



APSFL
Andhra Pradesh State FiberNet Ltd.

Request for Proposal

for

Connectivity to 49 villages/habitations in ITDA Rampachodavaram

Ref. No. APSFL/ITDA Rampachodavaram/365/2019, Dated 11/12/2019

Andhra Pradesh State FiberNet Limited

NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station,

Vijayawada - 520013

Web address: www.apsfl.in

Email address: apsfl@ap.gov.in

Disclaimer

The information contained in this Tender document or subsequently provided to Applicants, whether verbally or in documentary or any other form by or on behalf of the APSFL or any of its employees or advisers, is provided to Applicants on the terms and conditions set out in this TENDER and such other terms and conditions subject to which such information is provided.

This TENDER is not an agreement and is neither an offer nor invitation by the APSFL to the prospective Applicants or any other person. The purpose of this TENDER is to provide interested parties with information that may be useful to them in the preparation of their Proposals pursuant to this TENDER. This TENDER includes statements, which reflect various assumptions and assessments arrived at by APSFL. Such assumptions, assessments and statements do not purport to contain all the information that each Applicant may require. This TENDER may not be appropriate for all persons, and it is not possible for APSFL, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this TENDER. The assumptions, assessments, statements and information contained in this TENDER, may not be complete, accurate, adequate or correct. Each Applicant should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this TENDER and obtain independent advice from appropriate sources.

Information provided in this TENDER to the Applicants is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. APSFL accepts no responsibility for the accuracy or otherwise for any interpretation of the law.

APSFL, its employees and advisers make no representation or warranty and shall have no liability to any person including any Applicant under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this TENDER or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the TENDER and any assessment, assumption, statement or information contained therein or deemed to form part of this TENDER or arising in any way in this Selection Process.

APSFL also accepts no liability of any nature whether resulting from negligence or otherwise, howsoever caused, arising from reliance of any Applicant upon the statements contained in this TENDER. APSFL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this TENDER.

Issuance of this TENDER does not imply that the APSFL is bound to select an Applicant or to appoint the Selected Applicant, as the case may be, for the TENDER, APSFL reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.

The applicant shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations which may be required by the APSFL or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Applicant and APSFL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Proposal, regardless of the conduct or outcome of the selection process

Definitions

- **“Authority”** refers to MD/Directors of APSFL or its nominated representatives
- **“Authorized Representative”** shall mean any person authorized by either of the parties.
- **“Bidder/Supplier”** means any firm offering the solution(s), service(s) and /or materials as required in the TENDER. The word Bidder/ Supplier when used in the pre-award period shall be synonymous with parties bidding for this TENDER, and when used after award of the Contract shall mean the successful party with whom APSFL signs the agreement for rendering of services for implementation of this project.
- **“Law”** shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Central Government and/ or Andhra Pradesh or regulatory authority or political subdivision of government agency.
- **“LoA”** means Letter of Acceptance, which shall constitute the intention of the department to place the Purchase Order with the successful bidder.
- **“Party”** means APSFL or Bidder, individually and **“Parties”** mean APSFL and Bidder, collectively.
- **“Proposal / Bid”** means the Pre-Qualification and Technical Proposals submitted along with the subsequent clarifications and undertakings, if any;
- **“Request for Proposal (TENDER)”** means this document and its annexure etc., seeking a set of solution(s), services(s), materials and/or any combination of them.
- **“Requirements”** shall mean and include schedules, details, description, statement of technical data, performance characteristics and standards (Indian & International) as specified in TENDER.
- **“ITDA”** refers to Integrated Tribal Development Agency

1. Inviting Authority

Andhra Pradesh State FiberNet Limited (APSFL) invites sealed bids from the prospective bidders for Supply, installation and maintenance of Fiber & Network infrastructure along with accessories in Integrated Tribal Development Agency (ITDA) Regions. The bidders shall propose all the components as per the technical specifications mentioned in this TENDER and selected bidder(s) should support APSFL in providing reliable service delivery.

1.1 Key Events and Dates

Sl. No.	Description	Details
1.	Name of the Authority	Andhra Pradesh State FiberNet Limited
2.	Name of the Assignment	Connectivity to 49 villages/habitations in ITDA Rampachodavaram
3.	TENDER Number	Ref. No. APSFL/ITDA Rampachodavaram/365/2019, Dated 11/12/2019
4.	TENDER Publishing Date	11.12.2019
5.	Last date for submission of queries	13.12.2019 Queries shall be sent to apsfl@ap.gov.in
6.	Last date and time for submission of proposal (Proposal Due Date)	on or before 19.12.2019 - 3:00 PM The proposal (sealed bid) is to be submitted to APSFL corporate Office, Vijayawada. Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada - 520013 Web address: www.apsfl.in Email address: apsfl@ap.gov.in
7.	Date and time of opening of pre-qualification cum technical bids	19.12.2019 at 4:00 PM
8.	Date and time of opening of financial bid	Shall intimate technically qualified agencies at a later date
9.	Bid Processing Fee (Non-refundable)	INR 10,000 (INR Ten thousand Only) in the form of Demand Draft issued by one of the Nationalized / Scheduled Banks in India drawn in favour of Andhra Pradesh State FiberNet Ltd , payable at Vijayawada. Original DD must be submitted in APSFL office at Vijayawada before Proposal Due Date.
10.	Bid Security / EMD	INR 1,50,000 (Rupees One Lakh Fifty Thousand Only) in the

	(Refundable)	<p>form of Bank Guarantee issued by one of the Nationalized / Scheduled Commercial Banks in India drawn in favour of Andhra Pradesh State FiberNet Ltd, payable at Vijayawada.</p> <p>Original BG must be submitted in APSFL office at Vijayawada before proposal due date. Bid Security / EMD should be valid for a period of 180 (One Hundred & Eighty) days from Proposal Due Date. The Bid Security / EMD will be refunded to unsuccessful bidders.</p>
11.	For any enquiries and clarifications, please contact:	<p>Managing Director, Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, Vijayawada - 520013 Web address: www.apsfl.in Email: apsfl@ap.gov.in</p>
12.	Validity of the Proposal	Bidder proposals shall remain valid for a period of 180 days from the Proposal due date.

