



BHARAT SANCHAR NIGAM LIMITED

(A Government of India Enterprise)

BID DOCUMENT

Tender for Underground OFC laying works for Fiberization of 4G sites in rural area of Hyderabad BA

NIT No.: TS-CO/MM/Tenders/HYD/UG OFC 4G Rural/2024-25 Dated 30/10/2024

Name of the Work	Underground OFC laying works for Fiberization of 4G sites in rural area of Hyderabad BA
Estimated Cost	Rs. 52,78,735/-
Earnest Money Deposit	Rs. 1,31,968/-
Cost of Bid Document	Rs. 1180/-
Start Date & Time for Downloading Document	1300hrs of 30/10/2024
Last Date & Time for Online submission of Bids	1300hrs of 20/11/2024
E-tender Opening of Technical Bid	1300hrs of 21/11/2024

BHARAT SANCHAR NIGAM LIMITED
(A Government of India Enterprise)
O/o CGMT, Telangana Telecom Circle, Doorsanchar Bhavan, Hyderabad-500001.

E-Tender Notice

From:
AGM (MM),
O/o CGMT,
Telangana Telecom Circle

To,

Sub:-Tender Document for U/G OFC laying works for Fiberization of 4G sites in Hyderabad BA Rural area

Please find the enclosed tender document in respect of above mentioned tender which contains the following.

Section	Item	Page No.
	E-Tender Notice	2
1.	Detailed NIT	3-7
2.	Tender Information	8-11
3.	Scope of work (Requirements, SOR, Technical specifications)	12-43
4.PartA	General Instructions to Bidders (GIB)	44-68
4.PartB	Special Instructions to Bidders (SIB)	69-72
4.PartC	E-tendering Instructions to Bidders	73-81
5.PartA	General (Commercial) Conditions of Contract (GCC)	82-110
5.PartB	Special (Commercial) Conditions of Contract (SCC)	111-113
6.	Undertaking& declaration, No near Relation Certificate & No Deviation Certificate	114-116
7.	Proforma(s)	117-121
8.	Bidder's profile & Questionnaire.	122-123
9.Part-A	Bid Form	124
9.Part-B	Financial Schedule	125-127
Annexures	Annexure I to VIII	128-144

If interested, kindly submit your bid offers online on or before date & time specified in Clause 6 of detailed NIT.

Asst. General Manager (Proc)
O/o CGMT,TELANGANA CIRCLE
3rd FLOOR, DOOR SANCHAR BHAVAN,
HYDERABAD-500001
Mail ID: agmmbsnlte@gmail.com

SECTION-I

DETAILED NOTICE INVITING E-TENDER (DNIT)

BHARAT SANCHAR NIGAM LIMITED

(A Government of India Enterprise)

O/o. CGMT, Telangana Telecom Circle, Doorsanchar Bhavan-500001

On behalf of CGMT Telangana Telecom circle, BSNL, Digitally Sealed Tenders are invited from reputed, experienced Firms/Agencies for U/G OFC laying works for Fiberization of 4G sites in Hyderabad BA Rural area.

The estimated cost of the tender and the cost of EMD are given in the table below

Area of the Work	Total U/G OFC to be laid	Estimated cost in Rs. (Excl. GST)	Cost of Tender Form (Rs) (Incl. GST)	<u>EMD</u> (in Rs.)
HYDERABAD BA (RURAL)	18.4 KM	52,78,735/-	1180/-	1,31,968/-

Note:

1. The total quantity stated above are estimated and BSNL reserves the right to vary the above mentioned quantity to the extent up to +/- 25% of specified quantity as per the requirement at any time during the period of contract agreement without any change in unit price of items and other terms & conditions.
2. **Purchase of Tender Document:** Tender document can be obtained by downloading it from CPP Portal <https://etenders.gov.in/e procure/app>
 - 2.1 The bidders downloading the tender document are required to submit the tender fee of amount **Rs.1180/- (Incl. 18% GST)** through DD/ Banker's Cheque along with their tender bid failing which the tender bid shall be left archived un opened/ rejected. The DD/Banker's Cheque shall be drawn from any Nationalized/Scheduled Bank in favor of **"AO (Cash), BSNL, O/o CGMT, Hyderabad"** and payable at Hyderabad. IMPS/NEFT/RTGS to **Accounts Officer(Cash), A/c No. 05110200001650, IFSC code. BARB0HYDERA, Bank of Baroda, RBVR Reddy Hostel Compound, Hanuman Tekdi, Abids Circle,**
 - 2.2 The MSE bidders registered with the designated MSME bodies like National Small

Scale Industries Corporation etc. are exempted from payment of tender fee. However, they shall furnish a proof regarding registration with Bodies under the Ministry of Micro, Small & Medium Enterprises for the construction/Operations/Maintenance services in Telecom Industry / Maintenance and installation of OFC cables, valid on the date of opening of the tender. The scope of area of the above MSME registered bidders must be for construction/maintenance of underground telecom cables/ maintenance and installation of OFC cables /telecom outdoor network and Installation of Telecom Services etc. MSE bidders claiming exemptions from Tender fee & EMD as per MSME guidelines must also register their UAM on <https://etenders.gov.in/eprocure/app> (CPP Portal) and submit proof in this regard along with their bid.

3. Availability of Tender Document on the e-tender portal for bid submission: The tender document shall be available for downloading on CPP portal <https://etenders.gov.in/eprocure/app> from 30/10/2024 13:00Hrs onwards for start of online bid submission.

3.1 Physical copy of the tender document would not be available for sale.

4. Eligibility Criteria:

The bidder should meet the following eligibility requirements

4.1. General Qualification

4.1.1 The Bidder must be Indian registered Companies under Companies Act 1956/2013 or an LLP or a Firm registered under applicable Acts/Individual Proprietorship with valid GST.

4.1.2 The Bidder must not be black-listed in any Central/State Governments/PSUs in India at the time of submission of bid. An undertaking must be submitted in this regard.

4.1.3 The Bidder must have a valid PAN & valid registration under GST Act and EPF & ESI registration.

4.2 Technical Qualification

(a) The tenderer who possesses experience of having successfully completed the **Optical Fiber Cable Construction works** in BSNL/ MTNL/ TCIL/ ITI/ Rites/ Hindustan Cables Limited (HCL)/ PGCIL/ Rail Tel/ Govt (Central/State)/any other Govt. (Central/ State) undertaking having mandate to carry out OFC construction work or the PSUs directly themselves and who also have received the payment for such completed works to the extent as mentioned below, are

eligible to participate in the tender:

- (b) The bidder should have successfully executed U/G OFC laying works for an amount equal to at least 90% of estimated cost of work put to tender from 01/04/2019 to the date of issue of this NIT .

OR

an amount equal to at least 120% of Estimated cost of work put to tender from 01/04/2017 to the date of issue of this NIT .

- 4.2.1** The Bidder should NOT be a licensed Telecom Service Provider to provide Basic Services/ Cellular Telephony Services / Internet Services/ UASL/ NLD/ ILD Services anywhere in India. **Undertaking to this effect must be submitted by bidder.**

Note :- The experience certificate should clearly indicate the quantum of work done in KMs, with details and cost of work, certified by an officer of concerned organization not below the rank of AGM or equivalent.

4.3 Financial Qualification

- 4.3.1** Audited accounts and Turnover Certificate for any three years of the last 5 years i.e., from 2019-20 onwards.

The Annual turnover for any three years of the last five FY i.e., from 2019-20 for a minimum of 30% (each year) of the total estimated cost of the tender, duly certified by CA.

- 4.3.2** Solvency Certificate- for **not less than ₹10, 00, 000/- (Ten Lakhs)** from a Nationalized/Scheduled Bank, which shall not be older than three months from the date of NIT.

Note 1:-The bidders shall submit necessary documentary proof showing that they meet the eligibility criteria along with their tender bid. All documents submitted will also be self-attested by the bidder.

Note 2:-Work Order will be issued or Contract agreement will be signed only upon successful verification of the eligibility documents submitted in the bid, with the originals of the eligibility documents, which shall have to be produced by successful bidder.

5. Bid Security/EMD:

5.1 The bidder shall furnish the bid security/ EMD in one of the following ways:

- a. Demand Draft/Banker's Cheque drawn in favor of **“AO (Cash), BSNL, O/o CGMT,**

Hyderabad” and payable at Hyderabad. IMPS/NEFT/RTGS to Accounts Officer(Cash), A/c No. 05110200001650, IFSC code. BARB0HYDERA, Bank of Baroda, RBVR Reddy Hostel Compound, Hanuman Tekdi, Abids Circle

- b. The MSE bidders registered with the designated MSME bodies like National Small Scale Industries Corporation etc are exempted from payment of bid security. However, they shall furnish a proof regarding registration with bodies under the Ministry of Micro, Small & Medium Enterprises for the construction /Operations /Maintenance services in Telecom Industry / maintenance and installation of OFC cables, valid on the date of opening of the tender. The scope of area of the above MSE registered bidders must be for construction/ maintenance of underground telecom cables/maintenance and installation of OF cables/ telecom outdoor network, Installation of Telecom Services etc.

6. Date & Time of Submission of Tender bids: On or before 13:00Hrs of 20/11/2024

- 6.1 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. Any change in bid opening date due to any other unavoidable reason will be intimated to all the bidders separately.

7. Opening of Tender Bids: Technical Bid at 13:00Hrs of 21/11/2024

8. Place of opening of Tender bids:

- 8.1 The tenders shall be opened at **O/o AGM (Proc), Room No.309, Door Sanchar Bhavan, Hyderabad**, through ‘Online Tender Opening Event’. BSNL’s Tender Opening Officers as well as authorized representatives of bidders can attend the online Tender Opening Event (TOE) from the comfort of their offices. Kindly refer Section-4 Part C of Tender document for further instructions.

9. Tender bids received after due time & date will not be accepted.
10. Incomplete, ambiguous, Conditional, unsealed tender bids are liable to be rejected.
11. CGMT Telangana Telecom Circle, BSNL reserves the right to accept or reject any or all tender bids without assigning any reason. He is not bound to accept the lowest bid.
12. The bidder shall furnish a declaration, as per Section 6 (A), in his tender bid that no addition /deletion / corrections have been made in the terms & conditions of the downloaded tender document for which their bid is being submitted and these are identical to the tender document appearing on the website.

- 12.1 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.

12.2 All documents submitted in the bid offer should be preferably in English/Hindi/ State's official language. In case the certificate viz. experience, registration etc. is issued in any other language other than English/Hindi/ State's official language, the bidder shall attach a translation of the same in English/Hindi/ State's official language, duly attested by the bidder & the translator to be true copy in addition to the relevant certificate.

12.3 All computer generated documents should be duly signed/ attested by the bidder/bidder organization.

13. The queries in respect of this bid document, if any, can be submitted through E-mail latest up to 06/11/2024.

BSNLContact-1	
BSNL's Contact Person	G V RAMA KRISHNA, SDE(Tenders), O/o CGMT, Hyderabad
Telephone & Mobile	9490129100
E-mail ID	agmmbsnltc@gmail.com
BSNLContact-2	
BSNL's Contact Person	Sri N. DEVACHAND NAIK, AGM (Procurement), O/o CGMT, Hyderabad
Telephone & Mobile	040-23203385/ 94900197225
E-mail ID	agmmbsnltc@gmail.com

SECTION 2

TENDER INFORMATION

1. **Type of tender:** Single stage bidding-Two stage opening using two electronic Envelopes.
Note: The bids will be evaluated techno-commercially and financial bids of techno-commercially compliant bidders only shall be opened.
2. **Bid Validity Period/ Validity of bid offer for acceptance by BSNL:** 150 days from the tender opening date and can be extended.
3. The tender offer shall contain two electronic envelopes containing Electronic Form and Commercial, Technical & Financial documents & all relevant bid annexure of following, but not limited to documents:
4. **Submission of Tender:** The Technical bid should be submitted online in the portal by uploading the scanned copies of documents mentioned in point 5 of Tender Information.

The Physical copies of DDs or MSME/NSIC Certificates should be submitted offline by dropping in the tender box provided in O/o AGM (MM), Room No.309, 3rdFloor, Door sanchar Bhavan, Abids, Hyderabad-500001.

The Technical bid and financial bid should be submitted through online.

5. **List of documents to be uploaded with Technical bid in e-tender portal:**
 1. DD /Banker's Cheque for **Rs.1180/-** drawn in favour of **AO (Cash), BSNL, O/o CGMT, Hyderabad** from any Nationalized/scheduled bank OR IMPS/NEFT/RTGS to **Accounts Officer(Cash), A/c No. 05110200001650, IFSC code. BARB0HYDERA, Bank of Baroda, RBVR Reddy Hostel Compound, Hanuman Tekdi, Abids Circle** towards the cost of tender document OR MSME/NSIC Certificate
 2. EMD for Rs.1,31,968/- in the form of DD/Banker's Cheque drawn in favour of **AO (Cash), BSNL, O/o CGMT, Hyderabad** from any Nationalized/Scheduled Bank OR IMPS/NEFT/RTGS to **Accounts Officer(Cash), A/c No. 05110200001650, IFSC code. BARB0HYDERA, Bank of Baroda, RBVR Reddy Hostel Compound, Hanuman Tekdi, Abids Circle** towards the cost of tender document OR MSME/NSIC Certificate.
 3. Certificate showing fulfillment of the eligibility mentioned/stated in clause 4 of the detailed NIT.
 - (a) Solvency Certificate for not less than Rs. 10,00,000/- (Ten Lakhs) from a Nationalized/Scheduled Bank, which shall not be older than Three months from the date of NIT.
 - (b) Audited accounts And Turnover Certificate for any three years of the last 5 years i.e., from 2019-20 onwards.

The Annual turnover for any three years of the last five FY i.e., from 2019-20 should be for a minimum of 30% (each year) of the total estimated cost of the tender, duly certified by CA.

(c) Experience Certificate

4. Power of Attorney (POA) & authorization for executing the power of Attorney in accordance with Clause 14.3 of Section 4 Part A.
5. Copy of Articles and Memorandum of Association or Partnership deed as the case may be.
6. Details of the firm along with List of Directors on the Board of the Company, list of partners, as applicable.
7. Attestation of the signature of the authorized signatory, issuing POA, by Bank.
8. Bidder's Profile & Questionnaire duly filled & signed as per Section-8
9. Scanned Copy of Firm Registration or Declaration for Individuals (Annexure XIV)
10. Self-attested copy of PAN CARD & GST registration of the bidder/Firm.
11. IT Returns for the FY for which turnover is submitted.
12. EPF and ESI Proof (Self attested photo copy)
 13. The bidder should submit either a valid license obtained from the Labor Commissioner or an undertaking stating that he/she will comply the Labor Acts in accordance with Central Labor (R&A) Act, 1970 Section 1 clause 4 (b) as amended from time to time. (Proforma at Annexure VII)
14. Letter of authorization for attending bid opening event as per Section-7 Part (C)
15. Declaration of No near relatives in BSNL as per the proforma in Section 6(B)
16. Undertaking & Declaration duly filled in and signed as per section-6(A)
17. Tender/Bid form as per Section-9 part-A
18. Bidder should download the tender document, signed in all pages should be uploaded along with the technical bid in the-tender portal.
19. Checklist of the documents submitted as per annexure-II
20. Self-declaration stating that the firm/individual not blacklisted/debarred earlier as on date in Annexure-IV.
21. Certification regarding downloading of application from internet (Annexure-IX).
22. Declaration w.r.t. Rule 144 (xi) to GFR 2017. (Pro forma in Annexure X)
23. Declaration of Udyog Aadhaar Memorandum (UAM) number by the vendors on CPPP is mandatory (Annexure-XII).
24. Undertaking regarding NOT a licensed Telecom Service Provider to provide Basic Services/ Cellular Telephony Services / Internet Services/ UASL/ NLD/ ILD Services anywhere in India (Annexure-XI).
25. No Deviation Statement or Clause by clause compliance statement pursuant to Clause 11.2 (a) of Section-4 Part A (Pro forma at Section – 6 Part (C))
26. Any other documents required as per the conditions of tender document.

6. Financial envelope(online) shall contain: Price schedule as per Section-9 Part-B

Electronic Form Rates should be quoted in figures as well as in words. Rate quoted should be percentage (%) **above, on par with or below** the Schedule of rates (SOR) by considering all the 14 Line items as a whole. **The rate quoted should be inclusive of all**

taxes but exclusive of GST. In case of variation between the amount mentioned in figures & words, the amount mentioned in words shall be taken as final. Financial bid should be submitted online portal only. **No other mode of submission of financial bid is accepted under any circumstances.**

7. The following documents are required to be submitted offline:

7.1. Physical copies of EMD/Bid Security, Tender Document Cost kept in an envelope, should be dropped in tender box provided at O/o. AGM (Proc), Room No.309, 3rd Floor, Door sanchar Bhavan, Abids, Hyderabad-500001. **The envelope shall bear the tender number, name of work and the phrase: “Do Not Open Before 21/11/2024”.**

- i. EMD–Bid security (original copy)/Copy of MSE/NSIC Certificate.
- ii. DD/Banker’s Cheque of Tender schedule fee/Copy of MSE/NSIC Certificate.

Note 1: Tender Fee & EMD, if applicable, is required to be submitted by the bidder preferably through online payment mode as per the Bank/Beneficiary Details provided in the DNIT/Tender Enquiry document. In case of MSE (Micro & Small Enterprise) bidder, valid MSE Certificate /Udyam Registration certificate, broadly covering the tendered equipment/ services, for claiming exemption of Tender Fee / EMD shall be required to be submitted.

However, scanned copies of the following documents (which ever applicable):

- i) Bank Transaction details with UTR Number towards the successful e-payment for Tender Fee/ EMD
- ii) DD/ Banker Cheque or Bank Guarantee (if opted for EMD)
- iii) valid MSE Certificate /Udyam Registration certificate(for Micro & Small Enterprise claiming exemptions from Tender Fee/ EMD) are to be mandatorily uploaded by the bidder in their online Technical bid part (1st electronic Envelope i.e. Technical Envelope) on e-tender portal failing which the tender bid shall be archived unopened / rejected on e-tender portal at bid opening stage.

Originals of bank instruments such as DD or EMBG towards Tender Fee, EMD/Bid Security respectively (if not submitted through e-payment mode), shall be submitted by bidder on any date before or within 5 days of bid submission end date failing which the tender bid (if already opened on basis of scanned copies uploaded in 1st electronic Envelope i.e. Technical Envelope, shall be rejected.

Note 2: During tender process, BSNL’s tender inviting authority may require the bidder to produce original copy of any document such as Power of Attorney, Integrity Pact, Bid Form, security agreement etc., submitted as scanned copy, in Technical bid part on e-tender portal (1st electronic Envelope), which the bidder will have to comply with.

7.2 Tender Fee & EMD, if applicable, is required to be submitted by the bidder preferably through online payment mode as per the Bank/Beneficiary Details provided in the DNIT/Tender Enquiry document. In case of MSE (Micro & Small Enterprise) bidder, valid MSME Certificate/ Udyam Registration certificate broadly covering the tendered equipment/services, for claiming exemption of Tender Fee/EMD shall be required to be submitted. Declaration of Udyog Aadhaar Memorandum (UAM) number by the vendors on CPPP is mandatory. **The bidders who fail to submit the UAM number shall not be able to avail benefits available to MSME’s.**

- 8. Evaluation of Tender:** There will be two types of evaluation.
- a. Technical/Pre-selection Bid.
 - b. Financial/Price Bid.
 - c. On the day of opening of tenders only Technical Bids will be opened. Financial bids will not be opened on that day.
 - d. Based on the result of the technical screening, Financial Bids will be opened on a specified date and will be intimated to all technically qualified bidders.
 - e. Only one authorized representative from each tenderer will be permitted to be present at the time of opening of bids.
- 9. VENUE OF THE OPENING OF TENDERS:** O/o AGM (Proc), Room No.309, 3rd Floor, Door sanchar Bhavan, Abids, Hyderabad-500001.
- Note: In case where the documents of bid security etc. are not submitted in the manner prescribed above in Section-2, Clause 7.3 (C), the bid shall be rejected. An index showing the details of documents uploaded must also be uploaded.
- 10. Time line for start of services:**
- The Successful bidder should start the work immediately after entering the agreement.
- 11. Duration of Contract:**
- The tender is valid for a period of one year or on completion of the estimated cost/ quantity whichever is earlier. It can be extended by another 6(six) months with a span of three (3) months at a time and +25% quantity as per requirement.
- 12. Payment terms**
- The bidder should submit the invoice to the officer in-charge/Claims office in respect of OFC construction within two months after successful completion of the work. No invoice will be accepted beyond the above mentioned time limit. The invoice(s), duly certified, should reach the Claim office within 10 days from the date of the invoice.
- 13. Paying authority:** CAO, Claim office, Room No.504, 5th Floor, O/o CGMT, Telangana Telecom Circle, BSNL, Hyderabad.
- 14. Consignee:** Delivery of Services/Goods shall be made by the successful supplier to the work order issuing authority.
- 15. Store Depots/store locations,** from which BSNL supplied material can be collected, shall be specified in the Work Orders.

SECTION-3

SCOPE OF WORK

I. Introduction

- A) BSNL intends to select Contractor for Under Ground OF Cable laying works from nearest Telephone Exchange/BTS/OFC joint/ Fiber presence point of BSNL to proposed **4G BTS site locations in Rural area of Hyderabad BA** as per the specifications/engineering instructions mentioned in the tender document. The work is required to provide required bandwidth to 4G BTS and other services through U/G Optical Fiber media from BSNL.
- B) Tender is invited from reputed, qualified, experienced and financially strong firms / agencies for laying of Under Ground PLB pipe/Optical Fiber cable through the open trenching of soil/BT Road/CC Road/Duct/HDD etc. , Jointing/ terminations OF Cable, constructions of Joint chambers/route indicators and other allied works mentioned in the tender at appropriate places.
- C) Work Orders will be issued to successful approved bidder by the concerned AGM/ DGM for carrying out specified/required works in the route.

II. BRIEF DESCRIPTION OF WORK:

- A) The work which shall be carried out as per the construction specifications issued by BSNL contained in this bid document, involves conventional trenching and reinstatement, HDD and related allied works.
- B) Open trenching at 165CM depth, width of 45CM at top and 30CM at bottom.
- C) Whenever there is any doubt in any of the construction step, BSNLs Engineering Instructions on Under Ground Optical Fiber cable laying works shall be referred.
- D) **STORES SUPPLIED BY THE BSNL:** PLB pipes will be supplied by the BSNL in coils of varying lengths from 200meters onwards. OF cable of length 2KM/4KM drum will be supplied. Spools should be de-coiled using jack mechanism and bends/damages should not occur to the OF cable/PLB pipes. This will be part of the contractors work and no extra payment will be paid.
- All required stores like OF Cable, PLB Pipe, Jointing kits, patch cards, pigtails, termination box/FDMS etc. will be supplied by BSNL. The contractor

shall transport (including loading and unloading) all stores issued to him from District Telecom Store, to the site of work at his own cost. The BSNL shall not pay any transportation charges to the contractor.

- E) All materials supplied to the contractor by the BSNL shall remain the absolute property of BSNL and shall not be removed from site of the work except for use in the work and shall be at all times open to inspection by the Representative of Tender Issuing Authority. In case the materials like cable and accessories are taken delivery by the contractor and stored at the site office/store of the contractor such site office / store will also be treated “as site” for this purpose. Any such material remaining unused at the time of the abandonment, completion or determination of the contract shall be returned to the BSNL at a place informed to him by the BSNL, failing which the cost of the unused materials shall be deducted from the contractor’s material security or any of his pending bills or from any other security.
 - F) The contractor shall be responsible for the transportation of store, storage and safe custody of all material supplied to him by the BSNL, which in the contractor’s custody whether, or not installed in the work. The contractor shall satisfy himself regularly the quantity and quality of the materials supplied to him and he will be responsible for any subsequent deterioration and discrepancy (inclusive of theft) in the quantity/ quality of the materials.
 - G) The contractor shall submit a proper account of all the materials supplied to him by the BSNL and those consumed for items of work any discrepancy of difference between the materials issued to the contractor and those consumed in the work as per the “BSNL’s calculation” (which shall be final) will be charged to the contractor or deducted from his bills at 1.5 times of prevailing standard price including freight, handling charges, storage charges etc.
 - H) The contractor shall ensure that only the required materials are issued to him. Upon completion of work, the contractor shall return to the BSNL. at the later designated store in good condition, free of charges, any unused materials that were supplied by the BSNL.
- I) The tentative works to be carried out by the bidder.**
- i. Trenching of Soil/BT road/CC road etc.- **16.6KM** Approximately
 - ii. PLB Pipe Laying- **16.6 KM** Approximately

- iii. 24F/48F OF Cable Pulling /Laying/clamping, laying in trenches, U/G DUCTs etc.-**18.4KM** approximately
- iv. Construction of RCC Joint chambers-**30 No.s**
- v. Construction of Route indicator/Joint indicators- **114No.s**
- vi. 24F/48F cable Splicing and Termination and other allied works-**40 No.s**
- vii. The above mentioned quantities in lengths/units are tentative only.

J. COST OF WORK:

The estimated cost of work is as mentioned in the Notice Inviting Tender which has been worked out based on standard scheduled of rates mentioned in this tender document. The actual value of work may vary based on the actual requirement but generally being limited to +/- 25% of the contract value.

III. SPECIFICATIONS FOR LAYING Under Ground OPTICAL FIBER CABLE

The guidelines in the form of Engineering Instructions (E.Is.) on Construction Practices of Optical Fiber Cables are issued by T & D wing of the Department, from time to time. However, the present practices are summarized here under, from the point of view of describing scope of work under various items of work.

