

**STATE COUNCIL for IT & e-
GOVERNANCE DEPARTMENT OF
INFORMATION TECHNOLOGY
GOVERNMENT OF ARUNACHAL
PRADESH ITANAGAR**



RFP for

In view to extend SWAN connectivity to different Govt. offices to 17 different District Head Quarters by introducing fiber to the office (FTTO) technology. Purpose of the project is to extend SWAN connectivity to all said offices which will be not only future proof but also scalable and sustainable.

1 Fact sheet & Schedule of Bid Process

S.No.	Information	Details
1.	RFP No. and Date	DITC-12011/42/2021-SCITeG-DEPT of IT&C, 28-06-2022
2.	Last date for receipt of physical RFP document fees & EMD (Submitted Document Fees in cash will be verified during evaluations and bidders should upload self-declaration document in regard to the submission of document fees)	13 th July 2022, 1030 Hrs
3.	Last date (deadline) for submission of Bids (ONLINE mode only)	13 th July 2022, 1030 Hrs
4.	Opening of Bids	13 th July 2022, 1100 Hrs
5.	Approved project cost(approximate)	INR 1000.00 Lakhs
6.	RFP document fees(non-refundable)	INR 5000/- in the form of cash
7.	Earnest Money Deposit(EMD)	INR /-20,00,000 and 10,00,000/-(for APST) the form of DD /BG .
8.	Addressee and address at which proposal in responseto RFP notice is to be submitted:	Director IT&C DIGITAL CELL ROOM NO107 BLOCK IAP CIVIL SECRETARIAT ITANAGAR: ARUNACHAL PRADESH

Structure of the RFP

This Request for Proposal (RFP) document to extend SWAN connectivity to different Govt. offices to 17 different District Head Quarters by introducing fiber to office (FTTO) technology. Purpose of the project is to extend SWAN connectivity to all said offices which will be not only future proof but also scalable and sustainable comprises of the following.

SCITeG, Government of Arunachal Pradesh invites bids from eligible parties (hereafter referred as "Bidder") for extendsWAN connectivity to different Govt. offices to 17 different District Head Quarters by introducing fiber to the office(FTTO) technology project for the State of Arunachal Pradesh.

The bidders are expected to examine all the instructions, forms, terms, Project requirements and other information in the RFP documents. Failure to furnish all information required as mentioned in the RFP documents or submission of a proposal not substantially responsive to the RFP documents in every respect will be at the Bidder's risk and may result in rejection of the proposal

2. Background of the Project

To extend SWAN connectivity to different Govt. offices to 17 different District Head Quarters by introducing fiber to the office (FTTO) technology. Purpose of the project is to extend SWAN connectivity to all said offices which will be not only future proof but also scalable and sustainable

3. Objective:

The integration of SWAN connectivity to different Govt. offices to 17 different District Head Quarters by introducing fiber to the office (FTTO) technology will ensure efficient utilization and management of resources. Information required would be available on demand, which will help the department in enhancing efficiency .Operational costs and workload of individual employees can be drastically brought down.

4. Scope of Work:

To meet the above objectives, The integration of WAN connectivity through SWAN between District Head quarters and all offices in district. Each district office should have minimum 50(fifty) LAN points.

PoPs Location	No of DHQ/PoPs	No of Office Connected (Max) from DHQ	Total No of Nodes (max)
Dist. Headquarter (DHQ)	17	17X10=170	170X50=8500

Districts and PoPs Details

Sl.NO.	Districts	ARSWAN DHQ/PoP
1	Capital Complex	Itanagar
2	Papum Pare	Yupia
3	Namsai	Namsai
4	West Siang	Along
5	East Siang	Pasighat
6	Upper Siang	Yingkiong
7	Lower Dibang	Roing
8	Changlang	Changlang
9	Lower Siang	Likabali
10	Lohit	Tezu
11	Longding	Longding
12	Upper Subansiri	Daporijo
13	Kra Daadi	Palin
14	Tirap	Khonsa
15	Lower Subansiri	Ziro
16	West Kameng	Bomdila
17	Tawang	Tawang

5. Digital Connectivity & Hardware component:

Digital connectivity is an essential component for implementation of digital services. Therefore, in order to make implementation of SWAN Connectivity around all district office to be meaningful, provision for bringing digital connectivity would take a centre stage. The major activities would include networking equipment, LAN setup, installation and commissioning of links.