1.2 Bid Submission:

All bidders should submit documents in hard copy Original DD towards the bid processing the fee & Original BG towards EMD in APSFL office at Vijayawada before proposal due date.

Details of Bank for EMD:

Name of Beneficiary	Andhra Pradesh State Fibernet Limited
Name of Bank	Andhra Bank
Bank address	Andhra Bank, Main Branch, RR Apparao street, Vijayawada, Andhra Pradesh
Bank Account No	100611100002032
IFSC CODE	ANDB0000606
MICR CODE	520011025
BRANCH CODE	000606

2. Scope of Work

APSFL has established state-wide high speed optical fiber network infrastructure covering approximately 23,000 kms route across the 13 districts of Andhra Pradesh through 2471 PoPs and 12 DHQs being operated and controlled from Network Operations Centre (NOC) setup in Vishakhapatnam. APSFL is providing triple play services (Voice, IPTV and data) on top of this network through GPON ONTs at last mile.

Through this Tender, APSFL is planning to extend the connectivity from existing APSFL PoPs and fiber infrastructure already laid. APSFL proposes to provide triple play services initially to 49 unconnected villages/habitations in ITDA Rampachodavaram region with at least 5 connections in each village. List of 49 villages/habitations to be connected are enclosed. The successful bidder should supply necessary infrastructure as mentioned in the Bill of Materials (BoM) and maintain the same for a period of 1 year from the date of project completion. Detailed specification of each line item is enclosed.

Scope of the tender covers the following:

- Survey of the respective region/villages and preparation of optimal OFC network design for installation
- Supply, installation & commissioning of trunk fiber infrastructure (12F Optical Fiber Cable along with accessories) to each unconnected village from nearest PoP or tapping point
- Supply and installation of last mile fiber (2F OFC) to at least 5 connections in each village and commissioning of CPE supplied by APSFL
- Supply and installation of telephone equipment, UPS for CPE along with accessories
- Supply, installation of Poles and other accessories wherever necessary
- Operation & Maintenance of the supplied infrastructure and commissioned equipment for a period of 1 year
- Replacement of defective/damaged equipment and the bidder shall have enough spares to meet the service levels.
- Successful bidder shall undertake necessary activities for the above work such as delivery of equipment, deployment of sufficient manpower, coordination with different stakeholders including Electricity Department, ITDA Authorities and any other necessary activity for successful completion of the project and maintenance

3. Pre-Qualification Criteria

The prospective bidders must satisfy the following eligibility criteria for submission of their bids and provide supporting documents as proof of eligibility.

S. No.	Prequalification Criteria	Documentary Proof to be submitted
1.	The bidder should be a Company registered in India under the Indian Companies Act 1956/2013 or a Registered Partnership Firm or a Sole Proprietary Firm or LLP.	Bidder should produce the copy of the Certificate of Incorporation
2.	The Sole Bidder should have average annual turnover (TO) of minimum 6 crores in Indian Rupees from activities relating to Telecom supply or Services for last 3 audited financial years	Copies of the Audited Balance sheets and Profit and Loss Accounts for the last 3 audited financial years
3.	The bidder should have executed one work order in supplying networking/telecom equipment for a min value of INR 50 Lakhs each in last 3 years.	<ul style="list-style-type: none">• Copy of Purchase Order / Work Order / Contract / Agreement• Completion/Ongoing certificate issued and signed by Client
4.	The Bidder should have valid GST and PAN registration in India	Certified copy of valid GST & PAN registration certificates issued by competent authority in India.
5.	The Bidder should not have been blacklisted by any Govt or PSU in India as on the date of bid submission	Self-declaration by the bidder duly signed by the authorized signatory
6.	The bidder shall submit MAF from the Original Equipment Manufacturer	MAF should be submitted as per the Annexure given in this tender.

4. Delivery & Documents

Delivery of Equipment shall be made by the selected vendor strictly in accordance with the specifications of the tender document or in case of deviations, the specifications approved and accepted by APSFL. Corresponding documentation shall be submitted to APSFL along with delivery.

Delivery to the designated locations of APSFL is responsibility of the selected bidder.

5. Execution of Order

The Successful Bidder should nominate and intimate APSFL, an Account Manager for Single Point of Contact (SPOC), who should be responsible for effective delivery complying with all the terms and conditions. The Successful Bidder should ensure that the Account Manager fully familiarizes with the Tender Conditions, Scope of Work and deliverables.

6. Payment Terms

Successful bidder shall submit required documents as informed by APSFL including the following but not limited to, for payments:

- Invoices
 - Delivery challans
 - Commissioning certificate from Authority for all equipment
 - GIS coordinates of the fiber route along with locations of tapping points, splitters and CPE installed locations (including soft copy format) along with pictures
 - GIS Coordinates of the Poles installed along with pictures
 - Customer Acquisition Forms (CAF) duly signed by end customers along with picture showing the installed location.
 - Other documents requested by APSFL
- 30% of payment shall be released after successful commissioning of necessary infrastructure and last mile connections in one-third (1/3rd) of the total requested villages. For example, if the total villages to be connected is 49, first payment shall be made only after completion of work in 16 villages.
 - 30% of payment shall be released after successful commissioning of necessary infrastructure and last mile connections in next 1/3rd villages.
 - 30% of payment shall be released after successful commissioning of necessary infrastructure and last mile connections in remaining villages.
 - 10% of payment shall be released in 4 quarters during Operations and Maintenance period of 1 year. O&M period shall start after successful completion of commissioning in all villages as per purchase order.

