing in the document, signed by the Purchaser including all attachments and appendices thereto and all documents incorporated

**"The Contract Price"** means the price payable to the Installer under the Work Order for the full and proper performance of its contractual obligations.

**"Services"** means installation and commissioning of BTS and/or allied equipment.

**"BTS"** means the GSM/WCDMA/LTE Base station equipment either separate or combined combo(up to 2 cabinets) and also means a Node B/eNodeB.



**“Site”** means the land and / or places and / or rooms on, in or through which work is to be executed under the contract or any adjacent land, path or street through which the work to be executed under the contract or any other adjacent land path or street which may be allotted or used for the purpose of carrying out the contract.

**“Engineer-in-charge / Site Engineer”** means the DE /SDE / JTO/ level officer nominated by the purchaser to supervise the work at site(s).

**“AGM-in-charge”** means the AGM level officer nominated by the purchaser for supervising the works.

### **3. Purpose of the EOI**

BSNL CHTD (from here on BSNL means Competent Authority floating the EOI) intends to invite Expression of Interest (EOI) from interested parties for Installation of GSM Equipment and other GSM allied works. After evaluation of EOIs, agreements will be entered with the successful party **for a period of one year, which can be extended further up to a period of one year in step of 6 months as per performance and the rights for extension is solely with BSNL CHTD.**

### **4. General requirement**

BSNL CHTD intends to installation of GSM and other allied equipment Annexure (D) at selected telecom sites in CHTD/CPT (Chengalpattu)/Tiruvallur /Kanchipuram Dist) Area. These may be required for different works at different GSM/WCDMA/LTE sites as per requirement (Section III Clause 14 & 15 ).Contractors need to bid for the provision of services at all sites in a unit.

### **5. Eligibility Requirements**

**5.1** The bidder should have a minimum experience of 2 years(preferably in the last five years) in the field of GSM installation & commissioning, Mini links installation, Power Plant Installation, Battery sets installation , constructing plinth and allied works either for BSNL/MTNL or any other mobile operators / vendors.

**5.2** The bidder should have sound financial background and workforce.

**5.3** The bidder should have valid PAN and GST registration.

**5.4** The bidder should have been registered with the Ministry of Labour for engaging labour in such works as desired in this Bid.

**5.5** The bidder should have registered with EPF/ ESI authorities.

- 5.6** The eligible bidder should be a registered Indian company
- 5.7** The contractor /bidder must have a turnover of not less than **1** crores during each of the preceding 2 financial years. However turnover amount may be relaxed subject to meeting of all technical eligibility conditions.
- 5.8** List of Documents for eligibility requirement as mentioned in point **17** of this document (Section-II).
- 5.9** The Persons deployed should be physically fit and technically efficient to handle all work items mentioned in section V.
- 5.10 DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATION**

The bidder shall furnish the following:

- (a)** Documentary evidence for financial and technical capability necessary to perform contract.
- (b)** The attested copies of all the documents should be submitted including the documents required for qualification mentioned in the clause 5 of Section-II.
- (c)** Individual signing the tender or other documents connected with the contract shall indicate the full name below the signature.
- (d)** The Purchaser reserves the right to call for originals of the above documents at any time during the validity of the tender.

**5.11 DOCUMENTS ESTABLISHING GOODS/SERVICES CONFORMITY TO BID DOCUMENTS**

Pursuant to **Clause 5 of Section-II**, the bidder shall furnish, as part of his bid, documents establishing the conformity of his bid to the bid documents of all goods and services, which he proposes for Installation under the contract. The documentary evidence of the 'goods and services' conforming to the Bid Documents may be in the form of literature, drawings, data etc.

The bidder shall submit a clause-by-clause compliance on the Purchaser's Technical Specifications and Commercial Conditions demonstrating substantial responsiveness to the Technical Specification and Commercial conditions. A bid without clause-by-clause compliance of the Technical specification, Commercial conditions, and special conditions shall not be considered.

**6. Financial Requirement**

- 6.1. "All Suppliers (including MSEs who are registered with the designated MSME bodies like NSIC etc ) shall furnish performance security to the purchaser for an amount equal to 3% of value of Advance Work order within 14 days from the date of issue of Advance Work order by the purchaser".**

- 6.2 Contractor shall submit the aforesaid Performance Bank Guarantee of the said amount or as BSNL CHTD may recommend from time to time. **The performance Bank Guarantee shall be valid for a period of two years and six months from the date of award of contract.** Without prejudice to other rights and remedies available to BSNL, CHTD. BSNL, CHTD reserves the right to forfeit/adjust the said Performance Bank Guarantee in full or part or any sum due from the contractor to BSNL, CHTD at any time. Contractor shall continue to be liable for balance if any. BSNL, CHTD reserves the right to increase the amount of Performance Bank Guarantee at any time in its own discretion with respect to any/some/all such contractors. If the bidder fails to submit the unconditional acceptance and performance security deposit within the said period as specified in AWO, the AWO shall be automatically treated as cancelled.

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### 6.3 BID SECURITY DECLARATION FORM

- 6.3.1 **The bidders have to sign bid security declaration as per annexure 'M' accepting and stating they would not withdraw or modify their bids during period of validity.** If the bidder withdraws or modifies bid they shall be suspended/debarred/banned for the period of 1year.

**Note:** - The bidder shall mean individual company/ firm or the front bidder and its technology/ consortium partner, as applicable.

### 6.5 PERIOD OF VALIDITY OF BIDS

- 6.5.1 Bid shall remain valid for **ONE HUNDRED AND EIGHTY DAYS** from the date of opening of the tender. **A BID VALID FOR A SHORTER PERIOD SHALL BE REJECTED BY THE PURCHASER AS NON-RESPONSIVE.**

- 6.5.2 In exceptional circumstances, the Purchaser may request the bidder's consent for an extension to the period of bid validity. The request and the responses thereto shall be made in writing. The bid security declaration provided under **Clause 6.3 of Section-II** shall also be suitably extended. A bidder accepting the request and granting the extension will not be permitted to modify his bid.

### 6.6 SUBMISSION OF BIDS

#### 6.6.1 SEALING AND MARKING OF BIDS

- (a) The bid should be submitted in **two sealed INNER covers.**

The **first INNER cover "A" (MARK AS "A")** will contain original and copy of the Technical Bid and the documents establishing the bidder's eligibility satisfying technical and commercial conditions. The first Inner cover should be super scribed as **"Technical Bid for EOI for GSM BTS Inst & Deinst and Other Allied Works"**.

**(b) The Second INNER cover “B” (MARK AS “B”) will have only the FINANCIAL Quote.** The Second Inner cover should be super scribed as **“Financial Bid for GSM BTS Inst & Deinst and Other Allied Works”**. **NO ENCLOSURES ARE ALLOWED WITH THE FINANCIAL BID.**

**(c) These two Inner covers must be enclosed in a sealed OUTER COVER “C” (MARK AS “C”) & super scribed as “EOI for GSM BTS Inst Deinst and Other Allied Works” and submitted in the tender box. Only ONE copy of each Technical bid & financial bid need to be submitted.**

- 6.6.2** The inner and outer envelopes shall indicate the name and address of the bidder.
- 6.6.3** The outer envelope containing both Technical Bid and Financial Bid should be sealed and shall either be sent by Registered Post or deposited in the Tender Box kept in the notified office. The responsibility for ensuring that bids are deposited in the tender box / delivered in time to the proper, designated authority if sent by registered post shall rest with the bidder.
- 6.6.4** If the envelopes are not sealed and marked as required by **Clause 6.6.1 of Section-II** the bid shall be rejected.
- 6.6.5** In no case, more than one bid should be put inside a cover. In such case, all the bids shall be treated as cancelled.
- 6.6.6** Bid shall be in English language. All correspondence and documents relating to the bid exchanged between the bidder and the purchaser shall also be in ENGLISH language. However, any technical document/literature etc., printed in a language other than English shall be accompanied by its true English translation duly signed for its correctness. Any document submitted with the bid but not in English language shall not be treated as part of the bid document. The responsibility for the correctness of the translations if any solely rests on the bidder and purchaser shall not be responsible for any loss/likely loss arising out of error in translation whatsoever. In such cases, for the purpose of interpretation of the bid, the English translation shall prevail.
- 6.6.7** The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder in which case such correction shall be signed by the person or persons signing the bid. No such errors/corrections are permissible in the `Rates' quoted in the bid.

## **7. Evaluation Criteria**

- 7.1.** The Evaluation will be based on the gross total price inclusive of all charges (but excluding ITC) for all the items put together mentioned at column 15, of annexure 'D,'.
- 7.2.** **The work will be awarded to the lowest tenderer only. However BSNL may award the work to more than one tenderer also. In that case BSNL proposes to limit the maximum number of selected up to three only.** BSNL is having full discretion to distribute the sites among the successful bidders as per clause 18.3.2. The discretion of BSNL is final and non negotiable.
- 7.3** The rates of **L-1** approved by the BSNL shall be the rates at which work orders shall be placed by the BSNL on the other bidder, if the counter offer of the lowest bidder is accepted by other bidder as per the quantities mentioned above.
- 7.4.** After award of contract to the Approved bidders, the officer designated by the competent authority shall issue the work orders for commencement of the work.
- 7.5.** The contractor has to quote rates for services provided at work item. This is shown **Clause 14 & 15 of Section VI**. Further the contractor has to quote the total cost for the services provided as per **Annexure D**. Bids will be evaluated on the basis of total cost, excluding cenvatable credit.
- 7.6.** After awarding of the contract, BSNL CHTD reserves the right to add/delete sites where the services are required/not required. It also reserves the right to increase/decrease the type of works to be carried out in the site, where the services are required. In case of any changes the rates quoted in **Annexure D** will be used to determine the payments made to the contractor, post changes in sites, type of works etc.
- 7.7** The Purchaser shall evaluate the bids to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
- 7.8** Arithmetical errors shall be rectified on the following basis. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the Purchaser shall correct the total price. If there is a discrepancy between words and figures, the amount in words shall prevail. If the bidder does not accept the correction of the errors, his bid shall be rejected.
- 7.9** Prior to the detailed evaluation, pursuant to **clause 7 of Section-II**, the Purchaser will determine the substantial responsiveness of each bid to the Bid Documents. For purposes of these clauses, a substantially responsive bid is one, which conforms, to all the terms and conditions of the Bid Documents without material deviations. The Purchaser's determination of bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

Responsive bid" or" responsive proposal means a bid or proposal that substantially complies with the invitation to bid or request for proposals and all prescribed procurement procedures and requirements.

- 7.10** The Purchaser will reject a bid determined as substantially non-responsive and shall not subsequent to the bid opening be made responsive by the bidder by correction of the non-conformity. Such post-bid corrections by the bidder will not be permitted.
- 7.11** The Purchaser may at his discretion waive any minor infirmity or non-conformity or irregularity in a bid that does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.
- 7.12** During the technical evaluation, BSNL at its discretion may call upon the bidder to give their presentation on their offer, to explain their capability to undertake the project and to respond to any question from BSNL.
- 7.13** The Purchaser shall evaluate in detail and compare the bids previously determined to be substantially responsive pursuant to **clause 7.**

**7.14 INCIDENTAL DAMAGES:**

- 7.14.1** Notwithstanding any of the other provisions contained in this Tender / Contract, the Bidder shall protect, defend, indemnify and hold harmless to BSNL and its employees, officers, Directors, agents, or representatives from and against any and all liabilities , damages, fines, penalties and costs (including legal costs and disbursements) arising from 'or' relating to:
- (a)** Any breach of any statute, regulation, direction, orders or standards from any governmental body, agency, or regulator.
  - (b)** Any claim made by third parties arising out of the use of the services of BSNL being provided using the equipment supplied under the Tender.
  - (c)** Claims arising in connection with interruptions 'or' degradation of services to BSNL customers 'or' to other service providers whatsoever shall be the cause 'or' duration thereof: and
  - (d)** Any claim that the equipment/services/'or' any value addition component offered and supplied by the bidder in this tender, infringe any patent, trademarks or copy right of any third party.

**7.14.2** The bidder shall furnish an unequivocal, unqualified and irrecoverable undertaking along with the Bid Document to the effect that:

During the Bidding process 'or' during the course of execution of the Contract 'or' at any stage thereafter, if it is found that the Bidder has fraudulently misrepresented any of the facts about the product/services etc being offered under the Tender / Contract, the Purchaser (BSNL) shall be free to claim a sum equivalent to damage as assessed by it subject to a maximum of the Value of the Tendered goods and services from the Bidder for such misrepresentation. The Bidder shall immediately on being told by BSNL pay such sum of money to BSNL. Quantum of damages under this clause assessed and levied by the Purchaser (BSNL) shall be final and not challengeable by the Bidder/supplier.

## **8. Agreement period**

- 8.1.** The agreement shall be valid for a period of **one year** and will be extended sumoto on same terms and conditions in steps of six months but not more than one year subject to satisfactory performance during the previous period by the contractor. This is subject to extension of the Performance Bank Guarantee of same amount or enhanced amount as per the discretion of BSNL, CHTD, one month prior to the end of the agreement.

## **9. Right**

- 9.1.** BSNL,CHTD reserves the right to reject any application/ EOI for any reason, without assigning any reason and liability, the information provided by the contractor gathered by BSNL CHTD shall become BSNL CHTD's property even if application is rejected and can be used by BSNL CHTD in any manner, it deem fit.
- 9.2.** The EOI can be modified/ withdrawn at any time without any information or notice to anyone.
- 9.3.** The decision of BSNL, CHTD will be final and binding on all the bidders.

## **9.4 COST OF BIDDING**

The bidder shall bear all costs associated with the preparation and submission of the bid. The Purchaser, will in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

## 10.1 BID DOCUMENTS

The goods/service required to be supplied; bidding procedures and contract terms are prescribed in the Bid Documents. The Bid Documents include:

Section I	Notice inviting Tender
Section II	Instructions to Bidders
Section III	General (Commercial) Conditions of Contract
Section IV	Special Conditions of contract
Section V	Technical Specifications, Guidelines and Schedule of Requirements
Section VI	SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING
<u>Section VII</u>	<u>- PROFORMAS</u>
Annexure-A	Application Form to be submitted with EOI
Annexure-B	Performance Security Guarantee form.
Annexure-C	Format of Certificate regarding No close relatives working in BSNL
Annexure-D	Price Schedule.
Annexure-E	Undertaking and Pro-forma for Agreement
Annexure-F	Clause by clause compliance
Annexure-G	Vendor Master form
Annexure-H	Bidder's profile & Questionnaire
Annexure-I	Letter of authorization for attending bid opening
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Annexure-L	Financial bid
Annexure-M	Bid security declaration form
Annexure -N	Installation and deinstallation record
Annexure-O	undertaking and declarations
Annexure-P	Power of attorney
Annexure-Q	Check list

The Bidder is expected to examine all instructions, forms, terms and specifications given in the Bid Documents. Failure to furnish all information required as per the Bid Documents or submission of bids not substantially responsive to the Bid Documents in every respect will be at the bidder's risk and shall result in rejection of the bid.



## **10.2 DOCUMENTS COMPRISING THE BID**

### **(A) TECHNICAL BID:**

The Technical bid prepared by the bidder shall comprise the following components:

- (a)** The bid documents (Technical bid) supplied by BSNL in original duly filled in and signed and sealed on each page and also at corrections/ over writing by the Bidder.
- (b)** Documentary evidence in accordance with **Clause 5 and 10 of Section II** establishing that the bidder is eligible to bid and is qualified to perform the contract if his bid is accepted.
- (c)** A Clause-by-Clause compliance in the companys letter head as per Annexure F.
- (d)** Original Power of attorney in case any person other than bidder himself has signed the tender. The POA should be duly notarized.(Annex-P)
- (e)** Authenticated copy of Partnership Deed, in case of Partnership firm, NOC from Partners and Power of Attorney to the representative of the firm to operate the tender.
- (f)** In case of Ltd. / Pvt. Ltd. Company attested copy of MOA and Registration certificate is to be enclosed.
- (g)** ISO Certificate / ISI Certificates, if any.
- (h)** Attested copy of Service Tax Registration/GST Certificate and latest service tax paid certificate.
  - (i)** Copy of IT return file for the financial year 2017-18,2018-19,2019-20
  - (j)** Clearance from RBI in case of foreign collaboration.
  - (k)** Copy of audited financial statements (P&L Account and Balance Sheet) for the last three years.
- (l)** Documentation proof for having completed similar work as per **clause 5 of Section II.**( Viz. Advanced Purchase Order / Work Order etc)
- (m)** Copy of labour license / registration with Ministry of Labour.
- (n)** The proof for the bidder to have the annual turnover of Rs **1 crore** in the last 2 Years.
- (o)** A declaration from the bidder that he or the firm has not been terminated nullified or blacklisted on any of the earlier tenders of BSNL/MTNL(AnnexO)
- (p)** A Certificate to the effect that none of the bidder's relatives are employed in BSNL as per pro-forma given in Annexure C.

- (q)** Proof for maintenance of Provident Fund accounts for their employees as per the Provident Fund Act.
- (r)** Proof for remittance of EPF of their employees to the EPF department authorities.
- (s)** A declaration that the conditions of the EPF Act 1952 have been complied with.
- (t)** Registration certificate issued by the EPF & ESI.
- (u)** A self declaration along with evidence from the bidder that he or the firm has not been blacklisted by GST authorities.(Annex-O)
- (v)** Bid security declaration form as per annexure M

**(B) FINANCIAL BID:**

The Financial bid prepared by the bidder shall comprise the following components The bid documents (Financial bid)/Price schedule supplied by BSNL in original duly filled in and signed and sealed on each page. If the space provided for the quotation is insufficient, separate sheets in company letter heads may be enclosed in the same format as given in the financial bid.

**The bidder should quote for all items mentioned in the price schedule of the Financial Bid. The bid submitted by bidder without quoting any item will be summarily rejected.**

***NO OTHER ENCLOSURES ARE ALLOWED WITH THE FINANCIAL BID.***

**(C) BID FORM**

The bidder shall complete the Bid form as given in the tender and the goods to be supplied, a brief description of the goods/services as per **Section VI**. Bid forms submitted in any other formats are not acceptable.

**(D) BID PRICES**

- (i)** The bidder shall quote for the basic rate which shall be inclusive of all levies & taxes, packing, forwarding, freight and insurance for different work items as per price schedule given in Financial Bid.

- (ii)** Prices of incidental services should also be quoted. The offer shall be firm in Indian Rupees. The Purchaser will make no Foreign Exchange available.
- (iii)** The prices quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
- (iv)** The unit prices quoted by the bidder shall be with sufficient detail to enable the Purchaser to arrive at prices offered.
- (v)** The price approved by the Purchaser for the services will be inclusive of levies and taxes, packing, forwarding, freight and insurance as mentioned in **Annexure D**.

## **11. Responsibilities of Contractor**

- 11.1.** The contractor shall be responsible for delivery of the services and performance of the services as per **Clause 13 of Section-VI** at the site premises mentioned in **clause 14 of Section VI** & as per the Time Schedule provided in **Clause 15 of Section-VI**

However the Competent Authority can decide to change these schedule as per local conditions. The requirement of services will be provided by BSNL CHTD as per clause 15 of Section-VI.

## **12. DELIVERY AND DOCUMENTS**

Delivery of the services and documents shall be made by the Contractor in accordance with the terms specified by the Purchaser in its Schedule of Requirements and special conditions of contracts, and the goods shall remain at the risk of the Contractor until entire work has been successfully completed, acceptance tested and made over to BSNL. The delivery of the item of stores shall be to the ultimate consignee as given in the Work Order. Even the goods supplied by BSNL for executing the works desired in the work order shall be maintained in good condition by the contractor and is the responsibility of the contractor to ensure the safety and security of all such material also till the entire work has been successfully completed, Acceptance Tested and made over to BSNL. Any loss/ malfunctioning due to mishandling, theft, damage etc. during the execution of the work shall be made good by the contractor, failing which the equivalent cost of loss/damage will be recovered from the bills payable.

- 12.1** The tenderer should not cause any damage to any public or private property. The tenderer should not cause injury to any individual residing in the place of work or any public who are crossing across the work spot. Any such acts shall be at the own risk and responsibility of the tenderer and has to face all law and legal implications by themselves. They shall absolve BSNL/CHENNAI TELEPHONES from all the responsibilities of such act. Further all safety precautions should be taken for their staff while carrying out the works.
- 12.2** The bidder should give a certificate that none of his/ her near relative is working in the units as defined below where he is going to apply for the tender. In case of proprietorship firm certificate will be given by the proprietor. For partnership firm certificate will be given by all the partners and in case of limited company by all the Directors of the company excluding Government of India/ Financial institution nominees and independent non-Official part time Directors appointed by Government of India or the Governor of the state and full time Directors. of PSUs both state and central. Due to any breach of these conditions by the company or firm or any other person the tender will be cancelled and Bid Security will be forfeited at any stage whenever it is noticed and BSNL will not pay any damage to the company or firm or the concerned person. The company or firm or the person will also be debarred for further participation in the concerned unit.

### **13. Inspection**

BSNL,CHTD shall have the right to cause an examination of the work and the final bills of the contractor including all supporting vouchers, abstract etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for BSNL CHTD to recover the same from him through the PBG or future bills.

### **14. General Terms and Conditions**

#### **14.1. Commercial Terms & Conditions**

**14.1.1.** BSNL CHTD reserves the right to disqualify such bidders who have a record of not meeting contractual obligations against earlier contracts entered into with the BSNL.

**14.1.2.** The BSNL CHTD reserves the right to black list a bidder for a suitable period in case he fails to honour his bid without sufficient grounds.

- 14.1.3.** The BSNL CHTD reserves the rights to counter offer price(s) against price(s) quoted by any bidder.
- 14.1.4.** BSNL CHTD also reserves the right to award the work amongst more than one bidder. **BSNL CHTD also reserves the right to cancel the bid at any time during the tender processing without assigning any reasons.**
- 14.1.5.** Any clarification issued by BSNL CHTD, in response to query raised by prospective bidders shall form an integral part of bid documents and it may amount to amendment of relevant clauses of the bid documents.
- 14.1.6.** The company reserves the right to change the terms of trade from time to time with notice period of 30 days.
- 14.1.7.** The company reserves the right to withhold or delay the payment for the contractor in case of any pending disputes.
- 14.1.8.** In the event of any question, dispute or difference arising under this agreement or in connection there-with (except as to the matters, the decision to which is specifically provided under this agreement), the same shall be referred to the sole arbitrator appointed by BSNL CHTD.
- 14.1.9.** BSNL CHTD's decision will be final on all matters relating to the business and will be binding on the contractor.
- 14.1.10.** It will be BSNL CHTD's endeavour to make the payment to the contractors as per the schedule, however this may stretch beyond the scheduled time only in case of delays in getting claims from the contractors or in case of incorrect claims.
- 14.1.11.** The payment to the contractors will be made through a RTGS / ECS after deducting applicable taxes.
- 14.1.12.** All contractor's representatives will report to Competent Authority through the nodal officer appointed by Competent Authority..
- 14.1.13.** All present, future & additional taxes /Levies/ duties etc. that may be levied by the govt. /Local authorities etc. will be borne by the contractors.
- 14.1.14.** The contractor's representatives shall comply with all applicable laws, bye Laws, rules, regulations, orders, directions, notifications etc of the Govt./ Court/Tribunals and shall also comply with all directions issued by BSNL CHTD and provide BSNL CHTD with all information and cooperation that BSNL CHTD may reasonably require from time to time.
- 14.1.15.** The contractor's representatives have to fully cooperate with BSNL CHTD to investigate any complaint from the public/staff.

**14.1.16.** The contractor shall ensure provision of necessary safety devices tools/ kits etc required for discharge of services as mentioned in Clause 13 of Section-VI in the sites mentioned in **Clause 14 of Section VI.** at his own cost and shall recoup the same from time to time.

**14.1.17.** Contractor shall be liable for all payments of wages, Salary etc to its employees & shall comply with all statutory laws, rules, relating to employment, wages, PF, ID, act etc.

**14.1.18.** The Contractor shall be liable for any theft, sabotage etc. of BSNL CHTD property and the damages/losses if any will be recovered from the contractor. The contractor shall report any such incident to the site in charge immediately.

**14.1.19.** The Contractor agrees to protect, defend, indemnify and hold harmless BSNL CHTD and its employees, officers, directors, agents or representatives from and against any and all liabilities, damages, fines, penalties and costs (including legal costs and disbursements) arising from or relating to:

- (a)** Any breach of any statute, regulation, direction, orders or standards from any governmental body, agency, telecommunications operator or regulator Applicable to such party; or
- (b)** Any breach of the terms and conditions in this agreement by Contractor
- (c)** This clause shall survive even on the termination or expiry of this agreement.

**14.1.20.** BSNL CHTD Shall not be liable for any act of commission or omission of any third party.

**14.1.21.** The Contractor's representatives will have to abide by the policy rules, regulations & instructions of BSNL CHTD as revised/modified from time to time, without any prior notice to the Contractor in respect of all matters including security deposit / PBG, payment to the contractor etc.

**14.1.22.** The Contractor will be bound by all the aspects and legal issues relating to the labour laws.

**14.1.23** Suppliers should furnish the correct HSN/SAC classification/ customs tariff head in the price schedule. If the credit for the duties, taxes and cesses under provision /rules under GST laws is found to be not admissible at any stage, subsequently owing to wrong furnishing of Tariff head, then the supplier will be liable to refund such non-admissible amount, if already paid along with penalty and interest if charged by concerned authority.

**14.1.24** BSNL reserves the right to ask the bidders to submit documentary proof confirming the correct HSN or SAC classification /Customs Tariff head from CGST/SGST/IGST officer where the HSN/SAC classification 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.

**14.1.25** If the supplier 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 supplier

**14.1.26** If the supplier does not disclose the correct details on the invoice or on the GSTN 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 supplier.

BSNL can adjust/forfeit bank guarantee obtained from the supplier against loss of input tax credit to BSNL on account of supplier's default.

### **15. EOI submission**

The EOI (offline) may be submitted by the contractor at the following address:

**O/o DGM( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,CHENNAI - 600 028.**

**15.1** The envelope shall bear (the project name), tender number and the words **"DO NOT OPEN BEFORE" (due date & time).**

**15.2** Tender may be sent either by registered post or dropped in person in the 'Tender Box' placed at the above mentioned address during working hours between 1000 Hrs and 1700 Hrs. and up to 1130 Hrs. on 24.05.2021. It is the bidders' responsibility to ensure that the tenders are delivered in time at the above address.

**15.3** The Purchaser may, at its discretion, extend this deadline for the submission of bids by amending the Bid Documents (in which case all rights and obligations of the Purchaser and bidders subject to the previous deadline will thereafter be subjected to the deadline as extended)

**15.4** Any bidder can submit only one bid. If more than one bid are submitted by a bidder, all the bids of the said bidder shall be disqualified.

**15.5** Venue of Tender Opening: Tender will be opened in the office of

**O/o DGM( INST-CM),CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,CHENNAI - 600 028.**

At 12.00 Hrs on 24.05.2021.

**15.6** If due to administrative reason, the venue/time/date of Bid submission or opening is changed, it will be displayed prominently on BSNL website – [www.chennai.bsnl.co.in](http://www.chennai.bsnl.co.in) and [www.tenderwizard.com/bsnl](http://www.tenderwizard.com/bsnl)

### **15.7 LATE BIDS**

No bid shall be accepted either online by e tender portal or physically after the specified dead line for submission of bids prescribed by the purchaser.

### **15.8 MODIFICATION AND WITHDRAWAL OF BIDS**

**15.8.1** The bidder may modify or withdraw his bid after submission provided that the written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bid/s.

**15.8.2** The bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched as required in the case of bid submission in accordance with the provisions of **clause 15 of Section-II**. A withdrawal notice may also be sent by Fax but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.

**15.8.3** As per Tender document, no bid shall be modified subsequent to the deadline for submission of bids.

### **15.9 BID OPENING**

**15.9.1** The nominated officers of the Purchaser shall open bids in the presence of the bidders or their authorized representatives who choose to attend at the tender opening time on the due date at the Specified address. The bidder's representatives who are present shall sign an attendance register. The bidder shall submit authority letter from the Company to this effect before they are allowed to participate in bid opening as per the format in **Annexure-I**.

**15.9.2** A maximum of two authorized representatives for any bidder shall be permitted to attend the bid opening.

**15.9.3** The bidder's names, Bid prices and such other details as the Purchaser at his discretion, may consider appropriate will be announced at the time of opening.

**15.9.4** If the date fixed for opening of the bid is, if declared as Holiday by Government of India, the revised schedule date of opening will be notified. However, in absence of such notification the bids will be opened on the next working day, but the time and venue shall remain unaltered. The purchaser shall first open the envelope **C** containing the envelopes **A & B**. Then the purchaser shall open the envelope **A** containing the Technical bid. The 'Financial bid' (envelope **B**) of the bidders, whose bids are technically and commercially responsive shall be opened at a later date. The date, venue and time will be intimated separately.

### **15.10 CLARIFICATION OF BIDS**

**15.10.1** To assist in the examination, evaluation and comparison of bids, the Purchaser may, at its discretion ask the bidder for the clarification of its bid. The request for clarification and the response shall be in writing. However, no post bid clarification at the initiative of the bidder; shall be entertained.

## **16. PROCEDURE FOR SUBMISSION OF EOI**

**16.1.**Envelope containing Technical Bid must have the documents listed in **Clause 17 of Section-II** whereas the envelope containing the Financial Bid



must have quoted bid in the format specified in **Annexure D**.

**16.2.** The EOI should be submitted in person or through an authorized representative. Outstation applicants can send their application of EOI by Registered Post / Speed Post/ Courier.