6. Instructions to the Bidders

General

- The Bidders are requested to examine the instructions, terms and conditions and specifications given in the Tender. Failure to furnish all required information in every respect will be at the Bidder's risk and may result in the rejection of bid.
- Bidder should have a valid Memorandum of Understanding (MoU)/Agreement among all the members signed by the Chief Executives/Authorized Signatories of the Companies, dated prior to the submission of the bid.
- The Bidder shall make all arrangements as part of the contract to **supply and commissioning** at various locations at their own cost and transport.

- It must be clearly understood that the Terms and Conditions and specifications are intended to be strictly enforced. No escalation of cost in the Tender by the Bidder will be permitted throughout the period of Agreement or throughout the period of completion of contract whichever is later on account of any reasons what so ever
- The bidder shall be registered under Company Registration Act 1956. Bidder should possess valid income tax registration certificate and valid GST registration certificate.
- This RFP supersedes and replaces any previous public documentation & communications and Bidders should place no reliance on such communications.
- In case of receipt of a single bid the department will decide the further course of action & proceed accordingly, keeping in view the guidelines of GFR, CVC & requisite approval from the competent authority.
- The Bidder is also expected to upload the scanned copy of the EMD along with the Technical proposal and the same will be verified with physical EMD submitted during evaluation. Details of the physical EMD received and the scanned copy of the EMD should exactly be the same in all respects.
- EMD of all unsuccessful bidders would be returned / refunded by SCITeG within 30 Days of the bidder being notified as being unsuccessful or signing of contract with the successful bidder, whichever is earlier.
- The EMD amount is interest free and is refundable to the unsuccessful bidders without any accrued interest on it.
- The bid/proposal submitted without the EMD mentioned above will be summarily rejected.
- The EMD may be forfeited:
If a bidder withdraws its bid during the period of bid validity.

In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP

7. Right to Terminate the Process

SCITeG may terminate the RFP process at any time and without assigning any reason. SCITeG makes no commitments, express or implied, that this process will result in a business transaction with any one.

This RFP does not constitute an offer by SCITeG. The bidder's participation in this process may result SCITeG selecting the bidder to engage towards execution of the contract.

8. Submission of Proposals

- I. The Bidder shall submit the proposals through e-tendering process only in the portal www.arunachaltenders.gov.in However during the course of evaluation of Proposal as well as during the period of contract; the Evaluation Committee has the right to carry out a due diligence in a fashion relevant to understand the facts.
- II. Physical submission of Bid is not allowed (except for the submission of EMD & Document Fees).
- III. **Please Note that prices should not be indicated in the Technical Proposal, but should only be indicated in the Financial Proposal.**
- IV. The Financial Proposal has to be submitted in the template as uploaded in the e-tendering process.
- V. All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers Any deficiency in the documentation may result in the rejection of the Bid

9. Authentication of Bids

The Proposal should be accompanied by a power-of-attorney in the name of the authorised signatory of the Proposal. The Bid must be uploaded in the portal www.arunachaltenders.gov.in using Class II Digital Signature Certificate(DSC) issued by the organization, in name of the authorized signatory

10. Pre-Qualification Criteria

S. No.	Qualification Criteria	Documents/Information to be provided in the submitted proposal
1.	Bidder should be a registered Entity with Department of Taxation/Registrar of Companies registered in India under the Companies Act 1956 or 2013. Bidder should have been in the Information Technology/ IT enabled services/Telecommunication business/Video Recording Services/Internet Service Provider for 20 (Twenty) Years as on 15/03/2022.	a) Copy of the Registration with Taxation Department/Certificate of incorporation should be submitted. b) Relevant registration certificate with indirect taxation to be submitted in support of this..
2.	Bidder should be: <ul style="list-style-type: none">Registered under Companies Act, 1956 for last 3 years as on bid submission date.	a) Photo copy of Certificate of Incorporation by the Registrar of Companies.
4.	Bidder should have requisite manpower consisting of requisite expertise	List of manpower including qualification and experience relevant in the field duly certified by HR