7. Service Levels & Penalties

Delivery:

Successful bidder should provide connectivity to the requested villages/habitations within 45 days (or as mentioned in the purchase order). If the Successful Bidder fails to commence the assignment, the purchase order may be, cancelled /terminated.

However, in case of specific reasons for delay in supply beyond the periods specified herein the bidder should obtain specific written approval from APSFL citing the reasons. The decision of APSFL is final on the issue of extension of the delivery period.

Operation & Maintenance:

The selected vendor has to maintain the equipment and that are commissioned for one (1) Year and provide warranty period of 1 year from the date of commissioning as per the terms & conditions in the tender. The selected vendor also shall maintain the fiber infrastructure and resolve fiber cuts/losses to maintain the service

levels for end customers by deploying enough FRT teams in ITDA Rampachodavaram. The SLA will be calculated on quarterly basis and the SLA parameters are as given below:

Specification of Severity Levels and Penalties during the business hours (10:00 hrs to 17:00 hrs). The time will be calculated from the time trouble ticket is raised by the customer or by APSFL.

Severity Level	MTTR (Mean Time to Restore) of all complaints raised during quarter	Penalty
Level 1	Up to 4 Hours	No penalty
Level 2	Beyond 4 hours & Up to 12 hours	10% of the quarterly invoice raised
Level 3	Beyond 12 hours and up to 24 hours	20% of the quarterly invoice raised
Level 4	Beyond 24 hours	30% of the quarterly invoice raised

For the purpose of calculating SLA, the following faults or outage hours shall be excluded:

- (i) Periods where any Link is switched off at APSFL/Government office end due to its own reasons.
- (ii) Periods where the failure of any components or equipment belonging to APSFL/Government office.
- (iii) Periods where the failure is due to longer power outages (>12 hrs) by Electricity Department or natural calamities

8. Annexures

I. Checklist

Sl. No.	Documents	Compliance (Yes/No)
1.	Cover Letter	
2.	Bidder Profile as per given format	
3.	Financial Information as per given format	
4.	Declaration of acceptance of TENDER terms and conditions	
5.	Declaration of clean track record / No Blacklisting	
6.	EMD as per the given format	
7.	Price Bid as per given format	
8.	Registration certificate of the company.	
9.	Copy of Purchase Orders/client certificate should be submitted	
10.	In the case of authorized distributor/dealer, a Letter of Authorization from the OEM/manufacturers or the dealer certificate	
11.	In the case of OEM, the documentary proof for manufacturing the products.	
12.	Copies of the Audited Balance sheets and Profit and Loss Accounts for the last 3 financial years	
13.	Certified copy of valid GST registration certificates issued by competent authority in India. In case of consortium, this is applicable for all Indian members.	
14.	The bidder shall submit all the technical leaflets / technical literature / product certifications etc. to confirm the technical compliance.	
15.	The OEM should submit the compliance confirmation for each parameter in their letterhead.	
16.	Manufacturer Authorization Form for supplied equipment including OFC	
17.	If there is any deviation, the deviation with justification should be spelt out.	
18.	Index of furnished documents for the Prequalification criteria	

II. Annexure I – Cover Letter

(To be submitted by Bidder on Original Letterhead)

To
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station, NH – 65, Vijayawada – 520013

[Date]

Subject: RFP _____

Ref: _____

Dear Sir,

With reference to your TENDER Document dated I/We, having examined all relevant documents and understood their contents, hereby submit our Proposal.

1. All information provided in the Proposal and in the Appendices, is true and correct and all documents accompanying such Proposal are true copies of their respective originals.
2. I/We shall make available to the Authority any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
3. I/We acknowledge the right of the Authority to reject our Proposal without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
4. I/We to the best of our knowledge certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.
5. I/We understand that you may cancel the Selection Process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the vendor, without incurring any liability to the Bidders
6. I/We to the best of our knowledge certify that, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.

7. I/We to the best of our knowledge further, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
8. I/We agree and understand that the Proposal is subject to the provisions of the TENDER document. In no case, shall I/We have any claim or right of whatsoever nature if our Proposal is not opened or rejected.
9. I/We agree to keep this offer valid for 180 days from the Proposal Due Date specified in the TENDER.
10. I/We agree and undertake to abide by all the terms and conditions of the TENDER Document. In witness thereof, I/We submit this Proposal under and in accordance with the terms of the TENDER Document.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

III. Annexure II – Bidder Profile

(To be submitted by Bidder/consortium members on original letterhead)

#	Particulars	Details
1.	Name of the Company	
2.	Year of incorporation	
3.	Nature of the Company (Registered Company)	
4.	Registered Office Address	
	Office Telephone Number	
	Fax Number	
5.	Contact Person	
	Name	
	Telephone Number	
	Email Address	
6.	Local presence at Andhra Pradesh	
	Office Address	
	Office Telephone Number	
	Fax Number	

7.	Contact Person (in Andhra Pradesh)	
	Name	
	Telephone Number	
	Email Address	
8.	Registration Details	
	Permanent Account Number (PAN)	
	GST Number	
9.	Banker's Name, Address and Account Number	

IV. Annexure III - Financial Information

(To be submitted by Bidder on original letterhead)

