

MMP-I Section O/o PGM (MM-I)
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भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

AWO No. MMP-EB/AWO/ 08 /2025-26

Date: 05.05.2025

File No. BSNLCO-MMP/18(25)/13/2025-MMP (E-630490)

To,
M/s GR Infra Projects Limited
GR House, Hiran Magri, Sector 11
Udaipur, Rajasthan-313001
Mr. Girish Kumar Joshi DGM(Tech) b. +91-9928041185 and Email: girish@grinfra.com

Sub:- Advance Work Order (AWO) for Design, Supply, Construction, Installation, Upgradation, Operation and Maintenance of middle mile network of Bharatnet, in Kerala Telecom Circle against Package No.- 16 of Tender Enquiry No: MM/BNO&M/BN-III/T-791/2024 dated 15.02.2024

References:-

1. Tender Enquiry No: MM/BNO&M/BN-III/T-791/2024 dated 15.02.2024 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 Universal Service Obligation Fund (USOF), Department of Telecommunication, Government of India, the Chairman and Managing Director, BSNL, New Delhi, hereby place upon **M/s G R Infra Projects Limited (Consortium Partners: (1) M/s Annu Projects Private Limited (2) M/s SRIT India Private 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 Kerala Circle** against **Package No. - 16** of Tender Enquiry No: MM/BNO&M/BN-III/T-791/2024 dated 15.02.2024 at an all-inclusive value of **Rs. 1257,28,74,429.22/- (Rupees One Thousand Two Hundred Fifty Seven Crore Twenty Eight Lakh Seventy Four Thousand Four Hundred Twenty Nine and Paise Twenty Two only)**.

Based on the AWO, an agreement shall be signed between BSNL and you as per the tender terms and conditions. Route wise Work Orders will be issued by concerned circle within the AWO quantities allotted against the respective circles.

Work Order is likely to be issued after the receipt of your **Unequivocal** and **Unconditional** acceptance of all the terms and conditions of this AWO and submission of requisite Performance Bank Guarantee (PBG) along with other requisite documents as mentioned in this APO and verification of the eligibility documents.

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 62,86,44,000/- (Rupees Sixty Two Crore Eighty Six Lakh Forty Four Thousand Only) i.e. 5 % of the all-inclusive value of Advance Work Order and valid for 3½ Years shall be submitted by you within 14 working days from the date of issue of Advance Work Order by the Purchaser. 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 USOF, 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 security 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. 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 USOF, 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. 1257,28,74,429.22/- (Rupees One Thousand Two Hundred Fifty Seven Crore Twenty Eight Lakh Seventy Four Thousand Four Hundred Twenty Nine and Paise Twenty Two only).**

The break-up of APO Value is as below -

S. No.	Description	Amount (Rs)
1	CAPEX	765,00,97,267.34
2	OPEX for newly constructed network (@ 60% of capex)	459,00,58,360.40
3	OPEX for Existing Network	33,27,18,801.48
	TOTAL (Rs)	1257,28,74,429.22

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-12.2 mentioned below.

2.2 For changes in taxes / duties during the scheduled time period, the unit price shall be regulated as under:

- Prices will be fixed at the time of issue of purchase / work order as per taxes and statutory duties applicable at that time.
- 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 fiber 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 vendor must produce eligibility criteria documents for verification to this office within this period. 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 this office.
67. You are also requested to furnish the following along with the acceptance of the APO failing which APO 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 ie. 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 ie. Routers, UPS, RFMS and Racks to be installed at Block and GPs may also be submitted.
 - (iv) Undertaking to be submitted in compliance to the clause 2.1 (f) of Section IV A as per attached annexure-B by the bidder & each consortium partner separately duly signed by the authorized signatory.
 - (v) Kindly note that the writ petition no. WPC No. 15511/24 & 15518/24 are pending before the Hon'ble High Court and this APO is subject to the final outcome and orders of the court in the petition. Undertaking to therefore be submitted by the bidder and each consortium partner separately for unconditional acceptance of the consequence of the court case and indemnifying BSNL/DBN, DoT from any losses that may occur to bidder in view of the same duly signed by the authorized signatory.
 - (vi) 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 (Amendment No. 10.1.1) of the tender in any way.