1. General.

A detailed measurement of lengths of cable route along with details of rail/road crossings, culverts, causeways, etc. may be recorded in the detailed survey register. The probable locations of joints, terminations and re-generators may also be decided and marked on the route map.

On the basis of surveys, general permission from road and rail authorities for laying the Optical Fiber Cable along the decided routes and permission for rail / road crossings will have to be obtained. Generally, O.F.C. is laid straight as far as possible along the road near the boundaries, away from the burrow pits. The O.F.C. is laid along the roads at a minimum distance of 15 meters from the center line of the road or in accordance with the permission from the concerned road authorities in view of their road widening plan. As the O.F.C. carries high capacity traffic and is planned for 40 years of life, it is imperative that the cable is laid after obtaining due permission from all the concerned authorities to avoid any damage/shifting at a later stage and also disruption of services/ revenue loss.

In special cases, where it may be necessary to avoid burrow pits or low lying areas, the cable may be run underneath the shoulders at a distance of 0.6 meter from the outer edge of the road embankment provided the same is located at least 4.5 meters away from center line of road and 1.2 meter below the road surface. The Optical Fiber Cable is laid through PLB Pipes/Coils buried at a nominal depth of 165cms.

The steps involved in OF Cable construction are as under:

- i) Excavation of trench up to a nominal depth as specified, according to construction specifications along National/State Highways/other roads and also in city limits as mentioned in the notice inviting tender.

- ii) Laying of PLB pipes/coils coupled by PLB sockets in excavated trenches, on bridges and culverts, drawing of 6 mm polypropylene para pro rope (P.P. rope) through the PLB pipes/coils as per Construction Specifications and sealing of PLB pipe ends at every manhole by PLB end caps of suitable size.

- iii) Providing of mechanical protection by R.C.C. Pipes/GI pipes and/or concreting/chambering according to construction specifications, wherever required.

- iv) Fixing of GI pipes/troughs with clamps at culverts/bridges and/or chambering or concreting of G.I. Pipes/troughs, whenever necessary.

- v) Bank filling and dressing of the excavated trenches according to construction specifications. Digging of pits 1 meter towards jungle side at every manhole chamber to a depth of 60 cms., fixing of route indicator, concreting and back filling of pits. Painting of route indicators with yellow colour and sign writing denoting route indicator number as per construction specifications.

vi) **Documentation.**

The documentation, consisting of the following shall be prepared exchange to exchange for intra SSA OFC links and for each section in case of inter SSA/National long distance routes.

- a) **Route Index Diagrams – General:** This diagram shall consist of Cable Route Details on Geographical Map drawn to scale the prominent land marks and alignment of cable with reference to road. This shall be prepared on A-3 sheets of 80 GSM.

b) **Route Index Diagrams– Profile:** These diagrams will contain:

- a. Make and size of the cable.
- b. Offset of cable from center of the road at every 10 meters
- c. Depth profile of Cable at every 10 meters
- d. Details of protection with type of protection depicted on it
- e. Location of culvert and bridges with their lengths and scheme of laying of PLB pipe/PLB Blowing Type/Pre-installed ropes thereon.
- f. Important landmarks to facilitate locating the cable in future
- g. Location of joints and pulling manholes.

These diagrams shall be prepared on **A-4 sheets** of 80GSM. On one sheet profile of maximum 400 meters shall be given to ensure clarity.

c) **Joint location Diagram:** This diagram will show:

- a. Geographical location of all the joints.
- b. Depth of Joint Chamber covers from ground level
- c. Type of chamber (Brick/Pre-cast)
- d. Length of O.F. Cable kept inside the joint chamber from either direction.

This shall be prepared on **A-4 sheets** of 80 GSM. All the diagrams (i), (ii) & (iii) shall bear the signatures of the contractor, the Engineer-in-charge as a proof of accuracy of the details. The diagrams shall be bound in A-4 size book with cover. The cover sheets shall be of 110 GSM and laminated. The front cover shall have the following details.

1. Name of the BA/Project Organization.
2. Name of the OFC Link
3. Name of the Contractor
4. Date of commencement of work
5. Date of completion of work

For each route/section 6 sets of above-mentioned document shall be submitted.

2. **PLB/ROPE Materials used:**

PLB PIPE/COILS

PLB Socket: For coupling PLB Pipes/coils

PP Rope:6mm PP rope is drawn through the PLB pipes / coils and safely tied to the end

caps at either ends with hooks to facilitate pulling of the OF cables at a later stage

PLB End Caps: For pulling the cable through the pipes, it is necessary to have suitable manholes at every 200M length and also at bends and corners suitably located. The pipes are laid for 200M or less at a time for the distance between two manholes. The ends of the PLB pipes/coils are closed with PLB End Caps. A suitable arrangement should be provided in the End Cap to tie PP Rope.

MATERIALS FOR MECHANICAL PROTECTION

For lesser depths requiring mechanical protection as per specifications and in built up areas, in towns and cities falling within the municipal limits, suitable mechanical protection is provided to PLB pipes/coils using RCC full/half round pipes or GI pipes or concreting of size 25 cms x 25 cms reinforced with MS weld mesh or a combination of any of these as per the instructions of the SDE-in-charge of the work as per instructions of the Engineer-in-Charge.

G.I. PIPES: Whenever protection by G.I. pipe is provided, it is preferable to use PLB coils. As space on parapet wall on Bridges/culverts is limited, 65mm GI pipes may be used with 32 mm PLB coil drawn inside.

M.S. Weld Mesh: The PLB pipes can also be protected by embedding it in concrete of size of 25 cms x 25 cms reinforced with MS weld mesh.

The strength of RCC/CC is dependent on proper curing, therefore, it is imperative that water content of CC/RCC mix does not drain out into the surrounding soil. In order to ensure this, the RCC/CC work should be carried out by covering all the sides by yellow PVC sheets of weight of nor less than 1 kg per 8 sq. m. to avoid seepage of water into the soil.

RUBBER BUSH: To prevent entry of rodents into PLB pipes, the ends of PLB pipes are sealed at every manhole and joint using rodent resistant hard rubber bush (cap), so that it should be able to prevent the entry of insects, rodents, mud, and rainwater into the PLB pipe/Coil.

ROUTE INDICATOR: The route indicator are co-located with each manhole. In addition, route indicators are also to be placed where route changes direction like road crossings etc. The route indicators made of pre-cast RCC should have the following

dimensions: Base(250 mm x 150 mm); Top(200 mm x 75 mm); Height(1250 mm).The word 'BSNL OFC' should be engraved on the route indicators. The route indicators are painted yellow and the same are placed at 2 ft. away from the center of the trench towards jungle side. The engraved word 'BSNL OFC' should be painted in white, on route indicators. Numbering of route indicators should be done in white paint. The numbering scheme for route indicators will be Joint No./Route Indicator No. for that joint. For example, 2/6 marking on a route indicator means 6th route indicator after 2nd joint. Enamel paints of reputed brand should be used for painting and sign writing of route as well joint indicators.

JOINTCHAMBER

The joint chamber is provided at every joint normally at a distance of 2 Kms to keep the O.F.C. joint well protected and also to keep extra length of cable which may be required in the event of faults at a later date. The joint chambers are made at site using bricks and mortar or are of pre- cast RCC type.

Supply and fixing of Pre-fabricated RCC Closure as Joint Chamber:

For supplying RCC Ring, First, a RCC ring closure of size 1.2 m (dia) x 0.3m depth and rim thickness 50mm made of standard 1:2:4 concrete mix. It should have a split (with two halves) RCC cover of thickness 50mm made of cement concrete mix of 1:2:4 (1: cement, 2: coarse sand, 4 stone aggregate 20mm nominal size reinforced with MS fabric 75 x 75 mm mesh of weight not less than 7.75 Kg per sq. meter having galvanized iron handles for each half to facilitate easy lifting, to be used as joint chamber. The word 'OFC' should be engraved on each half of the cover. The joint chamber should be so designed that PLB pipe/PLB Blowing Type/Pre-installed rope ends remain protruding minimum 5 cms inside the chamber. The PLB pipes should be embedded within the chamber in such a way that PLB pipe remains free from the weight of the construction. The joint chamber should be plastered on all internal surfaces and top edges with cement mortar of 1:3 (1: cement, 3: coarse sand) with a floating coat of complete cement as per standard. The joint chamber is to be filled with clean sand before closing.

For fixing Pre-cast RCC chamber, first a pit of size 1.5 m x 1.5 m x 1.65 m depth is required to be dug. Pre cast RCC chamber consists of three parts (i) round base plate in two half of 140 cm dia and 5 cm thickness (ii) full round RCC joint chamber

with dia metre of 120 cm and height of 100cm and thickness of 5cm (iii)round top cover will be in two halves with diameter of 140cm and thickness of 5 cm having one handle for each half in centre and word 'BSNL OFC' engraved on it.. After, fixing the pre-cast RCC joint chamber, the joint chamber is filled with clean sand before closing. Lastly, back filling of joint chamber pit with excavated soil is carried out.

CABLE PULLING AND JOINTING/ SPLICING:

CABLE PULLING:

Manholes marked during PLB pipe Type/Pre-installed ropes laying of approx. size of 3m length x 1.0m width x 1.65m depth shall be excavated for pulling the cables. There may be situations where additional manholes are required to be excavated for some reasons, to facilitate smooth pulling of cable. Excavation of additional manholes will be carried out, without any extra cost. De-watering of the manholes, if required, will be carried out without any extra cost. Dewatering/ De-gasification of the ducts, if required, will be carried out without any extra cost. The existing 6mm PP rope shall be replaced by with PP rope of 8mm dia between the two consecutive manholes. This is to ensure that the PLB pipes Type/Pre-installed ropes are cleaned for pulling the cable without exerting undue tension on the OF cable. While cleaning, excessive pressure should not be put as this may result in breaking of P.P. rope and thus requiring opening of additional manholes. However, in case the cleaning rope gets stuck up during pulling, the location of clogging of PLB Pipe Type/Pre-installed ropes should be measured and located accurately. The trench at that location should be opened and the PLB Pipe Type/Pre-installed ropes should be cleaned properly or if not possible, it should be changed by a clean new PLB Pipe Type/Pre-installed ropes to facilitate easy cable pulling at a later stage without any breakage. If clogging of PLB Pipe Type/Preinstalled ropes is in the location where the pipes are protected either by RCC Pipe Type/Pre-installed ropes or by concreting and the protection is Broken for cleaning/changing the PLB Pipe, the protection thus removed should be brought back to normal by the contractor without any extra cost. However, PLB Pipes Type/Pre-installed ropes, RCC Pipes required for this purpose will be supplied by the BSNL.

CABLE BLOWING

- The tenderer should blow/de blow the cable in the PLB duct by air jet blowing as per Specification. Within 7 days of notice, the contractor shall commence Blowing /de blowing and complete the work at an average speed of 4 KM per day. There shall not be any damage to the OF cable blown/de blown. Cable blowing shall be done using blowing machine which can be kept inside the manhole, as it will avoid formation of loop outside. Compressor of suitable capacity shall be used.
- Blowing has to be done for the route length, end to end. This implies work may have to be done beyond the section awarded to the contractor, and he is bound to do it. The works involved in blowing are listed below.
- Transportation of all materials issued by BSNL from stores including cable drums, joint rings and handling of the same (including loading, unloading, handling and local distribution).
- Digging of manhole and reinstatement after blowing of cable.
- The opening of End plug, de-roping of rope in PLB pipes.
- Duct integrity test as per specifications.
- If any coupler is not connected properly, they should be connected at the coupling points. If required the coupling points are to be dug open for this purpose and the existing duct cut, aligned and coupled properly. Extra piece of pipe if required has to be coupled.
- Blowing of cable and fixing cable seal plug.
- Keeping 30 mtr coil in every joint chamber.
- Closing the manhole/joint cover and ensuring that the covers its properly.

If there is time gap after laying of pipes and blowing, the contractor should carry out Duct Integrity test of the pipe to the specified pressure and ensure that there is no block or leak, as per specifications. If there are blocks the same shall be rectified. A check list may be submitted to the site Engineer of the section after every pipe is tested, indicating the block etc. and the action taken to rectify the duct. No separate rates are payable for duct integrity test or rectification of ducts.

Cable should be blown for the entire section in the pre-assigned pipe & colour. No crossing should take place in manholes between different colored pipes, if multiple pipes are available. Ensure no mud, water or debris goes inside the pipe during the work. Any obstructions found in the pipeline after cable blowing, shall be removed at the expense of

the Contractor. Depending upon the length of the cable and the addl. length required at manholes, chain measurement should be taken from the starting end of the section, and the drums should be properly located.

The drums are of approx. 2 Km to 4 Km and may sometimes be smaller. It may be preferable to blow the OF cable by placing the drum at the manhole point nearest to midpoint of the coil size and blow in both directions. The standard practice is to keep the clock-wise end of the cable to 'A' side of the route and the anticlockwise end to 'B' side. Also, it is the convention to have the clock-wise end on top and anticlockwise at the bottom of the drum. With that in view, the OF Cable is mounted on the jack and wheel and positioned at the manhole point. It is important to keep the drum shaft (axle) in horizontal position by adjusting the jacks. After it is set in position, the cable should be inserted into the blowing machine.

Proper communication is to be established between the lead-in and take out manholes. This can be done by suitable Trans Receivers (Walkie Talkies) or Magneto telephones with drop wire. This has to be arranged by the contractor and communication with each point should be kept throughout the blowing. OF cable at RCC chambers should be lead along the walls & suitable MS clamps should be provided (4 on each side). Additional protection of cable if required shall be provided at manholes.

3. EXCAVATION OF TRENCHES

i) Trenching

Location and Alignment of the Trench: In city areas, the trench will normally follow the foot- path of the road except where it may have to come to the edge of the carriage way when cutting across road with specific permissions from the concerned authorities maintaining the road (such permissions shall be obtained by the department). Outside the city limits the trench will normally follow the boundary of the roadside land. However, where the road side land is full of burrow pits or a forestation or when the cable has to cross culverts/bridges or streams, the trench may come closer to the road edge or in some cases, over the embankment or shoulder of the Road (Permissions for such deviations for cutting the embankment as well as shoulder of the road shall be obtained by the contractor on behalf of BSNL).

The alignment of the trench will be decided by a responsible departmental official, not below the rank of a Junior Telecom Officer. Once the alignment is marked, no

deviation from the alignment is permissible except with the approval of Engineer-in-charge. While marking the alignment only the center line will be marked and the Contractor shall set out all other work to ensure that, the excavated trench is as straight as possible. The Contractor shall provide all necessary assistance and labour, at his own cost for marking the alignment. Contractor shall remove all bushes, undergrowth, stumps, rocks and other obstacles to facilitate marking the center line without any extra charges. It is to be ensured that minimum amount of bushes and shrubs shall be removed to clear the way and the contractor shall give all consideration to the preservation of the trees.

ii) Line-Up: The line-up of the trench must be such that PLB pipe(s) shall be laid in a straight line except at locations where it has to necessarily take a bend because of change in the alignment or gradient of the trench, subject to the restrictions mentioned elsewhere.

iii) Method of Excavation: In city limits as well as in built up areas, the contractor shall resort to use of manual labour only to ensure no damage is caused to any underground or surface installations belonging to other public utility services and/or private parties. However, along the Highways and cross country, there shall be no objection to the Contractor resorting to mechanical means of excavation, provided that no underground installations exist in the path of excavation, if any, are damaged.

There shall be no objection to resort to horizontal boring to bore a hole of required size and to push through G.I. Pipe (65mm dia) through horizontal bore at road crossing or rail crossing or small hillocks etc. All excavation operations shall include excavation and 'getting out'. 'Getting out' shall include throwing the excavated materials at a distance of at least one meter or half the depth of excavation, whichever is more, clear off the edge of excavation. In all other cases 'getting out' shall include depositing the excavated materials as specified.

In Rocky strata excavation shall be carried out by use of electro mechanical means like breakers or by blasting wherever permissible with express permission from the competent authority. If blasting operations are prohibited or nor practicable, excavation in hard rock shall be done by authorize.

Trenching shall as far as possible be kept ahead of the laying of pipes. Contractor shall exercise due care that the soil from trenching intended to be loose for back filling is not mixed with loose debris. While trenching, the Contractor should not cause damage to any underground installations belonging to other agencies and any damage caused should be made good at his own cost and expense.

The contractor to prevent any accident to pedestrians or vehicles shall provide necessary barricades, night lamps, warning boards and required watchman. While carrying out the blasting operations, the contractor shall ensure adequate safety by cautioning the vehicular and other traffic. The contractor shall employ sufficient man-power for this with caution boards, flags, sign writings etc.

The contractor should provide sufficient width at the trench at all such places, where it is likely to cave in due to soil conditions without any extra payment. A free clearance of minimum 15 cms should be maintained above or below any existing underground installations. No extra payment will be made towards this.

In order to prevent damage to PLB pipes over a period of time, due to the growth of trees, roots, bushes, etc. the contractor shall cut them when encountered in the path of alignment of trench without any additional charges. In large burrow pits, excavation may be required to be carried out for more than 165cms in depth to keep gradient of bed less than 15 degrees with horizontal. If not possible as stated above, alignment of trench shall be changed to avoid burrow pit completely.

iv) Depth and Size of the Trench: For normal & hard soil for all areas minimum depth shall be 165cms shall be followed for penalty. For ordinary & hard rock minimum depth shall be 135 cms shall be followed for penalty. For Hilly terrain, minimum depth shall be 90 cms shall be followed for penalty. However, Engineer-in-charge in exceptional cases due to adverse site conditions encountered may allow lying PLB Pipes at a lesser depth with additional protection. In all cases, the slope of the trench shall not be less than 15 degrees with the horizontal surface. The width of the trench shall normally be 45 cms. at the top and 30 cms. at the bottom. In case, additional pipes (PLB/GI/RCC Pipes) are to be laid in some stretches, the same shall be accommodated in this normal size trench.

When trenches are excavated in slopes, uneven ground, inclined portion, the lower edge shall be treated, as top surface of land and depth of trench will be measured accordingly. In certain locations, such as uneven ground, hilly areas and all other places, due to any reason what so ever it can be ordered to excavate beyond standard depth of 165 cms to keep the bed of the trench as smooth as possible. Near the culverts, both ends of the culverts shall be excavated more than 165 cms. to keep the gradient less than 15 degree with horizontal. In case where depth beyond specified depth is necessary it shall be clearly indicated in the technical specification of bid documents and of each work order. No extra payment shall be made for such extra depth.

If excavation is not possible to the minimum depth of 165 cms, as detailed above, full facts shall be brought to the notice of the Engineer-in-charge in writing giving details of location and reason for not being able to excavate that particular portion to the minimum depth. The competent authority shall grant approval in writing under genuine circumstances. The decision of the competent authority shall be final and binding on the contractor.

- v) **Dewatering:** The Contractor shall be responsible for all necessary arrangements to remove or pump out water from trench. The Contractor should survey the soil conditions encountered in the section and make his own assessment about dewatering arrangements that may be necessary. No extra payment shall be admissible for this.
- vi) **Wetting:** Wherever the soil is hard due to dry weather conditions, if watering is to be done for wetting the soil to make it loose, the same shall be done by the contractor. No extra payment shall be admissible for this.

vii) **Blasting:** For **excavation in hard rock**, where blasting operations are considered necessary, the contractor shall obtain approval of the Engineer-in-Charge in writing for resorting to blasting operations. The contractor shall obtain license from the competent authority for undertaking blasting work as well as for obtaining and storing the explosive as per the Explosive Act, 1884 as amended up to date and the explosive Rules, 1983. The contractor shall purchase the explosives fuses, detonators, etc. only from a licensed dealer. Transportation and storage of explosive at site shall conform to the aforesaid Explosive Act and Explosive Rules. The contractor shall be responsible for the safe custody and proper accounting of the explosive materials. Fuses and detonators shall be stored separately and away from the explosives. The Engineer-in-Charge or his authorized representative shall have the right to check the contractor's store and account of explosives.

The contractor shall provide necessary facilities for this. The contractor shall be responsible for any damage arising out of accident to workmen, public or property due to storage, transportation and use of explosive during blasting operation. Blasting operations shall be carried out under the supervision of a responsible authorized agent of the contractor (referred subsequently as agent only), during specified hours as approved in writing by the Engineer-in-Charge. The agent shall be conversant with the rules of blasting.

All procedures and safety precautions for the use of explosives drilling and loading of explosives before and after shot firing and disposal of explosives shall be taken by the contractor as detailed in **IS:4081** safety code for blasting and related drilling operation.

viii) Trenching Near Culverts/Bridges: The PLB pipes shall be laid in the bed of culvert at the depth not less than 165 cms protected by G.I. pipes/ DWC/ RCC and concreting as decided by Engineer-in-Charge.

Both ends of culverts shall be excavated more than 165 cms in depth to keep the gradient of not less than 15 degree with horizontal. The bed of trench should be as smooth as possible.

While carrying out the work on bridges and culverts, adequate arrangement for cautioning the traffic by way of caution boards during day time and danger lights at night shall be provided. In case of small bridges and culverts, where there is a likelihood of their subsequent expansion and authorized, the cable should be laid with some curve on both sides of the culvert or the bridge to make some extra length available for re-adjustment of the cable at the time of reconstruction of culvert or the bridge.

4. LAYING OF H.D.P.E. PIPES/COILS:

After the trench is excavated to the specified depth, the bottom of the trench has to be cleared of all stones or pieces of rock and leveled up properly. A layer of soft soil/or sand (in case the excavated material contains sharp pieces of rock/stones) of not less than 5 cms is required for leveling the trench to ensure that the cable when laid will follow a straight alignment. Adequate care shall be exercised while laying so that the OF cables are not put to undue tension/pressure after being laid as this may adversely affect the optical characteristics of cables with passage of time.

The contractor shall ensure that trenching and pipe laying activities are continuous, without leaving patches or portions incomplete in between. In case intermediate patches are left, measurement of the completed portions will be taken only after work in such left over patches are also completed in all respects.

Preparatory to aligning the pipe for jointing, each length of the PLB pipe shall be thoroughly cleaned to remove all sand, dust or any other debris that may clog, disturb or damage the optical fiber cable when it is pulled at a later stage. The ends of each pipe and inside of each PLB socket shall be thoroughly cleaned of any dirt or other foreign materials. After the trench is cleaned the PLB Pipes/Coil shall be laid in the cleaned trench, jointed with “O” ring type PLB Sockets & 6 mm PP rope should be drawn through the PLB Pipes at the time of laying the pipes to facilitate cable pulling at a later stage. At every manhole approximately at every 200m or at bends or turns the pp rope will be tied to the PLB end caps used for sealing the PLB pipes, to avoid entry of rodents/mud etc. At the end of each day work, the open ends of the pipes sections shall be tightly closed with end caps to prevent the entry of dirt/mud, water or any foreign matter into PLB pipes until the work

is resumed.

In City, Town, Urban area falling within Municipal/Corporation limits, the PLB Pipes shall be laid with protection using RCC/G.I. Pipes/Concreting reinforced with weld mesh. Moreover, in cross country routes, if depth is less than 1.2 meters, protection by using RCC/G.I. Pipe/Concreting reinforced with weld mesh shall be provided. Engineer-in-charge shall decide about such stretches and type of protection to be provided in view of the site requirements. Normally 100mm RCC Pipes shall be used for protecting PLB Pipe but if more than one PLB Pipe is to be laid and protected, RCC Pipe of suitable size to accommodate the required number of PLB Pipes shall be used.

The PLB Pipes shall be laid in RCC Full Round spun Pipes/DWC/GI pipes as required at road crossings. The RCC pipes/GI pipes shall extend at least 3 meters on either side of the road at road crossings. At road crossings, extra GI/PLB Pipes may be laid as per the direction of the Engineer-in-charge. On Rail bridges and crossings, the PLB Pipes shall be encased in suitable cast iron as prescribed by the Railway Authorities.

Whenever RCC pipes are used for protection, the gaps between the RCC collars and the RCC pipes shall be sealed using cement mortar 1:3 (1:53 grade cement of reputed brand, 3: fine sand without impurities) to bar entry of rodents. Every third collar of RCC pipes (Normally of 2 meters length) and also both ends of RCC Pipes will be embedded in a concrete block of size 40 cms. (L) x 40 cms (W) x 25 cms (H) of 1:2:4 cement concrete mix (1:53 grade cement of reputed brand, 2: coarse sand, 3: stone aggregate of nominal size of 20mm) so that the alignment of RCC pipes remain firm and intact and to avoid entry of rodents.

Wherever GI Pipes are used, special care should be taken to ensure that G.I. Pipes are coupled properly with the sockets so as to avoid damage to PLB Pipe and eventually the OF Cable in the event of pressure coming on the joint and G.I. Pipe joint giving its way. Rubber bushes shall be used at either ends of the GI pipes to protect PLB Pipe. Both the ends of G.I Pipe will be embedded in a concrete block of size 40 cms (L) x 40 cms (W) x 25 cms (H) of 1:2:4 cement concrete mix (1:53) grade cement of reputed brand, 2: coarse sand, 3: stone aggregate of nominal size of 20mm) so that the alignment of G.I. Pipes remain firm and intact and to avoid entry of rodents.

In case of protection by concreting at site, the nominal dimension of concreting shall be 250mmx250mm section. Cement Concrete Mixture used shall be of 1:2:4 composition i.e.1: 53 grade Cement of a reputed company, 2 : Coarse Sand, 4 : Graded Coarse Stone

aggregate of 20mm nominal size, reinforced with MS weld mesh. As the RCC is cast at site, it is imperative to ensure that special care is taken to see that proper curing arrangements are made with adequate supply of water. The contractor shall invariably use mechanical mixer at site for providing RCC protection to ensure consistency of the mix.