Annual Turnover of the Bidder(s)

Criteria	Sub Criteria	FY	Total Financials
Financial Capability	Annual Turnover (in INR)	FY 2016-17	
		FY 2017-18	
		FY 2018-19	

Documentary Proof Required:

- Statutory auditor's/Practising Chartered Accountant's certificate clearly specifying the Turnover for the specified years.
- Audited/Provisional Balance Sheets and Profit & Loss statements for the last 3 financial years

V. Annexure IV- Declaration of Acceptance of TENDER Terms & Conditions

(To be submitted by Bidder on original letterhead)

To,
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station, NH – 65, Vijayawada – 520013

[Date]

Subject: RFP _____

Ref: _____

Sir,

It is to certify that the TENDER document – TENDER No..... dated..... is carefully read & understood and all the sections and clauses are COMPLIED UNCONDITIONALLY AND UNEQUIVOCALLY. There is no deviation from the terms & conditions of the TENDER. We also hereby confirm that the solution proposed by us will meet the project requirements.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

VI. Annexure V - Declaration of Clean Track Record/ No Blacklisting

(To be submitted by Bidder on original letterhead)

To,

[Date]

The Managing Director,

Andhra Pradesh State FiberNet Limited,

3rd Floor, NTR Administrative Block,

Pandit Nehru Bus Station, NH – 65, Vijayawada – 520013.

Subject: RFP _____

Ref: _____

Sir,

I/We hereby declare that my company has not been debarred / black listed as on Bid submission date by any State Government, Central Government, Central & State Govt. Undertakings / Organizations and by any other Quasi Government bodies / Organizations, and any other major Enterprise / Organizations in India for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices.

Yours faithfully,

(Signature, name and designation of the authorized signatory)

(Name and seal of the firm)

VII. Annexure VI- Manufacturer's Authorization Form (MAF)

(To be submitted in Manufacturer's letterhead)

To
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station, NH – 65, Vijayawada – 520013

Sir,

We hereby authorize M/s _____ to undertake to submit a Bid, and subsequently negotiate & sign the contract with APSFL for the Tender No: _____ for product manufactured by us.

We also undertake to provide timely supplies as per terms of tender and as agreed mutually and also to provide a trouble free and continuous support either directly or through our authorized distributors/dealers under our supervision during the said support period. We will provide the necessary support in the event of up gradation of any of the software is necessitated while providing the support will arrange for complete replacement of the item(s) with an equivalent / higher version.

In case of violation of any of the conditions above, I/We understand that I/We are liable to be blacklisted by APSFL for a period of three years.

(Signature of authorized Personnel)

Note: Competent authority of the Manufacturer should issue the letter of authority individually for each bidder separately.

VIII. Annexure VII – Price Bid Forms

(To be submitted by Bidder on original letterhead)

To
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station, NH – 65, Vijayawada – 520013

Date:

Subject: Tender for Supply, Installation & Maintenance of Fiber & Network Infrastructure in ITDA Regions in Andhra Pradesh

A. Supply, Installation & Commissioning along with O&M of 1 year:

S.No	Item Description	UoM	Tentative Quantity	Unit Cost	Taxes	Total (in Rs)
1	12F ADSS Optical Fiber Cable 65 Mt Span length along with accessories	KMs	180			
2	2F ADSS Optical Fiber Cable along with splitters/accessories	KMs	100			
3	Galvanized Steel Pole 9 Mts	Nos	10			
4	UPS System for CPEs	Nos	245			
5	Push button Telephone Sets along with accessories	Nos	245			
	Total Cost (In Rs. Inclusive of Taxes)					
	Total Cost in Words					

Note

- I. Unit Rate shall include all duties, levies, insurance, transport and other charges including Taxes.
- II. The Bidders offering the Lowest Cost (Inclusive of Taxes) will be considered for award of Purchase Order.
- III. Quantities mentioned are estimated quantity and actual quantities may vary as per field conditions
- IV. If there is a discrepancy between words and figures, the amount in words shall prevail.

APSFL reserves the right to

1. Negotiate with the Bidder whose offer is the lowest (L1) for further reduction of prices.
2. Modify, reduce or increase the quantity requirements to an extent of the tendered quantity
3. The quoted/negotiated prices by the bidder shall be valid for a period of 1 year.
4. APSFL reserves its right to withhold any amount for the deficiency in the service aspect of the ordered items supplied.

(Signature, name and designation of the authorized signatory)

Annexure VIII -EMD Format

(To be executed in Rs.100/- Stamp Paper)

To,
The Managing Director,
Andhra Pradesh State FiberNet Limited,
3rd Floor, NTR Administrative Block,
Pandit Nehru Bus Station,
NH – 65, Vijayawada – 520013

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgment of claim:

This Guarantee executed by _____(Banker's Name & Address) having our Head Office at _____(address) (hereinafter referred to as “Bank”) in favour of Andhra Pradesh State FiberNet Limited NTR Administrative Block, 3rd Floor, Pandit Nehru Bus Station, NH -65, Vijayawada – 520013 India (hereinafter referred to as “Beneficiary”) for an amount not exceeding Rs. _____/- (Rupees _____ Only) as per the request of M/s. _____ having its office address at _____(hereinafter referred to as “Bidder”) against RFP reference _____ dated ____/____/____ of M/s. Andhra Pradesh State FiberNet Limited (APSFL). This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum of Rs. _____ /- (Rupees _____ Only) and the guarantee shall remain in full force up to _____ (date) and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before _____ (date).

ANDWHEREAS it has been stipulated by you in the said ORDER that the Supplier shall furnish you with a Bank Guarantee by a Scheduled/Nationalized Bank for the sum specified therein as EMD towards bid submission.