**16.3. Bidders to note that scanned copy of all the relevant documents as listed in clause 10.2(A) , 10.2(B) and 17 are required to be uploaded on the ETS Portal and original documents or documents self attested/attested/authorized are to be submitted in hard copy to: DGM INST-CM,2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,Old No 164,New No 238,R.K.MUTT ROAD ,CHENNAI - 600 028. offline in a sealed cover.**

**16.4.** The contractor shall be intimated after evaluation of the bid.

**16.5.** Declaration regarding the close relatives working in BSNL should be submitted as per **Annexure-C**.

**16.6 POWER OF ATTORNEY:**

- (i)** The Power of Attorney should be submitted and executed on the non-judicial stamp paper of appropriate value as prevailing in the respective states(s) and the same be attested by a Notary public or registered before Sub-Registrar of the states(s) concerned as detailed in annex-p
- (ii)** The Power of Attorney be executed by a person who has been authorized by the Board of Directors of the bidder in this regard, on behalf of the Company/Institution/Body Corporate.
- (iii)** In case of the bidder being a firm, the said Power of Attorney should be executed by all the partner(s) in favour of the said Attorney.

**16.7 GST COMPLIANCE:**

Timely uploading of correct and necessary information on GSTN portal is mandatory as prescribed in GST compliances.

Note :-

- 1) If the vendor fails to furnish necessary supporting documents i.e. GST invoice / Customs invoices etc. and also fails to upload the information on GSTN in respect of the Duties/taxes for which input tax credit is available, the amount pertaining to such Duties/Taxes will be deducted from the payment due to the supplier.
- 2) Tax amount will be paid to the vendor only after supplier declares the details of the invoices in its return in GSTR 1 and GSTR-3 uploaded by the supplier and the same is reflected in GSTR-2A of BSNL on GSTN portal.
- 3) TDS/ TCS shall be deducted at the prescribed rate, if any (as the case may be).
- 4) BSNL can adjust/ forfeit Bank Guarantee obtained from the supplier against any loss of input tax credit to BSNL on account of supplier's default.
- 5) In case BSNL has to pay GST on reverse charge basis, the supplier would not charge GST on its invoices. Further, the supplier undertakes to comply with the provisions of GST law as may be applicable.
- 6) BSNL has the right to recover Input tax credit loss suffered by it due to any mis-declaration on invoice by the supplier.
- 7) It would be responsibility of the vendor to declare correct information on invoice and GSTN viz the amount, place of supply rate of tax etc. In case the eligibility of input tax is questioned or denied to BSNL on account of default by supplier, the same would be recovered by BSNL from supplier

**17. List of documents to be submitted along with EOI**

**17.1.** Downloaded tender document with all pages signed by bidder. For the purpose of compliance to be furnished, the bidder shall sign on each and every page along-with the seal of the company

**17.2.** Application form (Annexure-A)

**17.3.** Format of the performance bank guarantee (Annexure-B)

**17.4** Declaration regarding no close relative working in BSNL (Annexure-C)

**17.5.** GST registration

**17.6.** Copy of PAN certificate

**17.7.** Attested copy of EPF and ESI Registration number & Proof of Remittance

**17.8** Price schedule (Annexure-D)

**17.9** Proforma for clause by clause compliance (Annexure F)

**17.10** Vendor Master Form (Annexure G)

**17.11** Bidder's Profile and Questionnaire (Annexure-H)

**17.12** Letter of Authorisation for Bid opening Event (Annexure-I)

**17.13** Bid Form (Annexure J)

**17.14** RTGS Mandate Form (Annexure-K)

**17.15** Bid Security Form (Annexure M)

**17.16** The turnover of the company/contractor as required in eligibility criteria to be issued/certified by a Chartered Accountant along with latest audited annual reports of the company (ie. profit & loss statement, Balance sheet)

**17.17** Income tax clearance certificate for the last three financial years.

**17.18** Proof of experience for having done similar works during the last two years in the form of certificate / APO / WO

**17.19** The duly filled EOI must be accompanied by declaration of BID security

**17.20** Certificate of incorporation wherever applicable.

**17.21** Article of Memorandum of Association of partnership deed or proprietorship deed as the case may be wherever required.

**17.22** The authorization / Power of Attorney of the competent authority for signing the EOI document, bid, agreement etc./Labour Licence.

**17.23** Bidder shall furnish a clause-by-clause compliance on the BSNL's all terms and conditions of this bid (Tender document and addendum/clarifications if any). A bid without clause-by clause compliance shall not be considered for evaluation and will be summarily rejected. ( Page 125-128)

**17.24** Copy of Labour License / Registration with Ministry of Labour

**17.25** A declaration from the bidder that he or the firm has not been terminated nullified or blacklisted on any of the earlier tenders of BSNL/MTNL.

**17.26** valid MSME/NSIC certificate if applicable

**18 GST REGISTRATION**

**18.1** All bidders participating in the bid are required to submit their GST identification number (GST IN). Bids of GST unregistered bidders will be rejected.

## **18.2 CONTACTING THE PURCHASER**

**18.2.1** No bidder shall try to influence the Purchaser on any matter relating to his bid, from the time of the bid opening till the time the contract is awarded.

**18.2.2** Any efforts by a bidder to influence the Purchaser in the Purchaser's bid evaluation, bid comparison or contract award decisions shall result in the rejection of the bid.

## **18.3 AWARD OF CONTRACT**

**18.3.1** It may not be practicable to distribute the orders to all the bidders who meet the technical considerations and commercial conditions, as in some cases the quantity ordered on each installer will be too small to be viable, both for installation and use by the Department. The distribution of orders therefore should normally be restricted to the limited number of bidders. In this tender the no. of bidders proposed to be selected is Three.

**18.3.2** The Purchaser intends to limit the number of technically and commercially responsive to three bidders from the list of such bidders arranged in increasing order of their evaluated prices starting from the lowest for the purpose of ordering against this tender. The distribution of the quantity shall be as given in Table 1 below.

**Table 1(A) (Without provisions for MSE Units)**

No. of Bidders to be approved (Col. 1)	Quantity allotted to the respective bidder		
	L1	L2	L3
One bidder	100%	Nil	Nil
Two Bidders	60%	40%	Nil
Three Bidders	50 %	30 %	20 %

**Table 1(B) (With provisions for MSE Units)**

No. of Bidders to be approved (Col. 1)	Quantity allotted to the respective bidder			Qty earmarked for MSE bidder(s) (Col. 3)
	L1	L2	L3	
One bidder	75%	Nil	Nil	25%
Two Bidders	45%	30%	Nil	25%
Three Bidders	37.5%	22.5%	15 %	25%

Note 1: Table 1(B) shall be followed if the tender has provision for reservations for MSE units.

Note 2: If no eligible MSE bidders are available then aforesaid earmarked 25% quantity shall be de-reserved & the allotted quantity for other general bidders will be restored to 100% and distribution shall be as per Table -1(A) above.

Note 3: If L-1, L-2, L-3, etc happens to be MSE bidders then they will be given allotted quantity as per the applicable sub-column of column 2 of above table. In case, there are MSE bidders whose quoted price is within +15% of L-1 price then 25% reserved quantity shall be distributed amongst such MSE bidders.

Note 4:

In the event of any of the eligible bidder(s) not agreeing to supply the equipment or not being considered by BSNL for ordering, inter-se ranking of the bidders below the aforesaid bidder(s) will be recast to fill up the vacated slot(s). This will be done to ensure that the number of bidders on which order to be placed remains same as specified in the tender.

- **Note 5:** 25% earmarked for MSE bidder includes sub target of
  - i) Minimum 3% reservation for Women owned MSE bidder and
  - ii) 5% procurement from the MSE's owned by SC/ST entrepreneurs.Document in support of sub target need to be submitted for availing the same.
- **Note 6:** In case if only one bidder out of all, qualifies all the eligibility conditions and becomes successful, the Purchaser reserves the right to award 100% of the work to the successful bidder.
- **Note 7:** The rates of L-1 approved by the Purchaser shall be the rates at which Work Orders shall be placed by the Purchaser on the other bidder, as per the quantities mentioned above.

#### **18.4 PURCHASER'S RIGHT TO VARY QUANTITIES AT THE TIME OF AWARD OF CONTRACT AND/OR CURRENCY OF CONTRACT**

- 18.4.1** The Purchaser reserves the right at the time of award of contract and/or currency of contract to Increase or decrease by up to **25%** of the quantity of goods and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions.
- 18.4.2** In the 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 right to place repeat orders up to 100% of the quantities of goods and services contained in the running tender/ contract within a period of twelve months from the earliest date of acceptance of AWO 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.
- 18.4.3** **Eventhough the works primarily belong to installation wing, the bidder shall carryout the work orders issued by concerned BSS ( Maintenance wing)**

#### **18.5 PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

- 18.5.1** The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring a liability to the affected bidder or bidders on the grounds for the Purchaser's action.
- 18.5.2** The Purchaser reserves the right to disqualify such bidders who have a record of not meeting the contractual obligations against earlier contracts entered into with the Purchaser.

#### **18.6 ISSUE OF ADVANCE WORK ORDER**

- 18.6.1** The issue of Advance work order shall constitute the intention of the tenderer to enter into the contract with the bidder.
- 18.6.2** The bidder shall within 14 days of issue of the Advance work Order, give his unconditional acceptance along with performance security of **3%** of the total bid value in conformity with **Annexure B** provided with the bid documents. If the bidder fails to submit the unconditional acceptance and the performance security deposit within the said period as specified in the AWO, the AWO shall be automatically treated as cancelled.

#### **18.7 SIGNING OF CONTRACT**

- (i) The issue of Work Order shall constitute the award of contract on the bidder.
- (ii) Upon the successful bidder furnishing performance security in pursuant to **Clause 18.6.2**, successful bidders shall enter into an agreement as detailed in annex E

### **18.8 ANNULMENT OF AWARD**

Failure of the successful bidder to comply with the requirement of **Clause 18.6.2** shall constitute sufficient ground for the annulment of the award and the banning the firm (detailed in appendix to sec IV pg 145) in which event the Purchaser may make the award to any other bidder at the discretion of the purchaser or call for new bids.

### **18.9 IMPORTANT CONDITIONS:**

**18.9.1** While all the conditions specified in the Bid Documents are critical and are to be complied with Special attention of bidder is invited to the following clauses of the bid document, non-compliance of any one of which shall result in outright rejection of the bid.

#### **18.9.2**

**(a) Clause 6.6.1 of Section II:** The bids will be recorded/ returned unopened if covers are not properly **sealed**.

**(b) Clauses 6.3(i), 6.3(iii) & 6.5.1 of Section II:** The bids will be **rejected** at opening stage if Bid security is not submitted as per **Clause 6.3(i)** and bid validity is less than the period prescribed in **Clause 6.5.1** mentioned above.

**(c) Clause 5, 10.2(A) & 5.10 of Section II:** If the eligibility condition as per **clause 5 of Section II** is not met and/or documents prescribed to establish the eligibility as per **Clause 10.2(A) and 5.10 of section II** are not enclosed, the bids will be **rejected** without further evaluation. NSIC Certificates not attested will be summarily rejected.

**(d) Annexure F :** If clause-by-clause compliance as prescribed are not given, the bid will be **rejected** at the stage of primary evaluation.

**(e) Annexure-D Price Schedule:** If Prices are not filled in as prescribed in price schedule, the bid will be rejected.

**(f)** In case of any conflict on the Specifications, Chennai Telephones will clarify and its decision will be final.

**(g)** Before outright rejection of the Bid by Bid-Opening team for non-compliance of any of the provisions mentioned, the bidder company is given opportunity to explain their position. If the person representing the company is not satisfied with the decision of the Bid opening team, he/they can submit the representation to Bid opening team immediately but in no case after closing of the tender process with full justification quoting specifically the violation of tender conditions if any.

**18.9.3 (i)** Bid opening team will not return the bids submitted by the bidders on the date of tender opening even if it is liable for rejection and will preserve the bids in sealed cover as submitted by taking the signatures of some of the desirous representatives of the participating bidder/companies present on the occasion.

**(ii)** The In-charge of the bid opening team will mention the number of bids with name of company found unsuitable for further processing on the

date of tender opening and number of representations received in bid opening Minutes and if bid opening team is satisfied with the arguments of the bidder/company mentioned in their representations and feel that there is prima-facie fact for consideration, the in charge of the bid opening team will submit the case for review to CGM, Chennai telephones, as early as possible preferably on next working day and decision to this effect should be communicated to the bidder company within a week positively.

Bids found liable for rejection and kept preserved on the date of tender opening will be returned to the bidders.

- (iii) If the reviewing officer finds it fit to open the bid of the petitioner, this should be done by giving three (working) days notice to all the participating bidders to give opportunity to desirous participants to be present on the occasion.
- (iv) Purchaser reserves the right to black-list a bidder if he fails to honour his bid.
- (vi) Canvassing in any form is strictly prohibited and results in disqualification of the bid.
- (vii) The tenderer should not cause any damage to any public or private property. The tenderer should not cause injury to any individual residing in the place of work or any public who are crossing across the work spot. Any such acts shall be at the own risk and responsibility of the tenderer and has to face all law and legal implications by themselves. They shall absolve BSNL/CHENNAI TELEPHONES from all the responsibilities of such act.
- (viii) The bidder should give a certificate that none of his/ her near relative is working in the units (as detailed in annex-C) where he is going to apply for the tender. In case of proprietorship firm certificate will be given by the proprietor. For partnership firm certificate will be given by all the partners and in case of limited company by all the Directors of the company excluding Government of India/ Financial institution nominees and independent non-Official part time Directors appointed by Government of India or the Governor of the state and full time Directors of PSUs both state and central. Due to any breach of these conditions by the company or firm or any other person the tender will be cancelled and Bid Security will be forfeited at any stage whenever it is noticed and BSNL will not pay any damage to the company or firm or the concerned person.  
The company or firm or the person will also be debarred from further participation in the concerned unit.

19. **CLARIFICATION OF BID DOCUMENTS**

A prospective bidder, requiring any clarification of the Bid Documents shall notify the Purchaser in writing or by FAX at the Purchaser's mailing address indicated in the invitation for Bids. The Purchaser shall respond in writing to any request for clarification of the Bid Documents, which it receives not later than

**10** days prior to the date for the submission of bids. Copies of the query (without identifying the source) and clarifications by the Purchaser shall be sent to all the prospective bidders who have received the bid documents. A request for clarification, which is considered by the Purchaser as either frivolous or is already sufficiently explained in the bid documents or is, in any way not considered pertinent shall be replied to accordingly by the Purchaser.

**Any clarification issued by BSNL in response to query raised by prospective bidder shall form an integral part of the tender document and it would amount to an amendment of relevant clauses of the tender document.**

## **20. AMENDMENT OF BID DOCUMENTS:**

**20.1** At any time, prior to the date for submission of bids, the Purchaser may, for any reasons, whether at his own initiative or in response to a clarification requested by a prospective Bidder, modify the bid documents by amendments.

**20.2** The amendments shall be notified in writing or by **FAX** or by **e-mail** to all prospective bidders on the address intimated at the time of purchase of bid document from the Purchaser and these amendments will be binding on them. The bidder shall also indicate their **Fax Nos and e-mail ids** on the bid form submitted by them.

In order to afford prospective bidders reasonable time to take the amendments into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids suitably. However the prospective bidders shall not claim this facility as a right on any account.

The bidders are required to keep a watch on BSNL website with reference to any amendment to the tender document or to clarification to the queries raised by the bidders. BSNL reserves the right to reject the bids if the bids are submitted without taking into account these amendments/clarifications. Further bidder will be fully responsible for downloading of the tender document and amendments for their completeness.

## **SECTION III**

### **CONDITIONS**

#### **A GENERAL (COMMERCIAL) CONDITIONS OF CONTRACT**

##### **1. APPLICATION**

The General Conditions shall apply in contracts made by the Purchaser for the services.

##### **2. STANDARDS**

The services installed under this contract shall conform to the standards prescribed in the Technical Specifications.

##### **3. DELIVERY AND DOCUMENTS**

Delivery of the services and documents shall be made by the Contractor in accordance with the terms specified by the Purchaser in its Schedule of Requirements and special conditions of contracts, and the goods shall remain at the risk of the Contractor until entire work has been successfully completed, acceptance tested and made over to BSNL. The delivery of the item of stores shall be to the ultimate consignee as given in the Work Order. Even the goods supplied by BSNL for executing the works desired in the work order shall be maintained in good condition by the contractor and is the responsibility of the contractor to ensure the safety and security of all such material also till the entire work has been successfully completed, Acceptance Tested and made over to BSNL. Any loss/ malfunctioning due to mishandling, theft, damage etc. during the execution of the work shall be made good by the contractor, failing which the equivalent cost of loss/damage will be recovered from the bills payable.

The delivery of the goods and services and documents shall commence within one week of placement of Work Order on the Contractor and shall be completed as stipulated in the Tender Document.

##### **4. PERFORMANCE SECURITY**

- 4.1** The supplier shall furnish performance security to the Purchaser for an amount equal to **3%** of the contract value apportioned to him within 14 days from the date of issue of Advance Work Order by the Purchaser.



All suppliers (including MSEs who are registered with the designated MSME bodies like National small savings Industries Corporation etc shall furnish performance security to the purchaser for an amount equal to 3% of the APO within 14 days from the date of issue of APO by the purchaser. A proof regarding current registration with NSIC for the TENDERED ITEMS will have to be attached along with the bid. The NSIC enlistment certificate, which is not renewed within 2 years before the date of opening of this tender, is not considered as a valid certificate and the firm is not exempted from furnishing the Performance Security.

- 4.2** The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract.
- 4.3.** The performance security Bond shall be in the form of Bank Guarantee issued by a scheduled Bank and in the format provided in '**Section VII' Annexure- "B"** of this Bid Document.
- 4.4.** The performance bank guarantee shall be for a period beyond six months of contract period and shall be renewed if contract period is renewed.
- 4.5.** The performance security Bond will be discharged by the Purchaser after completion of the supplier's performance obligations including any warranty obligations under the contract.
- 4.6.** In case the successful bidder(s) cannot satisfactorily execute the works awarded to him under the contract and also cannot rectify the defects raised by AT wing of BSNL within a period of one month from the date of communication of the problem(s), the performance security stands forfeited and no further order will be placed on the bidder.

### **5.1 WARRANTY for installation items.**

The contractor shall warrant that the works executed shall be free from all defects and faults, the workmanship shall be of the highest grade and consistent with the established and generally accepted standards for the goods and shall perform in full conformity with the specifications and drawings. The contractor shall be responsible for any defect that may develop under the conditions provided by the contract under proper use, shall remedy such defects at his own cost when called upon to do so by Purchaser who shall state in writing in what respect the services are not in conformity.

## **5.2 WARRANTY for Supply items.**

The warranty of supply items is 12 months from the date of supply and if it is found defective, the bidder has to rectify the problem at his own cost to the satisfaction of the engineer in-charge. If any deficiency found after the rectification, the entire amount of the cost of that particular material will be deducted from the future bills after communicating the same in writing to the bidder by the concerned AGM-in-Charge.

## **6. PRICES**

Any increase in Statutory Levies / Duties / Taxes etc will be to the Installer's Account while any reduction in Statutory Levies/Duties/Taxes etc will be passed on to the Purchaser up to and including the actual date of delivery.

## **7. SUBCONTRACTS**

Sub-contracting under this tender is "not permissible".

## **8. WORK ORDER AND CHANGES IN WORK ORDER**

- 8.1** The work order will be issued by the AGM in-charge for all the components or partial components as per the price schedule for one or more sites. The payment will be made for the works carried out by the bidder.
- 8.2** The Purchaser may, at any time, by a written order given to the Contractor, make change within the general scope of the contract in any one or more of the following.
- (a)** Drawings, designs or specifications, where Goods to be installed under the Contract are to be specially designed as per Purchaser's need.
  - (b)** The services to be provided by the Contractor.
  - (c)** The sites that are to be installed by the contractor.
- 8.3** There will not be any increase or decrease in price or the time required for the execution because of the above changes.
- 8.4** In no case Installation shall commence with objections/under protest by the contractor in respect of any terms and conditions of the contract.

## **9. PAYMENT TERMS for installation items**

- 9.1** The Payment shall be made in Indian Rupees Only. The mode of payment is as follows:
- (a)** All the payment will be made through Real Time Gross Settlement (RTGS) or ECS through Bank.

- (b)** The purchaser has to submit necessary letter mentioning the A/c No. , Name of Branch, MICR Code No., Internet Finance Security Code (IFSC) etc. proforma annexure k and vendor master form annexure G
- (c)** Payment can be made in fraction also (like 0.5,.075) based on execution of actual work (eg: In MW dismantling only one end removed ,0.5 factor will be used)

**9.2** The Contractor may submit Divisional Engineer wise fortnightly consolidated bills for for one or more sites or separate bills for installation & Deinstallation works after completion of works as mentioned in the Work Order. All the details of the supplier(name,address,GSTIN/unregistered supplier,place of supply,SAC/HSN code etc) and other mandatory details shall be mentioned on the invoice.

**9.3** **80% of initial payment** shall be made for the bills submitted by the Contractor(s) on successful installation and put to use of goods/services executed against the Work Orders issued to them. The following documents shall be submitted for claiming this payment:

- (i)** Bill in triplicate with details of the site id, site name, services executed under the Work Order number and date.
- (ii)** Copy of the work order against which the bill(s) is/are raised.
- (iii)** Certificate from site engineer that BTS/MW/Power Plant/Battery sets are installed successfully and are put to continuous use for atleast 7 consecutive days.

**9.4** **20% of the final payment** shall be made after the completed goods/services are made over to BSNL along with the **A/T Certificate(BTS/MW/PP/BTRY)**. The vendor is responsible for completion of equipment AT within **six months** from the date of commissioning of equipment for SOR items no.1,2,3,4,21,22,33 and 34. . However, if AT is not completed for aforementioned SOR items within 6months due to BSNL reasons, notwithstanding AT completion, 20% final payment shall be released to vendor after 6 months of commissioning the equipment. Conversely, if reason for non completion of AT is attributable to vendor, payment of 20% shall be withheld . If any shortfalls/damages/shortages are intimated to the the contractor/supplier in writing, the balance payment shall be released only after the cases are settled in accordance with the provisions of the work order or tender document. However in case of any Hardware or software fault ,BSNL will arrange the required materials for completing the A/T. The following documents shall be submitted for claiming final 20% payment:

- (i) Completion certificate from Engineer in-charge as detailed in annexure-N
- (ii) A/T certificate/FFC issued by the AT authorities or designated authorities of BSNL
- (iii) Make over certificate signed by vendor and BSNL authorities

The above payment terms of 80% and 20% is applicable only for SOR items 1,2,3,4,21,22,33 and 34 where AT is requisite.

**9.5** If the contractor fails to attend any defect or fault arising on the works executed by them during the making over period further payments shall not be made for all the works done by the contractor. **Payment against CENVAT-able duty will be made only when CENVAT-able invoice is submitted by the supplier.**

**9.6 PAYMENT TERMS FOR DE-INSTALLATION WORKS:**

100% payment shall be made on completion of deinstallation works and handing over of material to stores or shifting to any site as mentioned in workorders or as instructed by site in charge. The following documents shall be submitted for claiming the payment:

- a) Bill in triplicate with details of the site id, site name, services executed under the Work Order number and date.
- b) Copy of the work order against which the bill(s) is/are raised.
- c) Work Completion Certificate from the Site- in-Charge/ Engineer of BSNL to the effect that the work has been carried out satisfactorily and as detailed in Annexure- N

**9.7 PAYMENT TERMS for supply items:**

- (a) 90% initial payment shall be made on receipt of goods by work order authority**

For claiming this payment following documents are to be submitted:

- (i) Bill(s) in triplicate with details of material supplied under the Work Order number and date.
- (ii) Copy of the work order against which the bill(s) is/are raised.
- (iii) Certificate from site engineer/stores in charge that materials received in good condition for the quantity ordered in the work order

- (b) 10% final payment shall be made after six months from the date of supply.**

Following documents are to be submitted:

- (i) Copy of the work order against which the bill(s) is/are raised.

If any shortfalls/damages/shortages are intimated to the the contractor/supplier in writing, the balance payment shall be released only after the cases are settled in accordance with the provisions of the work order or tender document. The above payment terms for supply items is applicable only for SOR items 20,25,27 and 28.

**9.8** 100% payment shall be made for all SOR items other than SOR items mentioned in clause 9.4 and 9.7 where AT is not requisite provided work is completed to the satisfaction of site in charge or work order authority.

## **10. SCHEDULED DATE OF DELIVERY / DELAYS IN THE INSTALLER'S PERFORMANCE**

- 10.1** Delivery of the services and performance of services shall be made by the contractor in accordance with the time schedule Section VI of Clause 16 specified by the Purchaser in its tender conditions. In case the work is not completed within the stipulated delivery period, as indicated in the Work Order, the Purchaser reserves the right either to short close/cancel this Work Order and/or recover liquidated damage charges. The cancellation/short closing of the order shall be at the risk and responsibility of the contractor and Purchaser reserves the right to get the balance unsupplied item at the risk and cost of the defaulting vendors.
- 10.2** If at any time during the performance of the contract the supplier encounters condition impending timely delivery of the goods and performance of service, the Supplier shall promptly notify to the Purchaser in writing the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the period for performance of the contract (by not more than 20 weeks) subject to furnishing of additional performance security by the supplier @ 3% of the total value of the Purchase order Delivery of the services and performance of services shall be made by the supplier in accordance with the time schedule 16 of Section VI.
- 10.3** The Contractor should ensure that the equipment and materials to be issued by BSNL against a work order are received by him within one week from the date of issue of work order.
- 10.4** Duration for completion of work for a work item of unit quantity or of any quantity more than one for a site will remain the same as allowed for unit quantity. For example, work against a work order issued for provisioning of 2 or more nos. of earth pits at a site has to be completed in maximum of 15 days from the date of issue of Work Order.
- 10.5** Similarly, the duration for completion of work in full for different work items as mentioned in a Work Order for a site will not be the sum of duration of different work items. It will be equal to the maximum duration of a work item which is included in the Work Order. For example, if a Work Order is issued for Installation and Commissioning of Micro BTS, provisioning of 2 nos of earth pits, supply of AC cable of 10 m, and supply of 1 no. of aviation lamp, the allowed duration for completion of all works at this site will be 15 days from the date of issue of Work Order.

- 10.6** Therefore, the contractor is supposed to put sufficient teams on a site for carrying out different works in parallel in view of the above clauses.
- 10.7** For commissioning and AT of the Work Items the power supply and / or the media connectivity (E1) shall be arranged by the purchaser normally within the allowed duration of completion of work. However, in cases where the power supply and / or media connectivity is arranged after the due date for completion of work, the contractor must ensure that all the works as per Work Order are completed and the equipment is ready for integration and commissioning within the stipulated period. Once arranged, the equipment should be commissioned within 2 days of the date of arrangement of power supply and / or media connectivity, whichever is later and applicable as per site requirements.
- 10.8** Delay by the contractor in the performance of its installation obligations shall render the contractor liable to any or all of the following sanctions:
- (a)** Forfeiture of its performance security.
  - (b)** Imposition of liquidated damages.
  - (c)** Termination of the contract for default.
- 10.9** The bidder shall supply the rates for supply and installation separately in the price schedule.

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## **11. LIQUIDATED DAMAGES**

**11.1** The date of delivery of the services stipulated in the acceptance of tender should be deemed to be the essence of the contract and delivery must be completed not later than the dates specified therein. Extension will not be given except in exceptional circumstances. Should, however, deliveries be made after expiry of the contract period, without prior concurrence of the Purchaser, and be accepted by the consignee, such Deliveries will not deprive the Purchaser of his right to recover liquidated damages under **11.2** below.

**11.2** The contractor must ensure that the work commences at sites on receipt of work order within the time period mentioned under **clause 10.2 of Section III**. In case the contractor does not start work even after one week from the expiry of the period given in the table as per **clause 16 of Section VI**, Purchaser shall be free to re-allot the work to any other contractor or any outside agency and charge the expenditure incurred in completion of the said work on to the original contractor along with **5%** penalty attracted due the original delay.

**11.3.(i)** Should the contractor fail to complete the goods/services or any consignment in all respects within the period prescribed for delivery under **clause 10.1 of Section III**, the Purchaser, without prejudice to other remedies available to the purchaser shall be entitled to recover, as agreed liquidated damages for breach of contract, a sum equivalent to **0.5%** of the **work order** value of that particular item of delayed Installation for each week of delay or part thereof for a period up to **10 weeks**,

And thereafter at the rate of 0.7% of the value for the delayed Installation for each week of delay for a period of another **10 weeks** of delay, subject to a maximum of **12%**. **"In the case of package supply/ turnkey projects when the delayed portion of the supply materially hampers installation and commissioning of the systems, LD charges shall be levied as above on the total value of the concerned package of the Purchase Order."**

**(ii)** DP extension beyond 20 weeks would not be generally allowed. The extension beyond 20 weeks may be decided in most exceptional circumstances on case to case basis, by the CGM, Chennai Telephones, Chennai stating reasons and justifications for grant of extension of delivery period beyond 20 weeks.

- (iii) Quantum of liquidated damages assessed and levied by the purchaser and decision of the purchaser there on shall be final and binding on the supplier, further the same shall not be challenged by the supplier either before Arbitration, tribunal or before the court. The same shall stand specifically excluded from the purview of the arbitration clause, as such shall not be referable to arbitration.