68. Contract Manager will be communicated with the Work Order.
69. 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.
70. In case of any discrepancy found in APO/PO 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.
71. Regarding supply of products, vendor is required to adhere to the MTCTE Guidelines and Trusted Products related guidelines as mentioned at Clause - 2.15 and 2.16 of Section-IVA and related pre-bid clarifications / amendments / corrigendum of the tender.
72. **Amendment of APO** – APO will be suitably amended for those items which will be provided by PIA after the survey report is duly approved by BSNL.
73. Kindly note that the writ petitions WPC No. 15511/24 & 15518/24 are pending before the Hon'ble Delhi High court, and this APO is subject to any orders including the final order of the Hon'ble Court in these petitions.

This is issued with the approval of competent authority.

Enclosures -

1. Price Schedule-Annexure- A
2. Performa of Undertaking to be submitted as per clause 67 (iv) – Annexure-B
3. Performa of Undertaking to be submitted as per clause 67 (v) – Annexure C


AGM (MMP-I)

Copy to -

1. Dir. (Enterprise), BSNL CO, New Delhi (for kind information please)
2. PGM(Bharatnet) / PGM (ABP) / PGM(BN-III) / GM(MM-II) / PGM (PF) BSNL CO, New Delhi
3. AO (MM), BSNL CO, New Delhi
4. Office Copy

Tender Enquiry No. MM/BN&M/BN-III/T-791/2024 issued on 15.02.2024											Annexure-A	
AWO No. - MMP-EB/AWO/08/2025-26 Dated : 05.05.2025												
Name of Vendor - M/s GR Infraprojects Limited												
Price Schedule of Package - 16 (Kerala)												
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 suggested by BSNLCO Taxation cell	
			A	B	C=A*B	D	E	F	G=C*[(D+E) or F]	H=C+G		
1a	Supply of 24F OFC, Duct and Accessories including all the services, as described at Serial No.-1 in the Table: VII.(17).	RKM	6,23,265.00	8,492	5,29,27,66,380.00	9%	9%	18%	95,26,97,948.40	X1	6,24,54,64,328.40	995423
1b	Supply of 48F OFC, Duct and Accessories including all the services, as described at Serial No.-2 in the Table: VII. (17).	RKM	6,85,592.00	0	-	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. (17).	RKM	1,87,000.00	4	7,48,000.00	9%	9%	18%	1,34,640.00	X3	8,82,640.00	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. (17).	RKM	4,67,500.00	4	18,70,000.00	9%	9%	18%	3,36,600.00	X4	22,06,600.00	995423
2	Fibre Distribution Management System Type1 at Block location	Nos	85,600.00	152	1,30,11,200.00	9%	9%	18%	23,42,016.00	X5	1,53,53,216.00	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	1,14,200.00	978	11,16,87,600.00	9%	9%	18%	2,01,03,768.00	X6	13,17,91,368.00	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	3,93,900.00	152	5,98,72,800.00	9%	9%	18%	1,07,77,104.00	X7	7,06,49,904.00	995423
4	SFP 10G with 40 km pluggable	Nos	2,500.00	14,538	3,63,45,000.00	9%	9%	18%	65,42,100.00	X8	4,28,87,100.00	85176290
5	SFP 100G with 40 km pluggable	Nos	46,000.00	304	1,39,84,000.00	9%	9%	18%	25,17,120.00	X9	1,65,01,120.00	85176290
6a	EMS for GP routers (including H/W, S/W & licenses)	No. of NE	6,900.00	489	33,74,100.00	9%	9%	18%	6,07,338.00	X10	39,81,438.00	997331
6b	EMS for Block routers (including H/W, S/W & licenses)	No. of per 100 NEs	6,900.00	76	5,24,400.00	9%	9%	18%	94,392.00	X11	6,18,792.00	997331
6c	EMS additional license including H/W and S/W upgradation for GP router	No. of NE	6,900.00	489	33,74,100.00	9%	9%	18%	6,07,338.00	X12	39,81,438.00	997331
6d	EMS additional license including H/W and S/W upgradation for Block router	No. of per 100 Nes	6,900.00	76	5,24,400.00	9%	9%	18%	94,392.00	X13	6,18,792.00	997331
7a	Rack at GP locations (as per Section (IV C), Annexure-B, VI)	Nos	60,900.00	978	5,95,60,200.00	9%	9%	18%	1,07,20,836.00	X14	7,02,81,036.00	85371000
7b	Rack at Block locations (as per Section (IV C), Annexure-B, VI)	Nos	56,900.00	152	86,48,800.00	9%	9%	18%	15,56,784.00	X15	1,02,05,584.00	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	13,50,000.00	152	20,52,00,000.00	9%	9%	18%	3,69,36,000.00	X16	24,21,36,000.00	995423
9a	EMS for RFMS (including H/W, S/W & licenses)	No. of RTU	30,000.00	76	22,80,000.00	9%	9%	18%	4,10,400.00	X17	26,90,400.00	997331
9b	EMS additional license including H/W and S/W upgradation for RFMS	No. of 100 RTUs	30,000.00	76	22,80,000.00	9%	9%	18%	4,10,400.00	X18	26,90,400.00	997331
10	State NOC as per details and specification given at Section (IV C), Annexure-B, IV)	Nos	43,03,50,373.00	1	43,03,50,373.00	9%	9%	18%	7,74,63,067.14	X19	50,78,13,440.14	995423