ANDWHEREAS we have agreed to give the Bidder a Guarantee.

THEREFORE, we (Bankers address), hereby affirm that we are Guarantors and responsible to you on behalf of the Bidder for Rs. _____/- (Rupees _____ Only) and we undertake to pay you, upon your first written demand without any demur, cavil or argument, any sum or sums within the limit of Rs. _____/- (Rupees _____ Only) as aforesaid, without your needing to prove or show grounds

or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Bidder.

This Guarantee is valid until_____.

Place:

Date: Signature and seal of Guarantors (Bank)

Annexure- IX

LIST OF 49 VILLAGES PROPOSED TO BE CONNECTED

S.NO	POP NAME/ LOCATION	UNCOVERED VILLAGAE	FROM LOCATION	TO LOCATION	Latitude	Longitude	
1	RAMPA CHODAVARAM	Gandhinagaram	Rampachodavaram	Gandhinagaram	17.44231	81.746848	
2		Chinageddada	Gandhinagaram	Chinageddada	17.450486	81.737773	
3		Pedageddada	Chinageddada	Pedageddada	17.458645	81.735862	
4		Dokulapadu	Pedageddada	Dokulapadu	17.461552	81.732225	
5		Peddapadu	Dokulapadu	Peddapadu	17.46749	81.735407	
6		Pedamallupadu	Dokulapadu	Pedamallupadu	17.503378	81.730891	
7	MAREDUMILLI	Potlavada	Boduluru Tapping	Potlavada	17.660365	81.689269	
8		Katchalavada	Potlavada 3way	Katchalavada	17.659776	81.717351	
9		Nukaletivada	Katchalavada	Nukaletivada	17.717882	81.722344	
10		Gondivada	Boduluru PHC Tapping	Gondivada	17.672113	81.72958	
11		Nellore	Gondivada	Nellore	17.665387	81.64654	
12		Gondivada	Gondivada-1	Gondivada	17.672113	81.72958	
13		Kakuru Road	Kutravada	Kakuru	17.683136	81.753344	
14		Pamuleru	Kutravada	Pamuleru	17.624664	81.754534	
15		Bodlanka	Uppara Gothulu	Bodlanka	17.742049	81.850807	
16		Chavidikota	Bodlanka 3WAY	Chavidikota	17.780095	81.860371	
17		Akumamidikota	AM KOTA	Bodlanka	17.742049	81.850807	
18		Valamuru	Maredumilli-Coffe	Valamuru	17.625092	81.639527	
19		Vuthaluru	Maredumilli- HMTC	Vuthaluru	17.636471	81.670965	
20		Kondavada	Vuthaluru Village	Kondavada	17.620688	81.752187	
21		Pujaripakalu	Maredumilli PHC	Pujaripakalu	17.557039	81.758367	
22		Vetukuru	Pujaripakalu	Vetukuru	17.614222	81.746706	
23		Pandirimamidikota	Vetukuru	Pandirimamidikota	17.639804	81.76179	
24		Ivampalle	Pandirimamidikota	Ivampalle	17.662842	81.770843	
25		Bhimavaram	Ivampalle	Bhimavaram	17.65138	81.784992	
26		Gujjumamidivalasa	Maredumilli- HMTC	Gujjumamidivalasa	17.588388	81.64864	
27		Musuru	Gujjumamidivalasa	Musuru	17.571385	81.672137	
28		Kundada	Musuru	Kundada	17.568253	81.660744	
29		Munjamamidi	Kundada	Munjamamidi	17.542748	81.66299	
30		Elliwada	Kakuru Road	Elliwada			
31		Kothaveedhi	Elliwada	Kothaveedhi			
32		Uppara Gothulu	Kothaveedhi-1.2	Uppara Gothulu			
33		AM KOTA	Muchilivada	AM KOTA	Muchilivada	17.751153	81.785805
34			Pusiwada	Muchilivada	Pusiwada	17.759204	81.779652

35		Addarivalasa	Pusiwada	Addarivalasa	17.772039	81.767368
36		Egavalasa	Addarivalasa	Egavalasa	17.770386	81.749266
37		Gumpenagandi	Addarivalasa 3way	Gumpenagandi	17.785388	81.780795
38		Gundrathi	Gumpenagandi	Gundrathi	17.792324	81.785556
39		Pamulamamidi	Gundrathi	Pamulamamidi	17.779627	81.765859
40		Busigandi	Pamulamamidi	Busigandi	17.822561	81.796697
41		Gudesa	Gumpenagandi	Gudisa	17.797811	81.726753
42		Peddamarri	Egavalasa	Peddamarri	17.784315	81.756879
43		Pullangi	Pamulamamidi	Pullangi	17.77666	81.76441
44		vejuvada	Vejuvada Tapping	vejuvada Village	17.821848	81.818093
45	CHAPARAI	Chaparai	CHAPARAI Village	Chaparai pedda veedhi	17.839222	81.873635
46		Bodagondi	CHAPARAI Anganwadi	Bodagondi	17.867867	81.882773
47		Nagalova	Bodagondi Vilage	Nagalova	17.883256	81.895864
48		Kallepugonda	Nagalova	Kallepugonda	17.879028	81.903148
49	GANGAVARAM	Usirikajonalu	GANGAVARAM SS	Usirikajonalu	17.403462	81.853367

