

MMP-I Section O/o PGM (MM-I)
2nd Floor, Bharat Sanchar Bhawan
BSNL Corporate Office
Janpath, New Delhi – 110001
E-mail: mmpeb2025@gmail.com



भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

AWO No. MMP-EB/AWO/T-851/ 18 /2025-26

Date:05.03.2026

File No. BSNLCO-MMP/18(25)/3/2026-MMP (E-717138)

To,

M/s Telecommunications Consultants India Limited

TCIL Bhawan, Greater Kailash-I, New Delhi-110048

Contact Person: Sh. Om Prakash Mishra, JGM (IT and BD)

E-Mail ID: omprakash.mishra@tcil.net.in and Mob.: 91-9868132819.

Consortium Partners:

M/s Veremax Technologie Services Limited

Sub:- Advance Work Order (AWO) for Design, Supply, Construction, Installation, Upgradation, Operation and Maintenance of middle mile network of Bharatnet, in NER-I (Mizoram, Tripura, Meghalaya) Telecom Circle against Package No.- 11 of Tender Enquiry No: MM/BNO&M/BN-III/T-851/2025 dated 27.06.2025 revised on dated 07.09.2025

References:-

1. Tender Enquiry No: MM/BNO&M/BN-III/T-851/2025 Dated 27.06.2025 Revised on dated 07.09.2025 and all subsequent clarifications / amendments / corrigendum.
2. Your submitted Bid, response to BSNL's subsequent queries and clarifications submitted during the evaluation process of above mentioned tender and bid submitted and price negotiation if any.

Dear Sir,

On behalf of Digital Bharat Nidhi (DBN), Department of Telecommunication, Government of India, the Chairman and Managing Director, BSNL, New Delhi, hereby place upon **M/s Telecommunications Consultants India Limited [Consortium Partner : M/s Veremax Technologie Services Limited]** an Advance Work Order (AWO) as per the terms and conditions of the aforesaid tender, for Design, Supply, Construction, Installation, Upgradation, Operation and Maintenance of middle mile network of Bharatnet, in the NER-I (Mizoram, Tripura, Meghalaya) Telecom Circle against Package No. - 11 of Tender Enquiry No: MM/BNO&M/BN-III/T-851/2025 dated 27.06.2025 revised on dated 07.09.2025 at an all-inclusive value of **Rs 1271,12,64,127.54/- (Rupees One Thousand Two Hundred Seventy One Crore Twelve Lakh Sixty Four Thousand One Hundred Twenty Seven and Paise Fifty Four Only).**

The agreement, as per the tender terms and conditions, shall be signed between BSNL and PTPL, after the receipt of your **Unequivocal and Unconditional** acceptance of all the terms and conditions of this AWO and submission of requisite Performance Security along with other requisite documents as mentioned in this APO and presenting original eligibility document for verification.

After signing of agreement, route wise Work Orders will be issued by concerned circle within the AWO quantities allotted against that circle.

The subject AWO is being placed under the following terms and conditions

1. **Performance Security** - (As per Clause-4 of Section-III and related pre-bid clarifications, of the tender)
 - 1.1 Performance security amounting **Rs 63.56 Crore (Rupees Sixty Three Crore Fifty Six Lakh Only)** i.e. 5 % of the all-inclusive value of Advance Work Order and valid for **3½ Years** with 3 months claim period beyond validity, shall be submitted by you **within 14 working days** from the date of issue of this

Regd. & Corporate Office: Bharat Sanchar Bhawan, H.C. Mathur Lane, Janpath, New Delhi - 110 001
Corporate Identity Number (CIN): U74899DL2000GOI107739. Web: www.bsnl.co.in

Advance Work Order. In case of Consortium, minimum 50% of the Performance Security shall be furnished by the Lead member of the Consortiums.

- 1.2 The proceeds of the performance security shall be payable to BSNL on behalf of DBN, DoT as compensation for any loss resulting from the contractor's failure to complete its obligations under the contract.
- 1.3 The performance security Bond shall be in the form of Bank Guarantee or Insurance Surety Bond issued by a nationalized/scheduled Bank or Insurance company approved by IRDA and in the form provided in 'Section IX-A' of this Bid Document. Validity of such BG shall be 3 ½ years with 3 months claim period beyond validity. Validity shall be got extended by PIA as and when required to cover the periods of extension and be valid for six months beyond the date of such extensions.
- 1.4 The performance security Bond will be discharged by BSNL on behalf of DBN (DoT), DoT after completion of the contractor's performance obligations including any warranty obligations under the contract.
- 1.5 Performance Security for O&M –**
- 1.5.1 The successful bidders shall submit the Performance security, in accordance with clause 1.1 to 1.4 above. This Performance Security shall initially be taken for the construction Phase.
- 1.5.2 PIA shall have option to continue the same Performance Security (submitted against AWO) for the O&M period also by extending its validity
- 1.5.3 In case vendor requires release of main PBG, a Performance bank guarantee applicable for O&M Phase, shall have to be submitted at start of the O&M phase and shall be applicable as 5% of the O&M cost of 7 years as per AWO. The PBG submitted after award of contract shall be released only after new PBG for the O&M period is submitted and accepted by buyer after due verification. Bank guarantee for O&M period is to remain valid till completion of O&M period plus six months.