For carrying out concreting work in trenches, yellow PVC sheets of width not less than 1.0M and of weight not less than 1 kg. per 8 sq. meters shall be spread and nailed on sides of the trench to form trapezoidal section for concreting in the cleaned trench, to avoid seepage of water into the soil. A bed of cement concrete mixture of appropriate width and 75 mm thickness shall be laid on the PVC sheet, before laying PLB pipes. The PLB pipes shall then be laid above this bed of concrete. After laying the PLB pipes, MS weld mesh should be wrapped around and tied and concrete mix is to be poured to form the cross sectional dimensions as instructed by the Engineer-in-charge. The strength of RCC is dependent on proper curing, therefore, it is imperative that water content of RCC mix does not drain out into the surrounding soil. Portions where cement concreting have been carried out shall be cured with sufficient amount of water for reasonable time to harden the surface. After curing, refilling of the balance depth of the trench has to be carried out with excavated soil.

The PLB pipes/ RCC/ GI pipes shall be laid only in trenches accepted by Engineer-in-charge or his representative. The Contractor shall exercise due care to ensure that the PLB pipes are not subjected to any damage strain. Water present in the trench at the time of laying the PLB Pipes shall be pumped out by the contractor before laying the pipes in the trench to ensure that no mud or water gets into the pipes, thus choking it. In case of nallahs, which are dry for nine months in a year, the PLB Pipes shall be laid inside the RCC Pipes/ or GI Pipes and concrete laid at a minimum depth of 165 cms., as instructed by the Engineer-in-charge. The mechanical protection shall extend at least 5 meters beyond the bed of nallah on either side.

Notwithstanding anything contained in clauses referred above, the Engineer-in-charge may order, based on special site requirements, that the PLB Pipes may be encased in reinforced cement concrete, as detailed, *ibid*.

While laying the pipes, a gap of 2M is kept at convenient locations approx. 200m apart and at the bends and turns, which will be used as manholes during OF cable pulling. Ends of the PLB pipes at the manholes shall be sealed using PLB end caps after tying the PP rope to the end caps to avoid choking of the pipes. In a similar manner, manholes shall be kept while approaching bridges, road crossings etc., as instructed by the Engineer-in-charge.

The location of the manholes will be decided by the Engineer-in-charge.

5. Laying Protection Pipes on Bridges and Culverts:

In case trenching and pipe laying is not possible in the beds of the culverts, the pipes shall be laid over the culverts/bridges after getting due permission from the competent authority. Of late the bridge construction authorities are providing ducts below the footpaths on the bridges for various services. The telecom officers need to maintain good liaison with the concerned authority to get one side of the duct allotted for Telecom Cables. In such ducts, G.I. Pipes can be coupled and laid for pulling the cables. It would be pertinent to mention here that close liaison with bridge construction authorities would be of immense advantage in ensuring provision of ducts on one or both the sides of the bridges as per future requirements. However, for laying cables on existing bridges, where duct arrangement does not exist, one of the following methods may be adopted.

Normally in the Bridges/Culverts, where there are no ducts and where the cushion on the top of the Arch is 50 cm to 100 cm or more, G.I. Pipe (Carrying PLB pipe and cable) may be buried on the top of the Arch adjoining the parapet wall, by digging close to the wheel guards. Every precaution shall be taken to see that no damage occurs to the arch of the culvert. After burying the GI pipe, the excavated surface on the arch shall be restored. Where the thickness of the Arch is less than 50 cms, the pipe must be buried under the wheel guard masonry and the wheel guard rebuilt.

If neither of the two methods is possible, the G.I. Pipes/GI Troughs/DWC Pipes must be clamped outside the parapet wall with the clamps. If necessary, the pipe may be taken through the parapet wall at the ends where the wall diverges away from the road. In case where the methods explained in clauses referred above are not possible, the G.I. Pipes/GI Troughs/DWC Pipes can be fixed on the top of the road curb close to the inside face of the parapet wall by means of clamps, using raw plugs and wood screws or small diameter bolts, without damaging the concrete and limiting the external diameter of the bolts to 7.5 mm. The permission for carrying out this work will be obtained from the Road Authorities by the contractor. Methods cited in above clauses should be carried out under close supervision of Road authorities. The surface to be concreted should be thoroughly cleaned and leveled before concreting. At both ends of the Bridges/Culverts, where the GI Pipes/GI Troughs slope down and get buried, the concreting should be extended to ensure that no portion of the GI Pipes/GI Troughs is exposed as ordered by the Engineer-in-charge

to protect the Pipe/Trough from any possible damage externally caused. Where white wash/colour wash is existing on the Bridges/Culverts, the same should also be carried out on the concreted portion to ensure uniformity.

6. Back Filling and Dressing of the Trench:

The earth used for filling shall be free from all roots, grass, shrubs, vegetation, trees, saplings and rubbish. Provided that the PLB Pipes have been properly laid in the trench at the specified depth, the back--filling operation shall follow as closely as practicable. The back-filling operation shall be performed in such a manner so as to provide firm support under and above the pipes and to avoid bend or deformation of the PLB pipes when the PLB pipes get loaded with the back filled earth. At locations where the back filled materials contains stones/sharp objects which may cause injury to the PLB pipes and where the excavated or rock fragments are intended to refill the trench in whole or in part, the trench should be initially filled, with a layer of ordinary soil or de-rocked loose earth of not less than 10 cms above the pipes.

Back filling on public, private roads, railway crossings, footpaths in city areas shall be performed immediately after laying the PLB pipes. Back filling at such locations shall be thoroughly rammed, so as to ensure original condition and made safe for traffic. All excess soil/material left out on road/footpath/railway crossing shall be removed by contractor. However, along the highways and cross-country, the dug-up material left out should be kept as heap above the trench while refilling.

In city limits, no part of the trench should be kept open for more than 50 meters length at any time and in all places where excavation has been done, no part of the trench should be kept open overnight to prevent any mishap or accident in darkness.

7 Horizontal Directional Drilling (HDD)

7.1 GENERALWORK DESCRIPTION

Laying of PLB pipe of different types and sizes in general, including some or all of the following activities:-

Horizontal boring and laying the PLB pipe through it:

Horizontal boring and PLB pipe laying through it along road and under railway/ road/ canal/ streams crossing in all type of soil at suitable depth including all civil works. Supply of all tested tools and tackles other required equipment and consumables, labour etc. and making all such necessary arrangements are under vendor's scope. Total job has to be completed within time schedule mentioned in work order. The work is specified under two major heads.

- i) Laying along the road.
- ii) Road/Rail/canal crossing (road crossing means crossing a road of minimum width of 8 mtr)

Under each head there will be again three different sizes of boring :

- a) Boring of single pipe.
- b) Boring from two pipes to four pipes.
- c) Boring more than four pipes.

The PLB pipe will be pulled through the horizontal bore with insertion of nylon rope provided by the department. Balloon (25mm. dia and 45mm length) test both ways is to be carried out by the bidder including the rope insertion if necessary for each pipe line. Duct integration test is to be carried out for each pipe in case of without rope pipes.

7.2 SPECIFICATION FOR PLB PIPE LAYING HDD

7.2.1 In this system of cable laying following job specification should be maintained:

- (i) Guided boring/drilling technology is to be used. Mechanical mores are not permitted
- (ii) Radio or any other detection system should be used for avoiding damage to existing underground utilities i.e. electric supply, water pipelines, telecom copper cables and optical fiber cables, gas pipe lines, sewerage etc.
- (iii) The depth of boring should be such as to clear any underground utilities/obstacles. However in no case the depth of boring be less than 2m from the road surface.
- (iv) in horizontal and vertical boring the system should be capable of going up to 10mts below the ground level.

- (v) In a shift of 8hrs at least 500 (Five hundred) meter of drilling should be achieved.
- vii. As far as possible cable should be laid in drum lengths and cutting of cable should be avoided while laying along road.

7.2.2 Ground penetrating Radar survey and damage to Telephone cable and other underground utility services:

- (i) The contractor should collect all available information regarding underground services and take necessary care to protect them. He should also have sufficient arrangements to identify and protect such underground services.
- (ii) The contractor shall carry out ground penetrating Radar survey along the proposed cable route at his own cost to identify the underground services and for setting out the route as directed by executive officer. The executive officer shall provide the route map to the contractor if available for plotting the existing utilities and setting the route for horizontal drilling. However, for safe drilling the contractor should make requisite inspection and test pits whenever necessary.

7.2.3 LIFTING OF PLB PIPE:

The PLB pipe will be handed over to the contractor at stores. The contractor is to lift the store from the store depot to the work site. Guarding at work site is to be done by the contractor. At the time of laying, jack and wheel should be used so that the pipe is not damaged. The contractor is to make arrangement of water and power at the site of work. Permission for laying is to be taken by contractor from appropriate civic & road authorities. Digging of test pit and restoration of pits are to be done by the contractor.

7.2.4 Fixing of Route Indicators/Joint Indicators:

Pits shall be dug 1 M. towards jungle side at every manhole for fixing of Route Indicator. In addition, Route Indicators are also required to be placed where O.F.Cable changes directions like road crossing etc. The pits for fixing the indicator shall be dug for a size of 60 cms. X 60 cms. and 75 cms. (depth). The indicator shall be secured in upright position by ramming with stone and murrum up-to a depth of 60 cms. And concreting in the ratio of 1:2:4 (1: cement, 2: coarse sand, 4: stone aggregate 20 mm nominal size) for the remaining portion of 15 cms. Necessary curing shall be

carried out for the concreted structure with sufficient amount of water for reasonable time to harden the structure. The route indicator shall be painted with primer before painting with oil paint. The material used should bear ISI mark. The size of each written letter should be at least 3.5 cms. The colours of painting are yellow for Route Indicator and colour of sign writing white for Letters. The numbering scheme for route indicators will be Joint No./Route Indicators No. for that joint. For example 2/6 indicator means 6th route indicator after 2nd joint.

8. DOCUMENTATION:

The documentation, consisting of the following shall be prepared exchange to exchange for intra SSA OFC links and for each section in case of Inter SSA/National Long Distance routes.

i) Route Index Diagrams–General:

This diagram shall consist of pipe Route Details on Geographical Map drawn to scale with prominent land marks and alignment of pipe with reference to road. This shall be prepared on A-3 sheets of 80 GSM.

ii) Route Index Diagrams–Profile:

These diagrams shall contain: Make and size of the pipe, Offset of pipe from center of the road at every 10 meters, Depth profile of pipe at every 10 meters; Details of protection with type of protection depicted on it, Location of culvert and bridges with their lengths and scheme of laying of PLB Pipe/coil thereon, Important landmarks to facilitate locating the pipe in future and Location of pulling manholes.

These diagrams shall be prepared on A-4 sheets of 80 GSM. On one sheet profile of maximum 400 meters shall be given to ensure clarity.

All the diagrams (i) & (ii) shall bear the signatures of the contractor, the SDE-Site-in-charge as a proof of accuracy of the details. The diagrams shall be bound in A-4 size book with cover. The cover sheets shall be of 110 GSM and laminated. The front cover shall have the details: Name of the SSA/Project Organization, Name of the OFC Link, Name of the Contractor, Date of commencement of work & Date of completion of work

For each route/section, 6sets of above mentioned document shall be submitted.

9. SAFETY PRECAUTION:

i) Safety Precautions when excavating or working in excavations close to electric cables. The Engineer-in-charge of the work should get full information from Electricity undertaking regarding any electric cables, which are known or suspected to exist near the proposed excavation and unless this is done, excavation should not be carried out in the section concerned. The electricity undertaking should be asked to send a representative and work should be preceded with close consultation with them.

Only wooden handled hand tools should be used until the electric cables have been completely exposed. A cover slab of concrete, brick or stone from above should usually be used to protect power Cables, not laid in conduits. They may or may not be protected on the sides. It is safer, therefore, always to drive the point of the pickaxe downwards then uncovering a cable, so that there is less chance of missing such warning slabs. No workman should be permitted to work alone where there are electric cables involved. At least one more man should be working nearby so that help can be given quickly in case of an accident. If disconnection of power could be arranged in that section it will be better.

No electric cables shall be moved or altered without the consent of the Electric Authority and they should be contacted to do the needful. If an electric cable is damaged even slightly, it should be reported to the Electric Authority and any warning bricks disturbed during excavation should be replaced while back filling the trench. Before driving a spike into the ground, the presence of other underground properties should be checked. Information on plans regarding the location of power cables need not to be assumed as wholly accurate. Full precautions should be taken in the vicinity until the power cable is uncovered. All electric cables should be regarded as being live and consequently dangerous. Any power is generally dangerous, even low voltage proving fatal in several cases.

ii) Electric shock-Action and treatment:

Free the victim from the contact as quickly as possible. He should be jerked away from the live conductors by dry timber, dry rope or dry clothing. Care should be taken not to touch with bare hands as his body may be energized while in contact. Artificial respiration should begin immediately to restore breathing even if life appears to be extinct. Every moment of delay is serious, so, in the meanwhile, a doctor should be

called for.

Safety precautions while working in Public Street and along railway lines where a road or footpath is to be opened up in the course of work, special care should be taken to see that proper protection is provided to prevent any accidents from occurring. Excavation work should be done in such a manner that it will not unduly cause inconvenience to pedestrians or occupants of buildings or obstruct road traffic. Suitable bridges over open trenches should be so planned that these are required for the minimum possible time. Where bridges are constructed to accommodate vehicular traffic and is done near or on railway property, it should be with the full consent and knowledge of the competent railway authorities.

iii) Danger from falling material:

Care should be taken to see that apparatus, tools or other excavating implements or excavated materials are not left in a dangerous or insecure position so as to fall or be knocked into the trench thereby injuring any workman who may be working inside the trench.

iv) Care when working in Excavations:

Jumping into a trench is dangerous. If it is deep, workmen should be encouraged to lower themselves. Workers should work at safe distance so as to avoid striking each other accidentally with tools. If the walls of the trench contain glass bits, corroded wire or sharp objects they should be removed carefully. If an obstruction is encountered, it should be carefully uncovered and protected if necessary. Care must be taken to see that excavated material is not left in such a position that it is likely to cause any accident or obstruction to a roadway or waterway. If possible the excavated material should be put between the workmen and the traffic without encroaching too much on the road.

v) Danger of cave in:

When working in deep trenches in loose soil, timbering up/shoring the sides will prevent soil subsidence. The excavated material should be kept at sufficient distance from the edge of the trench or pit. Vehicles or heavy equipment must not be permitted to approach too close to the excavation. When making tunneled opening, it should be ensured that the soil is compact enough to prevent cave in even under adverse conditions of traffic. Extra care should be taken while excavating near the foundations

of buildings or retaining walls. In such cases, excavation should be done gradually and as far as possible in the presence of the owners of the property.

vi) Protection of Excavations:

Excavations in populated areas, which are not likely to be filled up on the same day should be protected by barriers or other effective means of preventing accidents and the location of all such openings must in any event be indicated by red flags or other suitable warning signs. During the hours from dusk to dawn, adequate number of red warning lamps should be displayed. Supervisory officers should ensure that all excavations are adequately protected in this manner as serious risk and responsibility is involved. Notwithstanding adoption of the above-mentioned precautions, works involving excavations should be so arranged as to keep the extent of opened ground and the time to open it to a minimum

vii) Precautions while working on roads:

The period between half an hour after sun-set and half an hour before sunrise, and any period of fog or abnormal darkness may also be considered at night for the purpose of these instructions, for the purpose of providing the warning signs. Excavation liable to cause danger to vehicles or the public must at all times be protected with fencing of rope tied to strong uprights or bamboo poles at a suitable height or by some other effective means. Any such temporary erection which is likely to cause obstructions and which is not readily visible should be marked by posts carrying red flags or boards with a red back-ground by day and by continuously lighted lamps at night.

The flags and the lamps should be placed in conspicuous positions so as to indicate the pedestrians and drivers of vehicles the full expanse i.e. both width and length of the obstruction. The distance between lamps or between floors should not generally exceed 1.25m along the width and 6m along length of the obstruction in non-congested area, but 4 meters' along the length in congested areas. If the excavation is extensive, sufficient notice to give adequate warning of the danger should be displayed conspicuously not less than 1.25m above the ground and close to the excavation.

Where any excavation is not clearly visible for a distance of 25m to traffic approaching from any direction or any part of the carriage way of the road in which the excavation exists, a warning notice should be placed on the side or edge of all such roads from which the excavation or as near the distance as is practicable but not less

than 10m from the junction of an entering or intersecting road in which the excavation exists. All warnings, in these should have a red background and should be clearly visible and legible. All warning lamps should exhibit a red light, but white lights may be used in addition to facilitate working at night.

Wherever required a passage for pedestrians with footbridge should be provided. At excavations, cable drums, tools and all materials likely to offer obstructions should be properly folded, round and protected. This applied to jointer's tents as well. Leads, hoses etc. stretched and across the carriageway should be guarded adequately for their own protection and also that of the public.

viii. Traffic Control:

The police authorities are normally responsible for the control of traffic and may require the setting up of traffic controls to reduce the inconvenience occasioned by establishment of a single line of traffic due to restriction in road width or any other form of obstruction caused by the work. As far as possible, such arrangements should be settled in advance. If there are any specific regulations imposed by the local authorities, these should be followed.

ix. Work along Railway Lines:

Normally all works at Railway crossing is to be done under supervision of the railway authorities concerned, but it is to be borne in mind that use of white, red or green flags by the Departmental staff is positively forbidden to be used when working along a railway line as this practice may cause an accident through engine drivers mistaking them for railway signals. When working along a double line of railway, the men should be warned to keep a sharp look on both the "UP" and "DOWN" lines to avoid the possibility of any accident when trains pass or happen to cross one another near the work spot.

x. Procedure and Safety precautions for use of explosives during blasting for Trenching:

In areas where the cable trench cannot be done manually on account of boulders and rocks, it is necessary to blast the rocks by using suitable explosives. The quality of explosive to be used depends on the nature of the rocks and the kind of boulders. A few types of explosive fuses and detonators normally used for making trenches for cable works are detailed as: Gun powder, Nitrate, Mixture, Gelatin, Safety Fuse, Electric Detonator, and Ordinary Detonator.

i) Procedure:

A detailed survey of the route is to be done to assess the length of the section where trenching is to be done with the help of blasting. A route diagram of the rocky section may be prepared indicating the length of the route where the explosives are to be used. For the purpose of obtaining license, a longer length of route should be given in the application as in many cases, after digging, rocks appear where blasting was not initially anticipated.

Next a license will have to be obtained for use and storing of explosive in that section. If the area falls under a police commissioner, the authority for granting such license is the police commissioner of the concerned area. When the route does not fall in the jurisdiction of a police commissioner, the authority for issuing license is the District Magistrate.

The concerned authority should be applied in prescribed form with a route map. The concerned authority will make an enquiry and issue a license for using/storing explosives for cable trenching work. Such license will be valid for 15 days only. The license should be got renewed if the blasting operation need to be extended. Once the license is granted, it is the responsibility of the holders of the license for the proper use of explosives, its transportation and storing.

ii) Method of using:

The safest explosive is the gelatin and electric detonator. Gelatin is in the form of a stick. Electric detonator is a type of fuse used for firing the explosive electrically. Holes are made at suitable intervals on rocky terrain or boulders either by air compressor or by manual chipping. The depth of the holes should be 2 to 3 ft. Fill up the holes with small quantity of sand for about 6". First the electric detonator is to be inserted into the gelatin and the gelatin is to be inserted into the holes keeping the + ve and -ve wirings of electric detonators outside the holes. Again refill the holes with sand. These + ve and -ve insulated wires of detonator are then extended and finally connected to an EXPLODER kept at a distance of not less than 100m. Now the explosive is ready for blasting. But, before connecting wires to exploder for blasting, all necessary precautions for stopping the traffic, use of red flags, exchange of caution signals, etc., should be completed and only then Exploder should be connected and operated.

iii) Operation of exploder(IDL Schaffer type 350 type exploder):

The type 350 blasting machine consists of a bearing block with blasting machine system and the explosion proof light – alloy injection moulded housing. The exploder is held with the left hand. The twist handle is applied to the drive pin, clapped with the right hand turned in the clock wise direction in continuous measurements at the highest speed from the initial position until it reached to a stop. At this stage an indication lamp will glow. When the indication lamp glows, “press button switch” should be pressed. This will extend the electric current to detonator and gelatin will be detonated. The rock will be blasted out of the trench. Number of holes can be blasted in a single stroke by connecting all such detonators in series connection and finally to the exploder. After blasting, again mazdoors are engaged on the work to clear the debris. If the result of the first blasting is not satisfactory, it should be repeated again on the same place.

iv) Warning:

There may be two reasons for unsatisfactory results of the blasting:

- a) Misfire of gelatin due to leakage for current from detonator.
- b) Overloading because of over burden

Never pull the broken wire pieces from the holes in such cases. Attempt should not be made to re-blast the misfired gelatin. The safest way is to make a fresh hole by its side and put fresh gelatin in that hole and blast it.

10. Precautions:

The abstract of Explosives Rules 1983 which are relevant to our work is given below:

Restriction of delivery and dispatch of explosives :

No person shall deliver or dispatch any explosives to anyone other than a person who is the holder of a license to possess the explosives or the agent of holder of such a license duly authorized by him in writing on his behalf OR is entitled under these rules to possess the explosives without a license. The explosives so delivered or authorized shall in no case exceed the quantity, which the person to whom they are delivered or authorized to possess with or without a license under these rules. No other shall receive explosives from any person other than the holder of a license granted under these rules. No person shall receive from or transfer explosives to any person for a temporary storage or safe custody in a licensed premise unless prior approval is obtained from the Chief Controller. A person holding license for possession of explosives granted under these rules shall store the explosives only in premises specified in the license.

11. Protection from Lightning During Storing :

Every magazine shall have attached there to one or more efficient lightning conductors designed and erected in accordance with the specification laid down in Indian Standard Specifications No.2309 as amended from time to time. The connections to various parts of earth resistance of the lightning conductor terminal on the building to the earth shall be tested at least once in every year by a qualified electrical engineer or any other competent person holding a certificate of competency in this behalf from the State Electricity Department. A certificate showing the results of such tests and the date of the last test shall be hung up in conspicuous place in the building.

i) Precautions during thunder-storm:

When a thunder-storm appears to be imminent in the vicinity of a magazine or storehouse every person engaged in or around such magazine and store house shall be withdrawn to a safe distance from such magazine or store house and the magazine and store house shall be kept closed and locked until the thunder storm has ceased or the threat of it has passed.

ii) Maintenance of records:

Every person holding a license granted under these rules for possession, sale or use of explosives shall maintain records in the prescribed forms and shall produce such record on demand to an Inspection Officer.

iii) Explosives not be kept in damaged boxes :

The licensee of every magazine or store house shall ensure that, the explosives are always kept in their original outer package. In case, the outer package gets damaged so that the explosives contained therein cannot be stored or transported, such explosives shall be repacked only after the same are examined by controller of explosives.

iv) Storage of explosives in excess of the licensed quantity:

The quantity of any kind of explosives kept in any licensed magazine or store house shall not exceed the quantity entered in the license against such kind of explosives. No explosives in excess of the licensed quantity shall be stored in the magazine or store house unless a permit in this behalf is obtained from the licensing authority by a letter or telegram.

v) Precautions to be observed at Site:

The electric power at the blasting site shall be discontinued as far as practicable

before charging the explosives. No work other than that associated with the charging operations shall be carried out within 10 Meters of the holes unless otherwise specified to the contrary by the licensing authority.

When charging is completed, any surplus explosive detonators and fuses shall be removed from the vicinity of the hole and stored at a distance which should prevent accidental detonation in the event of a charge detonating prematurely in any hole. The holes which have been charged with explosives shall not be left unattended till the blasting is completed. Care shall be taken to ensure that fuse or wires connected to the detonation are not damaged during the placing of stemming materials and tamping.

vi) Suitable warning procedure to be maintained:

The licensee or a person appointed by the licensee to be in charge of the use of explosives at the site shall lay down a clear warning procedure consisting of warning signs and suitable signals and all persons employed in the area shall be made fully conversant with such signs and signals.

vii) Precautions to be observed while firing:

The end of the safety fuse if used in place of a detonator should be freshly cut before being lighted. The exploders shall be regularly tested and maintained in a fit condition for use in firing. An exploder shall not be used for firing a circuit above its rated capacity. The electric circuits shall be tested for continuity before firing. All persons other than the shot-firer and his assistant, if any, shall be withdrawn from the site before testing the continuity.

For the purpose of jointing, the ends of all wires and cables should have the insulation removed for a maximum length of 5 cms. And should, then be made clear and bright for a minimum length of 2.5 cms. And the ends to be joined should be twisted together so as to have a positive metal contact. Then these should be taped with insulation to avoid leakage when in contact with earth

In case of blasting with dynamite or any other high explosive, the position of all the boreholes to be drilled shall be marked in circles with white paint. These shall be inspected by the Contractor's agent. Bore holes shall be of a size that the cartridge can easily pass down. After the drilling operation, the agent shall inspect the holes to ensure that drilling has been done only at the marked locations and no extra hole has been drilled. The agent shall then prepare the necessary charge separately for each bore hole.