S. No.	Qualification Criteria	Documents/Information to be provided in the submitted proposal
5.	Bidder, shall not be involved in corrupt or fraudulent practices or should not be blacklisted by any State government/Central government/PSUs.	A self-certified letter (s) by the authorized signatory of the bidder needs to be furnished mentioning that they are not blacklisted and not under any litigation in the court of law.It should be given on a Rs.100.00 stamp paper.
6.	Bidder should have an average annual turnover of Rs. 25.00 Crore and above in the last three audited financial years. (FY 2020-21,2019-20,2018-19)	<p>a. Copies of the Audited balance sheet for the last 3 financial years should be submitted.</p> <p>b. Certificate from the Chartered Accountant should be enclosed with positive Net worth in the last three financial years</p> <p>c. Copy of the ITR for the last 3 years should be submitted.</p> <p>d. The bidder should have valid copy of PAN and GSTIN Certificate along with current GST Tax and return deposition certificate.(GSTR-1,GSTR- 3B)</p>
7.	The Bidder should be at least ISO9001 & ISO 27001 2013 or higher Certificate	Certificate from authorized agency.
8.	Manufacturer Authorization Form (MAF) duly certified by the Original Equipment manufacturer (OEM) for all Major components as mentioned in the table for Bill of material.	Copy of the MAF letter in the letter head of the OEM or as per format mentioned in this RFP.
9.	The bidder should have experience in executing Data Network order in Government/PSU organizations in last 3 (three) years as on bid submission date.	Relevant Work Orders and Completion Certificate to be submitted.
10.	The vendor should have satisfactorily completed 'similar works of networking' in Government / Semi-Government / PSUs during the last 3(three) years from the date of publication of NIT: costing not less than 4 Crore in a single Order or two orders of 3crs or 3 orders of 2cr.	Relevant Work Orders along with Completion Certificate to be submitted Co.
11.	Bidder should conduct Site Survey before participation in the Tender, so that they have a clear picture about the scope of work to be undertaken.	Site Survey report duly signed by the tenderer should be submitted along with the technical bid document or else bid Will be rejected.
12.	All materials should be supplied within 180 days of issue of work order.	OEM or Bidder should provide necessary undertaking.
13.	The vendor should have a solvency of not less than Rs.5 Crore.	Scanned copy of latest solvency certificate issued by Nationalized bank to be uploaded. The date of issue of the certificate should not be older than 01-Dec-2021

11. Technical Qualification Criteria

- I. Technical proposal of only those bidders will be opened and evaluated who meet all the Pre-qualification Criteria.
- II. Thereafter, the evaluation committee will evaluate the Technical Proposals on the basis of the technical evaluation criteria as provided below.
- III. SCITeG may also seek verbal clarifications from the bidder. The main objective such process will be to clarify ambiguities and uncertainties arising out of the evaluation of the bid documents submitted by the respective bidder. In order to facilitate the Technical bid evaluation, the technical criteria are assigned weights as follows. The marking scheme presented is an indication of the relative importance of the evaluation criteria.
- IV. Bidders securing a minimum of 70% marks in the Technical evaluation will only be considered for further Commercial bid evaluation. Bids which do not secure the minimum specified technical score will be considered technically ineligible and hence debarred from Commercial bid evaluation. Scores of technically qualified bidders shall be weighed on a pro-rata basis, on a scale of 70 and shall be carried forward for evaluation together with the scores of Commercial bid evaluation.

Sl	Evaluation parameter	Score
1	Experience in Data Network	Max Score : 20
	>= 20 yrs	20
	>=15yrs <20yrs	10
	>=10yrs<15yrs	5
	<10yrs	0
2	Work Experience in Data Network	Max Score : 30
	Single order of 5 cr	30
	Two orders of 4cr	15
	Three orders of 3 cr	10
3	Certification	Max Score : 20
	ISO 9001 and ISO 27001	20
	ISO 27000 only	10
4	Turnover	Max Score :10
	More Than 30Cr for last three Fys	10
	>=20cr<30cr for last three Fys	5
	Less than 20cr	0
5	Presentation	Max score : 20
	Presentation should cover detail plan for project execution	
	Total Points	100

12. Bid Evaluation

- The Financial Bids of technically qualified bidders (i.e. above 70 marks) will be opened in the presence of bidder representatives.
- Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.
- The bid price will include all taxes and levies and shall be in Indian Rupees and mentioned separately.
- Any conditional bid will be rejected.
- If there is no price quoted for certain material or service, the bid shall be declared as disqualified.
- VI. It is mandatory to quote the unit price against each component wherever is asked in the financial format.

Award Criteria

The evaluation of this proposal will be based on QCBS (Quality and cost based system) which is at a rate of 70:30 on Technical & Commercial scores, respectively. Scores of the Commercial evaluation would be weighed prorata on a scale of 30 with the Bidder with the lowest commercial quote getting 30. These commercial scores would then be added up with the score of the technical evaluation and the Bidder getting the maximum total score out of 100 would be considered as the successful bidder (i.e. L1 Bidder) and called for negotiations, if required.