2. Prices – (as per Clause-12 of Section-III and related pre-bid clarifications of the tender)

This AWO is being placed at the prices as given in Annexure-A (attached). Total **all-inclusive** value of this AWO is **Rs 1271,12,64,127.54/- (Rupees One Thousand Two Hundred Seventy One Crore Twelve Lakh Sixty Four Thousand One Hundred Twenty Seven and Paise Fifty Four Only).**

The break-up of APO Value is as below –

S. No.	Description	Amount (Rs)
1	CAPEX	767,97,22,133.28
2	OPEX for newly constructed network (@ 60% of Capex)	460,78,33,279.97
3	OPEX for Existing Network	42,37,08,714.29
	TOTAL (Rs)	1271,12,64,127.54

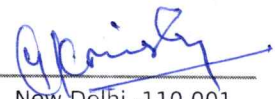
- 2.1 Prices charged by the PIA for the goods delivered and works/services performed under the contract shall not be higher than the prices quoted by the PIA in its Bid except for variation caused by change in taxes as specified in Clause-2.2 mentioned below.
- 2.2 For changes in taxes / duties during the scheduled time period, the unit price shall be regulated as under:
- a. Prices will be fixed at the time of issue of purchase / work order as per taxes and statutory duties applicable at that time.

- b. In case of reduction of taxes and other statutory duties during the scheduled time period, purchaser shall take the benefit of decrease in these taxes / duties for the supplies made from the date of enactment of revised duties / taxes.
- c. In case of increase in duties / taxes during the scheduled time period, the purchaser shall revise the prices as per new duties/taxes for the supplies, to be made during the remaining delivery period as per terms and conditions of the purchase / work order.
- 2.3 Any increase in taxes and other statutory duties/levies, after the expiry of the delivery date shall be to the supplier's account. However, benefit of any decrease in these taxes/duties shall be passed on to the Purchaser by the supplier. The total price is to be adjusted (by reducing the basic price) with increased duties and taxes as per price mentioned in PO.
3. **Payment of Bid Project Cost** – (as per Clause-12 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
4. **O & M Payments** – O&M Charges shall be paid as per Clause-13 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.
5. **Mobilization Advance** – Mobilization Advance will be paid as per Clause-12 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.
6. **Predefined Rates** – (as per Tender and related pre-bid clarifications / amendments / corrigendum of the tender.)
7. **BSNL's Right to Vary Quantities** - (as per Section-II clause-25 and related pre-bid clarifications / amendments / corrigendum of the tender.)
8. **Signing of Contract** - (as per Section-II clause-28 and related pre-bid clarifications / amendments / corrigendum of the tender.)
9. **BSNL's right to disqualify** - (as per Section-II clause-32 and related pre-bid clarifications / amendments / corrigendum of the tender.)
10. **BSNL'S Right to Ban Business Dealings** - (as per Section-II clause-33 and related pre-bid clarifications / amendments / corrigendum of the tender.)
11. **Verification of Documents and Certificates** – (as per Section-II Clause 35 and related pre-bid clarifications / amendments / corrigendum of the tender.)
12. **Standards** – (as per Section-III Clause 2 and related pre-bid clarifications / amendments / corrigendum of the tender.)
13. **Patent Rights** – (as per Section-III Clause 3 and related pre-bid clarifications / amendments / corrigendum of the tender.)
14. **Inspection and Tests** – (as per Section-III Clause 5 and related pre-bid clarifications / amendments / corrigendum of the tender.)
15. **Delivery/Making over works executed to BSNL and Documents** – (as per Section-III Clause 6 and related pre-bid clarifications / amendments / corrigendum of the tender.)
16. **Training** – (as per Section-III Clause 7 and related pre-bid clarifications / amendments / corrigendum of the tender.)
17. **Incidental Services** – (as per Section-III Clause 8 and related pre-bid clarifications / amendments / corrigendum of the tender.)