The bore holes shall be thoroughly cleaned before a cartridge is inserted. Only cylindrical wooden tamping rods shall be used for tamping. Metal rods or rods having pointed ends shall never be used for tamping. One cartridge shall be placed in the bore hole and gently pressed but not rammed down. Other Cartridges shall then be beaded as may be required to make up the necessary charge for the bore hole. The top most cartridge shall be connected to the detonator which shall in turn be connected to the safety fuses of required length. All fuses shall be cut to the length required before being inserted into the holes. Joints in fuses shall be avoided. Where joints are unavoidable, a semi-circular niche shall be cut in one piece inserted into the niche. The two pieces shall then be wrapped together with string. All joints exposed to dampness shall be wrapped with rubber tape.

The maximum of eight bore holes shall be loaded and fired at one occasion. The charges shall be fired successively and not simultaneously. Immediately before firing, warning shall be given and the agent shall see that all persons have retired to a place of safety. The safety fuses of the charged holes shall be ignited in the presence of the agent, who shall see that all the fuses are properly ignited.

Careful count shall be kept by the agent and others of each blast as it explodes. In case all the charged bore holes have exploded, the agent shall inspect the site soon after the blast but in case of misfire the agent shall inspect the site after half an hour and mark red crosses (X) over the holes which have not exploded. During his interval of half an hour, nobody shall approach them if fired holes. No driller shall work near such bore until either of the following operations have been done by the agent for the misfired boreholes.

The contractor's agent shall very carefully (when the tamping is a damp day) extract the tamping with a wooden scraper and withdraw the primer and detonator.

The holes shall be cleaned for 30 cm of tamping and its direction ascertained by placing a stick in the hole. Another hole shall then be drilled 15 cm away and parallel to it. This hole shall be charged and fired. The misfired holes shall also explode along with the new one. Before leaving the site of work, the agent of one shift shall inform another agent relieving him for the next shift, of any case of misfire and each such location shall be jointly inspected and the action to be taken in the matter shall be explained to the relieving agent. The Engineer-in-charge shall also be informed by the agent of all cases of misfire, their causes and steps taken in that connection.

12. General Precautions :

For the safety of persons red flags shall be prominently displayed around the area where blasting operations are to be carried out. All the workers at site, except those who actually ignite the fuse, shall withdraw to a safe distance of at least 200 meters from the blasting site. Audio warning by blowing whistle shall be given before igniting the fuse. Blasting work shall be done under careful supervision and trained personnel shall be employed. Blasting shall not be done within 200 meters of an existing structure, unless specifically permitted by the Engineer-in-charge in writing.

i) Precautions against misfire:

The safety fuse shall be cut in an oblique direction with a knife. All saw dust shall be cleared from inside of the detonator. This can be done by blowing down the detonator and tapping the open end. No tools shall be inserted into the detonator for this purpose.

If there is water present or if the borehole is damp, the junction of the fuse and detonator shall be made water tight by means of tough grease or any other suitable material. The detonator shall be inserted into the cartridge so that about one-third of the copper tube is left exposed outside the explosive. The safety fuse just above the detonator shall be securely tied in position in the cartridge. Water proof fuse only shall be used in the damp borehole or when water is present in the borehole.

If a misfire has been found to be due to defective fuse, detonator or dynamite, the entire consignment from which the fuse, detonator or dynamite was taken shall be got inspected by the Engineer-in-charge or his authorized representative before resuming the blasting or returning the consignment.

ii) Precaution against stray currents: Where electrically operated equipments is used in locations having conductive ground or continuous metal objects, tests shall be made for stray current to ensure that electrical firing can proceed safely.

The contractor shall indemnify the BSNL against loss which may arise due to negligence of lapses on the part of the contractor or his workers and also against any third party claim against the BSNL, if it is caused by failure to fulfill any of the terms and conditions of the contractor comply with relevant loss

If any dispute arises during the execution of work about interpretation /specifications of any item, the same shall be referred to a committee (as notified by BSNL) as per the following:-

- (a) DGM – Chairman
- (b) CAO/AO–Member
- (c) AGM/SDE-Member

The committee shall decide the case and the decision of the committee shall be final and binding.

SECTION-4

(Part A)

GENERAL INSTRUCTIONS TO BIDDERS (GIB)

1. DEFINITIONS

1.1 "**The Purchaser**" means the Bharat Sanchar Nigam Ltd. (BSNL), Telangana Telecom Circle.

1.2 "**The Bidder**" means the Company. Individual or firm who participates in this tender and submits its bid.

1.3 "The Supplier" or "The Vendor" or "Service Provider" means the individual or firm Awarded the contract.

1.4 "**The Services**" means providing services for external network which the Supplier is required to supply to the Purchaser under the contract.

1.5 "**The Advance Work Order**" or "**Letter of Intent**" means the intention of Purchaser to place the Work Order on the bidder.

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

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

1.8 "**Telecom Service Provider**" means any Telecom operator in India, who is licensed by the Department of Telecommunications (DOT), Government of India to provide telecom services to the general public or to the other DOT licensed Telecom operators. "Telecom Service Provider" also refers to any Telecom operator in other countries providing telecom services to general public of that country or to other telecom operators of the same country.

1.9 “**Successful Bidder(s)**” means the bidder(s) to whom work in this tender is awarded.

1.10 “**BA**” means Business Area comprising of one or more SSA’s

1.11 The **BSNL** means Bharat Sanchar Nigam Limited, the company with Chairman & Managing Director and Board of Directors, with Head Quarter at New Delhi. All references of Department
Chief General Manager Principal General Manager
Sr.General Manager/General Manager
Addl. General Manager/Joint General Manager
Deputy General Manager/Deputy General/ Divisional Engineer
Sub Divisional Engineer
Junior Telecom Officer
Chief Accounts Officer
Accounts Officer
Junior Accounts Officer

Including other officers in the BSNL, whatever designations assigned to them from time to time, who may be the in-charge of direction, supervision, testing, acceptance and maintenance including their successor(s) in the office appearing in various clauses shall be taken to mean the BSNL, an enterprise, under the Ministry of Communications and Information Technology, Government of India.

- The jurisdiction of CGM/PGM/ GM/Addl.GM/ DGM/DET shall mean the territorial area under their control for the purpose of administration and management of the projects and other associated functions.
- Representative of CGM/PGM/GM/Addl.GM/ DGM / DET means Officer and staff under their control for the time being deputed for supervising the work or testing etc.
- **Engineer – in – charge:** The Engineer – in – charge means the Engineering Officer nominated by the CGM/PGM/GM/Addl.GM/ DGM to supervise the work, under the contract. (Minimum Divisional Engineer level officer to be nominated while approving the work order).
- **Site Engineer:** Site Engineer shall mean JTO/SDE of the BSNL who may be placed by the work order issuing authority for supervising the work.
- **A/T Officer:** An officer authorized by BSNL to conduct A/T.
- The words bidder and tenderer have been used interchangeably.
- **Contract:** The term contract means, the documents forming the tender and acceptance

thereof and the formal agreement executed between the competent authority on behalf of the BSNL and the contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time, by the engineer in-charge and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

2. ELIGIBILITY CONDITIONS:

2.1 Kindly refer to Clause- 4 of Section-1 i.e. detailed NIT.

2.2 The Bidder must furnish the documentary evidence to meet the eligibility conditions laid down in general, technical, and financial qualification criteria.

3. COST OF BIDDING

3.1 The bidder shall bear all costs associated with the preparation and submission of the bid. BSNL will ,in no cases be responsible or liable for these costs, regardless of the conductor outcome of the bidding process.

4. DOCUMENTS REQUIRED

4.1 The bidder shall bear all costs associated with the preparation and submission of the bid. BSNL will, in no case, be responsible or liable for these costs, regard less of the conductor outcome of the bidding process.

4.2 The detailed list of services required to be provided by the bidder, bidding procedures and contract terms and conditions are prescribed in the Bid Documents. The contents of the Bid documents are specified in the covering letter.

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

5 CLARIFICATION OF BID DOCUMENTS

- 5.1 A prospective bidder, requiring any clarification on the Bid Documents shall notify BSNL in writing or by Email to tender inviting authority as indicated in the invitation of Bid. BSNL shall respond in writing to any request for the clarification of the Bid Documents, which it receives **latest up to 7 days from issue of NIT** Copies of the query (without identifying the source) and clarifications by BSNL shall be sent to all the prospective bidders who have received the bid documents.
- 5.2 Any clarification issued by BSNL in response to query raised by prospective bidders shall form an integral part of bid documents and shall amount to an amendment of the relevant Clauses of the bid documents.

6 AMENDMENT OF BID DOCUMENTS

- 6.1 BSNL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, may modify bid documents by amendments prior to the date of submission of Bids with due notification to prospective bidders.
- 6.2 The amendments shall be notified in writing by Fax or Email or by Addendum through e-tendering portal to all prospective bidders on the address intimated at the time of purchase of the bid document from BSNL and these amendments will be binding on them.
- 6.3 In order to afford prospective bidders a reasonable time to take the amendment in to account in preparing their bids, BSNL may, at its discretion, extend the deadline for the submission of bids suitably.

7 DOCUMENTS COMPRISING THE BID

The bid prepared by the bidder shall ensure availability of the following components:

- a) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted in accordance with the Clause 2 & 8.
- b) Bid Security furnished in accordance with Clause 12.
- c) A Bid form and price schedule completed in accordance with Clause 5 & 6.
- d) Documents mentioned in Clause 5 of Section 2

8 BID FORM

The bidder shall complete the bid form and appropriate Price Schedule furnished in the Bid Documents, indicating the services to be provided along with the prices as per Section-9B

9. BID PRICES–

The bidder shall give the total composite price inclusive of all levies and taxes, packing, forwarding, freight and insurance in case of materials to be supplied and inclusive of all taxes and levies but exclusive of Goods and service tax in case of works to be executed. Goods and Service tax shall be paid extra, if applicable. The contractor shall be responsible for loading/unloading and transporting the materials, to be supplied by the BSNL from any BSNL store / Telecom factory to the work site. The charges on this account shall be regulated as per the rates in Standard Schedule of Rates (SOR). The offer shall be firm in Indian Rupees.

Prices shall be quoted by the bidder as percentage below / above / at par the standard schedule of rates in the schedule of quoting rates (Financial Bid). Prices quoted at any other place shall not be considered. Quoted rates shall be inclusive of all charges and levies but exclusive of Goods and Service Tax(GST) which shall be paid extra as applicable.

The price 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.

Discount, if any, offered by the bidders shall not be considered unless they are specifically indicated in the schedule of quoting rates (Financial Bid). Bidders desiring to offer discount shall therefore modify their offers suitably while quoting.

(i).In case of any variation in quantity of individual sub-items und Excavation of Trenches of SOR as mentioned in tender document, on account of change in method of execution and/or soil strata, the payment of such items for excavation of trenches shall be limited to approved average running rate per meter of this item as a whole.

(ii).However, in case of any variation in quantity of individual items, arising from change in method of execution warranted due to statutory requirement of local bodies/state govt./central govt. which was not stipulated in survey and incorporated in SOR/quantity earlier, the payment Excavation of trenches may be made as per actual without afore said capping of payment as mentioned 9(i) above. The variation on this account shall be permitted only with prior approval of the tender approving authority after recording adequate reasons and justification supported by statutory orders/documents necessitating such change subject to limits of variation of overall

contract value as stipulated under this bid document.

10. DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATION

10.1. The bidder shall furnish, as part of the bid documents establishing the bidder's eligibility, the following documents **or whichever is required as per eligibility terms and conditions of Bid Documents.**

- a) Valid MSME Certificate.
- b) Documents to establish the eligibility and qualification of bidder as specified in Section-1.
- c) Power of Attorney as per Clause 14.3 (a) and (d) of this Section and authorization for executing the power of Attorney as per Clause 14.3 (b) or (c) of this Section.
- d) Documentary proof of GST registration. If the bidder is not registered with GST authority at the time of bid submission, then he shall have to submit GST registration at the time of award of work/ LOI/ signing of contract, if declared successful.
- e) Certificates from all Directors/ Partners of the bidder Company/firm stating that none of their near relatives are working in BSNL.
- f) Certificate of incorporation/Registration
- g) Article or Memorandum of Association or partnership deed as the case may be. List of all Directors including their name(s), Director Identification Number(s) (DIN) and address (es) along with contact telephone numbers of office and residence.

10.2 Documentary evidence for financial and technical capability.

- a) **Audited accounts And Turnover Certificate for any three years of the last 5 years i.e., from 2019-20 onwards.**

The Annual turnover for any three years of the last five FY i.e., from 2019-20 for a minimum of 30%(each year) of the total estimated cost of the tender, duly certified by CA.

- b) The bidder shall furnish documentary evidence about Job capability necessary to perform the contract.

Additional documents mentioned in Clause 5, Section 2.

11. DOCUMENTS ESTABLISHING SERVICES' CONFORMITY TO BID DOCUMENTS

11.1 Pursuant to Clause 7 of this Section, the bidder shall furnish, as part of its bid, documents establishing the conformity of its bid to the Bid Documents of all services which he proposes to supply under the contract.

11.2 The documentary evidences of the "services" conformity to the Bid Documents maybe, in the form of literature, drawings, data etc. and the bidder shall furnish:

- (a) A Clause-by-Clause compliance on the Purchaser's Job Specifications and Commercial Conditions demonstrating substantial responsiveness to the Job Specifications and Commercial Conditions. In case of deviations, a statement of the deviations and exception to the provision of the Job Specifications and Commercial Conditions shall be given by the bidder. A bid without Clause-by-Clause compliance of the Scope of Work, Section 3, General (Commercial) Conditions & Special (Commercial) Conditions, General Conditions (**Section-5 Part A&B**) shall not be considered.

12. BID SECURITY/EMD

12.1 The bidder shall furnish, as part of its bid, a bid security as mentioned in Detailed NIT Section-1 (DNIT).

12.2 The MSME bidders are exempted from payment of bid security:

- a) A proof regarding valid registration with body specified by Ministry of Micro, Small & Medium Enterprise for the tendered items will have to be attached along with the bid.
- b) The enlistment certificate issued by MSME should be valid on the date of opening of tender.
- c) If vender registered with body specified by Ministry of Micro, Small & Medium Enterprise claiming concessional benefits and fails to accept Advance Work Order(AWO)/ Letter of Intent (LOI) & submit required performance security or fails to obey any of the contractual obligations after being awarded work; he will be debarred from any further work/contract by BSNL for one year from the date of issue of such order.

12.3 The bid security is required to protect BSNL against the risk of bidder's conduct, which would warrant the forfeiture of bid security pursuant to Para 12.7.

12.4 A bid not secured in accordance with Para 12.1 and 12.2 shall be rejected by BSNL being non-responsive at the bid opening stage and archived unopened on

e-tender portal fore-tenders and returned to the bidder unopened (form annual bidding process).

12.5 The bid security of the unsuccessful bidder will be discharged/ returned as promptly as possible and within 30 days of finalization of the tender or expiry of the period of the bid validity period prescribed by BSNL pursuant to Clause 13 of this section.

12.6 The successful bidder's bid security will be discharged upon the bidder's acceptance of the advance work order satisfactorily in accordance with Clause 27 and furnishing the performance security, except in case of L-1 bidder, whose EMD shall be released only after the finalization of ordering of complete tendered quantity/sites in pursuance to Clause no.24 & 27 of this Section.

12.7 The bid security may be forfeited:

- a) If the bidder withdraws or amends its bid or impairs or derogates from the bid in any respect during the period of bid validity specified by the bidder in the bid form or extended subsequently; or
- b) If the bidder does not accept the AWO and /or does not submit PBG & sign the contract/agreement in accordance with Clause 28.

13. PERIOD OF VALIDITY OF BIDS

13 .1 Bid shall remain valid for period specified in Clause 2 of Tender Information (Section-2). A bid valid for a shorter period and if on pointing out by BSNL for same, the bidder does not undertake to make his bid valid for required duration, then the bid shall be rejected by BSNL and treated as non-responsive.

13.2 In exceptional circumstances, BSNL may request the consent of the bidder for an extension to the period of bid validity. The request and the response thereto shall be made in writing. The bid security provided under Clause-12 of this section shall also be suitably extended. The bidder may refuse the afore said request without risk of forfeiture of its bid security. A bidder accepting the request and granting extension will not be permitted to modify its bid.

14. FORMAT AND SIGNING OF BID

14.1 The bidder shall submit his bid online, complying all eligibility conditions, other terms and conditions of tender document to be read along with the clarifications and amendments issued in this respect. All the documents must be authenticated, by hand signatures by the authorized person and then uploaded on e-tender

portal. The letter of authorization shall be indicated by written power-of-attorney accompanying the bid.

14.2 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder in which case such corrections shall be signed by the person or persons signing the bid. All pages of the original bid, except for un-amended printed literatures, shall be manually signed by the person or persons signing the bid.

14.3 Power of Attorney

- a) The power of Attorney should be submitted and executed on the non-judicial stamp paper of appropriate value as prevailing in the concerned states(s) and the same be attested by a Notary public or registered before Sub-registrar of the state(s) concerned.
- b) The power of Attorney is 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.
- c) 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.
- d) In case, authorized signatory of the bid (i.e. POA holder) is different than the person who submits the online bids using digital signatures certificate (DSC), then the power of Attorney should also include the name of this person submitting online bids on e-tender portal.

15. SEALING AND MARKING OF BIDS

15.1 The bid should be submitted as per Clause-3 of Section-2 (**Tender Information**).

15.1.1 The bids are being called under Single Stage Bidding & two stage opening using two envelopes System. The details of sealing & marking of bids in each case is given below:

15.1.2 -DELETED.

15.1.3 In Single stage bidding & two envelopes system the bidder shall submit his bid online in two electronic envelopes; (Refer Section-4Part C))

The First envelope will be named as Techno-commercial bid. This envelope will contain documents of bidder's satisfying the eligibility/Technical & commercial conditions as per Clause 2 & 10 with Bid Security as per Clause 12. Second envelope will be named as Financial bid containing Price Schedules as per Section 9 Part B.

15.2

- a) The offline envelope shall be addressed to the purchaser inviting the tender: Asst. General Manager (MM), O/o CGMT Telangana Telecom Circle, Doorsanchar Bhavan, Nampally Station Road, Abids, Hyderabad-500001
- b) The offline envelope shall bear the name of the tender, the tender number and the words ' DO NOT OPEN BEFORE'(due date & time).
- c) The inner and outer offline envelopes shall indicate the name and complete postal address of the bidder to enable the purchaser to return the bid un opened in case it is declared to be received ' late'.
- d) Offline envelope should be deposited in the tender box provided by tendering authority or sent by registered post or delivered in person on above mentioned address (address is given in Clause 15.2(a) above). The responsibility for ensuring that the tenders are delivered in time, would vest with the bidder.
- e) The offline envelop delivered up to specified time & date as stated in NIT to AGM(MM), O/o CGMT Telangana Telecom Circle, Hyderabad at the venue (address is given in Clause15.2(a) above). The purchaser shall not be responsible if the bids are delivered elsewhere.
- f) Venue of Tender Opening: AGM (MM), O/o CGMT Telangana Circle, Hyderabad at specified time & date as stated in NIT.
- g) If due to administrative reasons, the venue of Bid opening is changed, it will be displayed prominently on BSNL website, e-tender portal (as the case may be).

15.3 If both the envelopes are not submitted as required at Para 15.1 and 15.2, the bid shall be rejected.

16. SUBMISSION OF BIDS

16.1 Bids must be submitted online only by the bidders on or before the specified date & time indicated in Clause 6 of Section-I i.e. DNIT.

16.2 BSNL may, at its discretion, extend this deadline for the submission of bids by amending the Bid Documents in accordance with Clause 6 in which case all rights and obligations of BSNL and bidders previously subject to the deadline will thereafter be subjected to the extended deadline.

17. LATE BIDS

17.1 No bid shall be accepted after the specified deadline for submission of bids prescribed by BSNL.

18. MODIFICATION AND WITHDRAWAL OF BIDS

18.1 The bidder may modify, revise or withdraw his bid after submission prior to deadline prescribed for submission of bid.

18.2 The bidder's modification, revision or withdrawal shall have to be online and digitally authenticated (in case of e-tendering) & physically (in case of manual bidding process) as per Clause 15 of this section.

18.3 Subject to Clause 20 of this section, no bid shall be modified subsequent to the deadline for submission of bids.

19. OPENING OF BIDS BY BSNL

19.1 BSNL shall open bids online (in case of e-Tenders) in the presence of the authorized representatives of bidders online who chose to attend, at time & date specified in Clause-7 of DNIT (Section-1) on due date.

19.2 The bidder's representatives, who are present, shall sign in an attendance register. Authority letter to this effect shall be submitted by the authorized representatives of bidders before they are allowed to participate in bid opening (A Format is given in enclosed in Section-7(C)).

19.3 A maximum of two representatives of any bidder shall be authorized and permitted to attend the bid opening.

19.4 Name of envelopes to be opened & information to be read out by Bid Opening Committee.

i. DELETED

ii. In Single stage bidding & two envelopes system, the bids will be opened in 2 stages i.e. the techno-commercial bid shall be opened on the date of tender opening given in NIT.

a) The financial bid will not be opened on the Date of opening of techno-commercial bids in this case & sealed financial bids will be handed over to AGM(MM), O/o CGMT Telangana Circle, Hyderabad for retention. Thereafter the CET will evaluate Techno-commercial bids & the report of CET will be approved by competent authority.

b) The financial bids of those bidders who are approved to be techno-commercially compliant by the competent authority, will be opened by TOC

in front of techno commercially eligible bidders/authorized representatives by sending them a suitable notice.

iii. The following information should be read out at the time of Techno-commercial bid opening:-

- a) Name of the Bidder
- b) Name of the item
- c) EMD amount & validity and acceptability
- d) Information in respect of eligibility of the bidder.
- e) Details of bid modification/withdrawal ,if applicable.

iv. The following information should be read out at the time of Financial bid opening:-

- a) Name of the Bidder
- b) Name of the item
- c) Prices quoted in the bid
- d) Discount , if offered
- e) Taxes & levies

(Information as per electronic forms shall be populated as comparison chart on e-tender system and no information shall be readout)

19.5 The date fixed for opening of bids, if subsequently declared as holiday by the BSNL, the revised date of schedule will be notified. However, in absence of such notification, the bids will be opened on next working day, time and venue remaining un altered.

20. CLARIFICATION OF BIDS

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

20.2 If any of the documents, required to be submitted along with the technical bid is found wanting, the offer is liable to be rejected at that stage. However BSNL at its discretion may call for any clarification regarding the bid document within a stipulated time period. In case of non-compliance to such queries, the bid will be out rightly rejected without entertaining further correspondence in this regard.

21. PRELIMINARY EVALUATION

21.1 BSNL shall evaluate the bids to determine whether they are complete, whether any compu

tational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are generally in order.

- 21.2 Arithmetical errors shall be rectified on the following basis. Based on the quoted percentage of taxes, etc. the amounts quoted thereof shall be worked out and rounded off to 2 decimal points.
- 21.3 If there is a discrepancy between words and figures, the amount in words shall prevail. If The supplier does not accept the correction of the errors, its bid shall be rejected.
- 21.4 Prior to the detailed evaluation pursuant to Clause 21, BSNL will determine the substantial responsiveness of each bid to the Bid Document. For purposes of these Clauses, a substantially responsive bid is one which confirms to all the terms and conditions of the Bid Documents without material deviations. BSNL's determination of bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.
- 21.5 A bid, determined as substantially non-responsive will be rejected by BSNL and shall not subsequent to the bid opening be made responsive by the bidder by correction of the non-conformity.
- 21.6 BSNL may waive any minor infirmity or non-conformity or irregularity in a bid which doesn't constitute a material deviation, provided such waiver doesn't prejudice or affect the relative ranking of any bidder.

22. EVALUATION AND COMPARISON OF SUBSTANTIALLY RESPONSIVE BIDS

The BSNL shall evaluate in detail and compare the bids previously determined to be substantially responsive pursuant to clause 21.

The evaluation and comparison of responsive bids shall be done on the basis of Net cost to BSNL on the prices of the services offered excluding GST, as per the price schedule in the Section -9 Part B of the Bid Document after arithmetical correction in the manner laid down in clause 21.2 above.

Vendors should furnish the correct HSN/SAC in the price Schedule. If the supplier fails to furnish necessary supporting documents i.e. GST invoices etc. in respect of the Duties/taxes of which ITC is available to BSNL, the amount pertaining to such Duties/Taxes will be deducted from the payment due to the firm.

23. CONTACTING BSNL

23.1 Subject to Clause 20, no bidder shall try to influence BSNL on any matter relating to its bid, from the time of the bid opening till the time the contract is awarded.

23.2 Any effort by a bidder to modify Its bid or influence BSNL in BSNL's bid evaluation, bid comparison or contract award decision shall result in the rejection of the bid.

24. PLACEMENT OF ORDER

BSNL shall consider placement of orders on those eligible bidders whose offers have been found technically, commercially and financially acceptable and whose Services have been approved/ validated by the Purchaser. The Purchaser reserves the right to counter offer price(s) against price(s) quoted by any bidder.

25. PURCHASER'S RIGHT TO VARY QUANTITIES

The CGMT reserves the right to offer the contract to any other tenderer or any other agency in case of unsatisfactory work. The contractor should carry out the work to the satisfaction of BSNL officer in charge and in the event of his failure the contract work will be got done from some other agency at the cost of the contractor and payment will be settled on Prorate Basis.

The decision of CGMT Telangana Telecom Circle on any matter connected to this tender is final binding.

26. BSNL's RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

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 any liability to the affected bidder or bidders on the grounds of purchaser's action.

27. ISSUE OF ADVANCE WORKORDER

27.1 The issue of an Advance Work Order (AWO) shall constitute the intention of BSNL to enter into contract with the bidder.

27.2 The bidder shall give its acceptance along with performance security and Material Security in conformity with the proforma provided with the bid document at Section-7B within 14 days of issue of the Advance Work Order.