Annexure- X

SPECIFICATIONS

1. 12F ADSS Optical Fiber Cable 65 Mt Span length along with accessories

S. No.	Description
1	12F OFC Cable should be complying as per ITU-T G.652 D.
2	Fiber Geometrical Parameters
2 (a)	MFD at 1310 nm – 9.2 +/- 0.4 μ m
2 (b)	MFD at 1550 nm – 10.4 +/- 0.5 μ m
2 (c)	Core Diameter (Typical) - 8.6 μ m
2 (d)	Cladding Diameter - 125 +/- 1.0 μ m
2 (e)	Cladding Non-Circularity - 1%
2 (f)	Core Clad concentricity error – 0.6 μ m
2 (g)	Diameter over primary coated with double UV cured acrylate – 245 μ m \pm 10 μ m
2 (h)	Coating / Cladding Concentricity < 12
3	Fiber Optical/Transmission Properties
3 (a)	Maximum Attenuation (Fiber) at 1310 nm < 0.34 dB/Km
3 (b)	Maximum Attenuation (Fiber) at 1490 nm < 0.24 dB/Km
3 (c)	Maximum Attenuation (Fiber) at 1550 nm < 0.20 dB/Km
3 (d)	Maximum Attenuation (Fiber) at 1625 nm < 0.23 dB/Km
3 (e)	Maximum Attenuation (Fiber) between 1380-1390 nm < Attenuation at 1310 nm (After Hydrogen Ageing)
3 (f)	Maximum Attenuation (Cabled Fiber) at 1310 nm < 0.36 dB/Km
3 (g)	Maximum Attenuation (Cabled Fiber) at 1490 nm < 0.26 dB/Km
3 (h)	Maximum Attenuation (Cabled Fiber) at 1550 nm < 0.23 dB/Km
3 (i)	Maximum Attenuation (Cabled Fiber) at 1625 nm < 0.26 dB/Km
3 (j)	Chromatic Dispersion (1285-1330)nm \leq 3.5
3 (k)	Chromatic Dispersion (1270-1340)nm \leq 5.3
3 (l)	Chromatic Dispersion at 1550nm \leq 18
3(m)	Chromatic Dispersion at 1625nm \leq 22
3 (n)	PMD (1310 nm & 1550 nm) < 0.2 ps/ \sqrt Km
3 (o)	LDV (1310 nm & 1550 nm) < 0.2 ps/ \sqrt Km
3 (p)	Zero Dispersion Slope 0.092 ps/(nm.sq.km)
3 (q)	Zero dispersion wave length range - 1300 – 1324 nm
3 (r)	Cable cut off - 1260 nm Maximum
4	Fiber Reliability Parameters
4 (a)	Proof test strain level - 1%
	Test method – IEC-60793-1-30
4 (b)	Dynamic Tensile strength (Un-aged) - >3.8 Gpa
	Test method – IEC-60793-1-31

4 (c)	Dynamic Tensile strength – (Aged) - > 3.0 Gpa
	Test method – IEC-60793-1-31
4 (d)	Stripability Force to remove primary coating – $1.3 < F < 8.9$ N
	Test method – IEC-60793-1-32
4 (e)	Dynamic Fatigue > 20
	Test method – IEC-60793-1-33
4 (f)	Static Fatigue > 20
	Test method – IEC-60793-1-33
4 (g)	Fiber Curl > 4.0 mtrs
	Test method – IEC-60793-1-34
4 (h)	Macro bend
	Test method – IEC-60793-1-47 / FOTP – 62
	Change in Attenuation when fiber is coiled with 100 turns on 30 + 0.1 mm radius mandrel.
4 (h)(i)	< 0.05 dB/km at 1550 nm
	< 0.5 dB/km at 1625 nm
	Change in Attenuation when fiber is coiled with 1 turn on 32 + 0.5 mm diameter mandrel.
4 (h)(ii)	< 0.5 dB/km at 1550 nm
	< 1.0 dB/km at 1625 nm
5 (a)	Buffer tube: Four numbers of primary coated colored fibers shall be protected by loose packaging within
	a tube which shall be filled with thixotropic jelly.
	Color sequence of fibers inside tubes should be Blue, Orange, Green & Brown.
5 (b)	Central Strength Member: Solid FRP non-metallic strength member in the center of the cable core shall be provided.
	Cable Core: Primary coated fibers in loose tubes, stranded together around a central strength member
5 (c)	(using reverse lay techniques), shall form the cable core. Color sequence of loose tubes around FRP should be Blue, Orange, Green, Brown, Slate & White.
5 (d)	The main cable core containing fibers shall be wrapped by a layer of water swell-able tape. Aramid yarn
	reinforcement shall be done over water swell-able tape to provide sufficient tensile strength.
	A circular and uniform tough weather resistant polyethylene compound HDPE/MDPE material
5 (e)	sheath/Jacket, black in color, (UV Stabilized) shall be provided over and above the reinforcement of Aramid Yarn. Thickness of outer sheath should be minimum 1.5 mm.
5 (f)	Two ripcords shall be placed diagonally opposite to each other below the outer jacket to strip the HDPE outer jacket.
6	OFC MECHANICAL PARAMETERS
6 (a)	Tensile Strength - 3000 N at maximum allowable 0.25 % Fiber strain
	Test Method – IEC 60794-1-2-E1
6 (b)	Crush resistance - 2500 N/100 MM X 100 MM
	Test Method – IEC 60794-1-2-E3
6 (c)	Impact Resistance – 50 N from 0.5 M
	Test Method – IEC 60794-1-2-E4
6 (d)	Torsion - +/- 180
	Test Method – IEC 60794-1-2-E7