18. **Spares** – (as per Section-III Clause 9 and related pre-bid clarifications / amendments / corrigendum of the tender.)
19. **Warranty** – (as per Section-III Clause 10 and related pre-bid clarifications / amendments / corrigendum of the tender.)
20. **Documents required for claiming payment** – (as per clause-11 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
21. **GST Invoices** - (as per clause-11.4 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
22. **Changes in Work/Purchase Order** - (as per clause-13 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
23. **Sub contracts for Services** - (as per clause-14 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
24. **Delays in the Contractor's Performance** - (as per clause-15 of Section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
25. **Force Majeure** - (as per clause-16 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
26. **Termination for Default** - (as per clause-17 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
27. **Termination (Insolvency & Convenience)** – (as per clause-18 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
28. **Dispute Resolution** – (as per clause-19 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
29. **Set-Off** - (as per clause-20 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
30. **Intimation of status of work executed** – (as per clause-21 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)

The bidders, who are given Purchase/ Work Orders, must give the details of the works made against all the Work Orders every month on the first working day of the following month to BA Heads and concerned user branch (Bharatnet Cell, BSNLCO, New Delhi).

31. **Fall Clause** – (as per clause-23 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
32. **Court Jurisdiction** – (as per clause-24 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
33. **Audit and Security services** – (as per clause-25 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
34. **Term and Extension of Contract** – (as per clause-26 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
35. **Third Party Damage** - (as per Clause-27 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)



36. **Utilities** – (as per clause-28 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
37. **Felling of trees** – (as per clause-29 of section-III and related pre-bid clarifications / amendments / corrigendum of the tender.)
38. **Penalty for causing inconvenience to the Public:** - (as per Clause-30 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
39. **Penalty for cutting/damaging the old cable** – (as per Clause-31 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
40. **Indemnities** – (as per Clause-32 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
41. **Easements, Permits, Licenses and Other Facilities** - (as per Clause-33 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
42. **Protection of Life and Property and Existing Facilities** - (as per Clause-34 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
43. **Labour Welfare Measures and Workman Compensation** - (as per Clause-35 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
44. **Insurance** - (as per Clause-36 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
45. **Compliance with Laws and Regulation** - (as per Clause-37 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
46. **The PIA's Office** - (as per Clause-38 of Section III and related pre-bid clarifications / amendments / corrigendum of the tender.)
47. **Scope of Work** - (as per Clause-2 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)

To implement the middle-mile network for Bharatnet program across selected Packages as per Table-A of Section- I of the tender document consisting of

- 47.1 **Construction:** To build network infrastructure across remaining Gram Panchayat (GP) and Block locations.
- 47.2 **Upgradation:** To upgrade the existing network infrastructure from linear to ring topology across GPs and Block locations.
- 47.3 **Operation and Maintenance:** To operate and maintain the existing and the newly deployed network infrastructure as per the defined SLA with adequate GIS Tool.
- 47.4 **Establishment of State NoC :** To establish NoC, to connect the complete network installed or maintained by the PIA for monitoring , supervision and O&M to meet the SLAs.
- 47.5 **Network and Service Provisioning:** To enable retail, enterprise and wholesale services as per the requirement of BSNL across the Contract Period with adequate GIS based service qualification/ Desktop Feasibility tool.

The scope of work for the Project Implementation Agency (PIA) shall cover across the defined 'Packages' as per the details in Section-V (Schedule of Requirement). It is to be noted that number of Gram Panchayats (GPs) in a Package as mentioned in Section-V is indicative, and PIA shall undertake the Scope of Work across all Gram Panchayats (GPs) identified post survey and approved by BSNL.


- 48. Detailed Scope of Work** - (as per Clause-3 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 48.1 Construction and Up gradation of the Network**
 - 48.1.1 Ring architecture using IP-MPLS
 - 48.2 Making Over the Network to PIA by BSNL**
 - 48.2.1 Handover/ Takeover of the Existing BharatNet Phase-I & Phase-II Networks
 - 48.2.2 Existing Infrastructure
 - 48.2.3 GP End Equipment
 - 48.2.4 Block End Equipment
 - 48.2.5 OFC Network
 - 48.3 Upgradation of Existing BharatNet Infrastructure**
 - 48.4 Site Survey and Planning**
 - 48.5 Network Design**
 - 48.6 OFC Implementation**
 - 48.7 Videography**
 - 48.8 State - Network Operations Centre (S-NOC) Implementation Including GIS based fibre inventory system**
 - 48.9 Electronics Installation**
 - 48.10 Last Mile Connectivity**
 - 48.11 Earthing at G.P. location**
- 49. Measurement** - (as per Clause-4 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 50. Rates payable in case of laying at less depth** – (as per Clause-5 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 51. Inspection and Acceptance Testing** – (as per Clause-6 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 52. Operation and Maintenance (O&M)** – (as per Clause-7 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 53. Capacity Augmentation** – (as per Clause-8 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 54. Network and Service Provisioning** – (as per Clause-9 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 55. Project Completion Schedule** – (as per Clause-10 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 56. Service Level Agreement (SLA) and penalties** – (as per Clause-11 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 57. Quality Assurance and Testing** – (as per Clause-15 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 58. Right of Way** – (as per Clause-16 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
- 59. Monitoring of the Project** – (as per Clause-17 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)