Formula for Final Bid Evaluation is

$$B_m = 0.7(TM) + 0.3(F_n)$$

$$F_n = (F_{min}/F_b) * 100$$

Where B_m is total marks of the bidder in consideration

TM is Technical Marks of the bidder in consideration

F_n is Normalized financial score of the bidder in consideration F_b is Evaluated Cost of bidder under consideration

F_{min} is Minimum evaluated cost of any bidder

In case of equal composite score obtained by multiple bidders, the organizations with the lowest Financial quote (i.e. highest Financial score) will be considered and declared as the successful bidder.

In case of equal composite score along with equal Technical & Financial scores (individually), re-tendering will be done.

13. Signing of Contract

- I. After the SCITeG notifies the successful bidder that its proposal has been accepted, SCITeG shall enter into a contract post issuance of LoI, incorporating all clauses, pre-bid clarifications (if any) and the proposal of the bidder between SCITeG and the successful bidder. The Draft Legal Agreement is provided as a separate document as a template.

14. Performance Guarantee

SCITeG will require the selected bidder to provide a Performance Bank Guarantee, within 15 days from the Notification of award, for a value equivalent to 3% of the total cost of project excluding tax (project value based upon the Commercial quote). The Performance Guarantee should be valid for a period of 3 (Three) year. In case the selected bidder fails to submit performance guarantee within the time stipulated, the SCITeG at its discretion may cancel the order placed on the selected bidder without giving any notice. SCITeG shall invoke the performance guarantee in case the selected Vendor fails to discharge their contractual obligations during the period or SCITeG incurs any loss due to Vendor's negligence in carrying out the project implementation as per the agreed terms & conditions.

15. Period of contract of Vendor/Party/Firm:

The firm/Vendor/Party selected shall have to enter/sign an agreement with SCITeG, DITC, Govt. of A.P. for supply & maintenance of work for 3 years from the date of entering into contractor signing of Contract Agreement

16. AMC of FTTO Infrastructure:

Based on critical need base requirement and as per performance (support & service)of the vendor/Party/Firm/OEM, SCITeG/DITC/Government of Arunachal Pradesh shall initiate AMC of FTTO infrastructure after during the expiry of 3-year warranty period. Further, all the prospective user Departments shall maintain and upkeep the FTTO infrastructure by themselves after expiry of warranty period for continuity of business.

17. Insurance of equipment's to be supplied:

The Bidder/Firm/Vendor/OEM shall be responsible for acquiring insurance for all components, Network equipment and Accessories till 3 months after the date of delivery. The goods supplied under the Contract shall be fully insured. The insurance shall be for an amount equal to 110 percent of the CIF value of the Goods delivered to the Department covering "All Risks"(fire, burglary, act of terrorist, natural calamities such as Earthquake, floods etc.) valid for a period not less than 3months after date of delivery. If the vendor fails to obtain insurance cover and any loss or damage occur the vendor will have to replace the items with new ones without any cost to the Department.

Where the vendor is required under the Contract to transport the Goods to a specified place of destination within Arunachal Pradesh, transport to such place of destination in Arunachal Pradesh, including insurance and storage, as shall be specified in the Contract, shall be arranged by the vendor.

For any loss or damage occur, the Bidder shall Initiate and pursue claim till settlement and promptly make arrangements for repair and/or replacement of any damaged item/ irrespective of settlement of claim by the underwriters.

18. Warranty:

The Bidder warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. All components should be covered under manufacturer warranty and support services for 3 (Three) year. The Bidder further warrants that all the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Department's Specifications) or from any act or omission of the Bidder, that may develop under normal use of the supplied Goods.

On-site comprehensive warranty:

The warranty would be on-siteand comprehensive in nature and back-to-back support from the OEM for 3 (Three) year from the date of delivery. The vendor/Bidder/Firm will warrant all the hardware, , network equipment's, FTTO device and accessories against defects arising out of faulty design, materials and media workmanship etc. for a period of three years from the date of acceptance of the materials. The vendor will provide support for all the components during the warranty period. Defective items shall be replaced by the vendor at his own cost, including the cost of transport. Vendor's hardware engineer will report at the Departments offices within 24 (twenty-four) hours of reporting of breakdown through email or courier at the vendor are nearest office and repairs the same at the earliest.

The Bidder must provide the following warranties:

- (a) The equipment proposed is complete in every way.
- (b) The hardware /software specification, capabilities and performance characteristics areas stated in the Bidder's proposal and accompanying documentation.

Free on-site maintenance services shall be provided by the vendor or its OEM during the period of warranty.