6 (e)	Cable Bending Test – 20 D, 4 Turns, 10 cycles
	Test Method – IEC 60794-1-2 E11
	Abrasion resistance - Needle – 150 gm, Dia – 1 mm, Weight – 500 gm
6 (f)	No of cycles – 100, Duration 1 minute
	Test Method – IEC-60794-1-2-E2
6 (g)	Repeated Bending - 20D, 35 Cycles
	IEC 60794-1-2 E6
6 (h)	Drip Test – 30 cm, 70°C, 24hr
	IEC 60794-1-2-E14
6 (i)	Water Penetration test - 1m head, 3m samples, 24 hrs
	IEC 60794-1-2 F5
7	OFC Environmental Parameters
7 (a)	Installation - -10°C to + 60°C
7 (b)	Operation - - 20°C to + 70°C
7 (c)	Storage & Transport - -20° to + 70°C
8	Optical Fiber Cable Loading Conditions
8 (a)	Maximum Span length - 65 Meters
8 (b)	Installation Sag - 1.00%
8 (c)	Operational Sag - 1.50%
8 (d)	Wind Speed - 100 Km/hour or 150 km/hour
8 (e)	Ice loading – Nil
9	Optical Fiber Physical Parameters
9 (a)	Cable Diameter - 10.4 +/- 0.5 mm
9 (b)	Cable Weight - 77 +/- 10% kg/km
9 (c)	Printing details : NAME OF MANUFACTURER SM G652 D 12 F ADSS Laser symbol Year of
	manufacturer length code Meter Marking
	(White Hot Foil Embossing)
9 (d)	Optical Fiber 12F
	No of Loose Tubes – 2
	Loose tube Color – Natural
	No of Fibers per Loose Tube -6
	Fiber Color - Blue, Orange, Green, Brown, Slate, White
9 (e)	Outer Sheath color – Black
10	Optical Fiber Cable packing details
10 (a)	Cable length in a drum – 2/4 +/- 5 % km
10 (b)	Short length - MAX 5 %
10 (c)	Order Tolerance - +/- 5 %
11	FRP - Strength member
(a)	Type - FRP ROD Embedded in outer Sheath
(b)	Diameter(MM) - 0.5+/- 0.05
(c)	Additional strength member - One messenger steel wire embedded in the sheath.
(d)	Diameter (MM) - 1.0 nominal
(e)	Max.Tensile strength - 660 N

(f)	Crush resistance - 500N/10 cm
(g)	Impact resistance - 5 N-M
(h)	Min.bend radius - 20 X D - Long term
(i)	Cable weight (KG/KM) - 20 (Nominal)
(j)	Standard K=Length (meters) - 2000 +/- 10%

2. 2F ADSS Optical Fiber Cable along with splitters/accessories

Single Mode Optical Fibre used in manufacturing Optical Fibre Cables shall be as per ITU-T Rec. G 657 A1. The specification of optical fibre is mentioned below.

Type of fibre : ITU-T G.657 A1

Geometrical Characteristics:	
MFD at 1310 nm	: 8.8 - 9.4 μ m
Cladding Diameter	: 125 μ m \pm 0.7 μ m
Cladding Non-circularity	: \leq 0.8%
Core clad concentricity error	: \leq 0.5 μ m
Diameter over primary coated with double UV cured acrylate.	: 242 μ m \pm 5 μ m
(Shall be measured on un-colored fibre)	
Colored fiber coating Diameter	: 252 μ m \pm 10 μ m
Coating/Cladding Concentricity	: \leq 12 μ m
Transmission Characteristics:	
Attenuation:	

- | | |
|-------------------------------------|---------------------|
| a) Fibre attenuation before Cabling | |
| i) At 1310 nm | : \leq 0.34 dB/km |
| ii) At 1550 nm | : \leq 0.20 dB/Km |
| iii) At 1625 nm | : \leq 0.23 dB/Km |
| b) Fibre attenuation after Cabling | |
| i) At 1310 nm | : \leq 0.36 dB/km |
| ii) At 1550 nm | : \leq 0.23 dB/Km |

Dispersion:

- | | |
|--------------------------------------|----------------------------------------|
| a) Total Dispersion | |
| i) In 1285-1330 nm band | : \leq 3.5 ps/nm.km |
| ii) In 1270-1340 nm band | : \leq 5.3 ps/nm. Km |
| iii) At 1550 nm. | : \leq 18.0 ps/nm. Km |
| iv) At 1625 nm. | : \leq 22.0 ps/nm.Km |
| b) Polarization mode dispersion | |
| i) Fibre | : \leq 0.2 ps/ \sqrt km |
| ii) abled Fibre | : \leq 0.2 ps/ \sqrt km |
| iii) Link Design Value | : \leq 0.2 ps/ \sqrt km |
| c) Zero Dispersion Slope | : \leq 0.092 ps/(nm ² Km) |
| d) Zero dispersion wave length range | : 1300 -1324 nm |
| e) Cable cut off | : 1260 nm Max. |

Mechanical Characteristics:

Proof test for minimum strain level : 1%
(Test method IEC- 60793 -1-30)

Stripability force to remove primary : $1.3 \leq F \leq 8.9$
N coating of the fibre.

(Test method IEC- 60793 -1-32)

The force required to remove 30 mm \pm 3 mm of the fibre coating shall not exceed 8.9 N and shall not be less than 1.3 N.