60. **Independent Engineer** – (as per Clause-18 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
61. **Exit Management Plan** – (as per Clause-19 of Section IV-B and related pre-bid clarifications / amendments / corrigendum of the tender.)
62. **Special Technical Conditions and Technical Specifications** – (as per Section IV-C and related pre-bid clarifications / amendments / corrigendum of the tender.)
63. **Paying Authority** – will be communicated with Work Order.
64. **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 may also be referred to as guiding principles.
65. All other Terms & Conditions including Commercial & Technical as mentioned in the Tender enquiry/Bid document, pre-bid clarifications / amendments / corrigendum issued by BSNL, and its subsequent amendments / clarifications / corrigendum, shall be applicable for this AWO.
66. An **unconditional and unequivocal** acceptance of this AWO, duly signed by **Authorised Signatory**, along with **requisite PBG**, must be submitted within the prescribed period of **14 working days** from the date of issue of this AWO and eligibility criteria documents (in original) should also be presented, within this period, for verification. In case if you fail to furnish the PBG and unconditional / unequivocal acceptance of the AWO in question, AWO shall deem to be withdrawn automatically at your entire risks and responsibilities without assigning any further reason. In the event of withdrawal of the AWO, subsequent claim of supplier for placement of Work Order shall not be entertained by BSNL.
67. You are also requested to furnish the following along with the acceptance of the AWO, failing which AWO acceptance shall not be considered:
- (i) Preparatory plan with timelines for installation of S-NOC, GIS based fiber inventory system, EMS, RFMS and Routers in Block.
 - (ii) GIS based desktop survey tool as per industry practice proposed to be used may also intimated along with the specifications of tools i.e. Hardware and software to be used for video recording as per provisions in item 3.7 of section IV B of tender document.
 - (iii) Status of the TSEC for proposed active components i.e. Routers, UPS, RFMS and Racks to be installed at Block and GPs may also be submitted.
 - (iv) Undertaking to be submitted by the lead bidder duly signed by Authorised Signatory as follows:

“As per tender requirements and RFP guidelines, we confirm our readiness to take over the existing network progressively regardless of the optical power level (whether it meets the -25db threshold or not) and seamlessly integrate it with the new network development phases.”

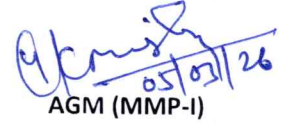
The above confirmation will not affect the provisions of Section-IV (B), Clause 3.2.1 of the tender in any way.
68. **Conditions for Field Trial of the Class I/ Class II local suppliers for routers** - (as per Section IV-A and related pre-bid clarifications / amendments / corrigendum of the tender.)
69. The successful bidder has to submit the GST Registration Certificate of the state where the bidder has been declared lowest bidder, along with acceptance of the AWO.



70. Contract Manager from BSNL, will be communicated with the Work Order.
71. In case of unsatisfactory performance of the contractor in any manner, the competent authority of BSNL will have the right to take suitable actions as per tender conditions inter alia terminate the contract etc.
72. In case of any discrepancy found in AWO/WO w.r.t. the tender document & pre-bid clarifications / amendments / corrigendum, the clause written in the tender / pre-bid clarifications / amendments / corrigendum shall be final.
73. **Amendment of AWO** – AWO will be suitably amended for those items which will be provided by PIA after the survey report is duly approved by BSNL.
74. BSNL reserves the right to correct any inadvertent error in this AWO.
75. The issue of this Advance work Order shall constitute the intention of BSNL as an agent of DBN, DoT to enter into contract with the bidder. It is clarified that issue of this AWO does not mean that BSNL is bound to enter into the contract / issue work order.

This is issued with the approval of Competent Authority.

Encl – Price Schedule (Annexure- A)


AGM (MMP-I)

Copy to –

1. Director (Enterprise), BSNL (for kind information please)
2. PGM (ABP-Plg.) / PGM (ABP-Imp.) / GM(MM-II) BSNL CO, New Delhi
3. PGM (PF) / PGM (Taxation) BSNLCO, New Delhi
4. AGM (ABP) / AGM (MMT), BSNLCO, New Delhi
5. AO (MM), BSNL CO, New Delhi
6. Office Copy