- 11.4** Normally, the work order will be issued by the Purchaser only after confirming that the site is ready for the work to be started. However, in the exceptional circumstances, Where-in the contractor, on going to the site, finds that there are some issues which preclude him from taking up the work, shall immediately intimate in writing to the Purchaser about the status of the site and the reasons inhibiting the starting of work. This should be received by the Purchaser within 1 week of the allotment of the work order to enable the Purchaser get the actual site status and take necessary action thereof. In case the said intimation is not received by the Purchaser within **7(SEVEN) days** of the issue of the work order, it shall be presumed that the site is ready in all respects and the contractor does not have any right to ask for any exemption from the penalties that may be levied on him for his delay in commencing the work. In case the Installation is not completed in the stipulated delivery period, as indicated in the Work Order, Purchaser reserves the right either to short close/cancel this Work Order and/or recover liquidated damage charges. The cancellation/short closing of the order shall be at the risk and responsibility of the supplier and Purchaser reserves the right to purchase balance-unsupplied item at the risk and cost of the defaulting vendors.
- 11.5.** In case of any genuine site issues beyond the scope of the contractor that prevent the contractor from executing the works during the contract, the Purchaser reserves the right to extend the execution period suitably and/or exempt the penalties liveable on the contractor on a case by case basis on receipt of a request for the same from the contractor with due justification. The decision of Purchaser in this regard is final and binding on the contractor.
- 11.6.** In case of any manufacturer defects arising in any of the equipment supplied by the Purchaser to the contractor for installation purpose, it is the responsibility of the contractor to bring it to the notice of the site in charge to deal with the manufacturer of the equipment and get the defects rectified. On intimation from the contractor, the delivery time in this case shall be extended accordingly.



- 11.7 . GST is applicable on Liquidated damages charge recovered / deducted by BSNL from vendors/ contractors on account of delay in supply of goods or non-adherence of quality standard prescribed by BSNL. **The GST on LD amount will be recovered from vendor only.****

## **12. CONTRACTOR CONDITIONS**

- 12.1.** The expression "works" or "work" where used in these conditions shall, unless there be something either in the subject or context repugnant to such constructions, be construed and taken to mean the works by the contract to be executed, whether temporary or permanent and whether original, altered, substituted or added.
- 12.2.** The person(s) whose tender is accepted hereinafter called the contractor(s), shall within fourteen days of the receipt by him/them of the notification of the acceptance of his/their tender, enter into agreement and pay the performance security as mentioned in clause 6 of this section for the due fulfilment of his/their contract.
- 12.3.** All compensation or other sums of money payable by the Contractor(s) to BSNL under the terms of his/their contract may be deducted from or paid by the sale of a sufficient part of his/their security deposit or from any sums which may be due or may become due to the contractors by BSNL on any account what so ever, and in the event of his/their security deposit being reduced by reason of any such deduction or sale of aforesaid, the Contractor(s) shall within fourteen days thereafter make good in cash or Government securities endorsed as aforesaid any sum or sums which may have been deducted from or raised by the sale of his/their security or any part thereof.
- 12.4.** The Contractor(s) is/are to provide everything of every sort and kind which may be necessary and requisite for the due and proper execution of the several works included in the contract whether original or altered according to the intent and meaning of the drawing and specifications taken together which are to be signed by the nominated officer of Purchaser and the Contractor(s), whether the same may or may not be particularly described in the specifications or shown in the drawings, provided that the same are reasonable to be inferred there from and in case of any discrepancy between the drawings and specifications, Purchaser may at its option on the request of the Contractor(s) provide him/them with such tools or accessories as may be in their disposal and can be conveniently loaned to him/them. If the Purchaser agrees to provide the contractor(s) with any tools or accessories, the contractor(s) shall return back all the tools or accessories in good condition after completion of testing. In case of loss or damage of any tools or accessories, their equivalent cost shall be deducted from contractor's bills or from security deposit.

- 12.5.** The Contractor(s) is/are to set out executing the whole of the works in conjunction with an Officer to be deputed by the Purchaser and during the progress of the works to amend on the requisition of the Purchaser, any error which may arise therein and provide all the necessary labour and materials for so doing. The Contractor(s) is/are to provide all plant, labour and materials which may be necessary and requisite for the works. All the materials and the workmanship are to be best of their respective kinds. The Contractor(s) is/are to leave the work spot/site in all respects neat, clean and perfect at the completion thereof. Site wise detailed accounting for the stores given by BSNL, stores utilized by the contractor and the balance stores available should be provided by the contractor within 7 days of completion of the work at each site. All the materials supplied to the Contractor(s) which are found surplus after the completion of work, shall be returned to the Purchaser or handed over to their designated representatives in good condition along with handing over of the site to BSNL, failing which the Contractor(s) shall be liable for recovery of cost of the balance material at penal rates. All the materials supplied to the contractor(s) and stored in the contractor's godown are open for inspection at any stage of the work by the Purchaser or the designated Officer AGM-In-charge of the work. If any of these materials are found misused or short of stock, the Purchaser shall recover the cost of missing material along with penal **10%** of cost of materials from the Contractor. The penal rates shall be fixed by the Purchaser whose decision shall be final.
- 12.6.** All works in the course of execution or executed in pursuance of the contract shall at all times be open for inspection and supervision by the Purchaser or its nominees. The Contractor(s) shall at all times during the usual working hours and at all other times of which notice of the intention of the Purchaser or its nominees to inspect the works, shall have been given to the agent of the Contractor(s) shall be considered to have the same force as if they had been given to the contractor(s) himself/ themselves. The Purchaser may instruct the contractor(s) to dismiss any person in the contractor's employee upon the works who may be incompetent or who may misconduct himself and the Contractor(s) shall forth with comply with such instructions.
- 12.7.** The Contractor(s) shall not vary or deviate from the drawings, specifications or instructions or execute any extra work of any kind whatsoever unless upon the authority of the Purchaser to be sufficiently shown by an order, in writing, or any plan or drawing explicitly given

and signed by the Purchaser as an extra or variation or by any subsequent written approval signed by the Purchaser. In compliance with the Purchaser aforesaid order, plan or drawing or approval involves extra work and/or expense beyond that involved in the execution of the contract works, then unless the same were issued in consequence of some breach of this contract on the part of the contractor(s), the latter shall be entitled to be paid the value of the said work (to be valued as here in after provided) and/or the expenses aforesaid.

- 12.8.** The Purchaser shall have power to make any alterations in, omissions from, additions to or substitutions for, the original specifications, drawings and instructions, and locations may appear to him to be necessary or advisable during the progress of the work and the contractor(s) shall bound to carry out the work in accordance with any instructions which may be given to him/them in writing signed by the Purchaser. Such additions, omissions, alterations or substitutions shall not vitiate the Contract. Any altered, additional or substituted work which the Contractor may be directed to do so in the manner above specified as part of the work shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such additional, altered or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order:-

**(a)** If the rates for the additional, altered or substituted work are specified in the contract for the work, the contractor is bound to carry out the additional, altered or substituted work at the same rates as are specified in the contract for the work.

**(b)** If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.

**(d)** If the rates for the altered, additional or substituted work cannot be determined in the manner specified in sub clauses (a) to (b) above, then the Contractor shall, within seven days from the date of receipt of order to carry out the work, inform the Purchaser the rate at which it is his intention to charge for such class of works, supported by analysis of

**(e)** Rates or rates claimed and the Purchaser shall determine the rate(s) on the basis of rates for similar nature of work from CPWD/ BSNL civil wing Schedule of rates of the District concerned, or from the prevailing market and pay the contractor accordingly. However, the Purchaser by notice in writing will be at liberty to cancel his order to carry out such class of works and arrange to carry out in such a manner as he may consider advisable but under no circumstances, the contractor(s) shall suspend the work on the plea of non-settlement of rates for items falling under the clause.

- 12.9.** The Contractor(s) shall give not less than fifteen days notice, in writing, to the Purchaser before covering up or otherwise placing beyond the reach of measurement any work in order that additions, omissions and alterations not covered by the original contract may be measured and correct dimensions thereof be taken before the same are so covered up or placed beyond the reach of measurement and shall not without the consent in writing of the Purchaser and if any work shall be covered up or placed beyond the reach of measurement with such notice having been given or consent obtained, the same shall be uncovered at the contractor's expenses, or in default thereof, no payment or allowance shall be made for such work or the materials with which the same was executed.
- 12.10** The Purchaser or its nominee shall have full powers to remove, on requisition, from the premises all materials which in his opinion are not in accordance with the specifications and in case of default, the Purchaser at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Purchaser or its Nominee has full powers to require other proper materials to be substituted therefore and in case of default, the Purchaser may cause the same to be supplied and all costs which may require such removal and substitution are to be borne by the Contractor(s).
- 12.11.** If in the opinion of the Purchaser any of the works have been executed with improper materials or defective workmanship, the Contractor(s) is/are required by the Purchaser forthwith to re-execute the same and to substitute proper materials and workmanship and in case of default of the contractor(s) in so doing within a week, the Purchaser has the full powers to employ other persons to re-execute the work and the cost thereof shall be borne by the Contractor(s). The Purchaser shall also

have full powers to instruct the Contractor to stop the work without any compensation whatsoever being paid to the contractor(s) and the contractor(s) shall stop the work as and when directed by the Purchaser or its nominee.

#### **12.12 STORES SUPPLIED BY BSNL**

- (a)** If the specification of schedule of items provides for the use of any special description of materials to be supplied from the AGM In-charge or if it is required by the Contractor(s) to use certain stores to be provided by the AGM -In-charge as per the schedule of materials ,the contractor shall use the said store from BSNL supply and if applicable, the value of the full quantity of materials and stores so supplied by AGM-in-charge at the rates specified in the said schedule of materials may be set off or deducted from any sums then due or thereafter to become due to the Contractor(s) under the Contract or otherwise or against or from the Security Deposit or the proceeds of sale thereof, if the same is held in Government securities, the same or a sufficient portion thereof being in this case sold for the purpose. All the materials so supplied to the Contractor(s) shall remain as the absolute property of BSNL and shall not be removed on any account from the work spot and shall be at all times open for inspection by the DE-In-charge. Any such materials remaining unused and perfectly in good condition at the time of completion or determination of the Contract shall be returned to the DE-In-charge at a place directed by him. The Contractor(s) shall not be entitled to return any such materials unless with such consent and shall have no claim for compensation on account of any such material so supplied to him as aforesaid not being used by him or for any wastage in or damage to any such materials.
- (b)** Provided that the Contractor(s) shall, in no case, be entitled to receive compensation or damages on account of any delay in supply or non-supply thereof of all or any such materials and stores by the Purchaser. In no case, contractor can claim extension of time pointing any delay in supply or non-supply of materials.
- (c)** Any defects, shrinkage or other faults which may appear within one year from the completion and commissioning of the work arising out of defective workmanship are to be rectified and made good by the Contractor(s) at his/their own cost and in case of default, the Purchaser may recover from the Contractor(s) the cost of making good the work (of

which the certificate of Purchaser is final ) from any sum that may then or at any time thereafter may become due to the Contractor(s) by BSNL under the Contract or otherwise or from his/their security deposit, or the proceeds thereof, or of a sufficient portion thereof.

**(d)** From the commencement of work, till the completion of the same, stores are to be under the Contractor(s) charge. The Contractor(s) shall remain responsible for the safety and security of same and for the proper execution of the work according to specifications and directions of the Purchaser. In the event of loss or damage to BSNL property or of materials directly handed over to the contractor(s) at any stage of progress of the work, it is the responsibility of the contractor to make good the losses at no cost to BSNL. On the Contractor's failure to comply, the Purchaser shall have the right to deduct the amount of damage so assessed from any sum, including the security deposit, which may be due or become due to the contractor(s) by BSNL whatsoever. The Contractor(s) is/are to be held responsible for and to make good all injuries, damages and repairs occasioned or rendered necessary to the said tools and accessories and other materials by fire or other cause and to hold the Purchaser harmless from any claims or injuries to person or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the Contractor(s) or anyone of his/their employees during the execution of the work.

**12.13** If the Contractor(s) or his/their employees shall break, deface, injure, destroy or cause any damage to any portion of the premises in which they may be working or any building, road, road curves, fence, enclosures, water pipes, cables, drains, electric or telephone posts or wires, trees, grass or grass land or cultivated land, contiguous to the premises on which they work, or part of its being executed the contractor(s) shall make good the same at his/their own expenses or in default, the Purchaser may cause the same to be made good by other workmen and deduct the expenses (of which the decision of the Purchaser shall be final) from any sums that may be then or at any time thereafter may become due to the contractor(s) by BSNL under the Contract or otherwise or from his/their security deposits or to the proceeds thereof or of a sufficient portion thereof.

**12.14** The Purchaser reserves the right to recover departmental claims arising under this contract from the amounts due to the contractor(s) on this work or under any other contract.

**12.15** The Purchaser has full powers to send workmen upon the premises to execute fittings and other works not included in the contract for whose operations, the contractor(s) is/are to afford every reasonable facility.

**12.16** In the event of non-responsiveness from the contractor, the Purchaser reserves the right to get the unexecuted part of the work done by any other agency at any rate (even if higher than the tendered rate) and recover the expenditure incurred from the bills payable to the original contractor or the security deposit. In addition the Purchaser shall not make any payment to the original contractor for any unfinished work and he is liable for penalties as given under **Clause 11 of Section III**.

**12.17 COMPLETION CERTIFICATE**

- (a)** Within a week of the completion of all the works for a site as per the work order, the contractor shall give a notice of such completion to the Purchaser or its designated AGM-in-charge and within 1 week of the receipt of such notice, the AGM-In-charge/ Engineer-in-charge shall inspect the work and if all contractual obligations are satisfied, issues a completion certificate for the work(s) done at the site.
- (b)** The completion certificate shall be issued only under the following conditions:
  - (i)** Successful completion of Acceptance Testing for all the works that are to be Acceptance Tested as mentioned under **Section V** –work items, within 6 months from the commissioned date and other works (for which Acceptance Testing are not needed) are carried out to the satisfaction of the site Engineer.
  - (ii)** The contractor(s) should remove from the site rubbish, waste material, any sanitary arrangements, temporary structures etc installed during the course of installation.
  - (iii)** The contractor(s) should clean off the dirt for all wood works, doors, windows, wells, floors or other parts of any building in or upon about which the work was executed or of which he may have had possession for the purpose of the execution thereof.
- (c)** If the Contractor shall fail to comply with the requirements of above **clause (b)**, as to removal of scaffolding, surplus materials, rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on

or before the date fixed for the completion of the work, the DE-In-charge may at the expense of the Contractor, remove such scaffolding, surplus materials and rubbish etc., and dispose off the same as he thinks fit and clean off such dirt.

### **13. SAFETY CODE**

- 13.1** Suitable scaffoldings should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period of works as can be safely done from ladders. When a ladder is used, an extra man shall be engaged for holding the ladder and if the ladder is used for carrying materials, suitable foot holds and handrails shall be provided on the ladder. The ladder shall be given an inclination not steeper than 1:4 (1 horizontal and 4 vertical).
- 13.2** Scaffolding or staging more than 12 feet above the ground level or floor swung or suspended from and overhead support or erected with stationary support shall have guard rail properly attached, bolted, braced and secured at least 3 feet height above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be fastened as to prevent it from swaying from the building structures/mast structures.
- 13.3** Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform or the gangway or stairway is more than 12 feet above ground level or floor level, they should be closely boarded, should be suitably fenced as described in (2) above and should have adequate width.
- 13.4** Every opening in ceiling of a building or in a working platform is provided with suitable means to prevent the fall of persons or materials or with suitable fencing or railing whose minimum height shall be 3 feet.
- 13.5** Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be more than 10 feet in length while the width between the side rails shall in no case be less than 11 1/2" for ladders up to and including 10 feet in length. For longer ladders this width should be increased at least 1/4" for each additional foot of length. Uniform step spacing shall not exceed 12". Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor(s) shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defense of every suit, action or other Proceeding at law that



may be brought by any person for injury sustained owing to neglect on the above precautions and to pay any damages and cost which may be awarded in any suit, action or proceedings to any such person or which may with the consent of the contractor(s) be paid to compromise any claim by any such person.

**13.6** All necessary personal safety equipment as considered adequate by the purchaser or its nominee should be kept available for the use of persons employed on the site and maintained in condition suitable for immediate use, and the contractor(s) should take adequate steps of ensuring proper use of equipment by those concerned.

- (a)** Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and with protective goggles.
- (b)** Those engaged in white washing or stacking of cement bags or any materials which is injurious to the eyes shall be provided with welders protective goggles.
- (c)** Those engaged in welding works shall be provided with welders protective goggles and/or protective eye sight lids.
- (d)** Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- (e)** When workers are employed in sewers and manholes which are in use, the Contractor(s) shall ensure that the manhole covers are opened and ventilated at least half an hour before the workers are allowed to get into the manhole and the manhole so opened shall be cordoned off with suitable railing and provide with warning signals or boards to prevent accidents to the Public.
- (f)** The Contractor(s) shall not employ persons below the age of 18 years and females for all the works involving risk.
- (g)** When the work is done near any place where there is risk of drowning all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment for all injuries likely to be sustained during the course of the work.
- (h)** Use of hoisting machines and shackles including their attachment, anchorage and support shall conform to the following standards or conditions:
  - (i)** These shall be of good mechanical constructions, sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
  - (ii)** Every rope used in hoisting or de-hoisting materials or as a means of suspension shall be durable quality and adequate strength and free from patent defects.
  - (iii)** Every crane operator or hoisting appliance operator shall be properly qualified and no person under the age of **21** years shall be

in-charge of any hoisting machine including any scaffolding winch or give signals to operator.

- (iv) In case of every hoisting machine and of every chain ring hook, shackle, swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be so ascertained by adequate means. Every hoisting machine and gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable with the safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in these paragraphs shall be loaded beyond the safe working load except for the purpose of testing.
- (v)** The Contractor(s) shall notify the safe working load of the machine(s) to the Purchaser, or its nominee, and should ensure that under no condition, the operating load of the machine should exceed the safe working load.
- (vi)** Motor, gearing, transmission, electric wiring and other dangerous part of hoisting appliances should be provided with sufficient safe guards. Hoisting appliances should be provided with such means as will reduce to the minimum risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced.
- (i)** When workers employed on electrical installations which are already energized, insulating mats, wearing apparel such as gloves, sleeves or both as may be necessary should be provided. The workers should not wear any rings, watch and carry keys or other materials which are good conductors of electricity.
- (j)** All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffolds, ladders or safety equipment shall be altered or removed while they are in use. Adequate washing facilities should be provided at or near the place of work.
- (k)** These safety provisions should be brought to the notice of all concerned by displaying on a Notice Board at a prominent place at work spot. The persons responsible for compliances of the safety code shall be named therein by the Contractor(s).
- (l)** To ensure effective enforcement of the Rules and Regulations relating to safety precautions, the arrangements made by the Contractor(s) shall be open to inspection by the Labour Officer or by the Purchaser or by its Nominee or representatives.
- (m)** Not with standing the above clauses from (a) to (l) there is nothing in these to exempt the Contractor(s) from the operations of any other Act or Rules in force in the Republic of India.

#### **14.LABOUR CONDITIONS**

- 14.1** Successful bidder should have registered themselves with Assistant Labour Commissioner (central) as per contract labour (regulation and abolition) Act (Central) 1972 and Contract Labour Rules (Central) 1971 as applicable and submit the copy of the license along with the bid.
- 14.2** The Contractor(s) should keep the list of workers being engaged on the work with their full postal address and specimen signatures. Everyday, attendance should be taken by the contractor/ In-charge of the work and no unauthorized persons should be allowed to attend the work either on the tower or near the tower.
- 14.3** The Contractor(s) should take all necessary precautions for the safety of the persons and other properties. The workers should be insured for any type of compensation in case of any injury to any person.
- 14.4** The contractor will be assigned work anywhere under the jurisdiction of Chennai Telephones and should be able to deploy sufficient man power to any place in the state for carrying out the works.
- 14.5** Provision for shelter and other necessary amenities for the labour engaged by the contractor during the course of installation works should be done by the contractor only at his own cost. The engineer-in-charge designated by the Purchaser may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors employ upon the work who may be incompetent or exhibit misconduct and the contractor shall forthwith comply with such requirements.
- 14.6** Engaging child labour (below the age of 14) is strictly prohibited.

#### **14.7 INSURANCE:**

Without limiting any of his/their obligations or liabilities, the Contractor(s) shall, at his/their own expense, take and keep comprehensive insurance including third party risk for the plant, machinery, and materials etc., brought to the site and for all the workers during the execution of work. The Contractor(s) shall also take out workmen's compensation insurance as required by Law and undertake to indemnify and keep indemnified BSNL from and against all manner of claims, demands, losses, damages, costs (including the cost between attorney and client) and charges and expenses that may arise in regard to the same or that the Government may suffer or incur with respect to and/or incidental to the same. The Contractor(s) shall have to furnish originals and/or attested copies when called upon by the Purchaser or its nominee of all the insurance policies taken as aforesaid, within 15 days of being called upon to do so together with all premium receipts and other papers related thereto which the Purchaser may require. In no case, the work should be commenced without taking the necessary insurance policies as aforesaid.

#### **14.8 FAIR WAGES CLAUSE:**

The Contractor(s) shall pay wages not less than the fair wage to the labourers engaged by him/them for the work.

**Explanation:**

- (a)** 'Fair Wage' means, wage whether for time or place of work fixed by Law or otherwise notified at the time of inviting tenders for the work and with such wages prescribed by the State Government for the District in which the work is done.
- (b)** The Contractor(s) shall, notwithstanding the provisions of any contract to the contrary, cause to be paid a fair wage to labourers indirectly engaged for the work, including any labour engaged by his sub contractor(s) if any, in connection with the said work, as if the labourers had been immediately engaged by him/them. Vis-à-vis the Union Government of India, the Contractor(s) shall be deemed to be part of this Contract and any breach thereof shall be breach of this contract/agreement.
- (c)** All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of BSNL without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

**14.9** In case of a tender by partners, any change in the constitution of the firm shall be forthwith notified by the Contractor(s) to the Purchaser.

**14.10** The successful bidder shall have to execute a Bond indemnifying the BSNL from all statutory / legal liabilities towards all the personnel either employed itself or in the rolls of its sub-vendors, who have been deployed for execution of various works against this project, that may arise due to various labor and other laws as specified by Central / State Government from time to time. Further the engagement and employment of any personnel and payment of wages to them as per the existing provisions of various labor laws and regulations is the sole responsibility of the bidder and any breach of such laws and regulations is the sole responsibility of the bidder and any breach of such laws or regulation shall be deemed to be breach of this contract.

## **15.WORK CONDITIONS**

**15.1** Adequate number of workers shall be employed by the contractor per each site to ensure timely completion of entrusted works and to avoid damage to the telecom materials at site and also to ensure required precautions during hoisting of all components for jobs described in **clause 13** above.

- 15.2** The Contractor(s) shall be intimated in the work order, the list of materials to be received for the installation purpose from the Purchaser, and will be responsible for the safe transport, storage and custody of the same until the work is completed in all respects. No enclosed accommodation will be provided at the site for the storage of tools or for the Contractors' staff. The Contractor(s) shall, therefore, make his/their own temporary arrangements for any such accommodation at his/their own cost.
- 15.3** All necessary tools and instruments required for Installation and Commissioning of BTS equipment and allied equipment and works, shall be arranged by the Contractor only and are not supplied by the BSNL.
- 15.4** All the works related to installation of BTS, Power Plant, Battery and other equipment and hoisting of GSM Antenna fixture, Erection of poles/wall mounts, GSM Antenna and Feeder cable etc. should be carried out strictly in accordance with the manufacturer's instructions. If at any time before the commencement or during the progress of the work, the method adopted or the appliances used appear to the Purchaser or any other officer authorized by the Purchaser to be inefficient or inappropriate for securing the quality of the work and/or the rate of progress of the work, the Purchaser or any other officer authorized by the Purchaser shall ask the contractor to rectify the same.
- 15.5** The failure of instructions of the Purchaser or any other officer authorized by the Purchaser to bring any defects to the notice of the contractor(s) does not relieve the latter of his/their obligations to secure the quality of work and rate of progress required by the contract. Any loss to the contractor due to the stoppage of work for reasons given above has to borne by him/them and any damage to the work shall be made good to the Purchaser.
- 15.6** The BTS Installation and Commissioning and allied works should be carried out as per the approved drawings to be supplied/ issued with the WO.
- 15.7** The Contractor(s) shall warn the Public about the danger of falling materials by providing display board and by other means also.
- 15.8** The Contractor(s) shall not cause any injury or damage to the Public or private properties or persons while executing the work.
- 15.9** The Contractor(s) should not tamper with or damage any structure in the camps or within the tower itself.
- 15.10** The successful bidder shall ensure that any installation carried out by them under this project should not become a safety hazard and is not in contravention of any statue, rule or regulation and public policy.

## **16. PURCHASER'S RIGHT TO VARY THE QUANTITY AFTER FINALISATION OF CONTRACT**

**16.1** The Purchaser reserves the right at the time of award of contract to increase or decrease by up to **25%** of the quantity of goods and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions.

## **17. ACCEPTANCE TESTING**

**17.1** After the completion of installation works, the contractor should offer the installed equipment for Acceptance Testing in co-ordination with the Engineer-in-charge and the AGM-in-charge which in general will be conducted by T&D or any other wing designated by BSNL for this purpose **as mentioned under Section V-work items**. BSNL shall have the right to make modifications or additions to any test or techniques of measurement as considered necessary by it. If the installation standards are qualitative and meet the AT standards, the contractor is issued the AT completion certificate for the work which he should attach along with his bill for claiming the payment.

**17.2** Purchaser reserves the right to appoint any testing authority including its own T&D circle for carrying out acceptance testing of the network and its network elements

**17.3** The vendor shall be responsible for offering and completion of equipment AT, where ever required, and obtaining Fit For commissioning (FFC) certificate from the concerned officer within 6 months from the date of commissioning. Also the full documentation to be done and handover to the BSS as per the instruction of the site engineer.

## **18. CLARIFICATIONS**

The BSNL reserves the right to issue any clarifications on or before the last date prescribed for submission of tenders. Such clarifications will be part of this tender document.

## **19. FORCE MAJEURE**

**19.1** If any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restriction, strikes, lockouts or act of God (Hereinafter referred to as events) provided notice of happenings, of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any such claim for damages against the other in respect of such non-performance or

delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist, and the decision of the Purchaser as to whether the deliveries have been so resumed or not shall be final and conclusive, provided further that if the performance, in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days either party may, at this option terminate the contract.

**19.2** Provided also that if the contract is terminated under this clause, the Purchaser shall be at liberty to take over from the contractor at a price to be fixed by the Purchaser, which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in the course of manufacture in possession of the contractor at the time of such termination of such portions thereof as the Purchaser may deem fit excepting such materials bought out components and stores as the contractor may with the concurrence of the Purchaser elect to retain.

**20. ACTION BY PURCHASER AGAINST BIDDER (S)/VENDOR(S) IN CASE OF DEFAULT:**

**20.1** In case of default by Bidder(s)/vendor(s) such as

- (a) does not supply equipment in time / carry out the work in time.
- (b) the equipment does not perform satisfactorily in accordance with the specification/non satisfactory of the quality of the work.
- (c) or any other default whose complete list is enclosed in Appendix (i)

Purchaser/tenderer will take action as specified in Appendix (i) of the section.

**22 & 23 ARBITRATION & SET OFF Refer Appendix Page 141-143**

**24. COURT JURISDICTION**

**24.1** Any dispute arising out of the tender/bid document/evaluation of bids/issue of APO shall be subject to the jurisdiction of the competent court at the place from where the NIT/Tender has been issued i.e Chennai only.

In the event of any question, dispute or difference arising under this agreement or in connection there with (except as to the matters, the decision to which is specifically provided under this agreement) the same shall be referred to the sole arbitration of the CGM, CHTD, BSNL or in case his designation is changed or his office is abolished, then in such cases to the sole arbitration of the officer for the time being entrusted (whether in addition to his own duties or otherwise) with the functions of the CGM, CHTD, BSNL or by whatever designation such an officer may be called (herein after referred to as the said officer) and if the CGM or the said officer is unable or unwilling to act as such, then to the sole arbitration of some other person appointed by the CGM, CHTD or the said officer. The agreement to appoint an arbitrator will be in accordance with the Arbitration and Conciliation Act 1996. There will be no objection to any such appointment on the ground that the arbitrator is a Government servant or that he has to deal with the matter to which the agreement relates or that in the course of his duties as a Government servant he has expressed his views on all or any of the matters in dispute. The award of the the arbitrator shall be final and binding on both the parties to the agreement. In the event of such an arbitrator to whom the

matter is originally referred, being transferred or vacating his office or being unable to act for any reason whatsoever, the CGM, CHTD, BSNL or the said officer shall appoint another person to act as an arbitrator in accordance with terms of the agreement and the person so appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.

**24.2** Where a contractor has not agreed to arbitration, the dispute/claims arising out of the contract/PO entered with him shall be subject to the jurisdiction of the competent court at the place from where contract/PO has been issued.

This contract/PO is subject to jurisdiction of court at Chennai only.

**24.3** The arbitrator may from time to time with the consent of both the parties enlarge the time frame for making and publishing the award. Subject to the aforesaid, Arbitration and conciliation Act 1996 and the rules made there under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

**24.3** The venue of the arbitration proceeding shall be the officer of the CGM, CHTD, BSNL Chennai or such other places as the arbitrator may decide.

## **25 FALL CLAUSE**

**25.1** The prices once fixed will remain valid during the scheduled delivery period except for the provisions in **clause 12 of Section III**. Further, if at any time during the contract

(a) It comes to the notice of purchaser regarding reduction of price for the same or similar equipment/ service;

And/or

(b) The prices received in a new tender for the same or similar equipment/ service are less than the prices chargeable under the contract.

The purchaser, for the purpose of delivery period extension, if any, will determine and intimate the new price, taking into account various related aspects such as quantity, geographical location etc., and the date of its effect for the balance quantity/ service to the vendor. In case the vendor does not accept the new price to be made applicable during the extended delivery period and the date of its effect, the purchaser shall have the right to terminate the contract without accepting any further supplies. This termination of the contract shall be at the risk and responsibility of the supplier and the Purchaser reserves the right to purchase the balance unsupplied quantity/ service at the risk and cost of the defaulting vendor besides considering the forfeiture of his performance security.