27.3 In the event of withdrawal of AWO/LOI, subsequent claim of bidder for placement

of Work Order/signing of contract , shall not be entertained by this office.

28. SIGNING OF CONTRACT

- 28.1 The issue of Work Order(WO) shall constitute the award of contract on the bidder.
- 28.2 Upon the successful bidder furnishing performance security pursuant to Clause 27 of this Section, the Purchaser shall discharge the bid security in pursuant to Clause 12 of this Section, except in case of L-1 bidder, whose EMBG / EMD shall be released only after finalization of ordering of complete tendered quantity in pursuance to Clause nos .24 & 27of this Section.

29. ANNULMENT OF AWARD

Failure of the successful bidder to comply with the requirement of Clause 27 & 28 of this section shall constitute sufficient ground for the annulment of the award and the forfeiture of the bid security in which event the BSNL may make the award to any other bidder on its discretion or call for new bids.

30. Deleted

31. REJECTION OF BIDS

31.1 While all the conditions specified in the Bid documents are critical and are to be complied, special attention of bidder is invited to the following Clauses of the bid documents. Non-compliance of any one of these shall result in outright rejection of the bid.

a. Clauses 12.1 & 13.1 of Section-4 Part A: The bids will be rejected at opening stage if Bid Security is not submitted as per Clause 12.1 and bid validity is less than the period prescribed in Clause13.1mentioned above.

b. Clause 2 & 10 of Section-4 Part A:If the eligibility condition as per Clause 2 of Section 4 Part A is not met and/ or documents prescribed to establish the eligibility as per Clause 10 of Section 4 Part A are not enclosed, the bids will be rejected without further evaluation.

c. DELETED

d. While giving compliance to Section-5 Part A, General Commercial conditions, Section-4Part B, Special Instructions to Bidders, Section-5B Special (Commercial) Conditions of Contract and Section-3 Technical Specifications ambiguous words like

"Noted", "Understood", "Noted & Understood" shall not be accepted as complied. Mere "Complied" will also be not sufficient, reference to the enclosed documents showing compliances must be given.

e. Section-9 Price Schedule: Prices are not filled in as prescribed in price schedule.

31.2 Before outright rejection of the Bid by Bid-opening team for non-compliance of any of the provisions mentioned in Clause 31.1(a), 31.1(b) of Section-4 Part A, the bidder company is given opportunity to explain their position, however if the person representing the company is not satisfied with the decision of the Bid opening team, he/they can submit the representation to the Bid opening team immediately but in no case after closing of the tender process with full justification quoting specifically the violation of tender condition if any.

31.3 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.

31.4 The in-charge of Bid opening team will mention the number of bids with the name of the 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 argument of the bidder/company mentioned in their representation 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 Officer competent to approve the tender 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 after issue of work order against the instant tender.

31.5 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 participants desirous to be present on the occasion.

32. ACTION BY PURCHASER AGAINST BIDDER(S)/ VENDOR(S) IN CASE OF DEFAULT.

As per Appendix-1 to Section 4 Part A.

33. Clause deleted.

34. NEAR-RELATIONSHIP CERTIFICATE

34.3. The bidder should give a certificate that none of his/ her near relative, as defined below, is working in the units*

In case of bidder being proprietorship firm, this certificate will be given by proprietor. For partnership firm, the certificate will be given by all the partners.

In case of bidder being company/ Limited company the certificate will be given by all the Directors of the company, but excluding the following:

- a) Government of India/ Financial institution nominees and independent non-Official part time Directors, appointed by Govt. Of India or the Govenrer of the state and
- b) Full time Directors of PSUs, both Central and State.

Due to any breach of these conditions or incorrect declarations by the bidder (company or firm or any other person), the tender/bid submitted 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.

*Units, shall be taken as following :

- a) In case of any near relative of the bidder being non-Executive employees, the “BSNL unit “ is defined as “Business Area (BA)” .
- b) In case of any near relative of the bidder being Executive(up to AGM/STS level), the “BSNL unit “ is defined as ” BSNL Circle”.
- c) In case of any near relative of the bidder being Executive(DGM/JAG/higher), the “BSNL unit “ is defined as “BSNL as a whole”

34.2 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).

34.3. The format of the certificate is given in Section 6(B).

35. VERIFICATION OF DOCUMENTS AND CERTIFICATES

The bidder will ensure that all the documents and certificates, including experience/ performance and self-certificates submitted by him are correct and genuine before enclosing them in the bid. The onus of proving genuineness of the submitted documents would rest with the bidder.

If any document/ paper/ certificate submitted by the participant bidder is found

/discovered to be false / fabricated / tempered / manipulated either during bid evaluation or during award of contract or thereafter, then BSNL will take action as per Clause-1 of Appendix-1 of this Section.

Note for Tender opening Committee:

1. At the time of tender opening, the TOC will check/ verify that the documents conforming to eligibility part are submitted by the participant bidder duly authenticated by the authorized signatory to obviate any possibility of doubt and dispute and maintain veracity of the documents/papers/certificates.
2. The documents/papers to be submitted in respective bid part have been explicitly stated in Clause-7of Section-4 Part A.
3. This opened bid part which is already signed by the authorized representative of the bidder company during bid submission will be signed by the tender opening committee on hard copy and preserve it along with the bids received online in case of e-tendering.
4. These papers will be treated as authentic one, in case of any dispute.

36. Security Clause as per latest guidelines and requirement –

Mandatory Licensing requirements with regards to security related concerns issued by the Government of India from time-to-time shall be strictly followed and appropriate Clauses shall be added in all bid documents. Necessary guidelines in this regard shall be issued separately.

Appendix-1 to Section 4 Part A

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
(a)	Submitting fake / forged	i) Rejection of tender bid of respective Vendor. 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) 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.
	a) Bank Instruments with the bid to meet terms & condition of tender in respect of tender fee and/ or EMD;	
	b) Certificate for claiming exemption in respect of tender fee and/ or EMD;	
	and detection of default at any stage from receipt of bids till award of APO/ issue of PO/WO.	
	Note 1:- However, in this case the performance guarantee if alright will not be forfeited.	
	Note 2:- 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 Goods and Services Tax, Income Tax departments etc and as supporting documents towards other terms & conditions with the bid to meet terms & condition of tender	
	<i>(i) If detection of default is prior to award of APO/WO</i>	i) Rejection of Bid & ii) Forfeiture of EMD. iii) Banning of business for up to three years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for up to three years from date of issue of banning order.
	<i>(ii) If detection of default after issue of APO/WO but before receipt of PG/ SD (DD, BG etc.)</i>	i) Cancellation of APO, ii) Rejection of Bid & iii) Forfeiture of EMD. iv) Banning of business for up to three years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for up to three years from date of issue of banning order.

	(iii) If <i>detection of default after receipt of PG/ SD (DD, BG etc.)</i> .	<ul style="list-style-type: none"> i) Cancellation of APO /WO ii) Rejection of Bid & iii) Forfeiture of PG/ SD. iv) However on realization of PG/ SD amount, EMD, if not already released shall be returned. v) Banning of business for up to three years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for up to three years from date of issue of banning order.
	(iv) If <i>detection of default after issue of PO/ WO</i>	<ul style="list-style-type: none"> i) Termination/ Short Closure of PO/WO and Cancellation of APO/WO ii) Rejection of Bid & iii) Forfeiture of PG/ SD. iv) However on realization of PG/ SD amount, EMD, if not released shall be returned. v) Banning of business for up to three years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for up to three years from date of issue of banning order.
	Note 3:- However, settle bills for the material received in correct quantity and quality if pending items do not affect working or use of supplied items.	
	Note 4:- 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 with intime period specified in APO/ AWO.	Forfeiture of EMD.
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.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> 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.
5.1	The supplied equipment does not perform satisfactory in the field in accordance with the specifications mentioned in the PO/ WO/Contract.	<ul style="list-style-type: none"> 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. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> 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.
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).	<ul style="list-style-type: none"> 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; <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> 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 EMD/PG & SD etc. and by invoking ‘ Set off ’ (clause 4) 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.	
Note 5:- The claims may be submitted with or without collusion of BSNL executive/employees.		
Note 6:- 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	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.
	a) Adversely affects the normal working of BSNL equipment(s) and/ or any other TSP through BSNL. b) Disrupts/ Sabotages functioning of the BSNL network equipment such as exchanges, BTS, BSC/ MSC, Control equipment including IN etc., transmission equipment but not limited to these elements and/ or any other TSP through BSNL. 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	<p>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.</p>	<ul style="list-style-type: none"> 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.
9	<p>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.</p>	<ul style="list-style-type: none"> 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). 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 v) 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.	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.
	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.
11	If the Central Bureau of Investigation/ Independent External Monitor (IEM) / Income Tax/Goods and Services Tax / Custom Departments recommends such a course	Take Action as per the directions of CBI or concerned department.
	The following cases may also be considered for Banning of business:	
	(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.	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.
	(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.	
	Note 7: The above penalties will be imposed provided it does not clash with the provision of this tender.	
	Note 8:-In case of clash between these guidelines & provision of invited tender, the provision in this tender shall prevail over these guidelines.	
	Note 9: 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.	

SECTION-4

Part-B

SPECIAL INSTRUCTIONS TO BIDDERS

The Special Instructions to Bidders shall supplement the 'Instructions to Bidders' and in case of any conflict with those in Section-4 Part A i.e. GENERAL INSTRUCTIONS TO BIDDERS(GIB),the provisions here in shall prevail.

1. Evaluation

1.1. The evaluation process comprises the following three (3)steps:

Step I: Fulfillment of requirements of Eligibility criteria, EMD and tender fee.

Step II: Evaluation of Bidder's fulfillment of Qualification Requirements as per Clause4 Section1 of DNIT

Step III: Selection of Successful Bidder

1.2. Step I- Responsiveness check of Techno-Commercial Bids

1.2.1. The Techno-Commercial Bid submitted by Bidders shall be scrutinized to establish responsiveness to the requirements laid down in Clause-4 of DNIT

1.2.2. Any of the following may cause the Bid to be considered "Non-responsive", at the sole Discretion of BSNL.

- a. Bids that are incomplete i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by a board resolution, valid EMD;
- b. Bid not signed by authorized signatory and / or stamped in the manner indicated in this Bid Document;
- c. Material inconsistencies in the information/ documents submitted by the Bidder, affecting the Qualification Requirements;
- d. Information not submitted in formats specified in the Bid Document
- e. Bid not providing information/document to satisfy Qualification Requirements;
- f. Bidder not meeting the criteria mentioned in Clause-4 of Section1 (DNIT) of this Document
- g. Bid validity being less than that required as per Clause 13 of Section 4 Part A of this Bid Document;
- h. Bid being conditional in nature

- i. Bid not received (Electronic and offline) by due date and time as specified in Clause 6 of DNIT;
- j. More than one Bidding Company using the credentials of the same Parent /Affiliate;
- k. Bidder delaying in submission of additional information or clarifications sought by BSNL.
- l. Bidder makes any misrepresentation of facts.
- m. Bid not accompanied by valid EMD

1.2.3. Each Bid shall be checked for compliance with the submission requirement set forth in this Bid Document before evaluation of Bidder's fulfillment of Qualification Requirement is taken up.

1.3. Step II-Evaluation of Bidder's fulfillment of Qualification Requirements as per Clause-4 Section 1 (DNIT)

1.3.1. After ensuring EMD with respect to its amount and validity; evaluation of Bid will be carried out based on the information furnished by the Bidder as per the prescribed Formats and related documentary evidence in support of meeting the Qualification Requirements as specified in Clause-4 of Section 1 (DNIT).

1.3.2. Price Bid of only those bidders will be opened whose Techno-Commercial qualification requirement, prima facie meets the Qualifying Criteria. However, if at later stage it is found that Techno-Commercial bid doesn't meet the qualification criteria, bid can be rejected at sole discretion of BSNL.

1.4. Step III-Selection of Successful Bidders

1.4.1. Only the bids qualifying in Step II above, shall be financially evaluated in this stage, on basis of their quote as per Financial schedule in Section 9 Part-B.

1.4.2. Successful Bidder shall unconditionally accept the AWO, issued by BSNL, within 14 days of issue of AWO.

1.4.3. If the Successful Bidder, to whom the AWO has been issued, does not accept the AWO unconditionally, BSNL reserves the right to annul the award of the AWO/Letter of Intent(LOI)to such Successful Bidder and forfeit EMD (in case of L-1 bidder).

1.4.4. It shall not be binding upon BSNL to accept the lowest bid as successful.

1.4.5. It shall not be obligatory on the part of BSNL to furnish any information or

explanation for cause of rejection of Bid or part of the Bid. Notwithstanding anything stated above, BSNL reserves the right to assess the credibility, capability and capacity of the bidders and viability of the Proposal to perform the contract should circumstances warrant such an assessment in the overall interest of BSNL and Bidder shall furnish all other required documents to BSNL.

1.4.6. BSNL reserves the right to interpret the Bid submitted by the Bidder in accordance with the provisions of this Bid Document and make its own judgment regarding the interpretation of the same. In this regard BSNL shall have no liability towards any Bidder and no Bidder shall have any recourse to BSNL with respect to the selection process.

1.4.7. BSNL shall evaluate the Bids using the evaluation process specified above, at its sole discretion.

1.4.8. BSNL's decision in this regard shall be final and binding.

2. Bid Security/EMD:

The bidder shall furnish the bid EMD in one of the following ways:-

- a) Demand Draft/Banker's Cheque drawn in favor of "**AO (Cash), BSNL, O/o CGMT, Hyderabad**" and payable at Hyderabad. IMPS/NEFT/RTGS to **Accounts Officer(Cash), A/c No. 05110200001650, IFSC code. BARB0HYDERA, Bank of Baroda, RBVR Reddy Hostel Compound, Hanuman Tekdi, Abids Circle**
- b) The MSE bidders registered with the designated MSME bodies like National Small Scale Industries Corporation etc are exempted from payment of bid security. However, they shall furnish a proof regarding registration with bodies under the Ministry of Micro, Small & Medium Enterprises for the construction /Operations /Maintenance services in Telecom Industry / maintenance and installation of OFC cables, valid on the date of opening of the tender. The scope of area of the above MSME registered bidders must be for construction/ maintenance of underground telecom cables/maintenance and installation of OF cables/ telecom outdoor network, Installation of Telecom Services etc.

3 Distribution of Quantity:

- i. The Purchaser intends to limit the number of technically and commercially responsive Bidders to **Two Bidders(2)** 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.

- ii. 25 % of the Estimated Quantity/requirement in this tender enquiry is earmarked for procurement from the eligible Micro & Small Enterprises (MSEs). However, in case eligible Micro & Small Enterprises (MSEs) bidder(s) are not available then this quantity would be de-reserved.

However, CGMT, Telangana Circle has the discretion to allot or distribute the tender quantity as per his/her discretion.

Table 1(A) [Without provisions for MSE Units]

No. of Bidders to be approved (Col. 1)	Quantity allotted to the respective bidder (Col. 2)	
	L1	L2
One bidder	100%	Nil
Two Bidders	60%	40%

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

No. of Bidders to be approved (Col. 1)	Quantity allotted to the respective bidder (Col. 2)		Qty. earmarked for MSE bidder(s) (Col. 3)
	L1	L2	
One Bidder	75%	Nil	25%
Two Bidders	45%	30%	25%

Note 1:- (i) In tender Participating MSE bidders, quoting price within price band of L1+15 percent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from some other than a MSE and such MSE shall be allowed to supply up to 25% of the total tender value shall be distributed among such bidders.

(ii) In case of More than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tender Quantity)

Note 3:- 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.

Section-4 Part C:
E-TENDERING INSTRUCTIONS TO BIDDERS

1. GENERAL

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as

Enclosed in Section-4 Part A of the Tender Documents.

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

The bidders are required to submit soft copies of their bids electronically on the Central Public Procurement (CPP) Portal, using valid Digital Signature certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at <https://etenders.gov.in/eprocure/app>.

2. REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:<https://etenders.gov.in/eprocure/app>) by clicking on the link "On line bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique User name and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify /n Code/ e-Mudhra etc.),with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC/e-Token.

3. INSTRUCTIONS

I. Tender Bidding Methodology:

Sealed Bid System– '**Single Stage-Two Envelopes**'. (Financial & Technical bid **shall be** Submitted at the same time)

II. Broad Outline of Activities From Bidders Perspective:

1. Bidder should do Online Enrolment in this Portal using the option Click Here to Enroll available in the Home Page. Then the Digital Signature enrollment has to be done with thee-token, after logging into the portal.
“Declaration of UAM (Udyog Aadhar Memorandum Number) by MSME bidders on CPPP is mandatory. If the MSME bidders who fail to submit UAM number on CPPP Portal, shall not be able to avail the benefits available to MSMEs as contained in Public Procurement Policy for MSMEs order, 2012 issued by MSME”.
2. Bidder then logs into the portal giving user id/password chosen during enrollment.
3. The e-token that is registered should be used by the bidder and should not be misused by others.
4. DSC once mapped to an account cannot be remapped to any other account. It can only be inactivated.
5. The Bidders can update well in advance, the documents such as certificates, Work order details etc. under **My Documents** option and these can be selected as per tender requirements and then attached along with bid documents during bid submission. This will ensure lesser upload of bid documents
6. After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as per the tender document; otherwise, the bid will be rejected.
7. The BOQ template must not be modified / replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for that tender. Bidders are allowed to enter the Bidder Name and Values only.
8. If there are any clarifications, this may be obtained online through the e-Procurement Portal, or through the contact details given in the tender document. Bidder should take into account of the corrigendum published before submitting the bids online
9. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender schedule and they should be in PDF / XLS / RAR / DWF formats. If there is more than one document, they can be clubbed together.
10. Bidder should arrange for the EMD as specified in the tender. The original should be posted / couriered / given in person to the Tender Inviting Authority, within the bid submission date and time for the tender.
11. The bidder should read the terms and conditions and accepts the same to proceed further to submit the bids.

12. The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.
13. There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file also gets reduced. This will help in quick uploading even at very low bandwidth speeds.
14. It is important to note that, **the bidder has to click on the Freeze Bid Button, to ensure that he / she completes the Bid Submission Process. Bids which are not frozen are considered as Incomplete/Invalid bids and are not considered for evaluation purposes.**
15. In case of Offline payments, the details of the Earnest Money Deposit(EMD) document submitted physically to the Department and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected
16. The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
17. The bidder may submit the bid documents online mode only, through this portal. Offline documents will not be handled through this system.
18. At the time of freezing the bid, the procurement system will give a successful bid updating message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the token of the bidder and then submitted.
19. After the bid submission, the bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.
20. Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness.
21. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected

22. The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e – Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid submission.
23. All the data being entered by the bidders would be encrypted at the client end, and the software uses PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission and not viewable by any one until the time of bid opening. Overall, the submitted bid documents become readable only after the tender opening by the authorized individual.
24. During transmission of bid document, the confidentiality of the bids is maintained since the data is transferred over secured Socket Layer (SSL) with 256-bit encryption technology. Data encryption of sensitive fields is also done.
25. The bidders are requested to submit the bids through on line e-Procurement system to the TIA well before the bid submission end date and time (as per Server System Clock).
26. Utmost care may be taken to name the files/documents to be uploaded on CPP Portal. There should be no special character or space in the name of file. **Only underscores are allowed.**

27. Bid related Information for this Tender (Sealed Bid)

The entire bid-submission would be online on CPP Portal. Broad outline of submissions are as follows:

- i. Submission of Bid Security / Earnest Money Deposit (EMD)
- ii. Submission of digitally signed copy of Technical Bid & Financial Bid (Excel Sheets).
- iii. Tender Documents/Addendum/Addenda
- iv. Two Envelopes
- v. Techno-commercial–Part
- vi. Financial-Part

Each of the above electronic envelopes consists of Main bid and Electronic form (both mandatory) and bid Annexure (Optional).

NOTE: Bidder must ensure that after following above the status of bid submission must be come–“**Complete**”.

Bidders must ensure that all documents uploaded on e-tender portal as files or zipped folders, contain valid files and are not corrupt or damaged due to any processing at bidder PC system like zipping etc. It shall be the responsibility of bidder himself for proper extract ability of uploaded zipped files. Any error/virus creeping into files /folder from client end PC system cannot be monitored by e-tender software/server and will be bidder's responsibility only.

28. Special Note on Security of Bids

i) Security related functionality has been rigorously implemented in CPPP 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. Security related aspects as regard Bid Submission are out lined below: As part of the Electronic Encrypted™ 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 CPPP 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.

ii) 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 Officers who will open the bid. Else Tender Opening Officer may authorize the bidder to open his bid himself. 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.

III. Online Tender Opening Event (TOE) and Advantages:

The bidders will be able to see the status of the tenders for which they have submitted quotes in different stages and would also be informed of the status by E-Mail.

Bidders will be able to view all the Technical bids for a particular tender on completion of Process-I (uploading Technical Evaluation summary in the portal). Similarly, Financial Bids can be viewed on completion of Process-II (uploading of Financial Evaluation Summary in the portal).

For the bidders who have registered themselves on the website through the "Stay

Updated” option, information of all the tenders for which they are interested to participate will be sent by E-Mail

Help Desk No.s of CPP Portal:

24x7 Toll Free Telephones No.180030702232 Mob:07878007972/73 Email ID: ccpp-nic@nic.in (Please Mark CC: support-nic@ncode.in)

Note 1: In case of internet related problem at bidder’s end, especially during ‘critical events’ such as—a short period before bid-submission deadline, during on line public tender opening event, during **e-auction**, it is the bidder’s responsibility to have back up 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).

Note2: MSE bidders should declare their UAM No. (Udyog Aadhaar Memorandum Number) on Central Public Procurement Portal (CPPP) failing which such bidders will not be able to enjoy the benefits available to MSMEs as contained in Public Procurement Policy for MSMEs order 2012 issued by MSME.

Note 3: Bidder must ensure that after following above the status of bid submission must be come – **“Complete”**. Bidders must ensure that all documents uploaded on e-tender portal as files or zipped folders, contain valid files and are not corrupt or damaged due to any processing at bidder PC system like zipping etc. It shall be the responsibility of bidder himself for proper extractability of

uploaded zipped files. Any error/virus creeping into files / folder from client end PC system cannot be monitored by e-tender software/server and will be **bidder’s responsibility only**. In case the files are non-extractable or illegible otherwise, **then the bidder’s authorized** representative shall be given one chance by Tender Opening Committee to open & demonstrate the contents of bid data downloaded from the e-tender portal in his presence. If, even after above chance, the bidder is unable to open & demonstrate the contents of bid data downloaded from the e-tender portal in his presence then no fresh bid in any form, soft or hardcopies, shall be accepted by tendering authority and his bid shall be summarily rejected and treated as non-responsive.

IV. Other Instructions

For further instructions, the vendor should visit the home-page of the portal (<https://www.etenders.gov.in>), **and check on “Help for Contractors” and “the Bidders Manual Kit”**. The compatible support software (PDF Converter, Java, etc) for online bid Submission may be downloaded from CPP Portal.

Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant

links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of CPPP.

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

1. Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission dead line on CPPP.
2. Register your organization on CPPP well in advance of your first tender submission Deadline on CPPP
3. **Get your organization's concerned executives** trained on CPPP well in advance of your first tender submission dead line on CPPP
4. Submit your bids well in advance of tender submission dead line on CPPP(There could be last minute problems due to Internet time out, break down, etc.)

Note: While the first three instructions mentioned above are especially relevant to first-time users of the **CPP-Portal**, the fourth instruction is relevant at all times.

V. Minimum Requirements At Bidders End

Computer System with good configuration (Min PIV, 1GBRAM, Windows 7)
2Mbps Broadband connectivity with UPS. Microsoft Internet Explorer 6.0 or above Digital Certificate(s) for users

VI. 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:-

- i. Download price schedule / BOQ Section-9 Part B (for Indigenous Item) in the given format.
- ii. Fill rates in down loaded price schedule/BOQ as specified in given format only in
White back ground cells. Don't fill in grey background cells.
- iii. BOQ Section-9 Part B file is password protected file. **Don't unprotect the file.** Price has to be filled in the same file and the same has to be uploaded.
- iv. Save filled copy of downloaded Consolidated sheet/BOQ, price schedule/BOQ file, in your computer and remember its name & location for uploading correct file (duly filled in) when required.

4. 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 2 or above,

issued by A certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA)[refer <http://www.cca.gov.in>].

5. REGISTRATION

To use the Electronic Tender [®] portal(URL of e-tender portal), vendor needs to register on the portal (if not already registered). Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for thee-tendering activities. Pay Annual Registration Fee if applicable.

Note: After successful submission of Registration details and Annual Registration Fee (as applicable). Please contact Helpdesk (as given below), to get your registration accepted/activated.

6. BID RELATED INFORMATION FOR THIS TENDER (SEALED BID)

Bidders should refer to User Manual for SO (Supplier Organization) in USER GUIDANCE on <https://etenders.gov.in/eprocure/app> (URL of e-tender portal). Bidders must ensure that all documents uploaded on e-ender portal as files or zipped folders, contain valid files and are not corrupt or damaged due to any processing at bidder PC system like zipping etc. It shall be the responsibility of bidder himself for proper extract ability of uploaded zipped files. Any error/virus creeping in to files/folder from client end PC system cannot be monitored by e-tender software/server and will be bidder's responsibility only. In case the files are non-extractable or illegible otherwise, then the bidder's authorized representative shall be given one chance by Tender Opening Committee to open & demonstrate the contents of bid data downloaded from the e-tender portal in his presence.