Annexure-A

Sr. No.	Item Description	Unit	Unit cost (INR) (excl. tax)	Quantity	Total Cost (INR) (Excl. tax)	Rate of CGST	Rate of SGST	Rate of IGST	Total GST (in INR)	Total cost (Inclusive Of GST) (in INR)	HSN / SAC
1a	Supply of 24F OFC, Duct and Accessories including all the services, as described at Serial No.-1 in the Table: VII.(5).	RKM	428082.000	5,032	2,15,41,08,624.00	9%	9%	18%	38,77,39,552.32	X1 2,54,18,48,176.32	995423
1b	Supply of 48F OFC, Duct and Accessories including all the services, as described at Serial No.-2 in the Table: VII. (5).	RKM	470891.000	-	-	9%	9%	18%	0.00	X2 0.00	995423
1c	Supply of 24F ADSS OFC and Accessories including all the services (using existing power Poles), as described at Serial No.-3 in the Table: VII. (5).	RKM	99614.000	5,296	52,75,55,744.00	9%	9%	18%	9,49,60,033.92	X3 62,25,15,777.92	995423
1d	Supply of 24F ADSS OFC and Accessories including all the services (including supply of Poles), as described at Serial No.-4 in the Table: VII. (5).	RKM	248961.000	5,295	1,31,82,48,495.00	9%	9%	18%	23,72,84,729.10	X4 1,55,55,33,224.10	995423
2	Fibre Distribution Management System Type1 at Block location	Nos	60900.000	130	79,17,000.00	9%	9%	18%	14,25,060.00	X5 93,42,060.00	85171890
3a	IP-MPLS Router at GP location: Supply of router at GP locations with accessories including installation, integration, testing and commissioning (as per Section (IV C), Annexure- B, II & III)	Nos	142944.000	3,817	54,56,17,248.00	9%	9%	18%	9,82,11,104.64	X6 64,38,28,352.64	995423
3b	IP-MPLS Router at Block location: Supply of router at Block locations with accessories including installation, integration, testing and commissioning (as per Section (IV C), Annexure- B, II & III)	Nos	428832.000	130	5,57,48,160.00	9%	9%	18%	1,00,34,668.80	X7 6,57,82,828.80	995423
4	SFP 10G with 40 km pluggable	Nos	1340.000	52,879	7,08,57,860.00	9%	9%	18%	1,27,54,414.80	X8 8,36,12,274.80	85176290
5	SFP 100G with 40 km pluggable	Nos	44688.000	260	1,16,18,880.00	9%	9%	18%	20,91,398.40	X9 1,37,10,278.40	85176290
6a	EMS for GP routers (including H/W, S/W & licenses)	No. of NE	1489.000	1,909	28,42,501.00	9%	9%	18%	5,11,650.18	X10 33,54,151.18	997331
6b	EMS for Block routers (including H/W, S/W & licenses)	No. of per 100 NEs	1489.000	65	96,785.00	9%	9%	18%	17,421.30	X11 1,14,206.30	997331
6c	EMS additional license including H/W and S/W upgradation for GP router	No. of NE	1489.000	1,908	28,41,012.00	9%	9%	18%	5,11,382.16	X12 33,52,394.16	997331
6d	EMS additional license including H/W and S/W upgradation for Block router	No. of per 100 NEs	1489.000	65	96,785.00	9%	9%	18%	17,421.30	X13 1,14,206.30	997331
7a	Rack at GP locations (as per Section (IV C), Annexure-B, VI)	Nos	44670.000	3,817	17,05,05,390.00	9%	9%	18%	3,06,90,970.20	X14 20,11,96,360.20	85371000
7b	Rack at Block locations (as per Section (IV C), Annexure-B, VI)	Nos	44670.000	130	58,07,100.00	9%	9%	18%	10,45,278.00	X15 68,52,378.00	85371000
8	Remote Fibre Monitoring System (RFMS) system including necessary hardware and software with accessories including installation, integration, testing and commissioning (as per Section (IV C), Annexure-B, V)	Nos	967850.000	130	12,58,20,500.00	9%	9%	18%	2,26,47,690.00	X16 14,84,68,190.00	995423
9a	EMS for RFMS (including H/W, S/W & licenses)	No. of RTU	2234.000	65	1,45,210.00	9%	9%	18%	26,137.80	X17 1,71,347.80	997331
9b	EMS additional license including H/W and S/W upgradation for RFMS	No. of 100 RTUs	2234.000	65	1,45,210.00	9%	9%	18%	26,137.80	X18 1,71,347.80	997331