**25.2** (a) The vendor while applying for extension of time for delivery of equipment/services, if any, shall have to provide an undertaking as "We have not reduced the sale price, and/or offered to sell the same or similar equipment/service to any person/ organization including Department of Central/ State Government or any Central/ State PSU at a price lower than the price chargeable under the contract for scheduled delivery period."

(b) In case under taking as in Clause 24.2(a) is not applicable, the vendor will give the details of prices, the name(s) of purchaser, quantity etc. to the Purchaser, while applying extension of delivery period.

## **END OF SECTION III**



## **SECTION IV**

### **SPECIAL CONDITIONS OF CONTRACT**

1. The special conditions of the contract shall supplement the "Instructions to the bidders" as contained in Section II & "General Conditions of the Contract" as contained in **Section III** and wherever there is a conflict, the provision herein shall prevail over those in **Section II and Section III**.
2. Date fixed for opening of bids is, if subsequently, declared as holiday by Government of India, the revised schedule will be notified. However in absence of such notification, the bids will be opened on next working day, time and venue remaining unaltered.
3. Bid submitted without bid security declaration form(annexure-M) will be rejected.
4. Purchaser reserves the right to disqualify such bidders who have a record of not meeting contractual obligations against earlier contracts entered into with the Purchaser.
5. Any clarification issued by BSNL Chennai Telephones in response to query raised by prospective bidders shall form an integral part of bid documents and it may amount to amendment of relevant clause(s) of the bid documents.
6. The Purchaser reserves the right to counter offers price(s) against price(s) quoted by any bidder.
7. The purchaser reserves the right to reject a bid as non-responsive if the prices for all items are not quoted by the bidder in the price schedule.
8. It is not mandatory on the part of the purchaser to issue work order to successful bidder for all the items of the tender. The Purchaser reserves the right to issue work orders to only some of the items mentioned in the tender as per his convenience, depending on the availability of stores and requirement.
9. If any manufacturing defects or faults in any components of the equipment supplied by the Purchaser **viz.BTS, Node B, Power Plant, Battery sets, Mini links** etc. are noticed/identified during the installation or testing which deteriorate the functionality or performance of the equipment or exhibits a spoiled look owing to physical damages, the contractor shall immediately bring to the notice of the Purchaser such defect(s) found by him. A comprehensive report mentioning full details of the defects/faults such identified should be submitted by the contractor along with the date and time of observation. If no such intimation is received from the contractor, it will be presumed by the Purchaser that all the equipment(s) supplied for installation purpose to the contractor are free from all types of manufacturing defects and the contractor shall be made responsible for any damages/defects noticed at the time of acceptance testing or taking over of the equipment, and also the contractor should arrange for rectifying the defects at his own cost. Also in this case, no relaxation time is applicable to the contractor and for any

delay thereof and shall be accounted for imposing penalty for liquidated damages. In case of failure of contractor to rectify such defects, the defects shall be made good by the Purchaser and the expended amount shall be deducted from any amounts due or security deposit of the contractor.

10. The Purchaser intends to limit the number of technically and commercially responsive bidders in each package from the list of such bidder arranged in increasing order of their evaluated price starting from the lowest for the purpose of ordering against this tender. The distribution of the quantity of the tendered items will be in accordance with **clause 18.3.2 of Section-II**. However, the Purchaser reserves the right for the placement of orders of entire quantities on the bidder with the lowest quoted and evaluated prices.
11. The tender shall be evaluated on the basis of rate mentioned in the price schedule of **Section VII –Annexure- “D”(FINANCIAL BID)**.
12. Purchaser reserves the right to blacklist a bidder for a suitable period in case he fails to honour his bid without sufficient grounds.
13. The successful bidder should engage adequate number of well skilled, technically qualified, active, motivated and dynamic personnel for carrying out installation works. As a large number of BTSs are to be installed in a time bound manner, the successful bidder should be able to deploy number of teams simultaneously at number of sites and complete the installation within the targeted time frame.
14. Any current proceedings against the bidder by any unit of BSNL should be informed at the time of the bid. In case of any suppression of information/providing false declaration is known at a later date, the bid is liable to be rejected. Also, in case any penalty is imposed by any BSNL unit against the successful bidder the submission of the bid and end of the deliveries against the issued PO, BSNL reserves the right to cancel the PO placed forthwith and regulate the security deposit/PBG as per BSNL guidelines. BSNL will then be free to award the full/part of the requirements to any of the other willing bidders.

**SECTION V**  
**TECHNICAL SPECIFICATIONS**  
**LIST OF WORK ITEMS**

**All the items mentioned bellow are including transportation to the stores or to the site as instructed by BSNL at the cost of the bidder.**

s.no	Work item	Work description
1	Work Item-1	Installation and commissioning of indoor or outdoor BTS/ Node-B/BTSs with RRU/Node Bs with RRUs (with power modules) on a site with single or two/Multi poles /RTT/GBT/ wall mounts including antennae and RF/CPRI feeder cable with AT
2	Work Item-2	Installation of combo BTS either any combination technology of 2G/3G/LTE
3	Work Item-3	In-building wiring with RF/CPRI cable and fixing of associated splitters, antennae, and other components with AT
4	Work Item-4	Installation and commissioning of 15 GHz / 18 GHz M/W System with AT
5	Work Item-5	Hoisting of main/ additional RF/CPRI cable along with connectorization including installation of Antenna at GBT/ RTT/ Pole/ Wall Mount not involving installation of BTSs/ Node-Bs
6	Work Item-6	Installation of wall mounting fixture
7	Work Item-7	Dismantling of Power Plants/UPS
8	Work Item-8	Dismantling of Battery Set of capacity up to 600 AH/UPS Battery
9	Work Item-9	Dismantling of Indoor BTSs/ Node-B/RRH including RF/CPRI cable/antennae
10	Work Item-10	Dismantling of Outdoor BTSs/ Node-Bs including RF/CPRI cable/antennae
11	Work Item-11	Dismantling of RF Cables including AMF/Antennae
12	Work Item-12	Dismantling of 15 GHz/18 GHz M/W terminals
13	Work Item-13	Dismantling of Diesel Generators
14	Work Item-14	Dismantling of Prefabricated Shelter and its accessories like Air conditioners, Timer, Stabiliser, Intruder , ACDB, Transmission Equipments, Internal Runways , Light fittings and internal wirings and other items.
15	Work Item-15	Dismantling of Poles/ wall mount with antenna, RF/CPRI cables and earth cables/Strips
16	Work Item-16	Dismantling of EB cables, Distribution boxes and accessories.
17	Work Item-17	Dismantling and transportation of O/D Battery cabinet of different capacity excluding Bty Sets
18	Work Item-18	Installation of Indoor/Outdoor Gauntry
19	Work Item-19	Removal of combo BTS
20	Work Item-20	3m pole supply,extension and installation

21	Work Item-21	Installation & Commissioning of Battery sets of capacity upto 600AH with enclosure if any.
22	Work Item-22	Installation & Commissioning of SMPS Modular Trype of Power plant of capacity less than or equal to 300A.
23	Work Item-23	Construction of RCC Plinth for installation of OD BTS/Node B
24	Work Item-24	Dismantling of RF cable only
25	Work Item-25	Supply of Antenna Mounting Fixtures of Standard design
26	Work Item-26	For only Modification and/or additions in AMF of standard design as per site requirements
27	Work Item-27	Supply of AC cable (armoured 4-core 25 Sq mm Multi strand flexible) for extension of supply from AC supply point to equipment.
28	Work Item-28	Supply of Multi-strand flexible DC cable of Size 35 Sq.mm
29	Work Item-29	Installation of GSM Antennas only. Installation of Antennas to the tower/pole etc and do the orientation as per RF requirement.
30	Work Item-30	Recovery of wall mounted pole.
31	Work Item-31	Dismantling of empty BTS Cabinet without . The cabinet without any cards and only skeleton to be dismantled and transportation to the required place.
32	Work Item-32	Installation of empty BTS Cabinet.
33	Work Item-33	Swapping of Indoor/Outdoor BTS/Node B/ RRH ( 2G or 3G only)
34	Work Item-34	Swapping of Combo BTS/Node B/ RRH (2G/3G/LTE)
35	Work Item-35	Installation of RF cable only and connecting to existing Antenna and check for VSWR and making it to the required level.
36	Work Item-36	Replacement of RRU and changing the CPRI cable. The RRU's and CPRI cables are to be changed and make them functional.
37	Work Item-37	Antenna Orientation ( irrespective of no of antennas in site) and adjusting VSWR. The antennas to be reoriented and brought to the desired position as per the RF requirements.
38	Work Item-38	Replacement of CPRI with out changing RRU. The CPRI are to be replaced and connected to RRU's and BBU for making them functional
39	Work Item-39	MW orientation and re-alignment. The MW antennas are to be re-aligned/re-positioned in such a way that the MW's are working and functional.
40	Work Item-40	Only RRH Shifting/ replacement. The RRU's are to be replaced/shifting without changing the CPRI cables. The new RRU is to be connected to existing CPRI cable and make it functional.
41	Work Item-41	MW ODU replacement. The ODU is to be replaced with the good one and connected to MW and make it functional to the desired level
42	Work Item-42	Dismantling of antenna only.
43	Work Item-43	Fixation of aviation light and laying & routing of cable
44	Work Item-44	Works at RRU without replacing RRU/CPRI cable
45	Work Item-	Laying of IF cable for microwave

	45	
46	Work Item-46	Dismantling of microwave ODU only
47	Work Item-47	Re routing of CPRI /IF/ with proper tie without any sag
48	Work Item-48	Replacement of faulty connecter at ODU for microwave
49	Work Item-49	Shifting of Antenna at the same tower without Fixture
50	Work Item-50	Shifting of Antenna at the same tower with fixture
51	Work Item-51	6m pole installation
52	Work Item-52	Shifting of microwave antenna and hoisting in the tower irrespective of tower height
53	Work Item-53	Dehoisting of microwave antenna irrespective of tower height and shifting to site or stores
54	Work Item-54	shifting of AMF and hoisting in the tower irrespective of tower height
55	Work Item-55	Dehoisting of AMF irrespective of tower height and shifting to site or stores

### **Guide Lines for effective Implementation of and Coordination**

1. It is suggested that before taking up the work at a site the contractor carries out a joint visit to the site along with the concerned Engineer-in-charge to understand the site conditions and requirements.
2. The contractor has to maintain all material details site wise.
3. The contractor should send progress reports of the works being carried out by him in any desired proforma and with periodicity as per the requirements of the purchaser.
4. After the completion of work, the contractor shall make sincere efforts to make over the equipment to the purchaser as per the tender condition at the earliest.

## **Work Item No: 1**

### **Installation and commissioning of indoor or outdoor BTS/ Node-B/eNodeB (with power modules) on a site with single or two/Multi poles /RTT/GBT/ wall mounts including antennae and RF/CPRI feeder cable with AT.**

#### **1.1 Scope of Work:**

The work involves installation of Indoor/Out Door BTS(1 or 2 cabinets)/Node B/enodeB and accessories on a site with single or two/Multi poles /RTT/GBT/ wall mounts including antennae and RF/CPRI cable, shifting from swap site as per the work order given inclusive of transportation, commissioning ,offering for AT and handing over to work order issuing authority or site incharge.

To hoist Single/Dual/Tri antennae of any type in the existing Pole/RTT/GBT/Wall mount and doing connectorization with RF/Jumper /CPRI Cable.

#### **1.2 Detailed specifications:**

- (a)** The work involves Installing Single Antenna Mounting Fixture, Dual Antenna Mounting Fixtures in existing Pole/RTT/GBT/Wall mount in GSM Site or installing wall mounting antenna fixtures supplied by the Purchaser as per the specifications of BSNL.
- (b)** The fixtures shall be mounted as per site requirements and instructions of the Engineer in charge.
- (c)** The fixtures shall be mounted to the Pole/RTT/GBT/wall firmly using clamps, bolts and nuts.
- (d)** Clamps supplied by BSNL shall be fixed to the AMF/DMF/wall mount poles. If the clamps cannot be fixed, the same support shall be arranged by the contractor.
- (e)** In some sites if Dual Mount Fixtures are to be erected, the existing Single mount fixture may have to be dismantled. In such case the contractor shall dismantle the same and hand over the single mount fixture to stores.
- (f)** The work should be completed to the satisfaction of the site Engineer and any modifications if proposed by the site Engineer should be carried out.

- (g)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (h)** Installation of cable tray.
- (i)** RF Cable routing and hoisting of Antennae.
- (j)** Integration and radiation of BTS/Node Bs.
- (k)** Installation and extension of alarms to OMCR.
- (l)** The GSM Macro antennae shall be hoisted in the Pole/RTT/GBT/Wall mount in the height as instructed by the site Engineer.
- (m)** The antennae so hoisted shall be oriented and optimized as per the instructions of the site Engineer.
- (n)** The antennae will have to be reoriented or will have to be re-hoisted at a changed height till desired power output and coverage is achieved as per the instructions of the site Engineer.
- (o)** The antennae ports shall be properly sealed for preventing from water entry.
- (p)** RET (Remote Electrical Tilt) assembly kit supplied by BSNL will have to be installed in the antennae and cabling to the RET shall be done as per specifications.
- (q)** The work should be completed to the satisfaction of the site Engineer and the VSWR measurements should be shown to the site Engineer which should be within the prescribed limits.
- (r)** The de-hoisted antenna and allied materials have to be handed over to store

**Work Item No: 2**

(s)

**Installation of combo BTS either any combination technology of 2G/3G/LTE**

**2.1.1 Scope of Work**

The work involves, transportation, installation and commissioning of Indoor/Out Door BTS(1 or 2 cabinets)/BTS/Node B/eNodeB and accessories on a site with single or two/Multi poles /RTT/GBT/ wall mounts including antennae and RF/CPRI cable, shifting from swap site as per the work order given inclusive of AT and handing over to site in charges.

**2.1.2 Detailed specifications:**

- a) The work involves Installing Single Antenna Mounting Fixture, Dual Antenna Mounting Fixtures in existing Pole/RTT/GBT/Wall mount in GSM Site or installing wall mounting antenna fixtures supplied by the Purchaser as per the specifications of BSNL.
- (g)** The fixtures shall be mounted as per site requirements and instructions of the Engineer in charge.
- (h)** The fixtures shall be mounted to the Pole/RTT/GBT/wall firmly using clamps, bolts and nuts.
- (i)** Clamps supplied by BSNL shall be fixed to the AMF/DMF/wall mount poles. If the clamps cannot be fixed, the same support shall be arranged by the contractor.
- (j)** In some sites if Dual Mount Fixtures are to be erected, the existing Single mount fixture may have to be dismantled. In such case the contractor shall dismantle the same and hand over the single mount fixture to stores.
- (k)** The work should be completed to the satisfaction of the site Engineer and any modifications if proposed by the site Engineer should be carried out.
- (f)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (u)** Installation of cable tray.
- (v)** RF Cable routing and hoisting of Antennae.
- (w)** Integration and radiation of BTS/Node Bs.
- (x)** Installation and extension of alarms to OMCR.
- (y)** The GSM/CDMA Macro antennae shall be hoisted in the Pole/RTT/GBT/Wall mount in the height as instructed by the site Engineer.
- (z)** The antennae so hoisted shall be oriented and optimized as per the instructions of the site Engineer.
- (aa)** The antennae will have to be reoriented or will have to be re-hoisted at a changed height till desired power output and coverage is achieved as per the instructions of the site Engineer.
- (bb)** The antennae ports shall be properly sealed for preventing from water entry.
- (cc)** RET (Remote Electrical Tilt) assembly kit supplied by BSNL will have to be installed in the antennae and cabling to the RET shall be done as per specifications.



**(dd)** The work should be completed to the satisfaction of the site Engineer and the VSWR measurements should be shown to the site Engineer which should be within the prescribed limits.

**(ee)** The de-hoisted antenna and allied materials have to be handed over to stores.

### **Work Item No 3**

#### **In-building wiring with RF/CPRI cable and fixing of associated splitters, antennae, and other components with AT.**

##### **3.1 Scope of the work:**

To hoist Main/Additional RF/Jumper/CPRI cable along with connectorization to the antennae and In-building wiring with RF/CPRI cable and fixing of associated splitters, antennae, and other components with AT.

In-Building has to be done according to the customer requirement to extend 2G/3G coverage in the entire building complex. In- door antennae and internal wiring has to be done without disturbing building decorum.

##### **3.2 Detailed Specifications:**

- (a)** The work involves transportation of IBS material from stores to site, Laying/Hoisting of RF /Jumper cable of any size/CPRI cable in protection pipe, in Pole/RTT/GBT/Wall mount/sites as per the specifications of BSNL including offering for AT as per the instructions of Site Engineer.
- (b)** RF cable (7/8" or 1/2") shall be hoisted in towers/Poles/Wall mounts sites from BTS/Node B point to Antennae.
- (c)** Wall hangers supplied by BSNL shall be fixed to the towers/poles or any other support shall be provided if the wall hangers cannot be fixed, the same support shall be arranged by the contractor.
- (d)** Connectorization shall be done with skilled technicians and the RF cable shall be connected to the Antennae ports as per the instructions of the site Engineer so that the power loss is at a minimum and VSWR of the RF cable is within limits.
- (e)** RF cable hoisting shall be done as per the guidelines given under BTS/Node B installation section.
- (f)** CPRI cable shall be laid in a protection pipe that will be supplied by BSNL as per the instructions of the site Engineer and terminated in RRU. Power cable also shall be laid along with CPRI cable.
- (g)** The work should be completed to the satisfaction of the site Engineer and the VSWR measurements should be shown to the site Engineer which should be within the prescribed limits.

- (h)** The recovered cable/other items have to be handed over to stores.
- (i)** Vertical or horizontal support shall be provided by the contractor wherever required as per the instructions of the site Engineer.
- (j)** The work shall be completed to the satisfaction of the site Engineer who will issue a completion certificate for the work.
- (k)** Installation & commissioning of IBS BTS/Node B as per the manufacturer's and BSNL's instructions.
- (l)** 7/8" /1/2" RF cable laying and installation of Dual-band antennae along with antenna mounting fixture for street coverage.
- (m)** 7/8" /1/2" RF cable laying and installation of Dual-band antennae/Omni and patch panel antennae along with antenna mounting fixture for street /In building coverage.
- (n)** 1/2" RF cable laying and installation of Omni and patch Panel antennae for providing in-building coverage. Installation and commissioning of SMPS power plant and battery sets if required.
- (o)** Installation of Invertors.
- (p)** Providing earthing for the equipment as per BSNL's instructions.
- (q)** Integration and radiation of BTS/Node B s.
- (r)** Building decorum should not be disturbed at any cost to avoid customer complaint.
- (s)** If any damages inside the building, the contractor is responsible for rectifying the damages at his own cost.
- (t)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (u)** The layout of internal wiring has to be handed over to Site Engineer/ BSS Engineer for further maintenance.

**Important Guidelines for RF/CPRI cable & Antennae & FWorks:RF/JUMPER/CPRI**

**CABLE ROUTING & ANTENNAE HOISTING**

- (a)** It shall be ensured that the personnel deployed for undertaking the works on the tower are properly trained and experienced in such works. They should use helmets and safety belts and other standard precautions.
- (b)** The installed equipment should have neat sign-writing on it. Markings have to be carried out using pre printed stickers of good quality suitable for external use. Similar labelling should be done at both the ends of the indoor jumper cables and the antenna jumper cables.

- (c)** The RF cable laying should be done very carefully to avoid any sharp bends and the curves and bends shall be within the limits specified by the manufacturer/BSNL.
- (d)** The RF cable earthing shall be done at both ends (at the top and bottom).  
The earthing shall be done as per the manufacturers' /BSNL specifications and should ensure that proper contact is ensured with proper removal of sheathing of the feeder cable by carefully removing the insulation surrounding the same. The other end should be connected to the nearest tower using lugs. The area on the tower where the same is fitted should be carefully cleaned off any dirt so that good contact is ensured. The exposed feeder cable portion should be thoroughly covered with insulation tape.
- (e)** CPRI cable shall be laid in protection pipe from Node B/BTS carefully without straining the cable and terminated in RRU. DC power supply cable also shall be laid from Node B/BTS and terminated in RRU.
- (f)** The Antennae shall be hoisted and fixed to the Antennae Mounting Fixture as per the instructions of the manufacturer.
- (g)** It shall be ensured that the antennae fixture is fitted at the tower properly and tightly.
- (h)** The verticality of the antennae mounting pipe should be ensured.
- (i)** The Antennae should be mounted to meet the specified height, tilt and azimuth as per the directions of the Engineer-in-charge.
- (j)** Antennae fixtures should be mounted on the face or corners of the tower in such a way that the specified orientation of the antennae is achieved with minimum horizontal tilt. The technicians of the contractor shall be provided with all necessary tools like binocular, magnetic compass to achieve the desired results to meet the above specifications.
- (k)** In- door antennae and internal wiring has to be done without disturbing building decorum. In case of damage to the building or property, vendor has to rectify and compensate at his own cost.

#### **(I) ACCEPTANCE OF WORK**

The contractor has to offer the Indoor or Outdoor BTS/ Node-B/eNodeB and RF cables for Acceptance Testing by the A/T unit as per the prescribed A/T schedule of BSNL's T&D circle. The same would be communicated to the contractor through the respective work orders wherever, A/T is mandatory.

The contractor is fully responsible for the successful completion of A/T and handing over of site to BSS (Mtce.)

#### **Work Item No 4**

##### **Installation and commissioning of 15 GHz / 18 GHz M/W System with AT.**

#### **4.1 Scope of the work:**

Minilink MW survey, transportation, installation and commissioning of 15 /18 GHZ or any band microwave system at both ends with A/T.

#### **4.2 Detailed Specifications:**

The contractor shall do the following works:

- (a)** Survey of sites identified by BSNL for LOS (line of sight) clearance.
- (b)** Getting the layout of the planned system approved from the concerned Site Engineer before the commencement of the installation works.
- (c)** Hoisting of 15GHz/18GHz MW Antenna fixtures for fixing the Antenna on any type of tower. Hoisting of 15GHz/18GHz M/W Antenna with ODU to any height on any type of tower. Hoisting coaxial cable with connectorization. Alignment of the Antennae so that LOS link is established with the far end terminal, maximum signal is received and the SNR is within the acceptable limits.
- (d)** Installation and commissioning of the 15 GHz MW IDU equipment and associated equipment in the space indicated by BSNL on wall or on the floor as per the approved layout diagram.
- (e)** The installation should be carried out as per the manufacturer's specifications and BSNL's instructions. The IDU should be firmly fixed with nuts and bolts in a wall mount rack or floor mounted 19`` transmission rack supplied by BSNL .
- (f)** DC power shall be extended to the IDU from the source indicated by the site Engineer. The earthing and power cables should be extended from the common earth points and supply points as per the instructions of Engineer-in-charge.
- (g)** The IF cable from the ODU shall be connectorized and connected to the IDU.
- (h)** Extension of E1s from the IDU to the transmission room is to be done with 16 Pair PCM Cable supplied by BSNL. The contractor shall lay the PCM Cable from the IDU to the transmission room and terminate on 6/32 PCM tag blocks or DDF modules supplied by BSNL. Similar PCM cabling is to be carried

out at GSM Site end also.

- (i) The tag blocks or DDF modules shall be fixed firmly in position in the place indicated by the site in charge at the cost of the contractor.
- (j) The contractor shall configure all the EIs of the MW system (4 EIs/8 EIs/16 EIs) and test the same end to end to the satisfaction of the site Engineer. For IP connectivity fibres to be extended to Node B/STMs as per the guide lines of site Engineer.
- (k) The Normal and standby coaxial cables shall be laid properly and tied with cable ties.
- (l) The Antenna and the ODU shall be earthed to the nearest tower member.
- (m) In case only one M/W terminal has to be installed and commissioned at a site with other terminal already available at other end, then this work shall be considered as half of the work of installing and commissioning of M/W system.
- (n) The contractor has to offer the equipment for Acceptance Testing by the A/T unit as per the prescribed A/T schedule of BSNL's T&D Circle. The same would be communicated to the contractor through the respective work orders wherever, A/T is mandatory. The contractor is fully responsible for the successful completion of A/T and hand over the site to the BSS (Mtce.)
- (o) The list material used in the sites must be recorded and list has to be handed over to Site Engineer.

#### **Work Item No: 5**

#### **Hoisting of main/ additional RF/CPRI cable along with connectorization including installation of Antenna at GBT/ RTT/ Pole/ Wall Mount not involving installation of BTSs/ Node-Bs.eNodeBs.**

##### **5.1 Scope of Work:**

To transport and hoist Main/Additional RF/Jumper/CPRI cable along with connectorization to the antennae and In-building wiring with RF/CPRI cable and fixing of associated splitters, antennae, and other components with AT.

##### **5.2 Detailed specifications:**

- a) The work involves transporting RF/CPRI cable from stores to site, Laying/Hoisting of RF /Jumper cable of any size/CPRI cable in protection pipe, in Pole/RTT/GBT/Wall mount/sites as per the specifications of BSNL including offering for AT
- (b) RF cable (7/8" or 1/2") shall be hoisted in towers/Poles/Wall mounts sites from BTS/Node B/eNodeB point to Antennae.

- (c)** Wall hangers supplied by BSNL shall be fixed to the towers/poles or any other support shall be provided if the wall hangers can not be fixed, the same support shall be arranged by the contractor.
- (d)** Connectorization shall be done with skilled technicians and the RF cable shall be connected to the Antennae ports as per the instructions of the site Engineer so that the power loss is at a minimum and VSWR of the RF cable is within limits.
- (e)** RF cable hoisting shall be done as per the guidelines given under BTS/Node B installation section.
- (f)** CPRI cable shall be laid in a protection pipe that will be supplied by BSNL as per the instructions of the site Engineer and terminated in RRU. Power cable also shall be laid along with CPRI cable.
- (g)** The work should be completed to the satisfaction of the site Engineer and the VSWR measurements should be shown to the site Engineer which should be within the prescribed limits.
- (h)** The recovered cable/other items have to be handed over to stores.
- (i)** Vertical or horizontal support shall be provided by the contractor wherever required as per the instructions of the site Engineer.
- (j)** The work shall be completed to the satisfaction of the site Engineer who will issue a completion certificate for the work.
- (k)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.

### **Work ItemNo:6**

#### **Installation of wall mounting fixture.**

##### **6.1 Scope of the Work:**

Installation of Wall Mounting fixtures as per the requirement of sites.

##### **6.2 Detailed Specifications:**

- (a)** The work involves transportation of wall mounting fixture from stores to site, Installing Single Antenna Mounting Fixture, Dual Antenna Mounting Fixtures in Wall mount in GSM Site supplied by the Purchaser as per the specifications of BSNL.
- (b)** The fixtures shall be mounted as per site requirements and instructions of the Engineer in charge.
- (c)** The fixtures shall be mounted to the wall firmly using clamps, bolts and nuts. If the clamps cannot be fixed, the same support shall be arranged by the contractor at his own cost.

- (d)** In some sites if Dual Mount Fixtures are to be erected, the existing Single mount fixture may have to be dismantled. In such case the contractor shall dismantle the same and hand over the single mount fixture to stores.
- (e)** The work should be completed to the satisfaction of the site Engineer and any modifications if proposed by the site Engineer should be carried out.
- (f)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.

### **Work Item No:7**

#### **Dismantling of Power Plants/UPS.**

##### **7.1 Scope of the Work:**

Dismantling of existing ID or OD Power plant/UPS and shifting to stores or site as mentioned in work order or site engineer instructions

##### **7.2 Detailed Specifications:**

1. Care has to be taken while disconnecting the power plant/UPS connections as the work has to be carried out in live condition Or otherwise
2. Recovered power plant/UPS units have to be shifted to BSNL stores immediately or to any place as directed by the site engineer.
3. TNEB connections have to be extended in correct polarity and there should not be any short circuit which breaks the power supply to the site.
4. Care has to be taken to put through the new Power plant/UPS without any interruption on the site or exchange.
5. DC/AC earth have to be connected properly to avoid damage to the existing equipment.
6. The list of material recovered like no. of power plant modules, DC and AC cables in the sites must be recorded and list has to be handed over to Site Engineer/stores incharge.

### **Work Item No: 8**

#### **Dismantling of Battery Set of capacity up to 600 AH/UPS Battery.**

##### **8.1 Scope of the work:**

Dismantling of existing Battery set at indoor or outdoor location while doing new battery installation and shifting to stores

Dismantling of existing UPS battery from the site along with battery back-up and the connected DC/AC cables.

##### **8.2 Detailed Specifications:**

1. Care has to be taken while disconnecting the battery/UPS Battery connections as the work has to be carried out in live condition.

2. Recovered battery units in full capacity have to be shifted to BSNL stores or to any place as directed by the site engineer immediately TNEB connections have to be extended in correct polarity and there should not be any short circuit which breaks the power supply to the site.
3. Care has to be taken to put through the new battery set without any interruption on the site.
4. DC/AC earth have to be connected properly to avoid damage to the existing equipment.
5. The list of no. of cells , battery links,battery stand and power cables recovered must be recorded as per annex N and handed over to Site Engineer/stores in charge.

### **Work Item No: 9**

#### **Dismantling of Indoor BTSs/ Node-B/eNodeBs/RRH including RF/CPRI cable/antennae.**

##### **9.1 Scope of Work:**

The work involves de-installation of Indoor BTSs/Node Bs along with accessories like antennae, RF/CPRI cable, earth cable and shifting of the de-installed equipments to BSNL stores/site as mentioned in WO or as per the instructions of BSNL site engineer.