Dynamic Tensile Strength (Test method IEC- 60793 -1-31)

- a) Un-aged : ≥ 550 KPSI (3.80 Gpa)
- b) Aged : ≥ 440 KPSI (3.00 Gpa)
- Dynamic Fatigue : ≥ 20

(Test method IEC- 60793 – 1-33)

Static Fatigue : ≥ 20

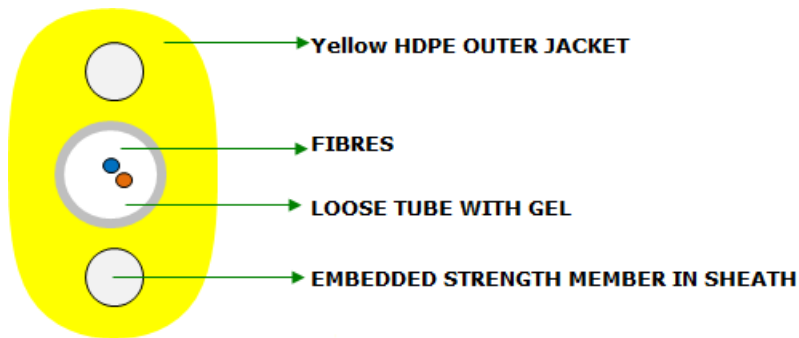
(Test method IEC- 60793 – 1-33)

Fibre macro bend

- a) Change in attenuation when fibre is coiled : ≤ 0.25 dB at 1550nm
With 10 turns on 15 mm radius mandrel : ≤ 1.0 dB at 1625 nm
- b) Change in attenuation when fibre is coiled : ≤ 0.75 dB at 1550nm 1 turn
around 10 mm radius mandrel : ≤ 1.5 dB at 1625

(Continued)

TYPICAL STRUCTURAL DRAWING FOR 2F SELF SUPPORTING OPTICAL FIBER CABLE



SPECIFICATION FOR 2F

Parameter	Unit	2F OFC
Fibre Count	Nos.	2
Fiber per Tube	Nos.	2
Fibre Color in Tube	-	Blue, Orange
Loose Tube Dimension Outer Diameter & Tolerance	mm	1.9 mm \pm 0.1
Loose Tube Color	-	White or Any
Loose Tube Material	-	PBT
Embedded Strength Member Material	-	FRP
Embedded Strength Member Diameter	mm	1.0 + 0.1 mm
No of Embedded Member	Nos	2
Outer Sheath Material Type	-	UV Stabilized HDPE
Outer Sheath Material Color	-	Yellow
Sheath Material Thickness (Non FRP Side)	mm	1.0
Cable Weight	Kg/Km	25 \pm 5
Cable Diameter	mm	4.0x6.4 \pm 1.0
Maximum Span Length	Mtrs	65
Operation Wind Velocity	Kmph	65
Ice Loading	Kg	NIL
Maximum sag without excess load		2% of span length
Maximum sag with excess load		3% of span length

3. Galvanized Steel Pole 9 Mts – Installation based on ISO Standards

Scope: The pole shall be of the tubular type

Reference: This shall meet the following standard specification

- i. Steel tube and base plate for pole: ISO/630
- ii. Hot dip galvanizing: BS-729

Technical Specification of Galvanized Steel Pole:

All the tubes and base plate shall be made of steel as per ISO 630 grade Fe 430 B or nearest equivalent grade in other standard.

The outer and inner surface of the pole including with base plate shall be hot dip galvanized as per BS 729 with minimum layer thickness of galvanization being 450.

Marking:

All poles shall be painted or printed with the word “APSFL” on external surface with distinct un-washable colour. The size of the letter should be (Thickness x Width x Height) 8mm x 30mm x 50mm.

For erection of any pole/tower, the SLO shall follow the guidelines of ICAO and applicable laws of India.

Life expectancy:

All poles shall be designed for a life expectancy of at least 30 years without any serious degradation of the performance or reliability maintained and when installed at the temperature range of –10C to + 55 0C in Andhra Pradesh.

Construction:

Pole Clearance: All types of ADSS shall have minimum of 7 m clearance from the point of lowest sag for 9 m poles.

4. UPS System for CPE

- Minimum 30 Mins back-up for CPE boxes installed at customer premises including Telephone
- 600VA / 360W
- Battery powered sockets
- 1 x 7.2Ah battery
- 1 year warranty
- BIS Approved ,Safety certified to Bureau of Indian Standards (BIS) latest UPS standard
- Sleek design ,Refreshed look
- Wide Input Voltage window, Works easily in most demanding input voltage conditions: 145-290V. AVR function corrects incoming voltage from utility without utilizing the battery, saving the battery when it is really needed – during power cuts

- Generator/Inverter compatibility, Operates in wide input frequency range, 45-65Hz, for compatibility with most generators. Works with inverters too!
- Electronic Overload protection , Automatically protects devices when there is an overload or short-circuit
- Cold-Start Capable, Powers up your devices from battery when mains are unavailable
- Battery Saver, Increases battery life up to 2x when selected, Enables no-load shutdown when on-battery, Keeps battery capacity in reserve for “double hit” power cuts
- Protection from Spikes,255J of spike suppression protects your devices
- Faster Charging, Charges in 4-6 hrs to ensure that the UPS is ready for the next power cut.
- Quiet UPS – Less Beeping, Stays quiet during changeovers between mains and generator
- LEDs – On/Off /Alert, Charging, Battery Saver, Helps the user understand UPS status quickly
- Thermal run-away prevention that helps to protects life and property, Designed to keep internal temperature under check and help to protect if temperature rises above set threshold

5. Push button Telephone Sets along with accessories

Color	Black/White/Grey
Usage/Application	Office, Home, Hotel
Model	Beetel M53 or equivalent
Connectivity Type	Wired
Material	Plastic
Keypad Type	Numeric
Packaging Type	Box
Dedicated Button	Redial, Hold, Pause
Display	LCD
Alarm	Yes
LCD Contrast Adjustable	5 Levels
Incoming Call Log	50 Incoming Call Log
Outgoing Call Log	10 Call