Sr. No.	Item Description	Unit	Unit cost (INR) (excl. tax)	Quantity	Total Cost (INR) (Excl. tax)	Rate of CGST	Rate of SGST	Rate of IGST	Total GST (in INR)	Total cost (Inclusive Of GST) (in INR)		HSN / SAC
										D	E	
10	State NOC as per details and specification given at Section (IV C), Annexure-B, IV)	Nos	416920000.000	1	41,69,20,000.00	9%	9%	18%	7,50,45,600.00	X19	49,19,65,600.00	995423
11a	Power System with backup provisions at GP locations with accessories including installation, integration, testing and commissioning with provision of MPPT Card including solar panels (as per Section (IV C), Annexure-B, VIII)	Nos	119120.000	1,909	22,74,00,080.00	9%	9%	18%	4,09,32,014.40	X20	26,83,32,094.40	85044090
11b	Power System with backup provisions at GP locations with accessories including installation, integration, testing and commissioning with provision of slot for MPPT Card BUT excluding MPPT Card & solar panels (as per Section (IV C), Annexure-B, VIII)	Nos	81895.000	1,908	15,62,55,660.00	9%	9%	18%	2,81,26,018.80	X21	18,43,81,678.80	85044090
11c	MPPT solar module of 1 KW (as per sub section VIII of Annexure B of Section IV C - Amendment no. 12)	Nos	11912.000	764	91,00,768.00	9%	9%	18%	16,38,138.24	X22	1,07,38,906.24	8504
12	Supply of 6F Aerial drop OFC including services for last mile connectivity as per TEC GR as described at Serial No. 5 at Table : VII (5)	Km	37225.000	13,156	48,97,32,100.00	9%	9%	18%	8,81,51,778.00	X23	57,78,83,878.00	995423
13	Supply, installation including services of RCC Poles - 7/8 meter working load of 115 Kgs for last mile connectivity	Nos	7467.000	26,312	19,64,71,704.00	9%	9%	18%	3,53,64,906.72	X24	23,18,36,610.72	995423
14	Supply and installation of Joint Chamber as per E.I. for restoration of existing network (As per Clause 3.2.9 k) of Section - IV B)	Nos	6105.000	1,398	85,34,790.00	9%	9%	18%	15,36,262.20	X25	1,00,71,052.20	995423
15	Supply, installation of Joint Closure, testing and splicing 24 F for Dark Fibre Provisioning and/or attending OFC fault for the first time in a joint as per TEC GR/ E.I. for restoration of existing network (As per Clause 3.2.9 k) of Section - IV B)	Per splicing location	2755.000	1,398	38,51,490.00	9%	9%	18%	6,93,268.20	X26	45,44,758.20	995423
										Rs	7,67,97,22,133.28	
										Rs	4,60,78,33,279.97	
										Rs	42,37,08,714.29	
										Total AWO Value (Rs)		12,71,12,64,127.54
Total cost in words: Rupees One Thousand Two Hundred Seventy One Crore Twelve Lakh Sixty Four Thousand One Hundred Twenty Seven and Paise Fifty Four Only												

(Signature)
05/03/2026

AGM (MIMP-I)
O/o PGM (MM-I), BSNLCO, New Delhi

T-851

TABLE: VII. (5)
Detailed description of the line items, referred in the Price Schedules of Packages-02, 10, 11, 14