##### **9.2 Detailed specifications:**

1. The power cables, PCM cable, Alarm cable, Jumper cables and other accessories shall be removed from the BTS with utmost care.
2. The removed materials shall be packed carefully and listed out and handed over to BSNL stores properly.
3. If power supply is available in the equipment, it is to be disconnected properly before handling the equipment.
4. RF /CPRI cable to be removed without any damage to the cable as the same cable has to be used in other required sites.
5. If any damage is done for the cable/equipment, it is the responsibility of the contractor and the cost of the damaged equipment/cable will be recovered from the bills/PBG.
6. The recovered material has to be handed over to BSNL stores
7. The list material recovered in the site must be recorded and list has to be handed over to Site Engineer.



## **Work Item No: 10**

### **Dismantling of Outdoor BTSs/ Node-Bs including RF/CPRI cable/antennae.**

#### **10.1 Scope of Work:**

The work involves de-installation of outdoor BTSs/Node Bs along with accessories like antennae, RF/CPRI cable, earth cable and transportation of the de-installed equipments to BSNL stores/site as instructed by work order authority of BSNL.

#### **10.2 Detailed specifications:**

1. The power cables, PCM cable, Alarm cable, Jumper cables and other accessories shall be removed from the BTS with utmost care.
2. The removed materials shall be packed carefully and listed out and handed over to BSNL stores properly.
3. If power supply is available in the equipment, it is to be disconnected properly before handling the equipment.
4. RF /CPRI cable to be removed without any damage to the cable as the same cable has to be used in other required sites.
5. If any damage is done for the cable/equipment, it is the responsibility of the contractor and the cost of the damaged equipment/cable will be recovered from the bills/PBG.
6. The recovered material has to be handed over to BSNL stores
7. The list of material recovered from the site must be recorded and list has to be handed over to Site Engineer

## **Work Item No: 11**

### **Dismantling of RF/CPRI Cables including AMF/Antennae.**

#### **11.1 Scope of Work:**

To de-hoist Main/Additional RF/Jumper/CPRI cable along with de-connectorization to the antennae and shifting to stores or site as per the instructions of work order authority

#### **11.2 Detailed specifications:**

- (a) The work involves De-Hoisting of RF /Jumper cable of any size/CPRI cable in protection pipe, in Pole/RTT/GBT/Wall mount/sites as per the specifications of BSNL.

- (b)** RF cable (7/8" or 1/2") shall be De-hoisted in towers/Poles/Wall mounts sites from BTS point to Antennae.
- (c)** RF/CPRI cable De-hoisting shall be done as per the guidelines given under BTS installation section.
- (d)** The work should be completed to the satisfaction of the site Engineer.
- (e)** The recovered cable/other items have to be handed over to stores.
- (f)** The cable should be handed over carefully without any damage.
- (g)** If any damage for cable found, the cost of damaged cable will be recovered from the bills/PBG.
- (h)** The list of material recovered in the sites must be recorded and list has to be handed over to Site Engineer.

## **Work Item No: 12**

### **Dismantling of 15 GHz/18 GHz M/W terminals.**

#### **12.1 SCOPE OF WORK**

Mini link De- installation and de-commissioning of 15 /18 GHZ microwave system at both ends, transportation and handing over to stores or site as per instructions of work order authority

#### **12.2 General Guidelines:**

The contractor shall do the following works:

- (a)** De-hoisting of 15GHz/18GHz MW Antenna fixtures for fixing the Antenna on tower/pole of any height. De-hoisting of 15GHz/18GHz M/W Antenna with ODU to any height on any type of tower. De-hoisting coaxial cable with connectors.
- (b)** De-Installation and De-commissioning of the 15 GHz MW IDU equipment and associated equipment should be transported to BSNL stores or to any specified location by the site engineer without any damage to the equipment.
- (c)** De-installation should be carried out as per the manufacturer's specifications and BSNL's instructions. In case of a wall mounted system, the IDU has to be carefully removed. In case of a floor mounted system, the system should be removed from the equipment rack without disturbing other MW systems. The de-installation procedures should be strictly followed and the system should be successfully de-installed and de-commissioned so as to use the same system by BSNL in the needy place.
- (d)** DC power shall be removed without affecting the power supply of other working systems. The earthing and power cables should be removed from the common earth points and supply points as per the instructions of Engineer-in-charge.

- (e)** The IF cable from the ODU shall be removed without any damage to the cable.
- (f)** The Normal and standby coaxial cables shall be removed and handed over to BSNL stores along with equipment.
- (g)** In case only one M/W terminal has to be de-installed and de-commissioned at a site with other end terminal has to be left without removing for BSNLs future use, then this work shall be considered as half of the work of installing and commissioning of M/W system.
- (h)** The list of material dismantled in the sites like length of IF cable and accessories must be recorded and list has to be handed over to Site Engineer/stores incharge

### **Work Item No: 13**

#### **Dismantling of Diesel Generators.**

##### **13.1 SCOPE OF WORK.**

The work involves dismantling of Diesel Generators including Battery, EB control panel ,cables, connectors and other associated accessories and other items at a site and shifting to stores

##### **13.2 General Guidelines.**

- (a)** The contractor shall have to dismantle the DG set as indicated and as per the guidelines and instructions of BSNL.
- (b)** The power cables, alarm cable, jumper cables and other accessories shall be removed from the DG set.
- (c)** The removed material shall be packed carefully.
- (d)** The list of items dismantled with corresponding quantities & other details shall be prepared and handed over to BSNL site engineer/stores incharge
- (e)** All the dismantled materials shall be shifted carefully in proper packing by the contractor at his own cost to BSNL stores/Go down or to a site as instructed by BSNL site engineer
- (f)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer

### **Work Item No: 14**

#### **Dismantling of Prefabricated Shelter and its accessories like Air conditioners, Timer, Stabilizer, Intruder, ACDB, Transmission Equipments, Internal Runways , Light fittings and internal wirings and other items.**

##### **14.1 SCOPE OF WORK**

The work involves dismantling of pre fabricated BTS shelter along with associated AC units, Timer unit, AC power panel, ACDB,DCDB, AC power cable, alarm board, Door alarm, smoke alarm, lighting fixtures, fire alarms panel and other associated accessories including transmission equipments from a site and shifting to stores

#### **14.2 General Guidelines.**

- (a) The contractor shall have to dismantle the pre fabricated shelter as per the guidelines and instructions of BSNL.
- (b) The shelter materials and associated AC units, Timer unit, AC Power panel, ACDB,DCDB, AC power cable, Alarm board, Door alarm, Smoke alarm, lighting fixtures, fire alarms panel and other associated accessories shall be dismantled and the removed materials shall be packed carefully.
- (c) A list of items dismantled corresponding quantities & other details shall be prepared and handed over to BSNL.
- (d) All the dismantled material shall be shifted carefully in proper packing by the contractor at his own cost to BSNL stores/Go down or to a site as instructed by BSNL.
- (e) The list material used in the sites must be recorded and list has to be handed over to Site Engineer/stores incharge.

#### **Work Item No: 15**

#### **Dismantling of Poles/wallmount with antenna, RF/CPRI cables and earth cables/Strips.**

#### **15.1 SCOPE OF WORK**

The work involves dismantling of all 3/6/9 meters poles used for mounting antennae of antennae, lighting arrestors, aviation warning lamps with cable, RF cables, Connectors, RF cable runways, ladders, cable trays and other associated items from a site and shifting to stores or location as per site engineer instructions.

#### **15.2 General Guidelines.**

- (a) All the dismantling works should be carried out with utmost care so that no damage is caused to the building. In case of damage the vendor has to rectify or compensate at his own cost
- (b) A list of items dismantled with corresponding quantities & other details shall be prepared and handed over to BSNL site engineer.
- (c) The RF cables shall be removed from RF hangers carefully.
- (d) The RF cables shall be removed from the antennae ports, de-connectorized in the tower end and shall be removed from the surge arrestors in the BTS/Node B end and de-connectorized.
- (e) The RF cable shall be carefully dismantled without giving strain and more bends than allowed as per specifications.
- (f) The RF Cables shall be coiled neatly in cable drums or coils of larger diameter shall be made.

- (g) Also the earthing kits shall be removed from the towers.
- (h) All the dismantled materials shall be shifted carefully with proper packing by the contractor at his own cost to BSNL stores/ Go Down or to the place as instructed by BSNL.

**Work Item No: 16**

**Dismantling of EB cables, Distribution boxes and accessories.**

**16.1 Scope of Work**

The work involves dismantling of EB panel, EB meter, Cables, Cut out point, DB, arrestors (if provided) and associated items from a site and handing over to stores

**16.2 General Guidelines.**

- (a) All the dismantling work should be carried out with utmost care so that no damage is caused to the building/premises and any other structure.
- (b) A list of items dismantled with corresponding quantities & other details shall be prepared and handed over to BSNL site in charge.
- (c) All the dismantled materials shall be shifted carefully with proper packing by the contractor at his own cost to BSNL stores/Go down or to the place as instructed by BSNL site in charge.

**Work Item No: 17**

**Dismantling and transportation of O/D Battery cabinet sets excluding Bty Sets.**

**17.1 Scope of Work**

The work involves dismantling and transportation of OD battery cabinet to stores or site as specified in WO.

**17.2 Detailed specifications:**

- (a) All the dismantling work should be carried out with utmost care so that no damage is caused to the building/premises and any other structure.
- (b) A list of items dismantled with corresponding quantities & other details shall be prepared and handed over to BSNL.
- (c) All the dismantled materials shall be shifted carefully with proper packing by the contractor at his own cost to BSNL stores/Go down or to the place as instructed by BSNL.

**Work Item No: 18**

**Installation of Indoor Gantry/outdoor gantry.**

**18.1 Scope of Work**

The work involves transportation and installation of internal/external runway along with associated accessories as per the instructions of the site Engineer in GSM site.

**18.2 Detailed specifications**

- (a)** The runways of any length supplied by BSNL shall be installed in GSM sites as per the instructions of the site Engineer without causing damage to building decorum
- (b)** The runways installed shall have to be installed horizontally and vertically.
- (c)** Horizontality/verticality shall be maintained.
- (d)** Vertical or horizontal support shall be provided by the contractor wherever required at the cost of the contractor as per the instructions of the site Engineer.
- (e)** The work shall be completed to the satisfaction of the site Engineer who will issue a completion certificate for the work.
- (f)** If vertical support is provided from ground or floor, the base of the vertical support shall be concreted by the contractor.
- (g)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.

**Work Item No: 19**

**Dismantling of Combo BTS.**

**19.1 Scope of Work**

The work involves Dismantling of combo BTS (2G/3G/LTE) irrespective of outdoor/indoor. Combo BTS with other associated accessories ,Antenna,Rf cable,power cable,earth cable and any other material related with combo BTS and shifting to stores or site as per the instructions of the site Engineer at GSM site.

**19.2 Detailed specifications**

1. The power cables, PCM cable, Alarm cable, Jumper cables and other accessories shall be removed from the BTS with utmost care.
2. The removed materials shall be packed carefully and listed out and handed over to BSNL stores properly.
3. If power supply is available in the equipment, it is to be disconnected properly before handling the equipment.
4. RF /CPRI cable to be removed without any damage to the cable as the same cable has to be used in other required sites.
5. If any damage is done for the cable/equipment, it is the responsibility of the contractor and the cost of the damaged equipment/cable will be recovered from the bills/PBG.
6. The recovered material has to be handed over to BSNL stores
7. The list material recovered in the site must be recorded and list has to be handed over to store /any other location as per Site Engineer instructions

**Work Item No 20**

**Extension of pole**

**20.1 Scope of Work:**

Supply ,Extension and installation of 3m pole at the terrace of any building

**20.2 Detailed specifications:**

Supply ,Extension and installation of 3m GI pole to be done on existing pole as per the requirement of BSNL with proper stray rods and climbing arrangement . This extension should have provision to extend up to 10m.

**Work Item No: 21**

**Installation & Commissioning of Battery sets of capacity upto 600AH with enclosure if any.**

**21.1 Scope of Work**

To transport, install and commission Battery sets of capacity up to 600 AH of any make,ID or OD site that will be supplied by BSNL in a GSM site as per the specifications and standards of the manufacturer.

**21.2 Detailed specifications**

- (a)** The battery set (24 cells as supplied by the manufacturer) of any capacity up to 600AH along with all the associated accessories should be installed as per the installation procedure of the respective manufacturer and instructions of BSNL.

- (b)** Layout diagram shall be prepared for installation of the battery sets by the contractor and got approved from the DE in charge.
- (c)** Batteries have to be handled with extreme care and should be positioned appropriately so that their large weight does not damage the floor. The charge and discharge should be done strictly according to the specifications of the manufacturer.
- (d)** Interconnections with power plant should be properly done using proper lugs. Appropriate crimping tools should be employed to ensure proper contacts. Insulation tapes should be wound at the lugged places so that all the exposed places other than what is essential to make proper contact are fully and securely insulated.
- (e)** The body of the battery stand shall be earthed properly from the common earth point.
- (f)** The area should be made clean and dry.
- (g)** The alignment and levelling of battery sets should be properly checked. There should not be any damage to the battery cell(s) and the stand should be neatly painted.
- (h)** All interlinking nuts and bolts, lugs should be firmly tightened and fine quality petroleum jelly should be applied for avoiding rusting.
- (i)** The details of installation of battery like Capacity, Date of commissioning, etc. should be labelled as per the direction of the BSNL Engineer-in-charge. Polarity sign writings should be made.
- (j)** The contractor has to offer the Battery sets for Acceptance Testing by the A/T unit as per the prescribed A/T schedule of BSNL's T & D circle/ any other designated BSNL Unit. The contractor is fully responsible for the successful completion of A/T and handing over to respective mtce. unit.
- (k)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (L)** The work shall be completed to the satisfaction of the site Engineer who will issue a completion certificate for the work.

**Work Item No: 22**

**Installation & Commissioning of SMPS Modular Type of Power plant of capacity less than or equal to 300A.**

**22.1 Scope of Work**

To transport,install and commission SMPS Modular type power plant of capacity upto 300 A of any make,ID or OD type that will be supplied by BSNL in a GSM site as per the specifications and guidelines of the manufacturer.



## **22.2 Detailed specifications**

- (a)** The installation should be done as per the manufacturer's specifications & guidelines and should meet the A/T standards.
- (b)** Layout diagram shall be prepared for installation of the Power Plant by the contractor and got approved from the DE in-charge.
- (c)** The Power Plant should be connected to Input three Phase AC Mains supply through a separate ACDB using suitable lugs, as per the instructions of the manufacturer and site Engineer. Necessary three phase MCBs with neutral link in built confirming to BIS standards are to be arranged by the contractor for the ratings meant for the ultimate capacity of the Power Plant as per the site requirements.
- (d)** Stage I & II surge suppressor provided along with the power plant should be installed as per the prescribed procedures.
- (e)** The power plant should be connected to the battery sets using suitable lugs.
- (f)** The power plant should be properly earthed from the common earth point using suitable lugs.
- (g)** All the modules equipped in the power plant should be made operational in load sharing mode.
- (h)** If additional modules are to be equipped to make the Power plant work up to the ultimate capacity the same has to be done, as per the instructions of the site Engineer.
- (i)** All types of tests related to the display of various parameters should be carried out.
- (j)** All the prescribed alarms should be extended to the alarm board/panel/BTS and tested as per the instructions of the site Engineer.
- (k)** The temperature sensor should be connected to the body of the battery and the temperature sensor wire from the power plant shall be connected to the battery for correction of voltage as per the battery temperature.
- (l)** All terminations should be firm, the wiring should be secure and cables should be drawn and tied very neatly.
- (m)** The installed equipment should have neat sign-writing on it.
- (n)** The contractor has to offer the SMPS Power Plant for Acceptance Testing by the A/T unit as per the prescribed A/T schedule of BSNL's

T&D circle/ any other designated BSNL Unit. The contractor is fully responsible for the successful completion of A/T and handing over to mtce.

- (o) The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (p) The work shall be completed to the satisfaction of the site Engineer who will issue a completion certificate for the work.

**Work Item No: 23**

**Construction of RCC Plinth for installation of OD BTS/Node B.**

**23.1 SCOPE OF THE WORK:**

To provide RCC plinth for installation of BTS in sites as per BTS/Power Plant/any other equipments as per site requirements. The work involves:

- (i) Constructing civil foundation for installation of Outdoor BTS and Battery Bank as per BSNL specifications.
- (ii) Constructing civil foundation for installation of IBS BTS and Power Plant as per BSNL specifications.
- (iii) Constructing civil foundation for installation of Poles for Antenna mounting as per BSNL specifications.

**23.2 Detailed specifications**

- (a) Platform of RCC and /or Brick work may be required at sites for installing BTs/Node B/Power Plants or any other equipments for stability and preventing water seepage or any other reasons as per site requirements which will be decided by the site In charge.
- (b) All RCC works shall be carried out in accordance with the CPWD 1996 specifications.
- (c) Curing of the RCC works should be done properly.
- (d) Plastering should be neat and properly levelled.
- (e) On completion of the work satisfactorily, site in charge will issue a completion report.
- (f) All RCC works shall be carried out in accordance with the CPWD 1996 specifications.

- (g)** The contractor shall get the layout plans for concrete foundation works approved from the Divisional Engineer concerned before commencing the work.
- (h)** The contractor shall construct a raised RCC Platform for installation of outdoor BTS and Battery Bank.
- (i)** The Plinth of the concrete shall be as per the specifications of the manufacturer of the BTS and it shall be constructed so as the iron plinth of the BTS sits exactly in the foundation.
- (j)** In case the area is prone to water logging the height of the foundation shall be elevated well above ground level as per the instructions of the site Engineer.
- (k)** For installing the IBS and Power plant the contractor shall construct a raised platform as per the dimensions of the BTS and Power Plant and as per the instructions of the site Engineer.
- (l)** In some cases, the contractor shall construct a RCC foundation for fixing the Pole in the terrace or roof for mounting the antennae.
- (m)** The contractor shall ensure proper curing works the RCC foundations to the satisfaction of the site engineer.

**Work Item No: 24**

**Dismantling of RF cable only with out removing the antenna**

**24.1 Scope of the work:**

The RF cable from the site to be removed without damage to the cable.

**24.2 Detail specification:**

- (a)** The RF cable from the site, without antenna dismantling, to be removed without damaging the cable and handing over to store.
- (b)** The connectors and jumpers are also to be removed and hand over.
- (c)** Earthing also to removed and handed over.

**Work Item No: 25**

**Supply of Antenna Mounting Fixtures of Standard design.**

**25.1 SCOPE OF THE WORK:**

The work involves supply of AMFs of standard design according to the site requirements

**25.2 Detailed specifications**

- (a)** Supply of AMFs of standard design along with the necessary accessories.
- (b)** The design to be such way that either single or dual antennas mounting fixture as per the requirement of the site.

**Work Item No: 26**

**For only Modification and/or additions in AMF of standard design as per site requirements.**

**26.1 SCOPE OF THE WORK:**

- (b) Modifying or fabricating the existing AMF to the site requirement making it suitable for fixing them at desired height in the towers/poles of any height.
- (c) Painting has to be done to make it rust proof.
- (d) The weight of the AMF before modification has to be recorded before BSNL authorised officer and the weight increase in the AMF after modification to be recorded and certified by the BSNL officer for claiming the bill accordingly.
- (e) A certificate duly signed by BSNL responsible officer is to be attached for increase of the weight along with the bill.

**Work Item No: 27**

**Supply of AC cable (armored 4-core 25 Sq mm Multi strand flexible) for extension of supply from AC supply point to equipment.**

**27.1 Scope of Work:**

Supply of AC cable (Aluminium armoured 4-core 25 Sq.mm multi stand flexible for extension of TNEB supply to the equipment.

**27.2 Detailed specifications:**

- (a) The cable must be of standard company make in the market and should with stand for the rating of 25 Sq.mm.
- (b) The total supply of the cable in one LOT and it should be handed over to installation stores under receipt.
- (c) The usage of the cable in the site has to be mentioned in the bill along with the Site Engineer certification.

**Work Item No: 28**

**Supply of Multi-strand flexible DC cable of Size 35 Sq.mm**

**28.1 Scope of Work:**

Supply of Multi strand flexible copper DC cable of size 35 Sq.mm for using in sites for extending the DC supply to the equipment.

**28.2 Detailed specifications:**

- (a) The cable must be of standard company make in the market and should with stand for the rating of 35 Sq.mm.
- (b) The total supply of the cable in one LOT and it should be handed over to installation stores under receipt.

- (c) The usage of the cable in the site has to be mentioned in the bill along with the Site Engineer certification.

**Work Item No: 29**

**Installation of GSM Antenna only**

**29.1 Scope of Work:**

Installation of GSM Antenna with the existing RF cable/jumper cable.

**29.2 Detailed specifications:**

- (a) Installation of mono/dual/tri band Antenna for swapping with the existing antenna or new installation or for any reason without RF cable changing. The antenna should be connected with the jumper cable (The connector should be redone, if required) The VSWR reading should be taken as per standard and to the satisfaction of the field engineer.
- (b) Transporting the removed Antennae, without damaging them, to the Store or to the other site as per the field engineer instruction.

**Work Item No: 30**

**Recovery of Wall Mounted Pole**

**30.1 SCOPE OF WORK**

The work involves dismantling of all type of wall mount pole ( irrespective of height of building) used for mounting antennae/wall mounts of antennae, lighting arrestors, aviation warning lamps with cable, RF cables, Connectors, RF cable runways, ladders, cable trays and other associated items from a site.

**30.2 General Guidelines.**

- (a) All the dismantling works should be carried out with utmost care so that no damage is caused to the building.
- (b) A list of items dismantled with corresponding quantities & other details shall be prepared and handed over to BSNL site engineer/stores incharge
- (c) The RF cables shall be removed from RF hangers carefully.
- (d) The RF cables shall be removed from the antennae ports, de-connectorized in the tower end and shall be removed from the surge arrestors in the BTS/Node B end and de-connectorized.

- (e) The RF cable shall be carefully dismantled without giving strain and more bends than allowed as per specifications.
- (f) The RF Cables shall be coiled neatly in cable drums or coils of larger diameter shall be made.
- (g) Also the earthing kits shall be removed from the towers.
- (h) All the dismantled materials shall be shifted carefully with proper packing by the contractor at his own cost to BSNL stores/ Go Down or to the place as instructed by BSNL.
- (i) This work necessarily involves using rope , wearing safety belt and helmet for the workers
- (j) This work covers all available poles at the particular site .

**Work Item No: 31**

**Dismantling of empty Cabinets**

**31.1 Scope of Work:**

Dismantling of empty BTS Cabinets.

**31.2 Detailed specifications:**

- (a) Dismantling of empty BTS Cabinet and transporting them to stores or other site as per the site engineer instruction. The shifting should be done without damaging the cabinet and associated items.

**Work Item No: 32**

**Installation of empty Cabinet**

**32.1 Scope of Work:**

Installation of Cabinet without cards

**32.2 Detailed specifications:**

- (a) Installation of Cabinet without cards The cabinet should be transported from the place as per the work order or as per the direction of the site engineer. The cabinet should be installed at the appropriate place, as per the instruction.

**Work Item No: 33**

**Swapping of Indoor/outdoor BTS/Node B/ RRH ( 2G or 3G only)**

**33.1 Scope of Work:**

Installation of Indoor/outdoor BTS/Node B/ RRH with any type of BTS/Node B/RRH and dismantling any type of Indoor /Outdoor BTS/Node B/RRH.

The work involves installation/de-installation & commissioning of Indoor or outdoor BTS(1/ 2 cabinets)/Node B /RRH and indoor/outdoor jumper cable changing or CPRI cable laying with protection pipe as per the work order given by the AGM-in-charge inclusive of transportation, commissioning ,offering for AT and handing over to site in charges. Dismantling of existing indoor/outdoor BTS/NodeB/RRH(2G or 3G or both) with any accessories and same to be shifted as per site engineer instruction

**33.2 Detailed specifications:**

- (a)** Installation & commissioning of indoor or outdoor BTS/NodeB/RRH(including transpiration) as per site engr instruction.
- (b)** Dismantling of existing indoor/outdoor BTS/NodeB/RRH(2G or 3G) with any accessories and same to be shifted as per site engr instruction.
- (c)** Indoor ,outdoor jumper cable changing,CPRI cable laying,RRU power cable laying,RRU fixing,Alarm extending
- (d)** The work should be completed to the satisfaction of the site Engineer and any modifications if proposed by the site Engineer should be carried out.
- (e)** The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (f)** Integration and radiation of BTS/Node Bs.
- (g)** Installation and extension of alarms to OMCR.
- (h)** The antennae will have to be reoriented till desired power output and coverage is achieved as per the instructions of the site Engineer.
- (i)** The antennae ports shall be properly sealed for preventing from water entry.
- (j)** RET (Remote Electrical Tilt) assembly kit supplied by BSNL will have to be installed in the antennae and cabling to the RET shall be done as per specifications.
- (k)** The work should be completed to the satisfaction of the site Engineer and the VSWR measurements should be shown to the site Engineer which should be within the prescribed limits.

**Work Item No: 34**

**Swapping of combo BTS/Node B/ RRH(both 2G &3G)**

**34.1 Scope of Work:**

Installation of combo BTS/Node B/ RRH(both 2G & 3G) or any technology combination irrespective of type of bts( indoor /outdoor/RRH) and dismantling any type of Indoor /Outdoor BTS/Node B/RRH(2G or 3G or both)

The work involves installation/deinstallation & commissioning of combo indoor/outdoor BTS(1/ 2 cabinets)/Node B /RRH and indoor/outdoor jumper cable changing or CPRI cable laying with protection pipe as per as per the work order given by the AGM-in-charge inclusive of transportation, commissioning ,offering for equipment AT and handing over to site in charges. Dismantling of existing indoor/outdoor BTS/NodeB/RRH(2G or 3G or both) with any accessories and same to be shifted as per directions of site in charge

**34.2 Detailed specifications:**

- (a) Installation & commissioning of combo indoor/Outdoor BTS/NodeB/RRH(including trasporation) as per site engr instruction.
- (b) Dismantling of existing indoor/outdoor BTS/NodeB/RRH(2G or 3G or both) with any accessories and same to be shifted as per site engr instruction.
- (c) Indoor ,outdoor jumper cable changing,CPRI cable laying,RRU power cable laying,RRU fixing, Alarm extending
- (d) The work should be completed to the satisfaction of the site Engineer and any modifications if proposed by the site Engineer should be carried out.
- (e) The list material used in the sites must be recorded and list has to be handed over to Site Engineer.
- (f) Integration and radiation of BTS/Node Bs.
- (g) Installation and extension of alarms to OMCR.
- (h) The antennae will have to be reoriented till desired power output and coverage is achieved as per the instructions of the site Engineer.
- (i) The antennae ports shall be properly sealed for preventing from water entry.
- (j) RET (Remote Electrical Tilt) assembly kit supplied by BSNL will have to be installed in the antennae and cabling to the RET shall be done as per specifications.
- (k) The work should be completed to the satisfaction of the site Engineer and the VSWR measurements should be shown to the site Engineer which should be within the prescribed limits.



**Work Item No: 35**

**Installation of RF cable only and connecting to existing Antenna**

**35.1 Scope of Work:**

Installation of RF cables with connectorisations and connecting BTS/Node B to the existing antenna

**35.2 Detailed specifications:**

The work involves transporting RF cable to the site and installation of RF cable and connected to the existing antennas and BTS as per the work order. The site to be tested for VSWR level, after RF cable replacement, and bring to the required level and to the satisfaction of the site engineer.

**Work Item No: 36**

**Replacement of RRU and changing the CPRI cable**

**36.1 Scope of Work:**

Replacement of RRU and changing the CPRI cable

**36.2 Detailed specifications:**

The work involves transportation of the RRUs and CPRI cables to site, hoisting of RRU and laying cpri cable with all protective mechanism. The old RRUs and CPRI cables are to be dismantled and handed over to stores or any location as per the work order copy or site engineer instruction.

**Work Item No: 37**

**Antenna Orientation ( irrespective of no of antennae in site) and adjusting VSWR**

**37.1 Scope of Work:**

Antenna Orientation ( irrespective of no of antennae in site) and adjusting VSWR

**37.2 Detailed specifications:**

The antennae (irrespective of no. of antennae in a site) are to be re-oriented and repositioned to the desired position as per the requirement of site engineer and RF section. If required the connector to be redone or change jumper cable to get the desired VSWR reading.

**Work Item No: 38**

**Replacement of CPRI with out changing RRU**

**38.1 Scope of Work:**

Replacement of CPRI with out changing RRU

**38.2 Detailed specifications:**

The faulty CPRI cables, are to be replaced with protective mechanism, if required by the site engineer, like laying through PVC pipe etc and tie the CPRI cable to the support and not allowing it to sag.

**Work Item No: 39**

**MW orientation and re-alignment**

**39.1 Scope of Work:**

The Microwave of any band/make is to be re-aligned and re-positioned.

**39.2 Detailed specifications:**

The MW, of any type, is to be re-aligned and re-positioned on the tower/pole of any height to achieve LOS link. All other related work is to be carried out to the requirement of the site engineer.

**Work Item No: 40**

**Only RRH replacement/Shifting**

**40.1 Scope of Work:**

Replacement/Shifting of RRU/s and connecting to the existing CPRI.

**40.2 Detailed specifications:**

The faulty RRU/s is/are to be replaced with the good one and connect the CPRI cable and make them functional as per the site engineer requirement. The RRU/s are to be fixed with all support. The faulty RRU/s is/are to be handed over to the place where site engineer is asking to handover.

In case of shifting RRU can be shifted to another place in that tower as per the requirement of RF team with proper connectrication of all cables connected to RRU at new location in the same tower.

**Work Item No: 41**

**MW ODU replacement**

**41.1 Scope of Work:**

ODU replacement of any type of MWs.

**41.2 Detailed specifications:**

ODU of the MW of any band/any make is to be replaced and make it functional to the satisfaction of the site engineer. The faulty MW ODU is to be handed over to the stores or as per site engineer instruction

**Work Item No: 42**

**Dismantling of antennas only**

**42.1 Scope of Work:**

Dismantling of antennas, any type/make from the site.