Tender Enquiry No. MM/BNO&M/BN-III/T-791/2024 issued on 15.02.2024											Annexure-A	
AWO No. - MMP-EB/AWO/08/2025-26 Dated : 05.05.2025												
Name of Vendor - M/s GR Infraprojects Limited												
Price Schedule of Package - 16 (Kerala)												
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 suggested by BSNLCO Taxation cell	
			A									B
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	1,32,000.00	245	3,23,40,000.00	9%	9%	18%	58,21,200.00	X20	3,81,61,200.00	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	77,400.00	733	5,67,34,200.00	9%	9%	18%	1,02,12,156.00	X21	6,69,46,356.00	85044090
11c	MPPT solar module of 1 KW (as per sub section VIII of Annexure B of Section IV C - Amendment no. 12)	Nos	55,000.00	196	1,07,80,000.00	6%	6%	12%	12,93,600.00	X22	1,20,73,600.00	85414300
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 (17)	Km	52,900.00	1,756	9,28,92,400.00	9%	9%	18%	1,67,20,632.00	X23	10,96,13,032.00	995423
13	Supply, installation including services of RCC Poles – 7/8 meter working load of 115 Kgs for last mile connectivity	Nos	10,600.00	3512	3,72,27,200.00	9%	9%	18%	67,00,896.00	X24	4,39,28,096.00	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	5,300.00	754	39,96,200.00	9%	9%	18%	7,19,316.00	X25	47,15,516.00	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	4,390.00	754	33,10,060.00	9%	9%	18%	5,95,810.80	X26	39,05,870.80	995423
Total cost in INR (X1+X2+X3...+X26) (CAPEX)										Rs	7,65,00,97,267.34	
OPEX for newly constructed network (@ 60% of capex)										Rs	4,59,00,58,360.40	
OPEX for Existing Network										Rs	33,27,18,801.48	
Total AWO Value (Rs)											12,57,28,74,429.22	
Total cost in words: Rupees One Thousand Two Hundred Fifty Seven Crore Twenty Eight Lakh Seventy Four Thousand Four Hundred Twenty Nine and Paise Twenty Two only												



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

TABLE: VII. (17)

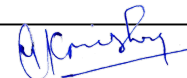
Tender No. MM/BNO&M/BN-III/T-791/2024 dated 15.02.2024

Detailed description of the line items, referred in the Price Schedules of Packages- 1 to 16

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"> 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 24F armoured optical fibre cable (OFC), duct (40/33 mm) along with accessories and joint chambers, RCC route/ joint indicators, SJC, BJC, FTB/ FDMS or any other accessories required as per TEC-GR including transportation, freight, insurance and warehousing etc. 3. 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. 4. 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) 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.
2	1b	<p>Supply of 48F OFC, Duct and Accessories including all the services, 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 48F Ribbon type armoured Optical Fibre Cable (OFC), duct (40/33 mm) along with accessories and joint chambers, RCC route/joint indicators, SJC, BJC, FTB/FDMS or any other accessories required as per TEC-GR including transportation, freight, insurance and warehousing etc. 3. 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. 4. 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). 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.