S.No.	Price Schedule S. No.	Item Description
1	1a	<p>Supply of 24F OFC, Duct and Accessories including all the services, as described below:</p> <ol style="list-style-type: none"> Physical survey of block to GP route, capturing the Latitude-Longitude of OF cable route, electronics infrastructure and power infrastructure, preparation of GIS survey report before execution of works. Supply of 24F armoured optical fibre cable (OFC), duct (40/33 mm) along with accessories and joint chambers, RCC route/ joint indicators, SIC, BJC, FTB/ FDMS or any other accessories required as per TEC-GR including transportation, freight, insurance and warehousing etc. Excavation of trench for PLB pipe laying, backfilling, reinstatement, and compaction after laying of PLB pipe, laying / blowing of optical Fibre Cable inside laid PLB pipe, splicing and jointing of Optical Fibre Cable including supply of As Built Diagram (ABD) of constructed OFC Route. This shall include fixing of joint chamber, manhole, splice closure, Fixing, painting and sign writing of Route /Joint Indicators, termination at FTB/FDMS and all the relevant accessories etc. The work also includes road / bridge crossing, providing protection as per EI wherever required and obtaining Right-of-Way (RoW) permissions. Commissioning, Acceptance Testing and makeover of the routes, commissioning of armoured optical fibre connectivity from the Block PoP to GP room and termination at GP router and end to end testing of dark and lit fibre per GP (for Underground laying) (as per the Engineering Instruction given at Section (IV C), Annexure-C) Capturing the Latitude-Longitude of OF route & joint location after execution of works from Block to GP and capturing coordinates of electronics infrastructure & power infrastructure along with integration of GIS data with As Built Diagram of OF routes, videography and photos as defined in scope of work section of this RFP.
2	1b	<p>Supply of 48F OFC, Duct and Accessories including all the services, as described below:</p> <ol style="list-style-type: none"> Physical survey of block to GP route, capturing the Latitude-Longitude of OF cable route, electronics infrastructure and power infrastructure, preparation of GIS survey report before execution of works. Supply of 48F Ribbon type armoured Optical Fibre Cable (OFC), duct (40/33 mm) along with accessories and joint chambers, RCC route/joint indicators, SIC, BJC, FTB/FDMS or any other accessories required as per TEC-GR including transportation, freight, insurance and warehousing etc. Excavation of trench for PLB pipe laying, backfilling, reinstatement and compaction after laying of PLB pipe, laying / blowing of optical Fibre Cable inside laid PLB pipe, splicing and jointing of Optical Fibre Cable including supply of As Built Diagram (ABD) of constructed OFC Route. This shall include fixing of joint chamber, manhole, splice closure, Fixing, painting and sign writing of Route /Joint Indicators, termination at FTB/FDMS and all the relevant accessories etc. The work also includes road / bridge crossing, providing protection as per EI wherever required and obtaining Right-of-Way (RoW) permissions. Commissioning, Acceptance Testing and makeover of the routes, commissioning of armoured optical fibre connectivity from the Block PoP to GP room and termination at GP router and end to end testing of dark and lit fibre per GP (for Underground laying) (as per the Engineering Instruction at Section (IV C), Annexure-C). Capturing the Latitude-Longitude of OF route & joint location after execution of works from Block to GP and capturing coordinates of electronics infrastructure & power infrastructure along with integration of GIS data with As Built Diagram of OF routes, videography and photos as defined in scope of work section of this RFP.
3	1c	<p>Supply of 24F ADSS OFC and Accessories including all the services (using existing power Poles), as described below:</p> <ol style="list-style-type: none"> Physical Survey of block to GP route, capturing the Latitude-Longitude of OF cable route, electronics infrastructure and power infrastructure, preparation of GIS survey report before execution of works. Supply of Self-supporting Metal Free Aerial Optical Fibre Cable (24F ADSS) along with required accessories, SIC, BJC, FTB/FDMS or any other accessories required as per TEC GR including transportation, freight, insurance and warehousing etc. Slinging / Laying and commissioning of 24 core optical fibre connectivity from Block PoP to GP room and termination at GP Router. The cost shall include laying, fittings, splicing, splitting, splice closure, Pole clamping installation, termination at FTB/FDMS & all the relevant accessories etc. and end to end testing of dark and lit fibre per GP (For Aerial laying) of Optical Fibre Cable. Supply of As Built Diagram (ABD) of constructed OFC Route and Acceptance Testing, commissioning and makeover of the routes. The work also includes road / bridge crossing, providing protection as per EI wherever required and obtaining Right-of-Way (RoW) permissions. (As per the Engineering Instruction at Section (IV C), Annexure-C) Installation by utilizing existing power infrastructure of State Discoms upto extent maximum possible. Capturing the Latitude-Longitude of OF route & joint location after execution of works from Block to GP and capturing coordinates of electronics infrastructure & power infrastructure along with integration of GIS data with As Built Diagram of OF routes, videography and photos as defined in scope of work section of this RFP.

T-857

TABLE: VII. (5)
Detailed description of the line items, referred in the Price Schedules of Packages- 02, 10, 11, 14