**42.2 Detailed specifications:**

The antennas of any type/make are to be dismantled from tower/pole irrespective of height and shifted to site/exchge/stores as per the work order or instructions given by the site engineer without damaging the antennas.

**Work Item No: 43**

**Fixation of aviation light and laying & routing of cable**

**43.1 Scope of Work:**

Fixation of aviation lamp at top of the Tower/building and laying & routing of cable .

**43.2 Detailed specifications:**

Fixing of aviation lamp on Tower/pole/Building of any height and connecting it to source by cable and making it functional. Aviation light and cable supplied by BSNL . Cable should be laid and routed properly to a particular switch board point.

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**Work Item No: 44**

**Works at RRU without replacing RRU/CPRI cable**

**44.1 Scope of Work:**

Any works at RRU without replacing RRU and CPRI cable .

**44.2 Detailed specifications:**

Works like changing of SFP, reconnection of disconnected CPRI cable/power cable, attending jumper cable fault to clear vswr alarm or any related works at RRU without dismantling RRU and CPRI cable.

**Work Item No: 45**

**Laying of IF cable for digital MW**

**45.1 Scope of Work:**

Laying of IF cable for digital MW (15Ghz/18 Ghz)

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**45.2 Detailed specifications:**

Laying of IF cable provided by BSNL from IDU to ODU of DMW without any sag and disturbance to existing cables at site and equipment.

**Work Item No: 46**

**Dismantling of ODU only**

**46.1 Scope of Work:**

Dismantling of ODU only (15Ghz/18 Ghz)

**46.2 Detailed specifications:**

Dismantling of ODU from any DMW, handed over to the place as per the work order or instruction given by the site engineer

**Work Item No: 47**

**Re routing of CPRI /IF with proper tie without any sag**

**47.1 Scope of Work:**

Re routing of CPRI/IF/ connected to ODU of DMW/RRU of BTS

**47.2 Detailed specifications:**

Re routing of IF cable/CPRI/jumper cable with proper Tie and clamps connected to ODU of DMW/RRU/jumper of BTS DMW without replacing the ODU/Dish/IF cable/CPRI/RRU/ANTENNA with proper tightness and without any sag.

**Work Item No: 48**

**Replacement of faulty connecter at ODU for DMW**

**48.1 Scope of Work:**

Replacement of faulty connecter at ODU for DMW

**48.2 Detailed specifications:**

Replacement of faulty connecter at ODU of DMW or any other work at DMW without replacing the ODU/Dish/IF cable with proper sealing ,any looseness in cable to be attended.

**Work Item No: 49**

**Shifting of Antenna in the same tower without fixture**

**49.1 Scope of Work:**

Shifting of Antenna in the same tower without fixture as per the requirement of RF Team.

**49.2 Detailed specifications:**

Shifting of antenna to be done at the same tower irrespective of type of tower as per the requirement of RF team with proper connectrisation of Jumper cable .

After shifting of antenna, required photos to be submitted to EMF team for further processing .

**Work Item No:50**

**Shifting of Antenna in the same tower with fixture**

**50.1 Scope of Work:**

Shifting of Antenna in the same tower with fixture as per the requirement of RF Team.

**50.2 Detailed specifications:**

Shifting of antenna with fixture to be done at the same tower irrespective of type of tower as per the requirement of RF team with proper connectorisation of Jumper cable .

After shifting of antenna, required photos to be submitted to EMF team for further processing .

**Work Item No:51**

**6m pole Installation work**

**51.1 Scope of Work:**

Installation of pole (6m) at the terrace of any building

**51.2 Detailed specifications:**

Transportation of 6m pole from stores to site and Installation of 6m Pole with sufficient strength to hold 2 antenna at terrace of any type of building with proper foundation of concrete base. Pole should be supported with two stray rods and necessary provisions for climbing the pole to do maintenance activities. Pole basement to be done as per the satisfaction BSNL team. Generally base is (1mx.5mx.5m) for 3m pole. The pole should be capable of bearing the load of two antennas and withstand wind speed based on topographical factors. This pole should have provision to extend up to 10m

**Work Item No:52**

**Hoisting of microwave antenna**

**52.1 Scope of work:**

Shifting of microwave antenna and hoisting in the tower/pole irrespective of tower height

**52.2 Detailed specifications:**

The microwave antenna is to be transported from stores of any location to the site or from site to site as per the instructions of site in charge. The microwave antenna is to be hoisted and fixed at a required height suggested by site in charge and make it functional by connecting IF cable and ODU

**Work Item No:53**

**Dehoisting of microwave antenna**

**53.1 Scope of work:**

Dehoisting of microwave antenna and shifting it to stores

**53.2 Detailed specifications:**

The microwave antenna is to be dehoisted from the tower of any height and to be shifted and handed over to stores without any damage as per the instructions of site in charge

**Work Item No:54**

**Hoisting of AMF**

**54.1 Scope of work:**

Shifting of AMF from stores to site or site to site and hoisting on to the tower/pole of any height.

**54.2 Detailed specifications:**

The antenna mounting fixtures are to be transported from stores to site or site to site as per the instructions of site in charge. The AMF is to be hoisted on the tower and fixed at height suggested by site in charge.

**Work Item No:55**  
**Dehoisting of AMF**

**55.1 Scope of work:**

Dehoisting of AMF from tower of any height and shifting the AMF to stores

**55.2 Detailed specifications:**

The antenna mounting fixtures are to be dehoisted from tower/pole of any height and shifted and handedover to stores as per the instructions of site in charge.

**GENERAL GUIDELINES:**

The contractor shall have to de-install the BTS indicated by BSNL as per the guidelines.

The power cables, PCM cable, Alarm cable, Jumper cables and other accessories shall be removed from the BTS with utmost care. The removed materials shall be packed carefully and listed out.

**DETAILED Guide lines in General**

The installation may consist of 1 or 2 BTS /Node B cabinets of any type.

The BTS/Node B equipment and RF cable, Antennae and allied accessories and installation materials (and the backhaul transmission 15/18 GHz) shall be supplied by BSNL from the warehouse. The contractor shall transport the above to the point of installation at his own cost with utmost care without causing any damage. The bidder shall be responsible for safety during transportation, handling of equipment and erection of pole.

**In case of Shifting of material from stores to site or site to stores, It is explicitly stated that stores means DSD Vyasarnagar/DTTC Tambaram/RTTC MMNGR or any Chennai Telephones storage location/godown .**

The handling should be strictly as per the manufacture's/BSNL's directions, wherever available, with utmost precautions so that no damage is caused. If anything gets damaged/lost the contractor will be held responsible for the same.

The opening of packing cases and unpacking should be carried out with proper tools. If any balance equipment is to be stored or transported back, the same shall be done in the original packing case only after proper packing and sealing.

The installation at the sites can be carried out only after taking the layout approval from the Site Engineer. A layout is to be prepared by the installer and

submitted well in advance to Site Engineer concerned for approval. The layouts will consist of the following:

- (a)** Marking of the existing Equipments in the layout of the proposed room.
- (b)** Position of the new BTS & associated installations to be installed in the eqpt. room in the proposed layout.
- (c)** External layout showing the tower external gantry in the overall compound.

The equipment cards and other sensitive electronic equipment which are part of the equipment should be handled only after wearing antistatic wrist bands which are properly earthed.

It shall be ensured by the contractor that the entire activities are carried out in a dust free environment. No dust shall be allowed into the equipment at any cost. The equipment room should be cleaned after each day's activities and the balance equipment at the site should be neatly stacked.

The DC power to the BTS shall be extended from the DCDB (and AC cables) and proper colour coding as per the general instructions given elsewhere in the tender document shall be followed. The power cables shall be laced neatly at regular intervals (not more than 10cms).

The DC (and AC power) cables should be properly lugged using tinned copper lugs of suitable dimension. The lugged cable ends should be appropriately wrapped with properly colour coded insulation tapes exposing only the required portion without insulation.

Earthing to the BTS shall be extended from the Common Earth bar using 35 sq mm copper cable with proper luggings.

Wherever entry holes are to be made the walls of the room or of the prefab shelter, the same shall need to be made taking due precautions to avoid spreading of debris and dust. Wave guide entry plates/wall glands will have to be fixed to ensure the same. Proper wooden box (typical size of 32cm X 32cm) should be arranged by the bidder and the walls should be neatly plastered to block any gaps and should be restored to original finish. Both sides of the wall should be properly sealed in order to stop leakage of air-conditioning, etc.

The Bidder shall ensure extension of Infrastructure Alarms viz. power plant, battery, air conditioner, DG sets, fire alarm, temp alarm etc. from all such BTS sites, wherever these items have been ordered to them, to a central location ( BSC). Required wiring has to be done by them.

Necessary support from the wall or the roof to be provided to the feeder cables and terminations in such a way that they are properly supported and no excessive strain is applied on the connectors. The bending radius of the feeder cables and other cables should within the limitations is specified by the respective manufacturer. It should be ensured that no water leakage is caused either thru the feeder cable holes or other places due to the installation at the site.

### **Guide lines for INSTALLATION OF INDOOR BTS**

#### **EQUIPMENT BTS Installation issues:**

Ensuring completion of all electrical works necessary for BTS installation, which are covered under electrical works item of the contract viz., Installation of DCDB, Laying of requisite power cable and earth cable from the Power plant to the DCDB and termination (PP fuses, cable trays, lacing of power cables, DC power cable of 35mm 2 of different colors, earth cable appropriate lugs and crimping), Supply of Ground bar and termination of cable, Laying of power/earth cables from the DCDB to the BTS rack etc.,

BTS layout preparation and approval.

BTS installation (handling of BTS, rawl bolts, drilling of holes, erection of rack)  
Installation of krone tag block for termination of alarms and PCM cable  
Connecting of alarms from all alarm points via the krone tag block to the BTS.

Extension of Earths from IGB to all equipments.

Installation should be carried out using C-channel, cable rack, etc as per the site requirement and strictly complying with the installation procedures.

The BTS equipment shall be firmly fixed to the ground with support of rawl bolts and installed with all accessories and DC distribution box (MDS or BSNL. Approved with Circuit breakers of same make & rating appropriate to equipment).

The DC power supply is to be extended from the existing or new power system. Similarly the earth also needs to be extended from the existing or new earth to the equipment.

Wherever installation of backhaul 15 GHz/ 18 GHz microwave media equipment is ordered to the contractor, the installation of this media equipment should also be done as per installation procedure and the connectivity to be extended to the BTS via DDF.

All the Alarms should be extended to the krone Tag block and properly terminated.

Specified surge arrestors will have to be installed between the feeder cable and the equipment as per the specifications.



## **RF/JUMPER CABLE ROUTING & ANTENNAE HOISTING**

It shall be ensured that the personnel deployed for undertaking the works on the tower are properly trained and experienced in such works. They should use helmet and safety belt and other standard precautions.

The contractor shall access the exact requirement of the length of ½" Jumper cable and 7/8" RF cable and cut the more accurate length of the cables to avoid wastage of RF cable.

Jumper cable should be laid from the surge arrestor to the BTS equipment and the same should be properly laced. The surge arrestor assembly shall be properly supported.

Jumper cable shall be laid from Antennae end to 7/8" RF cable in the RTT/Pole side also with proper connectorisation.

RF cable Hangers shall be mounted to the RTT/Pole/Gantry at regular intervals as specified by BSNL for hoisting the RF cable.

RF cable entry into the equipment room shall be made by the contractor by breaking the wall or cutting the prefab shelter and fixing the Hatch plate. The RF cable shall be routed through the hatch plates and boots shall be put in position so as there is no leakage of A/C. The wall if broken shall be plastered after fixing the Hatch plates.

The Jumper cables (typically ½") and feeder cables (typically 7/8") will require to be terminated using specified male/female connectors at both ends. This needs to be carefully and skillfully carried out using trained and experienced technicians. It should be ensured that the VSWR for each cable is less than 1.3. If it is subsequently found that the VSWR is not meeting the standard, the termination will have to be removed and carried out again till satisfactory results are obtained, without any extra cost. The connectorised ends shall be heat shrunk with thermoshrink-sleeves. Necessary weather proofing needs to be carried out after the termination.

It shall be ensured that the cables are sufficiently used so as not to cause any strain at the terminations or antennae connectors. Before hoisting of any wave

guide, it shall be ensured that necessary marking is made at both ends of the feeder cables. For example, they should be marked as 1TX, 1RX, 2TX,

2RX, & 3TX, 3RX at both ends in order to signify Trans and receive cables of sector 1, sector 2 and sector 3. These markings will have to be carried out using long lasting pre printed stickers suitable for external use. The same indication sticker should be fixed at both the ends of the indoor jumper cable, the antenna jumper cable and the feeder cable. Hence 6 sets of stickers are required for each cable for the six feeder cable (one set consisting of 1TX, 1RX, 2TX, 2RX, & 3TX, 3RX).

In some special cases as per the instructions of BSNL the contractor will have to hoist additional lengths of RF for additional sector.

The RF cable shall be handled very smoothly to avoid any bend and the curves and bends shall be within the limits specified by the manufacturer/BSNL.

The RF cable earthing shall be done at top, as well as near the horizontal bend at the bottom at the gantry level. The earthing shall be done as per the manufacturers' /BSNL specifications and should ensure that proper contact is ensured with proper removal of sheathing of the feeder cable by carefully removing the insulation surrounding the same. The other end should be connected to the nearest tower member using lugs. The area on the tower where the same is fitted should be carefully cleaned off any dirt so that good contact is ensured. The exposed feeder cable portion should be thoroughly covered with insulation tape.

The Antennae shall be hoisted and fixed to the Antennae Mounting Fixture as per the instructions of the manufacturer.

It shall be ensured that the antennae fixture is fitted at the tower properly and tightly. The verticality of the antennae mounting pipe should be ensured to be exactly correct, using a plumb or any other suitable instrument.

The tilts of the antennae need to be carefully adjusted as per the values of tilt furnished by BSNL site engineers.

Antennae fixtures should be mounted on the face or corners of the tower chosen in such a way that the designed orientation of the respective antennae

is achieved with minimum horizontal tilt. The installation team should be provided with compass with a mirror so as to enable to check azimuth orientation for each antenna.

In some cases additional antenna will have to be installed for making additional sector. The contractor will have to fabricate additional antenna fixture as per specifications and fix it in the GBT/RTT and hoist the antenna and RF cable as per the laying procedure mentioned earlier

The plinth of the specified design will have to be used for the BTS or other equipments in case the same is warranted as per the equipment specification. It shall be ensured that the entire equipment installation activities are to be carried out strictly as per the manufacturer's specification and as per the guidelines prescribed by the Site Engineer in charge. The installation may consist of 1 or 2 cabinet BTS.

### **Guide lines for INSTALLATION OF OUTDOOR BTS EQUIPMENT**

The specification as mentioned in the installation of Indoor BTS above, wherever applicable, will be applicable here as well. Apart from the above the following shall be ensured:

Outdoor BTS need to be placed on the concrete or steel plinth available at the site along with the associated battery sets in the battery banks as per the given layout.

AC Input cable from the ACDB shall be laid in Protective PVC pipe to the BTS point by the contractor at his cost.

All OD BTSs must be provided by a metallic ladder having sufficient number of steps for easy access to the BTS.

Provision of the ladder should be done at no extra cost and must be within the installation cost.

Regarding the hoisting of Antennae and routing of RF/Jumper cable, the specifications mentioned above under installation of RF/JUMPER CABLE

ROUTING & ANTENNAE HOISTING shall be applicable for Outdoor BTS also except for the Jumper / RF cable entry into the BTS which shall be from the bottom or sideways depending upon the type of the outdoor BTS.

### **ACCEPTANCE OF WORK**

The Indoor BTS/OD BTS installed will have to be offered for A/T along with the RF cable, Antennae and all associated installations for all the functional tests prescribed by T&D circle Jabalpur, by the contractor.

Prior to offering for BSNL A/T, the installer should do a pre A/T and satisfy that the BSNL A/T tests are cleared by the installed set. In case of failure to pass any test,

the same should be rectified, retested and offered for A/T only on successful clearing of pre A/T.

BSNL will not provide any tools/instruments for pre-A/T & A/T and the same will have to be arranged by the contractor.

### **In-building wiring with RF Cable, Splitter, Antennae and other components**

#### **Scope of Work**

1. Installation & commissioning of IBS BTS as per the manufacturer's and BSNL's instructions.
2. 7/8" /1/2" RF cable laying and installation of Dual-band antennae along with antenna mounting fixture for street coverage.
3. 7/8" /1/2" RF cable laying and installation of Dual-band antennae/Omni and panel antennae along with antenna mounting fixture for street /In building coverage.
4. 1/2" RF cable laying and installation of Omni and Panel antennae for providing in-building coverage.
5. Installation and commissioning of SMPS power plant and battery sets.
6. Providing earthing for the equipment as per BSNL's instructions.
7. Integration and radiation of BTS s.

The BTS equipment and RF cable, Antennae and allied accessories and installation materials shall be supplied by BSNL from the warehouse. The contractor shall transport the above to the point of installation at his own cost with utmost care without causing any damage.

The handling should be strictly as per the manufacture's/BSNL's directions, with utmost precautions so that no damage is caused. If anything gets damaged or lost, the contractor will be held responsible for the same.

The opening of packing cases and unpacking should be carried out with proper tools.

If any balance equipment is to be stored or transported back, the same shall be done in the original packing case only after proper packing and sealing.

The installation at the sites can be carried out only after taking the layout approval from the DE in charge. A layout is to be prepared by the Contractor and submitted well in advance to DE concerned for approval.

The layouts will consist of the following:

- (a) Marking of the existing Equipments in the layout of the proposed room.

- (b)** Position of the new BTS & associated installations to be installed in the equipment room in the proposed layout.
- (c)** External/Internal layout showing the antennae (Dual-band/Omni/Panel) location in the street or inside the building

The equipment cards and other sensitive electronic equipment which are part of the equipment should be handled only after wearing antistatic wrist bands which are properly earthed.

It shall be ensured by the Contractor that the entire activities are carried out in a dust free environment. No dust shall be allowed into the equipment at any cost. The equipment room should be cleaned after each day's activities and the balance equipment at the site should be neatly stacked.

The contractor shall construct a platform for keeping the BTS and Power plant wherever necessary as per the instructions of BSNL.

The IBS BTS has to be powered on either by installing a Power Plant with Batteries and extending the DC supply to the BTS or directly extending AC supply by providing AC power points as per the instructions of the manufacturer/BSNL. AC power point shall be extended near to BTS, from the Distribution point indicated by the building owner/BSNL and the contractor shall provide 2 nos of 15/5A power sockets.

Alarms shall be extended to OMCR as per the instructions of BSNL. One earthing pit has to be done and the earth shall be extended to the BTS/Power Plant as per the standard earthing procedure described under earthing.

**RF cable routing and allied works:**

Necessary permission for carrying out the installation works in the concerned building shall be got by the contractor himself and he shall not cause any disturbance or damage to the building or the premises. If any damage is caused, the contractor shall set right the issues.

The contractor shall fabricate the required mounting GI pole of specified length and Antennae Mounting fixture (site specific) for mounting the macro antennae for street coverage as per the instructions of BSNL.

The Antennae hoisting, RF cable routing, supporting, connectorising, weather proofing etc. shall be done by the contractor, as described under BTS installation.

In case of installation of Omni/panel antennae proper planning shall be done in advance, so as minimum length of Jumper cable/splitters are used.

The cable shall be laid carefully without much bends and all connectorization with splitters, antennae shall be perfect so that the losses are kept to the minimum. The splitter at the BTS end shall be given proper support.

After the site is radiated, the contractor shall check the coverage of the site with BSNL and if the BSNL desires additional antennae to be installed or the installed Antennae to be shifted to another location, the same shall be done by the contractor at no extra cost.

All the antennae shall be sign written with BSNL logo by the contractor.

After commissioning the site, the actual layout indicating the antennae positions with references shall be prepared **to scale** in AutoCAD and shall be submitted in soft (Auto CAD) and hard copies in triplicate.

The contractor shall submit the material utilization list to BSNL and the balance materials shall be accounted and handed over to BSNL stores.

### **ACCEPTANCE OF WORK**

The IBS BTS installed will have to be offered for A/T along with the RF cable, Antennae and all associated installations for all the functional tests prescribed by A/T team of BSNL, CHTD, by the contractor.

Prior to offering for BSNL A/T, the installer should do a pre A/T and satisfy that the BSNL A/T tests are cleared by the installed set. In case of failure to pass any test, the same should be rectified, retested and offered for A/T only on successful clearing of pre A/T.

BSNL will not provide any tools/instruments for pre-A/T & A/T and the same will have to be arranged by the contractor.

### **EXTERNAL WORKS**

It shall be ensured that the personnel deployed for undertaking the works on the tower are properly trained and experienced in such works. They should use helmet and safety belt and other standard precautions.

Antennae shall be oriented for getting the proper LOS so that maximum signal is received.

The Normal and standby coaxial cables shall be laid properly and tied with cable ties. The Antenna and the ODU shall be earthed to the nearest tower member.

### **ACCEPTANCE TESTING OF WORK**

The 15 Ghz/18 GHz MW system installed shall be offered for through A/T by the contractor and cleared. Pending points if any shall be attended immediately and reoffered for A/T. The contractor shall arrange testing instruments and meters for the testing.

### **DE-HOISTING OF RF CABLE**

**SCOPE OF THE WORK:**

The work involves de-hoisting of RF cables from GBT/RTT/Pole and shifting of the same to BSNL stores/site indicated as per the instruction of BSNL.

**GENERAL GUIDELINES:**

It shall be ensured that the personnel deployed for undertaking the works on the tower are properly trained and experienced in such works. They should use helmet and safety belt and other standard precautions.

The contractor shall have to de-hoist complete set of RF cables hoisted in the GBT/RTT/Pole carefully from the sites as instructed by BSNL. The RF cables shall be removed from the RF hangers carefully.

The RF cables shall be removed from the Antennae port, de-connectorized in the tower end and shall be removed from the surge arrestors in the BTS end and de-connectorized.

The RF cables shall be carefully de hoisted without giving strain and more bends than allowed as per specifications.

The RF cables shall be coiled neatly in cable drums or coils of larger diameter shall be made. Also the earthing kits shall be removed from the towers.

The RF cables and the associated materials shall be shifted carefully by the contractor at his own cost to BSNL stores or to the place as instructed by BSNL.

**DEINSTALLATION OF BATTERY SETS:**

**SCOPE OF THE WORK:**

The work involves removing the power cable from Power Plant, Removing the Battery links and de-installing the individual cells.

**GUIDELINES:**

The DC power cable shall be removed from the Power Plant.

The Battery links shall be removed from the cells.

The individual battery cells shall be carefully removed from the battery banks.

Care should be taken that acid does not spill out.

The dismantled cells, battery stands, battery links and DC cable and any associated materials shall be shifted carefully by the contractor at his own cost to BSNL stores or to the place as instructed by BSNL.

**DECOMMISSIONING & DISMANTLING OF 15 /18 Ghz MW SYSTEM**

**SCOPE:**

The work involves:

Decommissioning of the MW system and removing the IDU.

De Hoisting of 15GHz/18GHz M/W Antenna with ODU from the tower as instructed by BSNL.

De Hoisting of coaxial cables with connectorization.

De-hoisting of Antennae fixture as instructed by BSNL.

**General Guidelines:**

It shall be ensured that the personnel deployed for undertaking the works on the tower are properly trained and experienced in such works. They should use helmet and safety belt and other standard precautions.

The Antenna and the ODU shall be de-hoisted and removed from the tower carefully along with the Antenna clamps. The Antenna fixture shall be removed by the contractor as per the instructions of the site Engineer.

The Coaxial cables shall be removed and coiled properly. The IDU with the DDF shall be decommissioned and dismantled carefully.

The decommissioned MW Antennae, coaxial cable, ODU and IDU with accessories shall be neatly packed and handed over to BSNL at the site specified, without damage and with full material list.

**General Guidelines for Effective Implementation and Coordination**

- (1)** It is suggested that before taking up the work at a site the contractor carries out a joint visit of the site with the concerned Engineer-in-charge to understand the site conditions and requirements.
- (2)** The contractor should submit the requirement of equipment and materials site-wise with a proper item-wise list to the purchaser immediately after the Work Order is issued.
- (3)** The contractor has to maintain all material utilization details site-wise.
- (4)** The BTSs should be radiated in coordination and with permission of the Engineer-in-charge and as per the RF planning details furnished by the purchaser.
- (5)** The contractor should send progress reports of the works being carried out by him in any desired pro-forma and with periodicity as per the requirements of the purchaser.
- (6)** After the commissioning and completion of AT, the contractor shall make sincere efforts to make over the equipment to the purchaser as per the tender conditions at the earliest along with the making over documents comprising commissioning reports, approved layout copies, AT reports, equipment details, making over memo etc.

**\*\*\* End of Section V \*\*\***



**SECTION VI**  
**SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING**

**Note:-**The instructions given below are e-tender portal (<https://www.tenderwizard.com/BSNL>) and for e-tenders invited by GSM INSTALLATION, BSNL, CHTD, CHENNAI only.

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as enclosed in Sec II of the Tender Documents.

**Submission of Bids through online process is mandatory for this Tender.**

For conducting electronic tendering, BSNL, CHTD, CHENNAI is using the portal (<https://www.tenderwizard.com/BSNL>), a Government of India.

**Any clarification regarding accessing to the e-tender portal or uploading of documents etc., the bidder(s) may contact Sri. Dinesh, manager, ITI over phone number 9894191904 E-mail ID - [bsnlthelpdesk@gmail.com](mailto:bsnlthelpdesk@gmail.com), [thelpdesk679@gmail.com](mailto:thelpdesk679@gmail.com), [thelpdesk438@gmail.com](mailto:thelpdesk438@gmail.com)**

**(The following procedure are only indicative and the time to time modification by the above portal are applicable and same are to be followed)**

**1.Tender Bidding Methodology: Sealed**

Bid System –‘**Single Stage –**

Using Two Envelopes’, In case of two envelope system financial and techno-commercial bids shall be submitted by the bidder at the same time.

Followed by ‘e-Reverse Auction’ (if required by Business Unit / Planning cell) after opening of the Financial bids.

**However, the tender inviting authority has the right to go for manual negotiation with L1 bidder for reduction in rate without going for e-reverse auction.**

**2.Broad outline of activities from Bidders prospective:**

1. Procure a Digital Signing Certificate (DSC)
2. Register on Electronic Tendering system(ETS) of <https://www.tenderwizard.com/BSNL>. & Create Users and assign roles & View Notice Inviting Tender (NIT) & Download Official Copy of Tender Documents from ETS
3. Bid submission on ETS . Prepare & arrange all document/paper for submission of bid online and offline.
4. Attend public online tender opening event(TOE) on ETS –opening of technical part
5. Attend post TOE clarification on ETS(optional)
6. Attend public online tender opening event(TOE) on ETS –opening of financial part (only for technical responsive bidders)
7. Submission (dropped in tender box) of offline documents in sealed envelope to **DGM(INST-CM) 2<sup>nd</sup> floor R.K.Nagar Telephone Exchange,Old No.164,New no.238,R.K.Mutt road,Chennai-28** on or before due date & time 11.30 hrs 24.05.2021.

8. Utmost care may be taken to name the files/documents to be uploaded on <https://www.tenderwizard.com/BSNL>. These should be no special character or space in the name of file. Only underscores are allowed. The illustrative examples are given below.:

File name	Allowed or not allowed in <a href="https://www.tenderwizard.com/BSNL">https://www.tenderwizard.com/BSNL</a>	Reason for allowed / not allowed
QA Certificate	not allowed	Space is between words / characters not allowed
QACertificate(1)	not allowed	Special characters not allowed
QA_Certificate	allowed	Under score allowed Between words / characters
QACertificate	allowed	Upper & lower cases allowed

10. It is advised that all the documents to be submitted (See clause 4 of section II) are kept scanned or converted to PDF format in a separate folder on your computer before starting online submission. BOQ Part B (Excel Format) may be downloaded and rates may be filled appropriately. This file may also be saved in a secret folder on your computer. The names & total size of documents (Preferably below 50 MB) may be checked.

11. Participate in e-Reverse Auction on <https://www.tenderwizard.com/BSNL>.

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

### 3. Digital Certificates

For integrity of data and its authenticity/ non-repudiation of electronic records, and be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class 3 or above, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

### 4. Method for submission of bid documents

In this tender the bidder has to participate in e-tender online. Some documents are to be submitted physically offline. For details please see clause-3 of Section 2.

#### 4.1. Offline submission:

**The bidder shall submit the documents ( Refer :Section-II Clause 10.2 & 17&check list at the end ) offline to: DGM INST-CM,consumer mobility,2<sup>nd</sup> floor, R.K.Nagar Telephone Exchange,old no.164,new no.238,R.K.Mutt road Chennai-28 on or before the date & time of submission of bids specified in NIT, in a Sealed Envelope. The envelope shall bear (the project name), the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).**

**The Bidder has to upload the Scanned copy of all the documents( submitted offline) during Online Bid-Submission also.**

Note:

- (i) If some document is not applicable for the bidder then he has to upload scanned copy of paper mentioning 'The document <name> called vide clause \_\_\_\_\_ is not applicable on us.'
- (ii) If document asked for contains more than one page then all those pages may be uploaded in one PDF file.

**Registration:**

To use the Electronic Tender® portal <https://www.tenderwizard.com/BSNL> vendors need to register on the portal using `supplier organization` link under registration(if not registered earlier). Registration of each organization is to be done by one of its main persons referred to as super user coordinating for the e-tendering activities.

Amendments, if any, to the tender document will be notified in the above website as and when such amendments are notified. It is the responsibility of the bidders who have downloaded the tender document from the website to keep themselves abreast of such amendments before submitting the tender document. Intending bidders are requested to register themselves with M/s ITI through <https://www.tenderwizard.com/BSNL> for obtaining User ID, Digital Signature etc., by paying Vendor registration fee and processing fee for participating in the above mentioned tender.