If, even after above chance, the bidder is unable to open & demonstrate the contents of bid data downloaded from the e-tender portal in his presence then no fresh bid in any form, soft or hard copies, shall be accepted by tendering authority and his bid shall be summarily rejected and treated as non-responsive.

NOTE: In case any discrepancy between information entered by bidder in the electronic form/template and that as per the supporting document uploaded, then information as per uploaded supporting documents shall prevail over the information in the electronic form/template.

7. OFFLINE SUBMISSIONS:

The bidder is requested to submit the following documents offline to AGM (MM) O/o CGMT BSNL Telangana Telecom Circle on or before the date & time of submission of bids specified in covering letter of this tender document, in a Sealed Envelope. The envelope shall bear (name of the work), the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).

- i. EMD-Bid Security in Original.
- ii. DD/Bankers cheque against payment of tender fee.

Note: The Bidder has to upload the Scanned copy of all above said original

documents as Bid-Annexure during Online Bid-Submission also.

8. OTHER INSTRUCTIONS

For further instructions, the vendor should visit the home-page of the portal <https://etenders.gov.in/eprocure/app> (URL of e-tender portal), and go to the User-Guidance Center

Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of e-tender portal.

SECTION-5

Part A

GENERAL (COMMERCIAL) CONDITIONS OF CONTRACT

1. APPLICATION

The general condition shall apply in contracts made by the purchaser for the procurement of goods/services. Laying of PLB pipe and associated works by open trench method/trenchless technology, optical fiber cable pulling/blowing and splicing works etc.

2. STANDARDS

The works to be executed under the contract shall confirm to the standards prescribed in the OF Cable construction practices issued by BSNL using open trenching and trenchless technology methods.

3. (a) PATENT RIGHTS

The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof in Indian Telecom Network.

(b) SUBCONTRACTS: The contractor shall not assign, sub contract or sublet the whole or any part of the works covered by the contract, under any circumstances

4. PERFORMANCE SECURITY

4.1 All suppliers (including MSMEs who are registered with the designated MSME bodies, like National Small Scale Industries Corporation etc. shall furnish performance security to the purchaser for an amount **equal to 10%** of the value of Advance Work Order, within 14 days from the date of issue of Advance Purchase Order by the Purchaser.

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 either FD/DD in favor of AO (Cash), BSNL, O/o CGMT, Hyderabad in 'Section-7B of this Bid Document.

4.4 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. The PBG should be valid for 30 months period.

The Performance security shall be extended /renewed if contract period is extended/ renewed.

If the contract period is extended as per Clause 11 of Section-2 then the Performance security shall be given for the additional value of such extension, with validity of extension period and warranty period of the extension.

4.5 The performance security deposit shall be refunded after expiry of warranty period of last work executed provided there are no recoveries to be made arising out of poor quality of work, incomplete work and/or violation of any terms and conditions of the contract as stipulated in the bid document

4.6 The performance security deposit with the BSNL will be considered for adjustment against penalties, any other statutory levies and any loss to BSNL properties, if any reported, at the time of final conclusion of the contract and final settlement of account.

4.7 In case it is found that a bidder has submitted a fake/ forged bank instrument towards performance security deposit (say PBG), then, actions as per clause 1 (a) of Appendix -1 to Section 4 Part-A shall be applicable.

4.8 No interest will be paid to the contractor on the security deposit.

5. MATERIAL SECURITY

5.1. Each Successful Bidder including MSE bidder will have to deposit material security as mentioned in the scope of work subject to a **minimum of Rs2 Lakhs** in the form of bank guarantee, valid for the period of contract plus six months, from a scheduled bank and in the **material security bond form** provided in the bid documents **Section-7(A)**. Material security can also be submitted in the form of cross demand draft drawn in favor of AO Cash, BSNL, O/o CGMT, Hyderabad issued by a schedule bank and payable at Hyderabad. The Material security will be non-interest bearing deposit for any period whatsoever. BSNL reserves the right to increase the amount of material security based on the quantum of work/maximum store to be issued at the time of execution of the work at any point of time.

5.2 The contractor at any point of time will not be issued stores costing more than material

security. If due to any reason, more store has to be issued to the contractor then the material security shall be correspondingly enhanced to an amount equal to the cost of material/stores to be issued.

5.3 The proceeds of the material security shall be payable to the BSNL as a compensation for any loss resulting from the contractor's failure to account for the material issued to him.

5.4 The Material Security will be extended /renewed if contract period is extended/renewed.

5.5 The Material security shall be released / refunded within a month from the date of the payment of the last final bill of the work under the contract or final settlement of material account whichever is later on production of 'No Dues Certificate' from 'Engineer In Charge'.

6 ISSUE OF WORK ORDER AND TIME LIMIT

- a. Work will be executed by way of issuing work order. The work order shall be for a part of work which will have to be completed in time as specified in work order.
- b. The route wise work order(s) shall be issued by the AGM/DGM in-charge of OF cable construction works after Pro-forma work order approval from Tender Approving Authority. The AGM/DGM in charge of work shall issue the work order after examining the technical and planning details of the works to be executed.
- c. The BSNL reserves the right to cancel or modify the scope of work stipulated to be carried out against the work order in the event of change of plan necessitated on account of technical reasons or in the opinion of work order issuing authority or competent authority, the contractor is not executing the work at the required pace.

7 EXTENSION OF TIME LIMIT

- a) In the work order, the work order issuing authority shall specify the time allowed for completion of work consistent with the magnitude and urgency of work. The time allowed for carrying out the work is to be strictly observed by the contractor and shall be reckoned from seventh day from the date of issue of work order.
- b) In as much as "the time being deemed to be the essence of contract", throughout the stipulated period of contract, the work is to be proceeded with all due diligence on the part of the contractor.
- c) There may be some hindrances, other than covered under force majeure, while

execution of work and in such cases the contractor shall apply in writing to the engineer-in-charge for extension of time (EOT), on account of which, he desires such extension, on the same day of occurrence of hindrance. The Engineer-in-charge shall forward the request to the competent authority with his detailed report, within two days of receipt of request from the contractor. The competent authority is empowered to grant extension of time for completion of work on certain conditions. He shall exercise such powers, if the following conditions are satisfied.

- i) The application contains the ground(s), which hindered the contractor in execution of work.
 - ii) The Engineer-in-charge is of the opinion that the grounds shown for extension of time are reasonable.
 - iii) The competent authority shall consider the request keeping all the facts and circumstances in view and shall grant extension of time, if in his opinion, there are reasonable and sufficient grounds for granting such extension and the reasons for delay are not ascribable to the contractor.
 - iv) The competent authority may also grant extension of time for completion of work in cases where reasons for delay are ascribable to the contractor, but such extension of time shall be with LD charges as per clause dealing with Liquidated damages (LD) for delays in execution of works.
 - v) The competent authority shall grant EOT with time period for completion of work clearly mentioned. The sanction of the competent authority of EOT shall be issued under the signature of the Engineer-in-charge.
- d) If the competent authority is of the opinion that the grounds shown by the contractors are not reasonable and sufficient and declines to grant the extension of time, the contractor cannot challenge the soundness of the opinion by reference to arbitration. The decision of the competent authority on period of extension of time or refusal for extension of time shall be final and binding on the contractor.
- e) **Grant of Extension of Time without Applications:**
There are, at times, practical difficulties like non-availability of material, delay in providing permissions/right of way etc. reasons of which are ascribable to the BSNL. In such cases, the Engineer-in-charge with the approval of competent authority to sanction EOT, may issue extension of time suo-motto without waiting for contractor to make an

application for EOT. Entry of hindrances shall be made in the Hindrance Register. The BSNL will, however, not be liable to the contractor for any losses or damages, costs, charges, or expenses that the contractor may in any way sustain / suffer due to delay in making the above available

f) Updation of OFC construction/ rehabilitation in the TRANSNET portal.

Vide CGMT Lr. No. TSCO-21/12(14)/2/2022-BB AND Dated 28-07-2023,
The following guidelines/ activities have to be done by the officer in-charge of the CWIP route.

- i.** Nodal officer of TRANSNET in the circle will create functional unit with a category Transmission Project & will attach of officer in-charge of CWIP route and his reporting officer with the functional unit.
- ii.** The route has to be created under the category “CWIP” on OFCNET of TRANSNET and a unique Transnet RID is automatically generated.
- iii.** The KML file of the route has to be created on Google Earth and is to be uploaded in the Full GIS menu in the TRANSNET by concerned in-charge SDE/JTO
- iv.** The user has to install the TRANSNET Mobile APP and proceed on the route for uploading of the progress of the route by concerned in-charge SDE/JTO
- v.** the status of the progress of work (ROW, Trenching and pipe laying, cable pulling, A/T, OTDR trace of all the fibers and commissioning) has to be updated by making the two ends of the section.
- vi.** For every 200 meters of OFC construction, the progressive RKM, trench depth, offset distance from landmark has to be updated and photos of the route in-charge showing trench depth, offset & landmarks are required to be uploaded. For every 1 KM of OFC construction, a video of the landmarks is required to be uploaded by concerned in-charge SDE/JTO. Uploading of photo and video can be done only using TRANSNET mobile APP.
- vii.** A/T officer shall also verify that all the CWIP routes are updated in TRANSNET and see that photos/ videos as per above are updated in TRANSNET before the route is declared commissioned.

- viii.** After uploading the photo/videos and other parameters as above, TRANSNET system will generate as certificate with a unique certification ID of the route or section of the route.
- ix.** After completion of the task, the SES (Service Entry Sheet) is required to be created in SAP for the PO of cable laying.
- x.** On creation of SES an inspection lot will be generated. The Inspection lot is a Quality Schedule which will seek the information about the completion of TRANSNET activity.
- xi.** The user or third party will enter the Transnet RID and certificate ID in the inspection lot which is to be approved by a higher level officer after verification in TRANSNET. Without Transnet RID and certificate ID, the SES will be blocked.
- xii.** After completion of Inspection lot, the SES activity can be processed as normal for approval.

8 MEASUREMENT, INSPECTION, ACCEPTANCE AND TESTING

A) MEASUREMENT

The measurement books are to be maintained by the officer-in-charge of the work or his immediate engineering subordinate not below the rank of Junior Telecom Officer. The entry shall be made in ink. No entry shall be erased. If a mistake is made, it should be corrected by crossing out the incorrect words or figures and inserting the corrections, the corrections thus made shall be initialed & dated by the officer concerned.

- B)** The Junior Telecom Officer/Sub Divisional Engineer, directly responsible for supervision of work, shall be responsible for accuracy of 100% / 50% of measurements respectively. The AGM/DGM shall be responsible for conducting test check of 20% of measurements.
- C)** The measurements of the work shall be done activity wise as and when the item of work is ready for measurement. The methods of measurement of various items are enumerated as under

D) MEASUREMENT OF DEPTH OF TRENCHES

The cable routes of one work order shall be divided into a number of segments each of maximum 200 meters length bounded by identifiable landmarks at both the ends of

the segments. If landmarks are not available, length of segment may be maintained at 200 meters. The measurement of depth shall be recorded at each point of measurement (POM) in the measurement book in meters in the multiples of 5 cms. For example 97 cms will be recorded as 95 cms and 103 cms as 105 cms. The points of measurements shall be at a distance of 10 meters starting from 0 (zero) Meter. For example, if the length of segment is 75 meters, the POMs shall be at 0M, 10M, 20M, 30M, 40M, 50 M, 60 M, 70M.

The last POM shall be at 75th M to be recorded against Residual POM. The efforts required to excavate trenches is not proportionate especially with reference to depth. Therefore, normally the workers tend to dig shallow trenches. As standard depth of the trench is important for future life and protection of cables, this tendency has to be discouraged. In order to encourage the contractor to achieve best possible depth in the face of site.

constraints, the following scale of payment shall be applied for digging trenches of lesser depths, subject to condition that relaxation has been granted by the competent authority for lesser depths.

TABLE-I

Depth between	Reduction in rate
<165 Cms to \geq 150 Cms.	Pro rata basis
<150 Cms to \geq 130 Cms.	12.5 % of approved rates
<130 Cms to \geq 105 Cms.	25 % of approved rates
Below 105Cms	40 % of approved rates

The payment for normal length should be calculated using the following formula:

$$P = (100 - ROR) \times RA \times D / (100 \times ND)$$

P = Payment for one meter

ROR = Reduction in rate in % as given above

RA = Approved rate of trenching per meter

D = Actual depth in Cms.

ND = Nominal depth of trench 165/135/90 cms for which the tender has been floated.

E) Measurement of Lengths and profiles of strata and protection

The measurements of length of trenches are on running meter basis, irrespective of type of soil encountered while digging. The type of protection provided (item code-wise) in a segment shall be recorded in the measurement book in the sheet provided for this purpose.

F) **Measurement of Length of cable:** The length of cables laid in trenches, through pipes and through ducts shall be measured by use of RODO Meter/Measuring Tape. The length should be cross verified with the marking of lengths on the cables. The lengths shall be recorded in sheet provided in the measurement book.

G) **Measurement of other items:** The measurement/numerical details of other items shall be recorded in the sheets provided for respective items viz.

- Digging of joint pit and preparation of joint chamber along with its type i.e. Brick chamber or Pre Cast RCC type.
- Fixing, Painting and sign writing of route/joint indicators.
- Termination of Cable in equipment room and no. of joints.

The contractor shall sign all the measurement recorded in the measurement book. This will be considered as an acceptance by the contractor, of measurements recorded in the MB. In case contractor fails to attend at the measurements or fails to countersign or to record the difference within a week, then in any such events the measurements taken by Engineer-in-charge or by the subordinate as the case may be shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

The AGM/DGM before passing the bill for sections covered by each set of measurement may carry out test check by re-opening trench at as many locations as necessary, as specified in document 'procedures for underground cable construction' and bills will be passed only when he is personally satisfied of the correctness of entries in the "measurement Book" and also when he is satisfied of other aspects of the work as per the terms of the contract.

The contractor shall provide the necessary assistance of labour for re-opening of trench for test check by the AGM/DGM. Separate payment shall not be made to the contractor for excavation of such test checks, however such test pits shall not be more than 10% of the cable laying work

Measurement of the work of cable pulling through pipe/duct will be taken equal to the length of the pipe / duct through which the cable has been pulled and not the total length of the cable pulled through pipe/duct.

H) Guidelines for Depth A/T of Horizontal Directional Drilling

Brief Description of the work: A high capacity drilling machine is used to drill the earth in almost horizontal manner and hence the name of the technology. Two manholes of 2Mt X2 Mt X 2 Mt pits are taken at the places marked by the site engineer. The distance between these manholes can vary from a minimum of 40 metres to 250 metres. The drilling is done from Entry pit towards the Exit pit. At the Exit pit the PLB pipes are attached to the drill rods and the pipes are pulled back towards the Entry pit.

In general RCC manholes are constructed at the Entry pit and Exit pit after the HDD work is completed.

HDD work along with manholes:

The location of manholes shall not only depend on the capacity of the machine but also on the roads. The man holes where the drilling commences is called the Entry Pit. The second manhole is called as Exit pit. Normally if the HDD machine is kept near the Entry pit and the drilling is carried out, then the depth at which the Machine enters the earth shall not be less than 1.2 Mt. As per the T&D standard any pipe laying less than 1.2 Mt requires additional protection. In order to achieve higher depth at the Entry pit the HDD machine is kept at around 6 to 8 meters away from the Entry pit. A separate pit called as pilot entry pit is dug up at 4 to 6mtr away from the Entry pit. Wherever the roads are not in straight line, the span length reduces between the Entry and Exit pit. In general in overlay access works, the manholes are constructed at every 200 Mtrs approximately. The PLB pipes are coupled using the HDPE couplers.

The HDD machine drills the earth using 3 meter length rods. These rods jointed to each other by welding. In the beginning of the first rod contains the drill bit and an electronic beacon house. While the underground drilling work is in progress the drill bit position can be monitored from the surface of the earth using a tracker. The depth and the direction of the bit are monitored from the tracker. This is due to beacon house located in the drill bit.

In the onward drilling from the entry pit to Exit pit normally a lesser diameter (4 inch diameter) drill bit is used. After the drill bit reaches the Exit pit, the drill bit and the beacon house are removed from the first rod. A higher diameter drill bit

called, Back reamer is attached to the first rod. The pipes are attached to the reamer and the rods are pulled back. Thus in the return path the tracker cannot detect the depth and direction of the reamer. Hence depth of the pipes can be monitored during the drilling from Entry pit towards Exit pit only.

In general the HDD technology is used in the cities where open trenching is not permitted. These roads are covered thick BT surface. For verifying the depth the test pits cannot be taken in the middle of the road. The second difficulty arises due to the depth of the pipes, which are at about 3 meters below the surface. It is very difficult to manually open a test pit to verify the depth. Hence carrying out the depth AT after the entire work is completed is not possible as is done in the usual depth check. Hence the Depth AT for the HDD work shall be done in real time.

The following tests and suggestions are recommended for the PLB pipes being laid using the HDD technology. Apart from the depth check, the pipes continuity check is also recommended especially for the ACCESS network jobs where multiple pipes are laid.

Standard Tests:

1. Online depth and offset check of the PLB pipes. The depth can be monitored from the tracker. The accuracy of the tracker may be verified by site-in charge before the work is commenced. The depth of the pipe should be more than 2.0 Mtrs.
2. The depth of the pipe may be recorded at the Entry pit and the Exit pit of the spans under test. The depth at both the places should be more than 1.2 Mtrs.
3. The depth at least two coupling points are to be verified in 1 KM. The depth should be more than 1.2 Mtrs.
4. The offset of the pipe may be recorded both from the center of the road and also from the edge of the road wherever the compound wall exists (City Areas).
5. The depths of the pipes at a minimum of six continuous rods are to be verified by the T&D wing. The depth should be more than 2 Mtrs beyond 10 meters from the trailing edge of Entry pit.
6. The colours of the pipes to be recorded in case of multiple PLB laying. Different types of coloured pipes are to be used.

Protection: It is recommended that the regular depth protection standards may be

applied for HDD works also.

Depth Relaxation: The depth relaxation is required at some situations. In general when HDD is used only for crossing the roads and short spans of 15 to 25 Mtrs length, due to the paucity of the road margin and due to the site conditions, the depth of 2.0 Mtrs may not be achieved. The depth also cannot be achieved at places where very old underground concrete structures, water and drainage pipes exist. It is recommended that the depth relaxation may be given by the competent authority.

Sl.No.	Depth measured at 10 mtrs from the trailing edge of the Entry Pit	Recommending Authority	Relaxing Authority
1	>or=1.65Mtrto2.0mtr	SDE in charge	AGM In charge
2	>or=1.5Mtrto1.65mtr	AGM in charge	DGM in-charge

Note:- For depth more than 165 cms rates for horizontal drilling will remain same. In case of depths being less than 1.65 Mtrs up to 1.5 mtrs, the payment of horizontal drilling will be made on pro rata basis. It is hereby recommended that no pipe shall be laid by HDD method for depths less than 1.5Mtrs. Hence no protection is required for the Pipes.

I) **Inspection and Quality Control:**

- i. The Quality of Works: The importance of quality of Optical Fiber Cable Construction works especially laying of multiple PLB pipes/coils using open trenching and trenchless technology method cannot be over-emphasized. The quality and availability of long distance media, efficiency of the reliable media connectivity to exchanges and success of new concept of overlay access network depends upon quality of laying of Optical Fiberr Cable. Further, the OF cables are vulnerable to damages due to work of other agencies.
- ii. It is imperative that the contractor(s) is/are fully conversant with the construction practices especially laying multiple pipes by trenchless technology using HDD machine and shall be fully equipped to carry out the work in accordance with the specifications. The contractors are expected and bound to ensure quality in construction works in accordance with specifications laid down.

The contractor shall engage adequate and experienced supervisors to ensure that works are carried out as per specifications and with due diligence and in a professional manner. The contractors shall satisfy himself/ themselves that the work conforms to the quality specifications before offering the same to A/T officer for Acceptance and Testing.

- iii. An assessment of extent of interest shown by the contractors in executing the works with requisite quality shall be recorded and used in evaluating the Contractors' Performance Rating (CPR).
- iv. In addition to Acceptance Testing being carried out by A/T officer and supervision by Constructions Officers, all works at all times shall be open to inspection of the department. The contractors shall be bound, if called upon to do so, to offer the works for inspection without any extra payment.
- v. **Site Order Book:** The site order book is one of the primary records to be maintained by the JTO/SDE supervising the work during the course of execution of works. The noting made by officers as well as contractors, will form as basis for operation of many contractual clauses. The contractor shall remove all the defects pointed out by the department in the Site order book. The contractor or their authorized representatives shall also be at liberty to note their difficulties etc. in these books. The site order books shall invariably be consulted at the time of making final payments to the contractor.

J) Testing and Acceptance Testing:

- i. The work shall be deemed to have been completed only after the same has been accepted by the A/T Officer. After issuing of work order to the successful vendor, the A/T officer will be nominated by the competent authority in O/o PGM-Hyderabad BA. The contractor shall make test pits at the locations desired by A/T Officer for conducting test checks without any extra payment. The contractor shall restore the pits after test measurements to its original shape. The contractor shall be responsible to provide test/measurement tools and testers for conducting various tests.
- ii. **Scope of Acceptance and Testing:** The purpose of acceptance and testing is to verify integrity of measurement and quality of work done. The A/T Officer shall not be responsible for recording of measurements for the purpose of billing

and contractual obligations. However, if the measurements taking by A/T officer are found to be lesser than the measurements recorded by the officer responsible for recording the measurements, the measurement taken by A/T officer shall prevail without prejudice to any punitive action against the contractor as per provisions of the contract and the officer recording the measurements.

The contractor shall be obligated to remove defects/deficiencies pointed out by the A/T officer without any additional cost to the department.

iii. **Offering the work for acceptance and testing:** The Sub Divisional Engineer responsible for construction, after having satisfied himself of completion of work ready for A/T, shall offer the work to A/T Officer for conducting Acceptance and Testing. The work shall be offered for A/T as soon as part of work is complete in all respects. The work against any work order can be offered for A/T in a number of stages.

iv. The contractor shall provide labour, if demanded by the A/T officer for digging of test pits and other necessary infrastructure for carrying out the A/T work. No extra payment will be made for the digging of test pit

9 WARRANTY

9.1 The contractor shall warrant that the material supplied for the work shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The contractor shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate quantity of materials etc. and shall remedy such defects at his own cost when called upon to do so by the BSNL who shall state in writing in what respect the stores are faulty. This warranty shall survive inspection or payment for, and acceptance of goods, but shall expire except in respect of complaints notified prior to such date, **twelve months after the acceptance and testing.**

9.2 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the material under this clause, the provisions of the clause shall apply to the portion / portions material so replaced or renewed or until the end of the above mentioned **period of twelve months**, whichever may be later. If any defect is not remedied within a reasonable time, as prescribed by the BSNL, the BSNL may

proceed to do the work at the contractor's risk and costs, but without prejudice to any other rights which the BSNL may have against the contractor in respect of such defects.

9.3 The Cable joint shall be guaranteed for a period of ONE year from the date of closing of joint. In case of failure of the joint due to poor workmanship i.e. failure of joint without external damage, within the stipulated period of guarantee the contractor shall repair the joint(s) at his own cost within 24 hours of informing him, **failing which the BSNL may carry out the repairs and penalty equivalent to five times of the approved rate of the jointing work plus the cost of materials used shall be recovered from the contractor from his pending bill/SD or any amount due to him without prejudice to any other action as per terms and conditions of the tender.** The cost of joining kit, supplied by the BSNL, so used to revive the joint shall be deducted from the final bill of the contractor pending for payment or from security if all bills have been settled.

9.4 Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance, cost of works and other incidental charges.

10 AUDIT AND TECHNICAL EXAMINATION

10.1 BSNL shall have the right to cause an audit and technical 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 over paid 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 overpayment and it shall be lawful for BSNL to recover the same from him in the manner prescribed in clause with the heading payment of bills(same chapter), or in any other manner legally permissible and if it is found that the contractor was paid less than what was due to him under payment shall be duly paid by BSNL to the contractor.

10.2 Provided that BSNL shall be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment have been agreed upon between the AGM or his subordinate officer on one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the **Competent Authority** or his subordinate officer.

10.3 Any sum of money due and payable to the contractor (including security deposit

returnable to him) under this contract may be appropriated by the BSNL for the payment of a sum of money arising out of or under any other contract made by the contractor with the BSNL

11 PAYMENT TERMS-

11.1 Procedure for preparation and settlement of bills

11.1.1 All items of work involved in the work order shall be completed in all respects before preparing the bills for the work against the work order. The procedure for payment of bills is enumerated as under:

- a. 100% full and final payment shall be processed after commissioning of complete route.
- b. However, if a section(s) (***node to node**) of the route has/have been completed in all respect and acceptance tested for making it capable of being put to use, 80% payment of the work so completed shall be made as a running bill, pending 20% to be paid after commissioning of complete route.

***node implies**—Exchange /Transmission center/ Broad band center/ BTS site/ any equipment center where OFC is terminated.

The contractor shall prepare the final bill in triplicate after completion of the entire work entrusted against work order & acceptance and testing of all the works and submit the same to SDE in-charge of work within 60 days of acceptance and testing for payment. The final bill shall be prepared for all the measurements of all items involved in execution of complete work order.

11.1.2 The contractor shall prepare the final bill containing the following details:

- b) The bill for all the quantities as per Measurements at the approved rates.
- c) Adjustment of amount received against running bills.
- d) Store reconciliation statement furnishing account of stores received against the **Work Order** and returned to the designated Store go down as surplus with requisite verifications from store in-charge/SDE in-charge of work.
- e) Letters of grant of E.O.T(s), if work could not be completed within stipulated time.
- f) Six sets of bound documentation.