4	1d	<p>Supply of 24F ADSS OFC and Accessories including all the services (including supply of Poles), as described below:</p> <ol style="list-style-type: none"> 1. Physical Survey of block to GP route, capturing the Latitude-Longitude of OF cable route, electronics infrastructure and power infrastructure, preparation of GIS survey report before execution of works. 2. Supply of Self-supporting Metal Free Aerial Optical Fibre Cable (24F ADSS) along with required accessories including RCC poles and joint chambers, SJC, BJC, FTB/FDMS or any other accessories required as per TEC GR including transportation, freight, insurance and warehousing etc. 3. Slinging / Laying and commissioning of 24 core optical fibre connectivity from Block PoP to GP room and termination at GP Router. The cost shall include laying, fittings, splicing, splitting, splice closure, Pole clamping installation, termination at FTB/FDMS & all the relevant accessories etc. and end to end testing of dark and lit fibre per GP (For Aerial laying) of Optical Fibre Cable. Supply of As Built Diagram (ABD) of constructed OFC Route and Acceptance Testing, commissioning and makeover of the routes. The work also includes road / bridge crossing, providing protection as per EI wherever required and obtaining Right-of-Way (RoW) permissions. (As per the Engineering Instruction at Section (IV C), Annexure-C). 4. RCC Poles swaged of the length 7/8 meters (includes installation) not utilizing existing power infrastructure of State Discoms. 5. Capturing the Latitude-Longitude of OF route & joint location after execution of works from Block to GP and capturing coordinates of electronics infrastructure & power infrastructure along with integration of GIS data with As Built Diagram of OF routes, videography and photos as defined in scope of work section of this RFP
5	12	<p>Supply of 6F Aerial Drop OFC and Accessories including all the services as per clause 3.10 Last mile connectivity of Section IV-B</p>
<p>Note for All Packages</p>		
	Note-1	<p>RKM is the Route Kilometres. The RKM shall be measured through GIS system. However, RKM shall be measured by Rodo Meter till the implementation of GIS system.</p>
	Note-2	<p>Normally, the length of Duct used is almost 6% higher than the RKM and OFC Kms is higher by around 10%. The bidders, while quoting the rates must account for the same.</p>
	Note-3	<p>In Case of any other type of SFP required (SFP 10G with 40 Km pluggable shall be Rs F as per the bidder's quote and SFP 100G with 40 Km pluggable shall be Rs G as per the bidder's quote), the rates shall be paid to the bidder as mentioned below:</p> <ul style="list-style-type: none"> •SFP 10G with 80 km pluggable shall be 2 TIMES of F, •SFP 10G with 10 km pluggable shall be 0.25 TIMES of F, •SFP 1G with 10km pluggable shall be 0.13 TIMES of F, •Similarly, SFP 100G with 80 km pluggable shall be 1.2 TIMES of G.
	Note-4	<p>In Case of Block Router (Item#3 of Price Schedule), the bidder has to supply the type A router in place of type B as per requirement for which the rates shall be 1.2 times the price quoted for Block Router type B at Serial No. #3 of the Price Schedule. The quantity of the type A router will be around 10% of the total quantity. Every block will have only one type of router, either type A or Type B.</p>
	Note-5	<p>In Case of GP Router (Item#3 of Price Schedule), the bidder has to supply the type C router in place of type D as per requirement for which the rates shall be 1.2 times the price quoted for GP Router type D at Serial No.#3 of the Price Schedule. The quantity of the type C router will be around 10% of the total quantity. Every GP will have only one type of router, either type C or Type D.</p>
	Note-6	<p>Regarding items at Sl. No. 6 & 9 of the Price Sheets of all packages, BSNL may or may not procure the EMS for active equipment (as per SOR items at Sr. Nos. 7.5, 7.6, 8.4, 8.5, 9.2 and 9.3). However, quoted rates of these items shall be part of package price for bid evaluation. BSNL may decide to order one EMS of an OEM in any one package to cater more than one packages, based on actual requirement, along with additional licenses for integrating the network elements of other packages. PIA of the package where the EMS has been procured shall be obliged to integrate the network elements of other packages as decided by BSNL and also to facilitate the integration of the EMS with the S-NOC of such other packages for enabling the O&M by the PIA of such other packages. BSNL may procure any number of additional licenses in multiple of 100 licenses. Similarly, the PIA of the package from whom the EMS has not been procured, shall integrate all its network elements and S-NOC with the EMS of the package where the same has been procured by BSNL. In such case, BSNL shall provide the DCN connectivity required to establish this integration for smooth functioning of network.</p>
	Note-7	<p>Any other item required for completion of the project as per scope of work including but not limited to patch cords, connectors, installation material, adapters, attenuators, software, hardware etc. shall be supplied by the PIA without any additional cost to BSNL.</p>

T-857

TABLE: VII. (5)
Detailed description of the line items, referred in the Price Schedules of Packages- 02, 10, 11, 14

Note-8	Regarding ADSS OFC implementation (as per items# 1c & 1d of Price Schedules of all packages), the PIA may use GI poles also as per BIS standard No. BIS-2713 in place of RCC poles within the order price only. BSNL shall not pay any extra amount for the GI Poles.
Note-9	Regarding ADSS OFC implementation (as per item# 1c of Price Schedules of all packages), if the PIA needs to install some additional poles, such requirement shall be submitted to the Independent Engineer. BSNL shall consider such requirement on the case-to-case basis, based on recommendations of IE and the cost of such additional poles shall be paid as per Clause-3.10(x) of SectionIV-B (regarding cost of Pole to be used in Last Mile Connectivity).
Note-10	In case of areas which are prone to heavy snow fall in the States under NER-I circle, the PIA can use OFC with Ice Loading (in place of OFC without ice loading) for which BSNL shall pay additional amount of Rs. 10/- per Meter, however quantity of such OFC (with Ice Loading) shall not exceed 5% of the total quantity in the State.
Note-11	Since the OFC, to be used, is armoured; in order to trace the faults, suitable Cable Locator with each FRT is to be provided by the PIA.
Note-12	A Bidder / Lead Bidder shall quote the amount for last mile connectivity as mentioned in serial no. 12 & 13 of price schedule. The total amount shall be equally divided @ 10% per year for entire Contract Period (10 years). For evaluation purpose, the NPV shall be calculated at a discount rate of 10%.
Note-13	The items at S. No. 16, 17 and 18 of price schedule are optional and shall not be part of evaluation. Further, BSNL reserves the right to place the purchase order at a negotiated price that can be upto average price of all technical valid bids for the items or the bid of the successful bidder, whichever is lower.

A. K. Singh
6/5/2022