Pay Annual Registration Fee as applicable.

A prebid meeting shall be held on 11.00 hrs of 12.05.2021 at DGM INST-CM ,2<sup>nd</sup> floor,RK nagar,CH-28 to clarify issues raised by bidders.

Also Tender bidders may seek clarifications in regards to the tender document and methodology for submitting the documents in writing or by emails given below

Note: Please contact for any queries

Helpdesk	
BSNL Contact-1	
BSNL's Contact Person	Mr. B N V L V KISHORE, Asstt. General Manager(NWP CM)
Telephone	9444989978 [between 11:00 hrs to 17:00 hrs on working days]
E-mail ID	<a href="mailto:cdmamsccennai@gmail.com">cdmamsccennai@gmail.com</a>
BSNL Contact-2	
BSNL's Contact	Mr. Kishore Kumar Reddi Sub. Divisional Engr.GSM
Telephone	9444964140 [between 11:00 hrs to 17:00 hrs on working days]
E-mail ID	<a href="mailto:kishore.jto@gmail.com">kishore.jto@gmail.com</a>

**6. Price schedule / BOQ**

Utmost care may kindly be taken to upload price schedule / BOQ. Any change in the format of price schedule / BOQ file shall render it unfit for bidding. Following steps may be followed:

1. Down load price schedule / BOQ part B in XLS format.
2. Fill rates in down loaded price schedule / BOQ as specified in XLS format only in yellow background cells. Don't fill in white background cells.
3. BOQ file part B is password protected XLS file. Don't unprotect the file. Price has to be filled in the same file and the same has to be uploaded.
4. Save filled copy of downloaded price schedule / BOQ file in your computer and remember its name & location for uploading correct file (duly filled in) when required.

**7. Special Note on Security of Bids**

Security related functionality has been rigorously implemented in ETS in a multi-dimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software. Specifically for Bid Submission, some security related aspects are outlined below:

As part of the Electronic Encrypter™ functionality, the contents of both the 'Electronic Forms' and the 'Main-Bid' are securely encrypted using a Pass-Phrase created by the Bidder himself. Unlike a

'password', a Pass-Phrase can be a multi-word sentence with spaces between words (e.g. I love this World). A Pass-Phrase is easier to remember, and more difficult to break. It is recommended that a separate Pass-Phrase be created for each Bid-Part. This method of bid encryption does not have the security and data-integrity related vulnerabilities which are inherent in e-tendering systems which use Public-Key of the specified officer of a Buyer organization for bid-encryption. Bid-encryption in ETS is such that the Bids cannot be decrypted before the Public Online Tender Opening Event (TOE), even if there is connivance between the concerned tender-opening officers of the Buyer organization and the personnel of e-tendering service provider. It is important for the bidder to keep a safe record of his pass phrases for decrypting his bid parts. In case the bidder is unable to provide the correct pass-phrase during TOE, it will not be possible to open his bid and as his bid will be REJECTED (i.e. archived Un-opened). Before rejection in such a situation, the bidder will be given opportunity to himself enter the passphrase from his own office or from BSNL's office if his representative is physically present there. Typically, 'Pass-Phrase' of the Bid-Part to be opened during a particular Public Online Tender Opening Event (TOE) is furnished online by each bidder during the TOE itself, when demanded by the concerned Tender Opening Officer. There is an additional protection with SSL Encryption during transit from the client-end computer of a Supplier organization to the e-tendering server/ portal.

#### **8. Public Online Tender Opening Event (TOE)**

ETS offers a unique facility for 'Public Online Tender Opening Event (TOE)'. Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. For this purpose, representatives of bidders (i.e. Supplier organization) duly authorized are requested to carry a Laptop and Wireless Connectivity to Internet.

Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)' has been implemented on ETS.

As soon as a Bid is decrypted with the corresponding 'Pass-Phrase' as submitted online by the bidder himself (during the TOE itself), salient points of the Bids are simultaneously made available for downloading by all participating bidders. The tedium of taking notes during a manual 'Tender Opening Event' is therefore replaced with this superior and convenient form of 'Public Online Tender Opening Event (TOE)'.

ETS has a unique facility of 'Online Comparison Chart' which is dynamically updated as each online bid is opened. The format of the chart is based on inputs provided by the Buyer for each Tender. The information in the Comparison Chart is based on the data submitted by the Bidders. A detailed Technical and/ or Financial Comparison Chart enhances Transparency. Detailed instructions are given on relevant screens.

ETS has a unique facility of a detailed report titled 'Minutes of Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/ Downloading'.

There are many more facilities and features on ETS. For a particular tender, the screens viewed by a Supplier will depend upon the options selected by the concerned Buyer.

**IMPORTANT NOTE:** In case of internet related problem at a bidder's end, especially during 'critical events' such as – a short period before bid-submission deadline, during online public tender opening event, during e-auction, it is the bidder's responsibility to have backup internet connections. In case there is a problem at the e-procurement/ e-auction service-provider's end (in the server, leased line, etc) due to which all the bidders face a problem during critical events, and this is brought to the notice of BSNL by the bidders in time, then BSNL will promptly re-schedule the affected event(s).

#### **9. E-Reverse Auction**

E-Reverse Auction would be conducted on Unit/ total package/ net cost to BSNL value for bid evaluation, subsequently after the opening of the Financial-Part. The following would be parameters for e-Reverse Auction:

S. No.	Parameter	Value
1	Date and Time of Reverse-Auction Bidding Event	Will be intimated to Technically Responsive bidders after the opening of Financial-part.
2	Duration of Reverse-Auction Bidding Event .....	( Typically 1 to 2 ) Hours

3	Automatic extension of the 'Reverse-Auction Closing Time', if last bid received is within a 'Pre-defined Time-Duration' before the 'Reverse-Auction Closing	Yes
3.1	Pre-defined Time-Duration	..... xx Minutes(Typically 05 minutes)
3.2	Time-Duration of Automatic extension	..... yy Minutes (Typically 10 minutes)
3.3	Maximum number of Auto-Extensions	..... nn Automatic Extensions. (Typically 04 to 06 extensions)
4	Criteria of Bid-Acceptance	'Beat on Starting last quoted Price', as well as, 'Beat on Rank-1 Bid Value'
5	Entity – Start-Price	Unit/ total package/ net cost to BSNL (To be decided by planning cell)
6	Minimum Bid-Decrement	( Value in Currency) To be decided by planning cell
7	Display of 'Pseudo Identity' of Bidders during bidding period	To all Bidders, as well as, BSNL's officers.
8	Display of Bidder's own current Rank	Yes

**Note :** Parameters at S. No.1, 5 & 6 shall be confirmed after opening & evaluation of Financial bid parts.

#### 10. Other Instructions

For further instructions, the vendor should visit the home -page of the portal ([www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL)), and go to the Bidders Manual Kit.

1. Obtain individual Digital Signing Certificate (DSC) well in advance of your first tender submission deadline on [www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL).
2. Register your organization on [www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL) well in advance of your first tender submission deadline on [www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL).
3. Get your organization's concerned executives trained on [www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL) using online training module well in advance of your tender submission deadline on [www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL).
4. Submit your bids well in advance of tender submission deadline on [www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL) (BSNL should not be responsible any problem arising out of internet connectivity issues).
8. Minimum System Requirements information of Bidders are available on the e-tendering Portal ([www.tenderwizard.com/BSNL](http://www.tenderwizard.com/BSNL)).

#### 12. Work Items : As listed in Section V Page 62-94

s.no	Work item	Work description	Unit	Qty
1	Work Item-1	Installation and commissioning of indoor or outdoor BTS/ Node-B/BTSs with RRU/Node Bs with RRUs (with power modules) on a site with single or two/Multi poles /RTT/GBT/ wall mounts including antennae and RF/CPRI feeder cable with AT	Per SITE	100
2	Work Item-2	Installation of combo BTS either any combination technology of 2G/3G/LTE	Per site	100
3	Work Item-3	In-building wiring with RF/CPRI cable and fixing of associated splitters, antennae, and other components with AT	Per Antenna	100

4	Work Item-4	Installation and commissioning of 15 GHz / 18 GHz M/W System with AT	Per Hop	62
5	Work Item-5	Hoisting of main/ additional RF/CPRI cable along with connectorization including installation of Antenna at GBT/ RTT/ Pole/ Wall Mount not involving installation of BTSs/ Node-Bs	Per sector	28
6	Work Item-6	Installation of wall mounting fixture	Per Wall Mount	5
7	Work Item-7	Dismantling of Power Plants/UPS	Per SET	30
8	Work Item-8	Dismantling of Battery Set of capacity up to 600 AH/UPS Battery	Per SET	60
9	Work Item-9	Dismantling of Indoor BTSs/ Node-B/RRH including RF/CPRI cable/antennae	Per SITE	80
10	Work Item-10	Dismantling of Outdoor BTSs/ Node-Bs including RF/CPRI cable/antennae	Per SITE	50
11	Work Item-11	Dismantling of RF Cables including AMF/Antennae	per sector	10
12	Work Item-12	Dismantling of 15 GHz/18 GHz M/W terminals	Per HOP	65
13	Work Item-13	Dismantling of Diesel Generators	Per SET	39
14	Work Item-14	Dismantling of Prefabricated Shelter and its accessories like Air conditioners, Timer, Stabiliser, Intruder , ACDB, Transmission Equipments, Internal Runways , Light fittings and internal wirings and other items.	Per Shelter	20
15	Work Item-15	Dismantling of Poles/ wall mount with antenna, RF/CPRI cables and earth cables/Strips	Per SITE	20
16	Work Item-16	Dismantling of EB cables, Distribution boxes and accessories.	Per SITE	10
17	Work Item-17	Dismantling and transportation of O/D Battery cabinet of different capacity excluding Bty Sets	Per Cabinet	10
18	Work Item-18	Installation of Indoor/Outdoor Gauntry	Per 3M	20
19	Work Item-19	Removal of combo BTS	Per site	120
20	Work Item-20	3m pole supply,extension and installation	Per pole	30
21	Work Item-21	Installation & Commissioning of Battery sets of capacity upto 600AH with enclosure if any.	Per SET	20

22	Work Item-22	Installation & Commissioning of SMPS Modular Trype of Power plant of capacity less than or equal to 300A.	Per SET	30
23	Work Item-23	Construction of RCC Plinth for installation of OD BTS/Node B	Per Cubic Meter	10
24	Work Item-24	Dismantling of RF cable only	Per sector	10
25	Work Item-25	Supply of Antenna Mounting Fixtures of Standard design	Per AMF	15
26	Work Item-26	For only Modification and/or additions in AMF of standard design as per site requirements	Per additional KG	15
27	Work Item-27	Supply of AC cable (armoured 4-core 25 Sq MM Multi strand flexible) for extension of supply from AC supply point to equipment.	Per Meter	100
28	Work Item-28	Supply of Multi-strand flexible DC cable of Size 35 Sq.MM	Per Meter	100
29	Work Item-29	Installation of GSM Antennas only. Installation of Antennas to the tower/pole etc and do the orientation as per RF requirement.	Per Antenna	20
30	Work Item-30	Recovery of wall mounted pole.	Per Site	20
31	Work Item-31	Dismantling of empty BTS Cabinet without . The cabinet without any cards and only skeleton to be dismantled and transportation to the required place.	Per Cabinet	10
32	Work Item-32	Installation of empty BTS Cabinet.	Per Cabinet	10
33	Work Item-33	Swapping of Indoor/Outdoor BTS/Node B/ RRH ( 2G or 3G only)	Per Swap	30
34	Work Item-34	Swapping of Combo BTS/Node B/ RRH (2G/3G/LTE)	Per Swap	30
35	Work Item-35	Installation of RF cable only and connecting to existing Antenna and check for VSWR and making it to the required level.	Per sector	60
36	Work Item-36	Replacement of RRU and changing the CPRI cable. The RRUs and CPRI cables are to be changed and make them functional.	Per RRU	115
37	Work Item-37	Antenna Orientation ( irrespective of no of antennas in site) and adjusting VSWR. The antennas to be reoriented and brought to the desired position as per the RF requirements.	Per Site	265
38	Work Item-38	Replacement of CPRI with out changing RRU. The CPRI are to be replaced and connected to RRUs and BBU for making them functional	Per RRU	215
39	Work Item-39	MW orientation and re-alignment. The MW antennas are to be re-aligned/re-positioned in such a way that the MWs are working and functional.	Per HOP	136

40	Work Item-40	Only RRH Shifting/ replacement. The RRUs are to be replaced/shifting without changing the CPRI cables. The new RRU is to be connected to existing CPRI cable and make it functional.	Per RRU	295
41	Work Item-41	MW ODU replacement. The ODU is to be replaced with the good one and connected to MW and make it functional to the desired level	Per site	235
42	Work Item-42	Dismantling of antenna only.	Per antenna	18
43	Work Item-43	Fixation of aviation light and laying & routing of cable	Per site	10
44	Work Item-44	Works at RRU without replacing RRU/CPRI cable	per RRU	70
45	Work Item-45	Laying of IF cable for microwave	per site	50
46	Work Item-46	Dismantling of microwave ODU only	Per site	60
47	Work Item-47	Re routing of CPRI /IF/ with proper tie without any sag	Per site	50
48	Work Item-48	Replacement of faulty connecter at ODU for microwave	Per site	50
49	Work Item-49	Shifting of Antenna at the same tower without Fixture	Per sector	50
50	Work Item-50	Shifting of Antenna at the same tower with fixture	Per sector	30
51	Work Item-51	6m pole installation	Per pole	30
52	Work Item-52	Shifting of microwave antenna and hoisting on the tower irrespective of tower height	per piece	30
53	Work Item-53	Dehoisting of microwave antenna irrespective of tower height and shifting to site or stores	per piece	30
54	Work Item-54	shifting of AMF and hoisting in the tower irrespective of tower height	per piece	30
55	Work Item-55	Dehoisting of AMF irrespective of tower height and shifting to site or stores	per piece	20



**13. SCHEDULE OF REQUIREMENTS****Note:**

- (1) The work description is only indicative and all the delivery of goods and / or services should meet the technical specifications of the tender document.
- (2) The quantities given may change as per the requirements of the purchaser as already mentioned in the relevant tender conditions.
- (3) The 'Materials to be supplied by the contractor' as mentioned above are only indicative. Any minor items like lugs, nuts, bolts, screws, fixing items, bonding materials etc., all tools and testers, etc. required for carrying out the works have to be arranged by the contractor at his own cost.

**14. Details Redeployment/ Shifting/New / Dismantling Sites**

The sites will be in Chennai Telephones including rural areas of Kancheepuram ,Tiruvallur and chengalpet Districts. However the exact details of the sites will be intimated along with the work order to the prospective bidder .

**15.TIME SCHEDULE**

Work Items No	Time Limit to Start the work	Duration for Completion
1,2,3,4,5,29 & 32	Within one week from the Date of Issue of Work Order	15 days from the date of Issue of Work Order where infra is to be developed. 10 days where infra is readily available .
6 to 28 , 31& 33 to 55	Within one week from the Date of Issue of Work Order	15 days from the Date of Issue of Work Order

**\*\* End of Section VI \*\***

## SECTION-VII

### PROFORMAS Annexure – “A”

#### Application Form to be submitted with EOI

Name of the Contactor :

Address for correspondence :

I,....., authorized signatory of the contractor M/S....., certify that I fully agree and comply with all the clauses and sub-clauses of the EOI and annexure 'A' to 'O' available with EOI.

(Signature of the authorized signatory)  
(With seal and contact numbers)  
Dated..... at.....

Note: The bidder while submitting the bid should sign all the pages of the EOI document consisting of terms and conditions and draft of agreement and enclose the same with this Annexure.

**Annexure – “B”**

**FORMAT OF THE PERFORMANCE BANK GUARANTEE**

(To be typed on Rs.100/- non-judicial stamp paper)

Bank Guarantee in respect of LOI dated \_\_\_\_\_ between General Manager –CM, BSNL, Chennai Telephone District hereafter called BSNL CHTD and M/s\_\_\_\_\_, having its Registered Office at \_\_\_\_\_ (hereinafter called CONTRACTOR) has entered into an agreement dated \_\_\_\_\_ (hereinafter referred to as “the said agreement”) with General Manager-CM, Bharat Sanchar Nigam Limited (BSNL) (A Government of India Enterprise) Chennai Telephones having Office at , 238, R.K.Mutt Rd, Chennai - 600 028 whereby BSNL CHTD has agreed to appoint CONTRACTORs for providing BSNL CHTD services on the terms and conditions exclusively mentioned therein for the circle \_\_\_\_\_).

It has been agreed between the parties that a Bank Guarantee for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_thousand only) shall be given by the CONTRACTOR in favour of the BSNL CHTD for due and faithful performance of the terms and conditions of the said agreement. \_\_\_\_\_ Bank having its office at \_\_\_\_\_ has at the request of the CONTRACTOR (M/s \_\_\_\_\_), agreed to give the guarantee as hereinafter contained:

1. We, \_\_\_\_\_ (hereinafter called ‘the Bank’) do hereby undertake and assure to the BSNL CHTD that if in the opinion of the BSNL CHTD, the CONTRACTOR has in any way failed to observe or perform the terms and conditions of the said agreement or has committed any breach of its obligations there-under, the Bank shall on demand and without any objection or demur pay to the BSNL CHTD the said sum of Rs. \_\_\_\_\_/- (Rupees only) or such lesser amount as BSNL may demand without requiring BSNL CHTD to have recourse to any legal remedy that may be available to it, compel the Bank to pay the same.

- 2.** Any such demand from the BSNL CHTD shall be conclusive as regards the liability of CONTRACTOR to pay to BSNL CHTD or as regards the amount payable by the Bank under this guarantee. The Bank shall not be entitled to withhold payment on the ground that the CONTRACTOR had disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between CONTRACTOR and BSNL CHTD regarding the claim.
- 3.** We, the Bank further agree that the guarantee shall come into force from the date and shall remain in full force and effect for the period of thirty months from the date of commencement of the agreement or the term of this guarantee whichever is later. But if the period of the said agreement is extended either pursuant to the provisions in the said Agreement or by mutual agreement between the CONTRACTOR and the BSNLCHTD, the Bank shall automatically renew the period of the Guarantee for such period which expires 6 (six) months after the renewed period of the said agreement failing which it shall pay to the BSNL CHTD the said sum of Rs. /- (Rupees ----- only) without BSNL CHTD demanding the payment of the above sum.
- 4.** The Bank further agrees that the BSNL CHTD shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said agreement or to extend the time for performance of the said agreement from any of the powers exercisable by BSNL CHTD against the CONTRACTOR and to forbear to enforce any of the terms and conditions relating to the said agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to CONTRACTOR or through any forbearance, act or omission on the part of BSNL CHTD or any indulgence by BSNL CHTD to CONTRACTOR or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of relieving or discharging the guarantor.
- 5.** The Bank further agrees that in case this Guarantee is required for a larger period and it is not extended by the Bank beyond the period specified above in Clause 3, the Bank shall pay to BSNL CHTD without BSNL CHTD having to demand the payment of the said sum of Rs. /- (Rs. ----- only) on the last day on which the Bank Guarantee is due to expire.

**6.** Notwithstanding anything herein contained;

- (a)** The liability of the Bank under this guarantee is restricted to the PG Amount and it will remain in force for a period of 3 years i.e. up to \_\_\_\_\_.
- (b)** The guarantee shall stand completely discharged and all rights of the BSNL CHTD under this Guarantee shall be extinguished if no claim or demand is made on us in writing on or before \_\_\_\_\_.

**7.** The Bank guarantees that the below mentioned officer who have signed it on behalf of the Bank have authority to give this guarantee under its delegated power.

Place: .....

Date: ..... (Signature of the Bank Officer)

Rubber stamp of the bank

Authorized Power of Attorney Number: .....

Name of the Bank officer: .....

Designation:

Complete Postal address of Bank:

Telephone Numbers

Fax numbers

**Annexure – “C”**

**Format of Certificate regarding No close relatives working in BSNL**

(To be submitted by all the Directors of the Company)

“I \_\_\_\_\_ s/o \_\_\_\_\_ r/o \_\_\_\_\_ here by certify that none of my relative(s) as defined under is/are employed in BSNL unit for which I am bidding.. In case at any stage, it 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.”

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) and daughter's husband (son in law), brother(s) and brother's wife, sister(s) and sister's husband (brother in law).

Dated this \_\_\_\_\_ Day of \_\_\_\_\_ 2021

Signature: \_\_\_\_\_

**ANNEXURE “D”**  
**PRICE SCHEDULE FINANCIAL BID**

Sno	Work item	Unit	Total Qty	Basic unit price	GST**						Unit price inclusive	Amt of ITC	Unit price excluding ITC i.e Net unit cost to BSNL	Total Price (inclusive of all Levies and Charges but Excluding ITC) i.e net total cost Col. 15 =
					CGST		SGST		IGST					
				Rs.	%	Amount	%	Amount	%	Amount	Rs.	Rs	Rs.	Rs.
1	2	3	4	5	6	7=5*6	8	9=5*8	10	11=5*10	12=5+(7+9)/10	13	14=12-13	15=4*14
1	Work Item-1	Per SITE	100											
2	Work Item-2	Per SITE	100											
3	Work Item-3	Per Antenna	100											
4	Work Item-4	Per Hop	62											
5	Work Item-5	Per SECTOR	28											
6	Work Item-6	Per WM	5											
7	Work Item-7	Per SET	30											
8	Work Item-8	Per SET	60											
9	Work Item-9	Per SITE	80											
10	Work Item-10	Per SITE	50											
11	Work Item-11	Per SECTOR	10											
12	Work Item-12	Per HOP	65											

13	Work Item-13	SET	39										
14	Work Item-14	PER SHELTER	20										

S.No	Item of Work/Supply	Unit	Total Quantity	Basic unit price	GST**						Unit price all inclusive	AMT OF ITC	UNIT PRICE including T.C.I. as per clause 8.14-4-C-13	
				Rs.	%	Amount	%	Amount	%	Amount	Rs.	Rs	Rs.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
15	Work Item-15	Per SITE	20											
16	Work Item-16	Per SITE	10											
17	Work Item-17	Per Cabinet	10											
18	Work Item-18	Per 3M	20											
19	Work Item-19	Per site	120											
20	Work Item-20	Per pole	30											
21	Work Item-21	Per SET	20											
22	Work Item-22	Per SET	30											
23	Work Item-23	Per Cubic Meter	10											
24	Work Item-24	Per sector	10											
25	Work item -25	Per AMF	15											
26	Work Item-26	Per additional KG	15											
27	Work Item-27	Per Meter	100											
28	Work Item-28	Per Meter	100											
29	Work Item-29	Per Antenna	20											
30	Work Item-30	Per Site	20											
31	Work Item-31	Per Cabinet	10											
32	Work Item-32	Per Cabinet	10											



## Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021

Bharat Nigam (BSEI Ltd), BSEI/Inv/Conts/2020-21 dated 06/02/2021														
S.No	Work item	Unit	To tal Qty	Basic unit price	GST**						Unit price inclusive	Amt of ITC	Unit price Exclud ing ITC	Total Price (inclusive of all Levies and Charges but excluding ITC) i.e net total cost Col. 15 = 4*14
					Rs.	%	Amount	%	Amount	%				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
33	Work item-33	Per Swap	30											
34	Work item-34	Per Swap	30											
35	Work item-35	Per sector	60											
36	Work item-36	Per RRU	115											
37	Work item -37	Per Site	265											
38	Work item-38	Per RRU	215											
39	Work item -39	Per HOP	136											
40	Work item -40	Per RRU	295											
41	Work item -41	Per site	235											
42	Work Item-42	Per antenna	18											

43	Work Item-43	Per site	10											
44	Work Item-44	per RRU	70											
45	Work Item-45	per site	50											
46	Work Item-46	Per site	60											
47	Work Item-47	Per site	50											
48	Work Item-48	Per site	50											
49	Work Item-49	Per sector	50											
50	Work Item-50	Per sector	30											
51	Work Item-51	Per pole	30											
52	Work Item-52	per piece	30											
53	Work Item-53	per piece	30											
54	Work Item-54	per piece	30											
55	Work Item-55	per piece	20											

**\*\* Bidder has to submit quote for CGST/SGST or IGST applicable**

**ITC : Input TAX credit.**

**\*\*\*SAC/HSN code shall be mentioned against each work item by**

**bidders**

**Annexure –‘E’**

**PROFORMA FOR AGREEMENT**

**(Node B / BTS Installation & Deinstallation and allied works Tender Agreement)**

**THIS AGREEMENT IS EXECUTED ON the 2021**

**By and in Between**

**BSNL, Chennai Telephone** having office at 238, R.K.Mutt Road, Chennai 600028 and represented by General Manager (hereinafter referred to as the ‘Party of First Part’ or ‘**the Purchaser**’ which expression shall included the legally constituted signatories, assigns, successors and officers duly empowered to execute such agreement) of the **first part** empowered to execute this agreement.

**And**

M/s \_\_\_\_\_ having Address at \_\_\_\_\_ (hereinafter referred to as the Party of Second Part’ or ‘**the Contractor**’ which expression shall include the legally constituted signatories, assigns, successors and officers duly empowered to execute such agreement) of the **second part** through its \_\_\_\_\_ empowered to execute this agreement.

Whereas the contractor has offered to enter into contract with the said BSNL Chennai Telephones for the execution of **Node B / BTS Installation & Deinstallation and allied works** in Chennai Telephone Ara Chennai, chengalpattu ,Kancheepuram and Thiruvallur districts in GM(CM) , vide **Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

on the terms and conditions herein contained and the rates approved by the BSNL (copy of Rates annexed) have been duly accepted and where as the necessary security deposit have been furnished in accordance with the provisions of the tender document and whereas no interest will be claimed on the security deposits.

Now these presents witness and it is hereby agreed and declared by and between parties to these presents as follows :

1) The Contractor shall, during the period of this contract that is to say from..... to..... or completion of whichever is earlier or until this Contract shall be determined by such notice as is hereinafter mentioned, safely carryout, by means of labours employed at his own expenses and by means of tools, implements and equipment etc. to be supplied by him to his labour at his own expenses, “**Node B / BTS Installation & Deinstallation and allied works**” as described in tender documents. (annexed to the agreement), when the Department or the GM -CM in that

behalf require. It is understood by the contractor that the quantity of work mentioned on the schedule is likely to change as per actual requirements as demanded by exigencies of service.

2) The NIT (Notice Inviting Tender), Bid documents (Qualifying and Financial), letter of intent, approved rates, annexed hereto and such other additional particulars, instructions, drawings, work orders as may be found requisite to be given during execution of the work shall be deemed and taken to be an integral part of the contract and shall also be deemed to be included in the expression "The Agreement or "The Contract "wherever herein used.

3) The contractor shall also ensure the requisite number of workmen/teams with means & materials as well as tools, appliances, machines, implements, vehicles for transportation, cartage etc. required for the proper execution of work within the time prescribed in the work orders and /or as per the tender conditions.

4) The contractor hereby declares that nobody connected with or In the employment of B S N L is not/shall not ever be admitted as partner in the contract.

5) The contractor shall abide by the terms and conditions , rules, guidelines, construction practices, safety precautions etc. stipulated in the tender document including any correspondence between the contractor and the Government having bearing on execution of work and payments of work to be done under the contract.

6). The Liquidated Damages ( LD )will be deducted as per tender document Sec III clause 11

In witness whereof the parties presents have here into set their respective hands and seals the \_\_\_\_\_ day of \_\_\_\_\_ and year \_\_\_\_\_

**Signature of the Officer** signing  
on behalf of BSNL with Seal

**Signature of the Contractor**

(Name of the Officer signing the  
Document)

(Name of the contractor signing the  
Document)

**Above written Witness**

1

2

**ANNEXURE-“F”**

**PROFORMA FOR CLAUSE BY CLAUSE COMPLIANCE**

SECTION NO	CLAUSE NO	COMPLIANCE

**SPECIAL CONDITIONS OF CONTRACT (SECTION IV) AND  
TECHNICAL SPECIFICATION AND GUIDELINES (SECTION V)**

The bidder should mention “Fully complied” in column C above

**SECTION III - COMMERCIAL CONDITIONS OF CONTRACT**

Clause No (A)	Clause name (B)	Acceptance and Compliance (C)
1	Application	
2	Standards	
3	Delivery and documents	
4	Performance security	
5	Warranty	
6	Prices	
7	Sub Contracts	
8	Work order and changes in work order	
9	Payment terms for supply & Installation items.	
10	Scheduled date of delivery/delays in the installer's performance	
11	Liquidated damages	
12	Contract conditions	
13	Safety Code	
14	Labour conditions	
15	Work conditions	
16	Purchaser right to vary the quantity after finalisation of contract.	
17	Acceptance Testing	
18	Clarifications	
19	Force Majeure	
20	Termination for default	
21	Termination for insolvency	
22	Arbitration	
23	Set off	
24	Legal Jurisdiction	
25	Fall Clause	

The bidder should mention “Fully complied” in column (C) above

**SECTION IV - SPECIAL CONDITIONS OF CONTRACT**

Clause No. (A)	Clause Name (B)	Acceptance and Compliance (C)
01	Special conditions of the contract-1	
02	Special conditions of the contract-2	
03	Special conditions of the contract-3	
04	Special conditions of the contract-4	
05	Special conditions of the contract-5	
06	Special conditions of the contract-6	
07	Special conditions of the contract-7	
08	Special conditions of the contract-8	
09	Special conditions of the contract-9	
10	Special conditions of the contract-10	
11	Special conditions of the contract-11	
12	Special conditions of the contract-12	
13	Special conditions of the contract-13	
14	Special conditions of the contract-14	

The bidder should mention “Fully complied” in column (C) above

**SECTION V - TECHNICAL SPECIFICATIONS AND GUIDELINES**

(The contractor to refer to all clauses mentioned against the Work Item Nos)

w.i no col.A	wi name (B)	Time schedule( C)	Acceptance and compliance (D)
1	Work Item-1	page no 113	
2	Work Item-2	page no 113	
3	Work Item-3	page no 113	
4	Work Item-4	page no 113	
5	Work Item-5	page no 113	
6	Work Item-6	page no 113	
7	Work Item-7	page no 113	
8	Work Item-8	page no 113	
9	Work Item-9	page no 113	
10	Work Item-10	page no 113	
11	Work Item-11	page no 113	
12	Work Item-12	page no 113	
13	Work Item-13	page no 113	
14	Work Item-14	page no 113	
15	Work Item-15	page no 113	

16	Work Item-16	page no 113	
17	Work Item-17	page no 113	
18	Work Item-18	page no 113	
19	Work Item-19	page no 113	
20	Work Item-20	page no 113	
21	Work Item-21	page no 113	
22	Work Item-22	page no 113	
23	Work Item-23	page no 113	
24	Work Item-24	page no 113	
25	Work Item-25	page no 113	
26	Work Item-26	page no 113	
27	Work Item-27	page no 113	
28	Work Item-28	page no 113	
29	Work Item-29	page no 113	
30	Work Item-30	page no 113	
31	Work Item-31	page no 113	
32	Work Item-32	page no 113	
33	Work Item-33	page no 113	
34	Work Item-34	page no 113	
35	Work Item-35	page no 113	
36	Work Item-36	page no 113	
37	Work Item-37	page no 113	
38	Work Item-38	page no 113	
39	Work Item-39	page no 113	
40	Work Item-40	page no 113	
41	Work Item-41	page no 113	
42	Work Item-42	page no 113	
43	Work Item-43	page no 113	
44	Work Item-44	page no 113	
45	Work Item-45	page no 113	
46	Work Item-46	page no 113	
47	Work Item-47	page no 113	
48	Work Item-48	page no 113	
49	Work Item-49	page no 113	
50	Work Item-50	page no 113	
51	Work Item-51	page no 113	
52	Work Item-52	page no 113	
53	Work Item-53	page no 113	
54	Work Item-54	page no 113	
55	Work Item-55	page no 113	

The bidder should mention “Fully complied” in column ‘D’ above

I/we hereby accept all clauses in all the sections in the tender

Signature of bidder



ANNEXURE – “G”**VENDOR MASTER FORM**

(The details listed will be used for making all payments against POs / WOs, refund of EMDs / SDs, intimation of payments by email, issue of TDS certificates, C Form for CST purchases etc.)