11.1.3 The SDE in-charge of work shall scrutinize the final bill against the works entrusted and accord necessary certificates stating that the work has been

executed satisfactorily in accordance with specifications and terms and conditions of the contract. The SDE shall verify the quantities of items of work with reference to measurements recorded in the measurement book (and also A/T reports in case of any deviations noted by A/T office). The SDE in-charge of work shall submit the final bills, along with other documents mentioned above, with the documents as mentioned hereunder to the AGM/DGM, in-charge of work.

- Bill prepared by the contractor. ***Invoice should be GST compliant***
 - Material reconciliation statement.
 - Measurement Book.
 - A/T Certificates.
 - The site order Book.
 - The hindrances register.
 - Details of recoveries/ penalties for delays, damages to Departmental/ Third party properties as per provisions of the contract. In case no recovery is to be made, NIL report needs to be submitted.
 - Details of empty cable drums cost which needs to be recovered from the bill.
 - Low depth relaxation certificate
 - Route diagram

11.1.4 The AGM/DGM shall exercise the prescribed checks on the bills and accord necessary certificates on the bills.

11.2 Procedure for payment for substandard works:

A) The contractors are required to execute all works satisfactorily and in accordance with the specifications. If certain items of work are executed with unsound, imperfect or unskilled workmanship or with materials of any inferior description or that any materials or articles provided by him for execution of work are unsound or of a quality inferior to that contracted for or otherwise, not in accordance with the contract (referred to as substandard work herein after), the AGM/DGM in-charge shall make a demand in writing specifying the work, materials or articles about which there is a complaint.

B) Timely action by Site-In-charge: Timely reporting and action, to a great extent, can prevent occurrence of substandard work, which will be difficult or impossible to

rectify later on. It is incumbent on the part of Site-In-charge to point out the defects in work in time during progress of the work. The Junior Telecom Officer/Sub Divisional Engineer responsible for execution and supervision of work shall without any loss of time submit a report of occurrence of any substandard work to the AGM/DGM in-charge besides making an entry in the site order book.

A notice in respect of defective work shall be given to the contractor by AGM/DGM in-charge in writing during the progress of work asking the contractor to rectify/replace/remove the substandard item of work and also define time period within which such rectification/removal/replacement has to be done. After expiry of the notice period, if the contractor fails to rectify/replace/remove the substandard items, the defects shall be got rectified/replaced/removed departmentally or through some other agency at the risk and cost of the contractor.

Non-reporting of the substandard work in time on the part of Site In charge (s) shall not in any way entitle the contractor to claim that the defects were not pointed out during execution and as such the contractor cannot be absolved of the responsibility for substandard work and associated liabilities.

C) Authority and Procedure to accept substandard work and payment there of:

There may be certain items of work pointed out as substandard which may be difficult to rectify and in the opinion of the Tender Issuing Authority, the items in question will not materially deteriorate the quality of service provided by the construction, Tender Issuing Authority shall appoint committee to work out the reduced rates payable to the contractor for such substandard work.

The committee shall constitute one AGM/DGM other than the one who is directly in-charge of Cable Construction involving substandard items of work, as Chairman and one SDE and an Accounts Officer as members. The committee shall take into account the approximate cost of material/work pointed out as substandard and recommend the rates payable for substandard work which shall not exceed 60% of the approved rates of the item in question.

Record of substandard work: The items adjudged as substandard shall be entered into the measurement book with red ink.

D) No claim for delayed payment due to dispute etc: No claim for interest or damage will be entertained or be payable by the BSNL in respect of any amount

or balance which may be lying with the BSNL owing to any dispute, difference or misunderstanding between the parties or in respect of any delay or omission on the part of the Engineer in charge in making intermediate or final payments or in any other respect whatsoever.

12 DISPOSAL OF EMPTY CABLE DRUMS:

The contractor shall be responsible to dispose of the empty cable drums after laying of the cable. The competent authority taking into account the prevailing market rates has fixed the cost of Optical Fiber cable drums. The cost of empty cable drums shall be deducted from the bill for the work on which the cable along with the drum has been issued or any other amount due to the contractor or from security deposit.

Rates fixed for Optical Fiber cable drums are given in Tender Document in Annexure-VIII. The rates are fixed and there is no percentage above or below applicable on these rates.

13 LIQUIDATED DAMAGES/ PENALTY CLAUSE

13.1 Liquidated Damages clause for Delays in the contractor's performance:

The time allowed for completion of the work as per work order shall be strictly adhered by the contractor and shall be deemed to be the most important aspect of the contract on the part of the contractor and shall be reckoned from Seventh day from issue of work order by the BSNL. The work shall, throughout the stipulated period of contract, be proceeded with all due diligence to achieve the desired progress uniformly, and the contractor shall pay as LD for delay in execution of the work @0.5 % for each week of delay or part thereof , for a period up to ten weeks and there after @0.7% for each week of delay or part thereof for another ten weeks subject to a maximum of 12 % of the cost of the work allotted as per the **work order**.

13.2 On any date, if the LD payable as above, reaches 12 (twelve) percent of the cost of the work order, the competent authority reserves the right to short close the work order and get the remaining work done at the risk and cost of the contractor.

13.3 The days on which work is not done due to reasons beyond the control of

contractor, such as natural calamities, law & order situation etc., will not be accounted for in imposing the LD.

13.4 LD for delay in completion of the work shall be recoverable from the bills of the contractor and/or by adjustment from the security deposit or from the bills of any other contract. However, adjustment from security deposit will be made only when the contract has been terminated or at the time of final settlement of bills on completion of work.

13.5 In case of slow progress of the work in a section which has been awarded to a particular contractor, if the public interest does not permit extension of time limit for completion of the work, then Tender Issuing Authority will have the full right to order that the scope of the contract may be restricted to such fraction of the work and get the balance work executed at the risk and cost of the contractor. The details are given in Rescission of the contract clause of the bid document. All such payments shall be recovered from the contractor's pending bills or security deposit.

13.6 The Tender Issuing Authority **reserves** the right to cancel the contract and forfeit the security deposit if the contractor fails to commence the work within 7 days after issue of the work order or as the time permitted by the competent authority.

13.7 **Penalty for causing inconvenience to the public:** To ensure progress during the execution of work and to cause minimum inconvenience to the public, he shall cause to lay cable and close such trenches expeditiously. The contractor shall not leave the trenches open for more than 24 hours at a stretch in a route at a time and should take due precautions to avoid any mishap. In case of any accident, the contractor shall be fully responsible for the same and any penalty imposed on this account by any statutory authority shall be paid by the contractor. In case of failure to pay the same by the contractor it shall be recovered from his pending payment/security deposit.

The contractor shall not be allowed to dump the empty cable drums/waste materials in Govt./public place, which may cause inconvenience to Govt./Public. If the contractor does not dispose off the empty cable drums/waste materials within 3 days of becoming empty, the BSNL is at liberty to dispose off the drum in any manner deemed fit, also recover the amount fixed in this contract for empty cable drums/waste materials from the bill/security deposit/ along with the costs incurred by the BSNL in disposing off such materials. The BSNL may also levy a penalty up to Rupees One thousand only for each such default/incident.

13.8 Penalty for damaging the old cables: During excavation of trench utmost care is to be taken by the contractor, so that the existing underground cables are not damaged or cut. In-case any damage/cut is done to the existing cables, a penalty as per the schedule given below will be charged from the contractor or the amount will be deducted from his final bill.

Size of existing UG cable Cut/damaged	Amount of penalty per cut/damage
Up to 100 pairs cable	Rs. 3000.00 (Three thousand)
Above 100 pairs cable & up to 400 pairs	Rs. 5000.00 (Five thousand)
Above 400 pairs	Rs. 10000.00 (Ten thousand)
Type of cable Cut /damaged	Charges per fault for penalty and compensation
OF Cable of any size	Rs 25000.00 (Twenty Five thousand)

Besides the above penalty, the contractor shall carry out such repairs for restoration of the damaged cable free of charge. The cost of jointing kit, shall also be borne by the contractor. If contractor fails to repair the damage, the cost of repair (including cost of Labour + Jointing kit) shall be recovered from the contractor

13.9 penalty to damages stores/materials supplied by BSNL while laying :

The contractor while taking delivery of materials supplied by the BSNL at the designated place shall thoroughly inspect all items before taking them over. In case of execution of the work, if any material is found damaged/working unsatisfactorily, then a penalty equivalent to the cost of material +10 % as penalty shall be recovered from the contractor's payments/securities.

However, contractor will not be penalized for any defect in workmanship of the materials, which shall be taken up separately with the supplier of the stores.

13.10 Penalty to damages to U/G installation of other agencies:

While trenching, the contractor should not cause damage to any underground installations belonging to other agencies and any damage caused should be made good at his own cost and expenses.

13.11 Penalty for achieving lower depths:

In no case the statutory depth of boring should be (i) less than 2 mtr. from the road / ground surface and (ii) less than 1.65 mtrs at the pits. In order to encourage the

contractor to achieve required depth in the face of site constraints, the following payment schedule with penalty are to be adhered to for boring at lesser depths subject to condition that relaxation has been granted by the competent authority for lesser depths.

For ground surfaces other than pits

Actual micro tunneling (HDD) depth between	Penalty
< 2Mtr. To > 1.50 Mtr	10% of approved rate
<1.5 Mtr	No payment. To be treated as non-standard work

For pits

Actual micro tunneling (HDD) depth between	Penalty
<1.65 Mtr. To > 1.20Mtr	10% of approved rate
<1.2 Mtr	No payment. To be treated as non-standard work.

14 RESCISSION/ TERMINATION OF CONTRACT

14.1 Circumstances for rescission of contract: Under the following conditions the Tender Issuing Authority may rescind the contract:

- (i) If the contractor commits breach of any item of terms and conditions of the contract.
- (ii) If the contractor suspends or abandons the execution of work and the engineer in-charge of the work comes to conclusion that work could not be completed by due date for completion or the contractor had already failed to complete the work by that date.
- (iii) If the contractor had been given by the officer-in-charge of work a notice in writing to rectify/replace any defective work and he/she fails to comply with the requirement within the specified period.

14.2 Upon rescission of the contract, the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the BSNL as under:

14.2.1 Measurement of works executed since the date of last measurement and up to the date of rescission of contract shall be taken in the presence of the contractor or his authorized representative who shall sign the same in the MB. If the contractor or his

authorized representative do not turn up for joint measurement, the measurement shall be taken by the officer authorized for this purpose after expiry of due date given for joint measurement. The measurement taken by the officer so authorized shall be final and no further request for joint measurement shall be entertained.

14.2.1.1 The unused material (Supplied by the BSNL) available at site, shall be transported back by the BSNL to the Telecom Store at the risk and cost of the contractor. If any such material is found damaged/lost then the penalty shall also be recovered from the contractor as per conditions in tender documents/bid.

14.2.2 The un-executed work shall be got executed through the qualified bidder from amongst the bidders, who participated in the bidding process, by giving them offers in their order of ranking (L2, L3...) at their quoted rates. If the work was awarded on single tender basis then the BSNL shall get the unexecuted work completed through any other contractor approved in the area of Tender Issuing Authority at the approved rates of that particular section or to execute the work departmentally, as is convenient or expedient to the BSNL at the risk and cost of the contractor.

In such a event no compensation shall be payable by the BSNL to the contractor towards any inconvenience/loss that he may be subjected to as a result of such an action by the BSNL. In this regard the decision of **Tender Approving Authority** shall be final and binding. In all these cases, expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him shall be borne and paid by the original contractor and shall be deducted from any money due to him by the BSNL under the contract or his any other account whatsoever anywhere in the BSNL or from a security deposit.

14.2.3 The certificate of the AGM/DGM in-charge of work as to the value of work done shall be final and conclusive against the contractor, provided always that action shall only be taken after giving notice in writing to the contractor.

14.3 Termination for insolvency:

14.3.1 The BSNL may at any time terminate the Contract by giving written notice to the Contractor, without compensation to contractor, if the contractor becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect any right or action or remedy which has accrued

or will accrue thereafter to the BSNL.

14.3.2 Optional termination by the BSNL other than default of the contractor:

The BSNL may, at any time, at its option cancel and terminate this contract by written notice to the contractor, in which event the contractor shall be entitled to payment for the work done up to the time of such cancellation.

14.3.3 In the event of the termination of the contract, the contractor shall forthwith clear the site of all the contractor's materials, machinery and equipments and hand over possession of the work / operations concerned to the BSNL or as the BSNL may direct.

14.3.4 The BSNL may at its option, cancel or omit the execution of one or more items of work under this contract or any part of such items without any compensation, whatsoever, to the contractor.

14.4 Issuance of notice:

14.4.1 The AGM/DGM in-charge of work shall issue show cause notice giving details of lapses, violation of terms and conditions of the contract, wrongful delays or suspension of work or slow progress to the contractor directing the contractor to take corrective action. A definite time schedule for corrective action shall be mentioned in the show cause notice. If the contractor fails to take corrective action within the stipulated time frame, the AGM/DGM in-charge shall submit a draft of final notice along with a detailed report to the competent authority who had accepted the contract for approval.

14.4.2 The **final notice for rescission of contract** to the contractor shall expressly state the precise date and time from which the rescission would become effective. The following safe guards shall be taken while issuing the final notice.

- a) During the period of service of notice and its effectiveness, the contractor should not be allowed to remove from the site any material/equipment belonging to the BSNL.
- b) The contractor shall give in writing the tools and plants he would like to take away/remove from the site. Such of the materials as belong to him and which may not be required for future execution of balance work may be allowed by the AGM/DGM in-charge of work to be removed with proper records.
- c) No new construction beneficial to the contractor shall be allowed.

d) Adequate BSNL security arrangement in replacement of the contractor watch and ward shall be made forthwith. Expenses on this account are recoverable from the security deposit or any amount due to the contractor.

15 INDEMNITIES

15.1 The contractor shall at all times hold the BSNL harmless and indemnify from against all action, suits , proceedings, works, cost, damages, charges claim and demands of every nature and descriptions, brought or procured against the BSNL, its officers and employees and forthwith upon demand and without protect or demur to pay to the BSNL any and all losses and damages and cost (inclusive between attorney and client) and all costs incurred in endorsing this or any other indemnity or security which the BSNL may now or at any time have relative to the work or the contractors obligation or in protecting or endorsing its right in any suit on other legal proceeding, charges and expense and liabilities resulting from or incidental or in connection with injury, damages of the contractor or damage to property resulting from or arising out of or in any way connected with or incidental to the operations caused by the contract documents. In addition, the contractor shall reimburse the BSNL or pay to the BSNL forth with on demand without protector demur all cost, charges and expenses and losses and damages otherwise incurred by it in consequences of any claim, damages and actions which may be brought against the BSNL arising out of or incidental to or in connection with the operation covered by the contractor.

15.2 The contractor shall at his own cost at the BSNL's request defend any suit or other proceeding asserting a claim covered by this indemnity, but shall not settle, compound or compromise any suit or other finding without first consulting the BSNL.

16 DELETED

17 FORCE MAJERE

17.1 If, at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, 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 claim for damages against 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 an event 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.

Further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may, at its option, terminate the contract.

17.2 Provided, also that if the contract is terminated under this clause, the Purchaser shall be at liberty to take over from the Supplier 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 course of manufacture which may be in possession of the Supplier at the time of such termination or such portion thereof as the purchaser may deem fit, except such materials, bought out components and stores as the Supplier may with the concurrence of the purchaser elect to retain.

18 ACTION BY PURCHASER AGAINST BIDDER(S)/ VENDOR(S) IN CASE OF DEFAULT.

18.1 In case of default by Bidder(s)/Vendor(s) such as

18.1.1 Failure to deliver services within the time period(s) specified in the contract, or any extension thereof granted by the purchaser pursuant to clause 6&7 of this section;

18.1.2 Failure to perform any other obligation(s) under the Contract; and

18.1.3 Equipment does not perform satisfactory in the field in accordance with the specifications;

18.1.4 Or any other default whose complete list is enclosed in Appendix-1 of Section-4, Part-A; Purchaser will take action as specified in Appendix-1 of Section-4, Part-A.

19 DELETED.

20 ARBITRATION

20.1 Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties here to 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 here under.

20.2 Apart wishing to commence arbitration proceeding shall invoke 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.

20.3 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 3 rd arbitrator, who shall be the presiding arbitrator, by the two Arbitrators.

20.4 Neither party shall appoint its serving employee as arbitrator.

20.5 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.

20.6 Parties agree that neither party shall be entitled for any pre-reference or pendent elite interest on its claims. Parties agree that any claim for such interest made by any party shall be avoid

20.7 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 up to Rs.5 Crores.

20.8 Fast Track Procedure–

20.8.1 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\

20.8.2 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.

20.8.3 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 field 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 ooral 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.

20.8.4 The award under this section shall be made within a period of six months from the date the arbitral tribunal enters upon the reference.

20.8.5 If the award is not made within the period specified in sub-section (4), the provisions of sub-Sections (3) to (9) of 29 B of the Arbitration Conciliation Act, 1996 shall apply to the proceedings.

20.8.6 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.

20.8.7 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)
--------------------------------------------	------------------------------------------------------------------------------------------------------------------------------

UptoRs.5Crores	Within 6months (Fast Track procedure)
AboveRs.5Crores	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.

20.8.8 In case 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.

20.8.9 The Arbitration proceeding shall be held at Hyderabad.

20.8.10 Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment there of shall apply to the arbitration proceedings under this Clause.

21 SET OFF

Any sum of money due and payable to the supplier (including security deposit refundable to him) under this contract may be appropriated by the purchaser or the BSNL or any other person(s) contracting through the BSNL and setoff the same against any claim of the Purchaser or BSNL or such other person or person(s) for payment of a sum of money arising out of this contract or under any other contract made by the supplier with the Purchaser or BSNL or such other person(s) contracting through the BSNL.

22 DELETED

23 DELETED

24 DELETED

25 COURT JURISDICTION

25.1 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.

25.2 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. Accordingly, a stipulation shall be made in the contract as under.

“This Contract/PO is subject to jurisdiction of Court at HYDERABAD only”.

26 General Guidelines:-

The General guidelines as contained in General Financial Rules (GFR)as amended from time to time on works, procurement of goods and services and contract management respectively will also be referred to as guiding principles.

SECTION-5

Part B

SPECIAL (COMMERCIAL) CONDITIONS OF CONTRACT (SCC)

The Special (Commercial) Conditions of Contract (SCC) shall supplement General (Commercial) Conditions of Contract (GCC) as contained in Section 5 Part A and wherever there is a conflict, the provisions herein shall prevail over those in Section 5 Part A i.e. General (Commercial) Conditions of Contract (GCC).

1. **The successful tenderer / contractor shall** submit an Indemnity bond declaration, as per Annexure-1, for indemnifying BSNL against any non-compliance by bidder to any of the applicable statutory requirements, if the work is awarded to them.

2. **Safety of Labor and BSNL property:-**

The **successful tenderer/contractor shall** be solely responsible for payment and compensation under WC Act 1923 as in force from time to time applicable in the event of accident causing injury/death to his workers and CGMT Telangana Telecom circle shall not be responsible in any manner.

- 2.1 The contractor shall obtain/ purchase all required insurances and make all safety arrangements required for the laborer engaged by him at his own cost. All consequences due to negligence or due to lapse of security/safety or otherwise shall remain with the contractor. BSNL shall not be responsible for any mishap, injury, accident or death of the contractor's staff directly or indirectly. All liabilities arising out of accident or death while on duty shall be borne by the contractor. No claims in this regard shall be entertained/accepted by the BSNL.
- 2.2 The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards/flags and providing barriers etc. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work. Nothing extra shall be paid on this account.
- 2.3 Contractor shall be fully responsible for any damages caused to BSNL/ Government/ private/ other operators property / Injuries public at large/loss of life by him or his Laborer in carrying out the work and the same shall be rectified / compensated by the contractor at his own cost.

- 2.4 It will be sole responsibility of the contractor that the men deployed for the purpose of maintenance of the external plant with BSNL are to be trained to avoid any mishap, directly or indirectly.
- 2.5 On account of security considerations or on account of convenience of office staff, there could be some restrictions on the working hours or movement of vehicles for transportation of materials. The contractor shall be bound of follow all such restrictions and just the program for execution accordingly.
- 2.6 The contractor should carry out the work to the satisfaction of BSNL officer in charge and in the event of his failure the tendering authority reserves the right to offer the contract to any other tenderer or any other agency in case of unsatisfactory work at the cost of the contractor and payment will be settled on prorated Basis.
- 2.7 The contractor should engage workers with proven integrity to carry out the contract work. He/His worker should vacate premises after the completion of contract work.
- 2.8 The contractor shall be solely responsible for payment and compensation under WC act 1923 as in force from time to time applicable in the event of accident causing injury/death to his workers and CGMT Telangana Telecom circle shall not involve in any manner.
- 2.9 **No documents, towards compliance of afore said requirements, will be required to be submitted by bidder to BSNL paying authority for settlement of their payment invoices but the contractor must comply all requirements as per applicable Law/Acts etc.**
- 2.10 The decision of Head of the Circle Telangana Telecom Circle on any matter connected to this tender is final & binding on bidder.

3. Important instructions

- 3.1 After the work commences the contractor or his authorized representative(s) shall be present at the site. The representative shall be authorized by the AGM/DGM in-charge based on the contractor's request.
- 3.2 If the contractor does not provide the barricades, warning cones, warning tapes and work notice board, 5% additional penalty shall be levied. The same shall be provided by BSNL and 150 % of the cost of the items shall be recovered from the contractor.
- 3.3 The right of way (ROW) shall be obtained by the successful contractor on behalf of

BSNL, including various permission from authorities like R&B, GHMC, HMDA, TSIIC, Water board, Electricity, other utilities, traffic police, Municipal authorities etc. The ROW charges shall be paid by BSNL. The work shall be carried out as per terms and conditions and timelines mentioned in the ROW permission. The contractor shall deploy adequate men and machine so as to complete the work within permitted time.

- 3.4 The approved bidder shall obtain way leave permission (right of way) from the concerned road authorities, including permission for working from Police/District authorities. This will include the works of preparing the requisition for permission along with the necessary drawings as required by the highway authorities, get the same duly signed by the AGM/DGM in charge of the work, and submit the same to the road authorities. They shall pursue the case on a continuous basis and get the permission in the shortest time. The rate quoted for trenching shall also include the charges for undertaking the work to get permission. No separate rates will be applicable for getting permission.
- 3.5 The permission should be obtained in the most cost effective method for BSNL
- 3.6 The restoration charges shall be paid to the highways authorities directly by BSNL on obtaining the estimate along with written permission; provided,
- a) the rates are as per standard rates of the respective agency;
 - b) the stretch of BT/ Berm are not more than the actual.
 - c) the width payable shall be for ≤ 60 cm only.
- 3.7 The contractor shall restore the cut portions of BT/Concrete roads to their original conditions immediately on completion of the pipe laying works. If the restoration work is not satisfactory with reference to the standards prescribed by the Corporation / Highways, the amount equal to the charges as claimed by the Corporation/Highways will be recovered from the contractor.
- 3.8 The contractor shall deploy as many machines as required for the timely completion of the work.
- 3.9 The fact that the contractor is working simultaneously in one or more sections in the same Division/other Divisions, will not absolve him from the responsibility of completing the work in time.

SECTION-6

UNDERTAKING & DECLARATION

6(A)-For understanding and agreeing with the terms& condition of Tender & Specifications of work

a) Certified that:

1. I/ We have read, understood and agree with all the terms and conditions included in the tender documents & offer to execute the work as per tender terms & conditions (without any deviation)and at the rates quoted by us in the tender form.
2. If I/ We fail to enter into the agreement & commence the work in time, the EMD/Performance linked Security Deposit/PBG deposited by us will stand forfeited to the BSNL.

b) The tenderer here by covenants and declares that:

1. All the information, Documents, Photo copies of the Documents/ Certificates enclosed along with the Tender/Bid offer are correct.
2. In case of any correction/ addition/ alteration/ omission of the terms & conditions in the tender document, our tender / bid shall be treated as non-responsive and shall be rejected summarily.
3. 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 and forfeit the EMD/ Performance linked Security Deposit/PBG / Bill amount pending with BSNL. In addition, BSNL may debar the contractor from participation in its future tenders.

Date:
.....

Signature of Tenderer

Place:.....

Name of Tenderer Along with date
& Seal

6(B)– NEAR RELATIONSHIP CERTIFICATE:

(by the bidder in respect of status of employment of his/her near relation in BSNL)

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

OR

If the bidder has near relatives in the BSNL Unit where tender is being submitted, then they shall submit following details of those officers:

Sl.No	Name of the near relative	Designation	Employed in office of	Address	Mobile No.

Signature of the tenderer With date and seal

Note: In case of a Firm/Company, the near relationship certificate should be submitted by all the directors/partners of the Firm/company.

6 (C) – No Deviation’ statement or Clause-by-Clause compliance statement

I/We Declare and undertake for 100% clause by clause compliance and no-deviation of all clauses of tender document

TS-CO/MM/Tenders/HYD/UG OFC 4G Rural/2024-25 Dated 30/10/2024

Signature of the tenderer With
date and seal

SECTION-7 PROFORMAS

7(A)-MATERIAL SECURITY BOND FORM (To be typed on Rs.100/-non-judicial stamp paper)

Whereas.....<Contract awarding authority> (here in after referred to as BSNL) has issued an Award Letter no.....Dated...../...../20...for awarding the work of Optical Fibre Cable Laying work to M/s (here after referred to as “Contractor”) and the BSNL has asked them to submit a bank guarantee, towards material security, in favour of _____ O/o of Rs...../-

(here after referred to as “BG. Amount”) valid up to/...../20.....(here in after referred to as “Validity Date”). Now at the request of the Contractor,

We.....Bank.....Branch having
.....