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"> 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, SJC, BJC, FTB/FDMS or any other accessories required as per TEC GR including transportation, freight, insurance and warehousing etc. 3. Slingsing / 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. Installation by utilizing existing power infrastructure of State Discoms upto extent maximum possible. 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
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. Slingsing / 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	Supply of 6F Aerial Drop OFC and Accessories including all the services as per clause 3.10 Last mile connectivity of Section IV-B
Note for All Packages		
	Note-1	RKM is the Route Kilometres. The RKM shall be measured through GIS system as mentioned in the Amendment#2. However, RKM shall be measured by Rodo Meter till the implementation of GIS system.
	Note-2	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.
	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	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.



Note-5	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.
Note-6	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.
Note-7	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.
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 Amendment No.- 10.4.3 (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 of Himachal Pradesh, Uttarakhand, NE-I circle & NE-II 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. There shall be no such limit in the UTs of J&K and Ladakh.
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.



UNDERTAKING

(To be submitted in the form of Affidavit by the Lead Bidder and each Consortium Partner, separately)

Ref: Tender No. MM/BNO&M/BN-III/T-791/2024 issued on 15.02.2024 for Development (Creation, Upgradation and Operation & Maintenance) of Middle mile network of BharatNet on Design Build Operate and Maintain (DBOM) Model.

We, M/s (Lead/Consortium Member of L1 Bidder in Package-.....), hereby declare and confirm the following:

- i. That we do not hold any ISP/ TSP license in any of the State(s)/ UTs in the package no. where we have been declared L1 bidder.

We further declare and confirm the following:

- ii. That we do not have more than 50% stake in our company of any other company who is operating ISP/TSP services in any of the State(s)/ UTs in the package no. where we have been declared L1 bidder
- iii. That we do not have more than 50% stake in any other such company who is operating as ISP/ TSP in any of the State(s)/ UTs in the package no. where we have been declared L1 bidder
- iv. That we are not a subsidiary of a parent company who is operating as ISP/TSP in any of the State(s)/ UTs in the package no. where we have been declared L1 bidder.
- v. That we have no subsidiary company who is operating as ISP/TSP in any of the State(s)/ UTs in the package no. where we have been declared L1 bidder.

We,, also undertake and confirm that we shall obtain prior approval of BSNL, in case we or any of our associate / parent company (falling under any of the above categories) intends to operate/ provide ISP/ TSP service, during the contract period under the referred tender, in any of the State(s)/ UTs in the package no. where we have been declared L1 bidder.

We,, also unconditionally undertake that in case of any of the above fact is found to be incorrect, our bid/agreement may be cancelled / terminated and, any further action by BSNL/DBN DOT as per tender terms & conditions of the RFP shall be acceptable to us, without any liability on BSNL/DBN.



UNDERTAKING TO INDEMNIFY BSNL

(To be submitted in the form of Affidavit on stamp paper of Rs 100/- by the Lead Bidder and each Consortium Partner, separately)

Ref: Tender No. MM/BNO&M/BN-III/T-791/2024 issued on 15.02.2024 for Development (Creation, Upgradation and Operation & Maintenance) of Middle mile network of BharatNet on Design Build Operate and Maintain (DBOM) Model.

We hereby undertake to unconditionally accept outcome of the Court Case(s) which are currently pending before the Hon'ble High Court of Delhi in respect of the BSNL Tender Enquiry No. MM/BNO&M/BN-III/T-791/2024 issued on 15.02.2024, being W.P. (C) No. 15518 of 2024 and W.P. (C) 15511 of 2024.

We further understand and accept that the issuance of the AWO No. -----Dated----- against Pkg. No.----- will be subject to the outcome of the decision of the Hon'ble High Court of Delhi in W.P. (C) No. 15518 of 2024 and W.P. (C) 15511 of 2024

We further undertake to indemnify BSNL / DBN / DoT against any consequence of the decision in the afore-said Writ Petitions.

We also undertake not to make any claim against any loss/damage that may occur as a consequence of the final outcome in the decision in the afore-said Writ Petitions- in W.P. (C) No. 15518 of 2024 and W.P. (C) No. 15511 of 2024 in respect of the BSNL Tender Enquiry No. MM/BNO&M/BN-III/T-791/2024 issued on 15.02.2024.