(\*) Minimum Required Fields to be Filled by the Company/Vendor. Please Attach copies of the supporting documents.

Title\* :  Mr.  Ms.  M/s  Dr.

Name\* :

Address\* :

Town/District\* :

City\* :

State\* :

Postal/Pin code\* :  Country\* :

**Contact Details:**

Telephone Number :  Fax No. :

Email id :

(Mandatory for E-Tendering)

Name of Contact Person :  Mobile No. :

Alternate Contact Person :  Mobile No. :

**Tax information:**

PAN :

Service Tax reg. no. :

LST (Local VAT reg.No.) :  CST Reg. No. :

Tax Registration no.  
(for Foreign Vendors) :

**Income Tax Exemption details:**

IT exemption no. :  IT exemption rate :

IT Exemption date :

IT exemption date from :  IT exemption date to :

**ANNEXURE – “ H”****Bidder's profile & Questionnaire.**

Tenderer / Bidder's Profile &amp; Questionnaire

(To be filled in and submitted by the bidder)

Tender No:DGM (INST-CM)/GSM/Inst-Deinst/2020-21 dt: 30/01/21

**A) Tenderer's/bidder's Profile**

1. Name of the Company/ Firm: .....

2. Name of authorized signatory: .....

3. Capacity in which he is signing: .....

4. Existing Vendor code (as SAP) in CHTD if avl: .....

5. Present Correspondence Address

.....

.....

.....

Telephone No. .... Mobile No. ....

FAX No. ....

6. Address of place of Works/

Manufacture .....

.....

Telephone No. .... Mobile No. ....

7.State the Type of Firm: (Tick the correct choice )

sno	Type of firm	Tick correct choice
1	Sole proprietor-ship	
2	partnership firm	
3	Private limited company	
4	Others(please specify)	

8.Name of the sole proprietor/ partners/ Director(s) of Pvt. Ltd Co.:

S. No	Name	Designation(pr oprietor/partne r/director)	Mobile no.
1			
2			
3.			
4.			
5.			

Total no. of Director/partners: .....

9.Name of the person authorized to enter into and execute contract/agreement and the capacity in which he is authorized (in case of partnership/ private Ltd Company):

.....

.....  
10. Permanent Account No. : .....

11. Details of the Bidder's Bank for effecting e-payments:

- (a) Beneficiary Bank Name:.....  
(b) Beneficiary branch Name:.....  
(c) IFSC code of beneficiary Branch.....  
(d) Beneficiary account No.:.....  
(e) Branch Serial No. (MICR No.):.....

12. Whether the firm has Office/ works (i.e. manufacture of the tendered item) in Chennai? If so state its Address

.....  
13. GSTIN registration number(s) of all units/business place of the bidders vide which he intends to execute the contract if awarded:

GSTIN1: .....

GSTIN2: .....

GSTIN3: .....

GSTIN4:..... and so on

14. NSIC/MSE registered with following category:

sno	Type of firm	Tick on appropriate box
1	Micro	
2	Small	
3	Medium	
4	SC/ST Enterprise	
5	Non NSIC regtd/Firm/company	

15. In case of MSME UAN no. ....

### **B) Questionnaire**

1. Do you think any other detail/ material is required to complete the work specified in the specification? Yes/ No.

1.1 If Yes, Give details

.....  
2. Do you think any other item of work need be included in tender form to complete the work specified in the specification? Yes/ No.

2.1 If Yes, Give details

.....  
3. Kindly indicate the maximum Quantity of tendered material which you are capable of supplying within the scheduled delivery period.

Name of the tendered Item

Qty that can be supplied by the firm within scheduled delivery period.

4. Suggestion for improvement of the tender document.

Place.....

Date .....

Signature of contractor .....

Name of Contractor .....

**ANNEXURE- "I"**

**For Letter of Authorization for attending Bid Opening Event.**

(To be typed preferably on letter head of the company)

**Subject:** Authorization for attending Bid opening

I/ We Mr. /Ms. .... have submitted our bid for the tender  
no. .... in respect of .....  
..... (Item of work) which is due to open on  
..... (date) in the Meeting Room, O/o  
DGM INST-CM 2<sup>nd</sup> floor RK NAGAR, R.K.Mutt road, Chennai-28  
.....

We hereby authorize Mr. / Ms. ....& Mr. /  
Ms..... (alternative) whose signatures are attested below, to attend the bid  
opening for the tender mentioned above on our behalf.

.....  
Signature of the Representative

.....  
Name of the Representative

Signature of Bidder/ Officer authorized to sign  
on behalf of the Bidder

.....  
Signature of the alternative Representative

.....  
Name of the alternative Representative

Above Signatures Attested

**Note 1:** Only one representative will be permitted to attend the Bid opening

2. Permission for entry to the hall where bids are opened may be refused in case authorization as prescribed above is not received.
3. Letter of authorization should be submitted to Tender opening committee before opening of bids.

**Annexure- “ J”**

**BID FORM**

**Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

(Name & Address of the Bidder)

To

**O/o DGM( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238  
R.K.MUTT ROAD ,CHENNAI - 600 028.**

Sir,

1. Having examined the conditions of contract and specifications including addenda Nos..... the receipt of which is hereby duly acknowledged, we, undersigned, offer to Installation and deliver ..... in conformity with the conditions of contract and specifications for the sum shown in the schedule of prices attached herewith and made part of this Bid.
2. We undertake, if our Bid is accepted, to commence the services within one week and to complete the services of all the items specified in the contract within the time schedule specified in the Tender and/or your Work Order and to Installation items specified in the contract for a period of ONE year from the date of agreement at the same approved rate, which can be extendable by you for a further period of one year.
3. If our Bid is accepted, we will obtain the guarantees of a Scheduled Bank for a sum not exceeding 3% of the contract sum for the due performance of the Contract.

4. We agree to abide by this Bid for a period of 180 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5. Until a formal Work Order of Contract is prepared and executed, this Bid together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.
6. Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.
7. We understand that you are not bound to accept the lowest or any bid, you may receive.
8. Signing of bid form shall be considered as signing of bid document and will assume that bidder has read whole bid document carefully, accepting all technical specification, technical and financial conditions along with all clarification, corrigendum and amendment.

Dated this                      day of ..... 2021

Signature of  
In capacity of

Duly authorized to sign the bid for and on behalf on

Witness

Address ..... Fax No. :.....  
..... Tel No. :.....

Signature .....

Name in Block Letters

Date:.....

**ANNEXURE “K”**  
**MANDATE FORM**

E Payment of suppliers bills through RTGS

Serial No	Particulars	
1	Company's Name	
2	Address	
3	Phone No	
4	Particulars of Accounts NAME OF THE ACCOUNT	
5	Bank Name	
6	ACCOUNT NO	
7	Branch Name& Address	
8	IFSC CODE OF BRANCH	

I/we hereby declare that the particulars given above are correct and complete. I/We undertake that till a change is requested by us the payment shall continue to be in the above account only. I/We also agree to bear the RTGS charges in case such charges are levied by any bank for processing the RTGS transaction.

Date

Signature of the authorized signatory  
(Sealed of the company)

\*\*Certified that the particulars furnished above are correct as per our records.

Bank Stamp

Signature of the Authorized Officer  
(From the Bank)



**TENDER FOR INSTALLATION AND COMMISSIONING OF BTS AND ALLIED EQUIPMENTS**

**Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021**

**FINANCIAL BID- TWO STAGE**

**O/o DGM( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238**

**R.K.MUTT ROAD ,CHENNAI - 600 028.**

**FINANCIAL BID (I STAGE) SHOULD BE SUBMITTED IN WAX SEALED COVER**

***Date:***

***From (Name & address of the Bidder)***

***To***

**O/o DGM( INST-CM),  
CONSUMER MOBILITY,  
2ND FLOOR, R K NAGAR TELEPHONE EXCHANGE,  
Old No 164 New No 238**

**R.K.MUTT ROAD ,CHENNAI - 600 028.**

**Sir,**

In response to your Notice Inviting **Tender No: DGM (INST-CM)/GSM/Inst-Deinst /2020-21 dated 30/01/2021** , I / we hereby submit my / our firm bid for

"Installation

and commissioning of BTS and allied equipment" complete in all respects, as mentioned below.

Thanking you,

Yours sincerely,

Signature of the bidder:

Name :



**Annexure-M**

**BID SECURITY DECLARATION**

(To be submitted in Rs. 100/- stamp paper with notary public attestation)

I / we / M/s. \_\_\_\_\_ hereby submitting this Bid security declaration towards participating in E-Tender for Installation and Deinstallation of BTS and allied works of Etender no. DGM(INSTLN-CM)/TENDER/BTS INSTLN & DE-INSTLN/2020-21 Dt: 30 -01 -2021., accepting that if I/WE\_\_\_\_\_ withdraw or modify their bids during period of validity etc., I/We\_\_\_\_\_ will be suspended/debarred/banned for the period of one year, as same as specified in the clause 11 of section-I .

Place:

Date:

Bidder

Notary Public

**ANNEXURE- N****De-installation & Installation Record****1.De-Installation –Transportation & Handover at stores**

Work order No. & Date								
Sl No	Site ID	Site name	De-Installed eqpt	No of cells dismantled in case of bty	Battery Capacity (AH)	Date of dismantling of eqpt	Date of handover to store yard	Stores Entry RegisterNo. Page No. &Slno
Signature with Date		Site Incharge:		Vendor:			Stores Incharge (BSNL)	

**2. Installation –Transportation & Commissioning**

Sl. No.	Site ID	Site name	Work order no. & Dt	Dt of Transportation from stores	Installed eqpt	Date of installation	Date of AT Done
Signature with Date		Site Incharge:			Vendor:		

**Note:**

The vendor should give a copy of receipt signed by the concerned store yard in-charge containing the quantity of batteries for De-Installation/Installation works as detailed above along with the invoice.

**Annexure O**  
**Undertaking &Declarations**

sno	subject	declaration
1	No debar/Black listed declaration	I/we hereby declare that I/our firm has/have not been debarred for taking part in tender anywhere in any unit of BSNL. I/We also declare that my/our firm is not process of debaring by any unit of BSNL. I/We are aware that any suppression of facts in this regard,breach of this condition/clause would result in immediate termination of contract or cancellation of existing contract
2	Not black listed by GST authority	We do hereby declare that we have not been black listed by GST authority(CGST/IGST/SGST) as on date. In case this bidder firm/company gets blacklisted during the tenure of BSNL contract then it is unequivocally indemnified to BSNL that BSNL reserves the right to recover the dues against input tax credit to BSNL on account of companys default
3	No addition/correction/ Deletion in the bid	I/we hereby declare that "no addition/deletions/corrections in the downloaded tender document being submitted and it is identical to the tender document appearing on the website"
4	Right to accept or reject to any or all the bid	BSNL Chennai Telephones reserves the right to accept or reject any or all bids par or whole without assigning any reason
5	Reading and Understanding of tender document	I have read and understand the whole tender document and its clarifications,corrigendums carefully

I have read all above declarations from s.no 1-5,understand and are accepted. We also declare that All the information, documents, Photo copies of the documents/certificates enclosed along with the tender offer is correct.

If anything is found false and/or incorrect and/or reveals any suppression of fact at any time, BSNL reserves the right to debar our tender offer/cancel the LOI/Purchase/Work order if issued. In addition, BSNL may debar the contractor from participation in its future tenders.

Signature of bidder with seal

**Annexure P**

Proforma of Power of attorney (Non judicial stamp)

**Power of attorney**

Be it known all to whom it concern that

1.Shri \_\_\_\_\_ s/o. \_\_\_\_\_ residing at \_\_\_\_\_

2.Shri \_\_\_\_\_ s/o. \_\_\_\_\_ residing at \_\_\_\_\_

3.Shri \_\_\_\_\_ s/o. \_\_\_\_\_ residing at \_\_\_\_\_

I,the proprietor/we all the partners/directors of M/s. \_\_\_\_\_

(Name & address) hereby appoint shri \_\_\_\_\_ S/o. \_\_\_\_\_

Residing at \_\_\_\_\_ postal address,mobile no. email id

as my/our attorney to act in my/our name on behalf,sign and execute all documents/agreements binding the firm for all contractual obligations(including reference cases to arbitration) arising out of contracts to be entered into by the firm with the Chief General Manager,Chennai Telephones in connection with their tender name \_\_\_\_\_

dated \_\_\_\_\_ for BTS instln and deinstln works due for opening on \_\_\_\_\_

In short he is fully authorized to do all,each and everything requisite for the above purpose

Concerning M/s. \_\_\_\_\_. And I/we here by agree to ratify and confirm his

all and every act of this or any documents by my/our said attorney within the scope of authority

Hereby confirmed on him including references to cases of arbitration and the same shall be binding on me/us and my/our firm as if the same were executed by me/us individually or jointly

Signature of witness

1. \_\_\_\_\_

2. \_\_\_\_\_

signature of partners/proprietor/directors

1. \_\_\_\_\_

2. \_\_\_\_\_

Signature of signatory of tender offer of the firm

Attested by Notary public/ registered before subregistrar

**Appendix to Section III Clause 22 and 23****22. Arbitration:**

Except and otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties unable to settle mutually the same shall be referred to arbitration as provided hereunder:

- a) A party wishing to commence arbitration proceeding shall revoke Arbitration Clause by giving 60 days notice to the designated officer of the other party. The notice invoking arbitration shall specify all the points of disputes with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.
- b) The number of the arbitrators and the appointing authority will be as under

Claim amount (excluding claim for counter claim, if any)	Number of Arbitrator	Appointing Authority
Above Rs.5 lakhs to Rs.5 crores	Sole Arbitrator to be appointed from a panel of Arbitrators of BSNL	BSNL (Note: BSNL will forward a list containing names of three empanelled arbitrators to the other party for selecting one from the list who will be appointed as sole arbitrator by BSNL)
Above Rs.5 crores	3 Arbitrators	One arbitrator by each party and the 3rd arbitrator, who shall be the presiding arbitrator, by the two arbitrators. BSNL will appoint its arbitrator from its panel.

- c) Neither party shall appoint its serving employee as arbitrator.
- d) If any of the arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left it both parties consent for the same; otherwise, he shall proceed de novo.
- e) Parties agree that neither party shall be entitled for any pre-reference or pendentelite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.

- f) Unless otherwise decided by the parties, Fast Track procedure as prescribed in Section 29 B of the Arbitration Conciliation Act, 1996 for resolution of all disputes shall be followed, where the claim amount is upto Rs.5 crores.

**Fast track procedure:**

- (1) Notwithstanding anything contained in this Act, the parties to an arbitration agreement, may, at any stage either before or at the time of appointment of the arbitral tribunal, agree in writing to have their dispute resolved by fast track procedure specified in sub-section (3).
- (2) The parties to the arbitration agreement, while agreeing for resolution of dispute by fast track procedure, may agree that the arbitral tribunal shall consist of a sole arbitrator who shall be chosen by the parties.
- (3) The arbitral tribunal shall follow the following procedure while conducting arbitration proceedings under sub-section (1):-
  - (a) The arbitral tribunal shall decide the dispute on the basis of written pleadings, documents and submissions filed by the parties without oral hearing;
  - (b) The arbitral tribunal shall have power to call for any further information or clarification from the parties in addition to the pleadings and documents filed by them;
  - (c) An oral hearing may be held only, if, all the parties make a request or if the arbitral tribunal considers it necessary to have oral hearing for clarifying certain issues;
  - (d) The arbitral tribunal may dispense with any technical formalities, if an oral hearing is held, and adopt such procedure as deemed appropriate for expeditious disposal of the case.
- (4) The award under this section shall be made within a period of six months from the date the arbitral tribunal enters upon the reference.
- (5) If the award is not made within the period specified in sub-section (4), the provisions of sub-sections (3) to (9) of section 29A shall apply to the proceedings.
- (6) The fees payable to the arbitrator and the manner of payment of the fees shall be such as may be agreed between the arbitrator and the parties.
- (7) The arbitral tribunal shall make and publish the award within time stipulated as under:

Amount of Claims and Counter Claims	Period for making and publishing of the award (counted from the date the arbitral tribunal enters upon the reference)
Upto Rs.5 crores	Within 6 months (Fast Track procedure)
Above Rs.5 crores	Within 12 months

However, the above time limit can be extended by the Arbitrator for reasons to be recorded in writing with the consent of parties and in terms of provisions of the Act.

- (8) In case of arbitral tribunal of 3 arbitrators, each party shall be responsible to make arrangements for the travel and stay, etc. of the arbitrator appointed by it. Claimant shall

also be responsible for making arrangements for travel/stay arrangements for the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

In case of sole arbitrator, BSNL shall make all necessary arrangements for his travel/stay and the expenses incurred shall be shared equally by the parties.

**(9) This contract is subject to the jurisdiction of courts at Chennai only.**

**23. Set Off (Recovery of sum due to BSNL):**

- a) Any sum of money due and payable to the Service Provider (including security deposit refundable to him) under this contract may be appropriated by BSNL and set off the same against any claim of BSNL for payment of a sum of money arising out of this contract or under any other contract made by Service Provider with BSNL.
- b) In the event of said security deposit being insufficient, the balance of total amount recoverable, shall be deducted from any sum due to the Service Provider under this or any other contract with Bharat Sanchar Nigam Limited. Should this amount be insufficient to cover the said full amount recoverable, the Service Provider shall pay to Bharat Sanchar Nigam Limited on demand the balance amount, if any, due to Bharat Sanchar Nigam Limited within 30 days of such demand made by BSNL.
- c) If any amount due to the company is so set off against the said security deposit, the service provider shall have to make good the said amount so set off to bring the security deposit to the original value immediately by not later than 10 days.

**Appendix to Section IV**  
**(Standard Tender Enquiry Document)**

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
1 (a)	Submitting fake / forged	i) Rejection of tender bid of respective Vendor.
	a) Bank Instruments with the bid to meet terms & condition of tender in respect of tender fee	ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order.
	b) Bid security declaration form	
	and detection of default at any stage from receipt of bids till award of APO/ issue of PO/WO.	iii) Termination/ Short Closure of PO/WO, if issued. This implies non-acceptance of further supplies / work & services except to make the already received material work/ complete work in hand.
	<b>Note 1:-</b> However, in this case the performance guarantee if alright will not be forfeited.	
	<b>Note 2:-</b> Payment for already received supplies/ completed work shall be made as per terms & conditions of PO/ WO.	
1 (b)	Submitting fake / forged documents towards meeting eligibility criteria such as experience capability, supply proof, registration with Sales Tax, Income Tax departments etc and as supporting documents towards other terms & conditions with the bid to meet terms & condition of tender :	
	(i) If detection of default is prior to award of APO	i) Rejection of Bid & ii) Banning of business for three years which implies Barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for upto three years from date of issue of banning order.
	(ii) If detection of default after issue of APO but before receipt of PG/ SD (DD,BG etc.)	i) Cancellation of APO , ii) Rejection of Bid & iii) Banning of business for three years which implies Barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for upto three years from date of issue of banning order.



S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
1(b) con td.	(iii) If detection of default after receipt of PG/ SD (DD, BG etc.	i) Cancellation of APO ii) Rejection of Bid & iii) Forfeiture of PG/ SD.
	(iv) If detection of default after issue of PO/ WO	i) Termination/ Short Closure of PO/WO and Cancellation of APO ii) Rejection of Bid & iii) Forfeiture of PG/ SD.
	<b>Note 3:-</b> However, settle bills for the material received in correct quantity and quality if pending items do not affect working or use of supplied items.	
	<b>Note 4:-</b> No further supplies are to be accepted except that required to make the already supplied items work.	
2	If vendor or his representative uses violent/ coercive means viz. Physical / Verbal means to threatens BSNL Executive / employees and/ or obstruct him from functioning in discharge of his duties & responsibilities for the following :	Banning of business for 3 years which implies Barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order.
	a) Obstructing functioning of tender opening executives of BSNL in receipt/ opening of tender bids from prospective Bidders, suppliers/ Contractors.	
	b) Obstructing/ Threatening other prospective bidders i.e. suppliers/ Contractors from entering the tender venue and/ or submitting their tender bid freely.	
3	Non-receipt of acceptance of APO/ AWO and SD/ PG by L-1 bidder within time period specified in APO/ AWO.	Banning for a period of 1 year

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
4.1	Failure to supply and/ or Commission the equipment and /or execution of the work at all even in extended delivery schedules, if granted against PO/ WO.	i) Termination of PO/ WO. ii) Under take purchase/ work at the risk & cost of defaulting vendor. iii) Recover the excess charges if incurred from the PG/ SD and outstanding bills of the defaulting Vendor.
4.2	Failure to supply and/ or Commission the equipment and /or execution of the Work in full even in extended delivery schedules, if granted against PO/ WO.	i) Short Closure of PO/ WO to the quantity already received by and/ or commissioned in BSNL and/ or in pipeline provided the same is usable and/or the Vendor promises to make it usable. ii) Under take purchase/ work for balance quantity at the risk & cost of defaulting vendor. iii) Recover the excess charges if incurred from the PG/ SD and outstanding bills of the defaulting Vendor.
	The supplied equipment does not perform satisfactory in the field in accordance with the specifications mentioned in the PO/ WO/Contract.	i) If the material is not at all acceptable, then return the non-acceptable material (or its part) & recover its cost, if paid, from the o/s bills/ PG/ SD. OR ii) If the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee. Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD.

S. No.	Defaults of the bidder / vendor.		Action to be taken
A	B		C
5.2	Major quality problems (as established by a joint team / committee of User unit(s) and QA Circle) / performance problems and non-rectification of defects (based on reports of field units and QA circle).	i) If the material is not at all acceptable, then return the non-acceptable material (or its part) & recover its cost, if paid, from the o/s bills/ PG/ SD; OR ii) If the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee. Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD; and iii) Withdrawal of TSEC/ IA issued by QA Circle.	
6	Submission of claims to BSNL against a contract		i) Recovery of over payment from the outstanding dues of Vendor including PG & SD etc. and by invoking 'SET OFF' clause 23 of Section III or by any other legal tenable manner. ii) Banning of Business for 3 years from date of issue of banning order or till the date of recovery of over payment in full, whichever is later.
	(a) for amount already paid by BSNL .		
	(b) for Quantity in excess of that supplied by Vendor to BSNL.		
	c) for unit rate and/ or amount higher than that approved by BSNL for that purchase.		
	<b>Note 5:-</b> The claims may be submitted with or without collusion of BSNL Executive/ employees.		
<b>Note 6:-</b> This penalty will be imposed irrespective of the fact that payment is disbursed by BSNL or not.			
7	Network Security/ Safety/ Privacy  If the vendor tampers with the hardware, software/ firmware or in any other way that  b) Disrupts/ Sabotages functioning of the BSNL network equipments such as exchanges, BTS, BSC/ MSC, Control equipment including IN etc., transmission equipments but not limited to these elements and/ or any other TSP through BSNL.	i) Termination of PO/ WO. ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order. iii) Recovery of any loss incurred on this account from the Vendor from its PG/ SD/ O/s bills etc. iv) Legal action will be initiated by BSNL against the Vendor if required.	

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
7 con-td.	c) tampers with the billing related data/ invoicing/ account of the Customer/ User(s) of BSNL and/ or any other TSP(s).	
	d) hacks the account of BSNL Customer for unauthorized use i.e. to threaten others/ spread improper news etc.	
	e) undertakes any action that affects/ endangers the security of India.	
8	If the vendor is declared bankrupt or insolvent or its financial position has become unsound and in case of a limited company, if it is wound up or it is liquidated.	i) Termination/ Short Closure of the PO/WO ii) Settle bills for the quantity received in correct quantity and quality if pending items do not affect working or use of supplied items. iii) No further supplies are to be accepted except that required to make the already supplied items work. iv) In case of turnkey projects, If the material is commissioned and is usable without any degradation of performance, then settle bills for the acceptable equipment/ material (or its part). v) In case of turnkey projects, if the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee, Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD.

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
9	In the event of the vendor, its proprietor, Director(s), partner(s) is / are convicted by a Court of Law following prosecution for offences involving moral turpitude in relation to the business dealings.	i) Termination/ Short Closure of the PO/ WO. ii) Settle bills for the material received in correct quantity and quality if pending items do not affect working or use of supplied items. iii) No further supplies are to be accepted except that required to make the already supplied items work. iv) In case of turnkey projects, If the material is commissioned and is usable without any degradation of performance, then settle bills for the acceptable equipment/ material (or its part). v) In case of turnkey projects, If the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee. Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD.
10	If the vendor does not return/ refuses to return BSNL's dues:	i) Take action to appoint Arbitrator to adjudicate the dispute.
	a) in spite of order of Arbitrator. b) in spite of Court Orders.	i) Termination of contract, if any. ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL from date of issue of banning order or till the date by which vendor clears the BSNL's dues, whichever is later. iii) Take legal recourse i.e. filing recovery suite in appropriate court. i) Termination of contract, if any. ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL from date of issue of banning order or till the date by which vendor clears the BSNL's dues, whichever
11	If the Central Bureau of Investigation/ Independent External Monitor (IEM) / Income Tax/ Sales Tax/ Excise / Custom Departments recommends such a course	Take Action as per the directions of CBI or concerned department.

S.No	Defaults of the bidder/ vendor	Action to be taken
A	B	C
12	The following cases may also be considered for Banning of business:	i) Banning of business for 3 years which implies Barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order.
	(a) If there is strong justification for believing that the proprietor, manager, MD, Director, partner, employee or representative of the vendor/ supplier has been	
	guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolation, misrepresentation with respect to the contract in question.	
	(b) If the vendor/ supplier fails to execute a contract or fails to execute it satisfactorily beyond the provisions of Para 4.1 & 4.2.	
	(c) If the vendor/ supplier fails to submit required documents/ information, where required.	
	(d) Any other ground which in the opinion of BSNL is just and proper to order for banning of business dealing with a vendor/ supplier.	
The above penalties will be imposed provided it does not clash with the provision of the respective tender.		
In case of clash between these guidelines & provision of invited tender, the provision in the respective tender shall prevail over these guidelines.		
Banning of Business dealing order shall not have any effect on the existing/ ongoing works/ AMC / CAMC which will continue along with settlement of Bills.		

**ANNEXURE- Q****CHECK LIST**

The check list shall be filled up and enclosed with the Tender document

SL. No.	ITEMS	Whether available Yes/No	Remarks
1	Bid security declaration as in Annexure-`M`		
2	DD or bankers cheque for the tender fee		
3	MSME/NSIC certificate if applicable		
4	Chennai Office details		
5	Digitally signed copy of tender documents, Corrigendum and Addendum.		
6	Authorization to sign bid document		
7	Proprietary deed/ Partnership deed/ MOA		
8	Power of attorney in case of Partnership Company. Annex `P`		
9	Document proof of past performance in PSU/ Govt dept, having done similar works done in the form of certificate		
10	Bid form Annex `J`		
11	No close relative certificate annex `C`		
12	Proof of financial health of bidder certified by Chartered Accountant /Bank		
13	IT returns copy of last 2 years		
14	Authorization letter for attending bid opening annex `I`		
15	Profile of bidder& questionnaire annex `H`		
16	Vendor master form annex `G`		
17	Self Declarations and undertakings Annex `O`		
18	GST registration copy		
19	PAN card copy		
20	EPF registration copy		
21	ESI registration copy		
22	Financial bid annex `D`,`L`		
23	Clause by Clause compliance annex `F`		
24	Any other required documents		

Signature of Bidder with Date:

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**END OF THE E-TENDER DOCUMENT**