(Address)

And Regd. Office address as (Here in after called „ the Bank”)

agreed to give this guarantee as here in after contained:

1. We, “the Bank” do hereby undertake and assure to the BSNL that if in the opinion of the BSNL, 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 the said sum limited to BG Amount or such lesser amount as BSNL may demand without requiring BSNL to have recourse to any legal remedy that may be available to it to compel the Bank to pay the same.

2. Any such demand from the BSNL shall be conclusive as regards the liability of Contractor to pay to BSNL 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 regarding the claim. Liability of the bank under this present being absolute and unequivocal.

3. We, the Bank further agree that the guarantee shall come into force from the date of its issue and shall remain in full force and effect up to its Validity date.

4. The Bank further agrees that the BSNL 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 against the Contractor and to forebear 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 for bearance, act or omission on part of BSNL or any indulgence by BSNL 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. Notwithstanding anything herein contained; (a) The liability of the Bank under this guarantee is restricted to the BG Amount and it will remain in force up to its Validity date.(b) The guarantee shall stand completely discharged and all rights of the BSNL under this Guarantee shall be extinguished if no claim or demand is made on us in writing on or before its validity date.

6. In case BSNL demands for any money under this bank guarantee, the same shall be paid through DD/Banker's Cheque/RTGS in favour of AO (Cash), Name of the BSNL Office.

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)

Rubberstamp of the bank

Authorized Power of Attorney

Number:.....

Name of the Bank officer:Designation:

Complete Postal address of Bank: Telephone

Numbers.....

7(B) For the Performance BANK Guarantee

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

Sub: Performance guarantee.

Dated:.....

Whereas (Hereafter referred to as BSNL) has Issued an AWO no. Dated/...../20..... awarding the work of.....to M/s.....

R/o..... (here after referred to as “Bidder”) and BSNLhas asked him to submit a performance bank guarantee in favour of.....of Rs...../- (here after referred to as“ P.B.G. Amount”) valid up to...../...../20.....(here after referred to as “Validity Date”)

Now at the request of the Bidder, We Bank.....Branch having.....

.....(Address) and Regd. office address as

.....(Here in after called ‘the Bank’) agreed to give this guarantee as here in after contained:

2. We, “the Bank” do hereby undertake and assure to the BSNL that if in the opinion of the BSNL, the Bidder has in any way failed to observe or perform the terms and conditions o 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 the said sum limited to P.B.G. Amount or such lesser amount as BSNL may demand without requiring BSNL to have recourse to any legal remedy that may be available to it to compel the Bank to pay the same.
3. Any such demand from the BSNL shall be conclusive as regards the liability of Bidder to pay to BSNL 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 Bidder 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 Bidder and BSNL regarding the claim.
4. We, the Bank further agree that the guarantee shall come in to force from the

date of its issue and shall remain in full force and effect up to its Validity date.

5. The Bank further agrees that the BSNL shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations here under 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 against the Bidder and to forebear 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 Bidder or through any forbearance, act or omission on the part of BSNL or any indulgence by BSNL to Bidder 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.
6. Not with standing anything here in contained;
 - (a) The liability of the Bank under this guarantee is restricted to the P.G. Amount and it will remain in force up to its Validity date.
 - (b) The guarantee shall stand completely discharged and all rights of the BSNL under this Guarantee shall be extinguished if no claim or demand is made on us in writing on or before its validity date.
7. In case BSNL demands for any money under this bank guarantee, the same shall be paid through banker's Cheque in favour of " AO(Cash) BSNL....." Payable at
8. 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.....

7 (C)-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
.....
.....

We here by 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 the alternative Representative
.....

Name of the alternative Representative

Above Signatures Attested

Signature of Bidder/ Officer authorized to sign on behalf of the Bidder

- 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.

Section 8

Bidder's Profile & Questionnaire.

(To be filled in and submitted by the bidder)

A) A. Tenderer's profile.

1. Name _____ of _____ the _____ Individual/Firm:

2. Present _____ Correspondence _____ Address _____

Tele Phone No.....Mobile No.....

3. Registered Office _____

Tele Phone No. _____
 Mobile No.....

4. State the Type of Firm: Sole proprietor-ship/ partnership firm/ Private Limited

Company (Tick the correct choice)

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

S.No.	Name	Father's Name	Designation
1.			
2.			
3.			
4.			
5.			

6. 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):

.....

..... 7.A
 Permanent _____ Account _____ No.:

7.B GST _____ Registration
 No(s).....

8. 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.):.....
9. Whether the firm has Office / works (i.e. manufacture of the tendered item) in Delhi? If so state its Address
-
-
-
- ...

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. Suggestion for improvement of the tender document.
-
-

Place.....

Signature of contractor.....

Date..... Name of Contractor.....

SECTION-9 Part-A

BID FORM

To

Asst. General Manager (MM),

O/o CGMT Telangana Telecom Circle, Door sanchar Bhavan, Hyderabad-500001

From

Bidder's Reference No:.....Dated.....

Ref: Your Tender Enquiry No.....dated.....

1. Having examined the above mentioned tender enquiry document including amendment/clarification/corrigenda / addenda Nos. Datedthe receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver.....in conformity with the said drawings, conditions of contract and specifications for the sum shown in the schedule of prices attached here with and made part of the financial Bid.
2. Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.
3. We agree to abide by this Bid for a period of **150 days** from the date fixed for Bid opening or for subsequently extended period, if any, agreed to by us. This bid shall remain binding upon us up to the afore said period.
4. We understand that you are not bound to accept the lowest or any bid, you may receive.
5. If our Bid is accepted,
 - i) we will provide you with a performance guarantee from a Scheduled Bank for a sum at **10%** of the contract value for the due performance of the contract plus Warranty period. (Total PBG should be valid for **30** months)
 - ii) We will provide you with a Material Security from a Scheduled Bank for an amount of Rs. 2,00,000/- for the valid for Tender period plus 6 months)
 - iii) If the contract period is extended as per Clause 11 of Section-2 then the Performance security will be given for the additional value of such extension, with validity of extension period and warranty period of the extension.
 - iv) The Performance security and Material Security will be extended /renewed if contract period is extended/ renewed.
6. If our Bid is accepted, we undertake to complete delivery of all the items and perform all the services specified in the contract in accordance with the delivery schedule specified in the Section-2 (Tender Information).
7. Until a formal Purchase/ 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.

Dated:.....day of 2024

Signature.....

Witness

Name

Signature.....

In the capacity of.....

Name

Duly authorized to sign the bid for and on

SECTION-9 PART-B

Financial/Price Bid:

E-Tender for U/G OFC laying works for Fiberization of 4G sites in Hyderabad BA Rural area.				
I Services As per approved U/G SOR dated 15-06-2022 & Revision of SOR dated 28-03-24				
		M/unit	Cost per M/Unit (excl GST)	(excl GST) Total cost
1	Trenching to a width of 30-45cm and for a depth of 165CM as specified in the standard laying practices for cables including dressing of sides and ramming of bottoms, including getting out the excavated soil and then refilling of soil as required, watering etc. and disposal of surplus excavated soil as directed- ALL Kinds of Soil-	15000	218.6	3279000
2	Trenching to a width of 30-45cm and for a depth of 165CM as specified in the standard laying practices for cables including dressing of sides and ramming of bottoms, including getting out the excavated soil and then refilling of soil as required, watering etc. and disposal of surplus excavated soil as directed - Ordinary Rock	600	315.7	189420
3	Excavation /Micro trenching -BT /CC Road at road crossings at shallow depths of required size 200mm depth 60mm width to run the PLB pipes from one end to other end of the road where excavation of road is prohibited for a depth of 165 cm and including entry and exit pits, reinstatement of road with 1:2:4 CC and all other operations involved as per the directions of Engineer in charge.	600	1190	714000
4	Horizontal Directional Drilling for laying of U/G PLB pipes to a standard depth of 165cm as specified in laying practices of OF Cable by HDD method	400	650	260000
5	Laying of PLB/HDPE pipe in excavated trenches/ducts	16600	6.5	107900
6	Pulling OF cable 24F to 96F in trenches as per standard practices including allied works as per the directions of Engineer in charge	18400	6.5	119600

7	DWC Pipe laying over bridge, culverts clamping and fixing etc.	500	77.3	38650
8	providing and laying in CC 1:2:4 (1cement : 2 coarse sand : 4graded stone)of specified grade in cable trench for protection of PLB/GI/DWC at low depth areas, bridges, culverts crossings etc. as per the directions of Engineer in charge	20	6275	125500
9	Providing and fixing RCC Joint protection chamber of 1.2M outer diameter with precast RCC rings/ collars and RCC top& base covers as per standard design and drawing and filling sand as per the directions of Engineer in charge. 1.2M outer dia, 0.4M height and wall thickness of 50mm with concrete mix of 1:2:4 with necessary reinforcement. Base bottom plate is of 1.2M dia, 50mm thickness, top plate consist of 2nos of semi circular plates each made with precast RCC 1.2M dia, 50mm thickness with concrete mix of 1:2:4	30	3600	108000
10	Providing and fixing precast RCC (1:2:4) Joint/route indicator with dimensions of 0.125m X 0.125m X 1.05 m, painting , letter writing etc. as directed by the Engineer in charge	114	1330	151620
11	Splicing of all fibers of OF Cable laid at every joint/ termination within specified splicing loss <0.02dB	40	2620	104800
12	Supply of Teflon flexible pipe 1" dia-meters	350	50	17500
13	Supply of stone dust in trenches, plinth, chambers-in cubic meters	30	1411.50	42345
14	Supply of Class B GI pipe 65mm	30	680	20400
	TOTAL (B)			5278735

1. The Bidder has to quote his percentage (%) for financial bid in a sheet(BOQ) provided in online portal, please refer e-tender instructions

1. The rate quoted should be inclusive of all costs establishment charges, profit margin. The total cost quoted by the bidders is Exclusive of GST.
2. Rate quoted should be percentage (%) above, on par with or below by considering all the 14 line items as a whole. The rate quoted should be inclusive of all taxes but exclusive of GST. In case of variation between the amount mentioned in figures & words, the amount mentioned in words shall be taken as final.
3. GST as applicable may be claimed by bidder for payment. The bidder has to submit

GST Based invoices duly uploading in GSTN. Proof of uploading is to be attached to the invoice.

5. The tender will be evaluated to arrive L-1 based on the lowest composite amount.
6. All the rates shown are as per SOR (New Schedule of Rates Dated 15-06-2022)
7. **Above mentioned rates are including Transportation of Material from District stores to work spot.**

ANNEXURE-I

DEED OF INDEMNITY

This **DEED OF INDEMNITY** is executed on this the.....,by

1. <<**Name of the Bidder**>>, a company/firm registered under the.....

(Applicable acts, as the case may be) (Hereinafter referred to as the **Bidder**) and having its registered office at <<Address of the Bidder>> acting through <<Authorized Signatory>> is here in after, for the purposes of this Deed of Indemnity.

TO AND IN FAVOUR OF

Bharat Sanchar Nigam Limited, through the.....BSNL.....

Office (here in after referred to as the **Purchaser** which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include its authorized representatives and permitted assigns) **on the Other Part.**

WHEREAS

(a) The Purchaser had invited bids *vide* their Tender Enquiry No..... (hereinafter referred to as ‘Tender’) for the purpose Of

.....
.....

(b) The Bidder had submitted its bid/ proposal dated (hereinafter referred to as the ‘Bid’) for the provision of such services in accordance with its proposal as set out in its Bid and in accordance with the terms and conditions of the Tender.

(c) The Bidder has in order to comply with the terms of the Tender agreed to execute the Deed of Indemnity on such terms and conditions more fully mentioned below.

NOW THIS DEED OF INDEMNITY WITNESSETH AS FOLLOWS:

1. The Bidder shall ,in consideration of the Purchaser making payment under and in accordance with the Tender Document, hereby agrees to indemnify the Purchaser against any costs, loss, damages and claims from third parties or liabilities suffered by the Purchaser and directly arising out of the following reasons:

a. Any illegal or unauthorized use or in connection with any claim or proceedings relating to any breach or violation of any permission/license terms by the Bidder or

any of its sub-contractor in the process of fulfillment of required obligations during contract period.

- b. The Bidder shall protect, defend, indemnify and hold harmless to BSNL and its employees from and against any and all liabilities, damages, fines, penalties and cost (including legal costs and disbursements) arising from:
- I. Any breach of any statute, regulation, direction, orders or standards from any Governmental body, Agency or regulator issued with respect to the product/ services being supplied/provided under this Tender.
 - II. Any claim made by third parties arising out of the use of the services of BSNL being provided using the equipment/services supplied under the Tender to the extent these are attributable solely to the poor quality or non-compliance of the products/services to the respective specifications.
 - III. Any claims arising from other utility / service providers in connection with interruptions or degradation of their services due to services provided by bidder under this Tender.
2. The bidder also declares that in case bidder is blacklisted by GST Authorities in future & which results in loss of Input Tax Credit (ITC) to BSNL, then BSNL shall have right to recover any such loss of ITC arising on account of such black-listing.
 3. This Deed of Indemnity shall stand terminated on expiry of or early termination of the contract period as envisaged in the above said Tender requirement.
 4. The Deed of Indemnity shall constitute the entire indemnity provided by the Bidder for the indemnities asked in said Tender.
 5. This Deed of Indemnity shall be governed by and construed in accordance with Indian law.

(Authorized Signatory)

<<Name of the Bidder>>

Witness1:

Witness2:

Date:Place

ANNEXURE-II

CHECK LIST FOR THE BIDDERS

Please ensure that all documents are fully authenticated by the Authorized Signatory with his signature with official seal, as per the eligible bidder's criteria. Offer is liable to be rejected, if enclosed documents are not authenticated.

Documents forming part of the bid:-

Sl. No	DOCUMENTS	Submitted/ Not Submitted (If Not Applicable, reason in brief)
1	Cost of the tender Document (Rs1180/-) or proof regarding valid registration with body specified by Ministry of Micro, Small & Medium Enterprise for the tendered items will have to be attached along with the bid.	
2	Bid Security in the form of Bank Guarantee for Rs131968/- valid up to 180 days from the date of tender opening. Or A proof regarding valid registration with body specified by Ministry of Micro, Small & Medium Enterprise for the tendered items will have to be attached along with the bid.	
3	Scanned copy of Bid Form in Section-9 Part A duly filled up and signed.	
4	Power of Attorney (POA) in accordance with Clause 14.3 of Section 4 Part A (as applicable)	
5	Scanned Copy of Articles and Memorandum of Association or Partnership deed as the case may be.	
6	Scanned copy of List of Directors on the Board of the Company, list of partners, as applicable	
7	Scanned Copy of Firm Registration or Declaration Individuals (Annexure XIV)	
8	Scanned copy of experience certificate as per clause 4.2 of Section-1	
9	a) Audited accounts and Turnover Certificate as per Clause 4.3.1 section 1 b) Solvency Certificate as per Clause 4.3.2, Section 1. c) Income Tax returns for the FYs Turnover is submitted.	
10	'No Deviation' statement or Clause-by-Clause compliance statement pursuant to Clause 11.2 (a) of Section-4 Part A, (pro forma at Section 6 (C))	
11	Scanned copy of EPF and ESI Proof	
12	No Near Relationship Certificate as per Section 6 Part(B)	

13	Declaration that the firm is non-blacklisting as per clause 4.1.2 of Section-1 (Pro Forma at Annexure-IV)	
14	Scanned copy Letter of Authorization to attend Bid opening event as per section-7 Part (C)	
15	Scanned copy of Valid PAN Card	
16	Scanned copy of Valid Goods and Services Tax Registration Certificate (s)	
17	Undertaking and Declaration as per Section-6 (A) duly filled and signed	
18	Scanned copy of Attestation of the signature of the authorized signatory, issuing POA, by Bank.	
19	Bidder's Profile & Questionnaire as per Section-8 duly filled up and signed.	
20	Scanned copy of valid license obtained from the Labor Commissioner or an undertaking stating that he/she will comply the Labor Acts in accordance with Central Labor (R&A) Act, 1970 Section 1 clause 4 (b) as amended from time to time. (Pro forma at Annexure VII)	
21	Scanned copy of the tender document, signed in all pages along with the technical bid in the e-tender portal	
22	Certification regarding downloading of application from the internet (Annexure-IX)	
23	Declaration w.r.t. Rule 144 (xi) of GFR17 (Annexure-X)	
24	Undertaking regarding not a licensed Telecom Service Provider providing Basic Services/ Cellular Telephony Services / Internet Services/ UASL/ NLD/ ILD Services anywhere in India. (Annexure-XI)	
25	Declaration of UAM number in CPPP (Annexure XII)	
26	Any other supporting documents asked for in bid document.	
27	This Checklist of the documents submitted as per Annexure-II	

Note: All documents should be self-attested and scanned and then uploaded.

Place:.....

For and on behalf of

Date:.....

M/s

Signature and Name of the Authorized signatory of the Company

Company rubber stamp/ seal

ANNEXURE-3

Mandate Form for payment through ECS /RTGS/ NEFT BANK DETAILS

1	Tenderer Name	
2	Name of the city	
3	Account Name	
4	Type of Account	
5	Bankers Name	
6	Bank Account number	
7	Branch Address	
8	Branch Name	
9	Branch phone no.	
10	MICR code	
11	IFSC code	
12	Supplier phone number	
13	Supplier e mail ID	
14	PAN number	
15	TIN number	

ANNEXURE-IV

SELF DECLARATION OF NON-BLACKLISTING BY Central/State Governments/PSUs

“I/We _____ authorized signatory hereby declare that
I/Our firm was not black listed/debarred by any Cental/State Government/PSUs as on date.

Dated this _____ Day of _____ 2024

Seal and Signature of the bidder

ANNEXURE-V

Name and address of the issuing office

EXPERIENCE CERTIFICATE

Lr.No: _____ Dated _____

Subject: Experience certificate for optical fiber cable construction work.

It is certified that M/s _____ having
office at _____ whose
Proprietor(s)/Partner(s)/Director(s)are

have successfully carried out Under Ground **Optical Fiber Cable construction work** for the quantity/ amount mentioned here under. It is certified that these amounts have been paid to the above mentioned contractor.

S.N.	Period during which work carried out and payments Made		Name of the Route and Quantity of U/G OFC laid	Amount paid (In Rs.)
	From	To		
1.	01-04-YYYY	31-03-YYYY+		

DGM/AGM/AO/DDO/Equivalent Officer responsible for
Maintaining contractors' ledger
Signature of office seal

ANNEXURE-VI

PROFORMA OF AGREEMENT

The successful tenderer shall have to execute the following agreement;

NIT No:.....Dated:.....

LOI No:.....Dated:.....

This agreement made on this _____ day of (month) _____ (year) _____ between M/s _____ herein after called “The Contractor” (which expression shall unless excluded by or repugnant to the context, include its successors, heir, executors, administrative representative and assignee) of the one part & Chairman & Managing Director, BSNL through <Tender Issuing Authority> herein after referred to as BSNL, of other part.

Whereas the contractor has offered to enter into contract with the BSNL for the execution of work of U/G OFC laying on behalf of BSNL using open trenching and trenchless technology and other associated works of OF Cable 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 deposits, as mentioned below, have been furnished in accordance with the provisions of the tender document and whereas no interest will be claimed on the security deposits.

a) PBG No:.....for Rs.....Issued by: _____ (Bank)

b) Material Security BG No:..... for Rs.....Issued by: _____ (Bank)

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

1) The contractor shall, during the period of this contact that is to say from.....to.....or completion of work for Rs.

_____ (In words) _____ whichever is later or until this contracts shall be determined by such notice as is hereinafter mentioned, safely carryout, by means of labors 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, all trenching and trenchless pipe laying, cable pulling, cable splicing, joint chamber preparation, fixing, painting and sign writing or route indicators and other associated works as described in tender documents (annexed to the agreement), when the Tender Issuing Authority or any other persons authorized by Tender Issuing Authority 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 supply the requisite number of workmen 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.

4) The contractor hereby declares that nobody connected with or in the employment of the BSNL 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 BSNL having bearing on execution of work and payments of work to be done under the contract.

In witness where of the parties present here in set their respective hands and seals the day and year in _____

Above written:

Signed sealed & Delivered by
The above named Contractor in

The presence of.

1

2

Signed & Delivered on behalf of BSNL
by the:

ANNEXURE-VII

UNDERTAKING

I/We, _____ (Name of the Signatory) representing _____
(Firm Name) in the capacity of
(Authorized Signatory/ Partner/Managing Director Etc.). The contractor (Successful Bidder) with
Bharat Sanchar Nigam Limited (BSNL), Telangana Telecom Circle carryout
(Nature of work) here by undertake to comply with the following Labor Acts as amended from time
to time.

1. Contract Labor (Regulation & Abolition) Act, 1970.
2. Employee Provident Fund & Miscellaneous Provision Act, 1952.
3. Employee State Insurance Act, 1948.
4. The Building and other Construction workers welfare cess act, 1996.
5. All the provisions of Minimum Wages Act 1948, Contract Labor (R&A) Act and rules framed and other labor laws affecting man power that may be brought into force from time to time.

I hereby further undertake that the Principal Employer i.e. CGMT BSNL, will not be held responsible for the violation/omissions occurred with regard to the above mentioned Acts during carrying out the works as mentioned above.

Place: Hyderabad

Date: _____

SEAL AND SIGNATURE OF THE BIDDER

ANNEXURE-VIII

RATE OF EMPTY CABLE DRUM

These are the rate of the empty cable drums which have to be deducted from contractor bills as per tender document.

<i>Sl.No.</i>	<i>Particulars of drum</i>	<i>Rate of disposal</i>
1	Optical Fibre cable drum 24F/12F/48F	Rs.100/-per empty cable drum
2	Optical Fibre cable drum 96F/144F/288F	Rs.200/-per empty cable drum

Note:-These are fixed rates and no variations shall be acceptable from these rates.

Signature of the Bidder with seal

CERTIFICATE

“I/We _____ authorized signatory hereby declare that the tender document submitted has been downloaded from the website <https://telangana.bsnl.co.in/> or <https://etenders.gov.in/eprocure/app> and no additions / deletions /corrections have been made in the *pro forma* downloaded. Further if any modification(s) in the tender schedule is/are noticed the bid may be rejected irrespective of whether the tender is under evaluation or in awarding stage or awarded or at any other stage, as per the decision of the CGMT Telangana Circle. The decision of the CGMT Telangana Circle is final and binding on both sides. The EMD and/or SD paid by me can be forfeited. I also declare that I have enclosed a D.D. for Rs.1180/- drawn on AO (Cash), BSNL, O/o CGMT, Hyderabad on bank (Name of the bank) towards the cost of tender document with this bid.”

Seal and Signature of the bidder

Declaration w.r.t. Rule 144 (xi) to GFR 2017

Certificate to be submitted by Bidders (On Company's Letter Head)

Reference 1: BSNL Tender Enquiry No.....issued on
.....

Reference 2: Department of Expenditure Office Memorandums (OMs) No. 6/18/2019-PPD dated 23rd July 2020 and its Clarification dated 24/07/2020.

I, in capacity of authorized signatory of M/s.....(Name of the company) having Regd. office at..... being a participant bidder in BSNL T.E cited at reference 1 above, do hereby declare that I have read and understood all the clauses regarding Restrictions under Rule 144(xi) of the General Financial Rules (GFRs) 2017 on grounds of Defense of India and National Security issued vide OM cited at reference 2 above, on procurement from bidders from a country or countries which shares a land border with India. It is declared that we fulfill all the requirements in this regard and are eligible to be considered for the Tender Enquiry under reference 1 above.

Further, we undertake that we will also abide by all the requirements of cited OMs during the entire contract period.

(Name of the authorized signatory)

Signature

Designation in Company

Seal / Stamp of Company

Counter signed by Company Secretary of the Company with seal / stamp.

UNDERTAKING REGARDING NOT A LICENSED TELECOM SERVICE PROVIDER

I/We,hereby declare that I/We am/are not providing any Basic Services/ Cellular Telephony Services / Internet Services/ UASL/ NLD/ ILD Services anywhere in India.

Seal and Signature of the bidder

DECLARATION BY MSE BIDDER

I/We hereby declare that UAM has been updated in the CPP Portal. MSE certificate updated / submitted by us is authentic & valid as on bid closing date of this tender.

Date:

Place:

Seal and Signature of the bidder

ANNEXURE-XIII

GSTIN	TAX INVOICE	ERP Vendor Code:						
PAN	EPF No.:							
Buyer To CGM, HYD BA, GSTIN:36AABCB5576G1Z M, State Code: 36	Bill No:	Date:						
	Work Order No:	Date:						
	Scope of work: In Section: Date of Commencemen t: Date of Completion:							
S.No	Particulars	HSN/ SAC Code	Depth	Qty	Rate	Amount	Tax Amt	G.Total
Amount in words:							Total Amount Before Tax: CGST SGST	
Bank Details:							Total GST Total Amount after Tax	
							Signature	

Pro forma regarding certificate to be given by Individuals.

I, Mr. /Mrs. /Ms. /M/s. _____ S/H/D/W/P/ of _____ hereby declare that I am an individual proprietary concern and do not have any proof of registration as firm/partnership deed. Further I declare that I have registered for GST/ EPF/ ESI/ Labour license as individual only.

Date: _____

Place: _____

Signature of Tenderer

Name of the Tenderer

Along with date & Seal