19. Force Majeure:

If the performance as specified in this order is prevented, restricted, delayed or interfered by reason of Fire, explosion, cyclone, floods, War, revolution, acts of public enemies, blockage or embargo, any law, order, proclamation, ordinance, demand or requirements of any Government or authority or representative of any such Government including restrict trade practices or regulations, Strikes, shutdowns or labour disputes which are not instigated for the purpose of avoiding obligations herein, or any other circumstances beyond the control of the party affected, then notwithstanding anything here before contained, the party affected shall be excused from its performance to the extent such performance relates to prevention, restriction, delay or interference and provided the party so affected uses its best efforts to remove such cause of non-performance and when removed the party shall continue performance with utmost dispatch.

If a Force Majeure situation arises, the Bidder shall promptly notify the Department in writing of such condition, the cause thereof and the change that is necessitated due to the conditions, until and unless otherwise directed by the Department in writing, the Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

20. Forfeiture of EMD/ Performance security:

The Department shall be at liberty to set off/ adjust the proceeds of the performance security towards the loss, if any, sustained due to the supplier's failure to complete its obligations under the contract. This is without prejudice to the Department's right to proceed against the Supplier in the event of the security being not enough to fully cover the loss/damage.

21. Penalty for Default Delivery:

Delivery period of all Equipment's is 180 days from the issuance of LOI to successful bidder.

If the vendor/ Party/ Firm fails to deliver the items within stipulated period, Department will impose penalty of 1% of the order value for the late delivered item for each weeks delay or part thereof, subject to maximum of 5% of value of the late delivered items.

In case the delay exceeds eight weeks, Department reserves the right to cancel the order and in such a case, the vendor will have to repay Department the advance paid, if any, with 12% p.a. interest , unconditionally. In such an event vendor/Firm/Party will not be entitled to or recover from Department any amount by ways of damages, loss or otherwise. If orders are cancelled due to non-delivery, the vendor/Firm/Party will be debarred by the Department for participating in any future tenders floated by the Department.

22. Termination of Contract:

The Department may at any time terminate the contract by giving written notice to the Bidder if the Bidder /Firm / Party becomes bankrupt or otherwise insolvent. In this event, termination will not prejudice or affect any right of action or remedy, which as accrued or will accrue thereafter to the Department.

The Department reserves the right to cancel the contract in the event of happening one or more of the following Conditions:

Failure of the successful bidder to accept the contract and furnish the Performance Guarantee within specific days of receipt of purchase contract as stated in the Purchase order;

Delay in offering equipment for pre-delivery Inspection; Delay in delivery beyond the specified period;

Delay in completing installation / implementation and acceptance tests / checks beyond the specified periods;

In addition to the cancellation of purchase contract, the Department reserves the right to appropriate the damages through encashment of Performance Guarantee given by the bidder.

23. Resolution of disputes:

It will be the Department’s endeavor to resolve amicably any disputes or differences that may arise between the Department and the Bidder/ Firm/ Party from misconstruing the meaning and operation of the Tender and the breach that may result.

In case of Dispute or difference arising between the Department and the Supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The Arbitrators shall be chosen by mutual discussion between the Department and the Vendor or in case of disagreement each party may appoint an arbitrator and such arbitrators may appoint an Umpire before entering on the reference. The decision of the Umpire shall be final.

The Bidder shall continue work under the Contract during the arbitration proceedings unless otherwise directed in writing by the Department or unless the matter is such that the work cannot possibly be continued until the decision of the Arbitrator or the umpire, as the case may be, is obtained.

Arbitration proceedings shall be held at Itanagar, Arunachal Pradesh, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English;

Notwithstanding anything contained above, in case of dispute, claim & legal action arising out of the contract, the parties shall be subject to the jurisdiction of courts at Itanagar, India only.

Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by e-mail and confirmed in writing to the other party’s specified address. The same has to be acknowledged by the receiver in writing.

A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

Bill of Material

1.12 List of Components

ITEM	No of Offices	Qty (a)	UoM
CAPEX for FTTO at Govt. Offices			
OFC (avg. 2 km per Office)	170	340	km
FTTO Aggregator/OLT Device	17	17	nos
FTTO CPE/ONU Device	170	340	nos
Fiber Patch Cord	170	340	nos
Fiber Termination Accessories	170	340	nos
FTTO laying Cost (Overhead via existing Electric Poles) includes fiber Slinging / Laying, Installation of accessories and fixtures et. Splicing, Jointing, commissioning and testing etc.	170	340	km
OPEX for FTTO of Govt. Offices			
FMS of FTTO Service	170	3	Years
Annual Maintenance of FTTO	170	3	Years
ITEM	No of Offices	Qty	UoM
CAPEX for LAN at Govt. Offices			
Layer 3 Devices	170	238	nos
layer 2 Access Switches	170	238	nos
Network Rack (9U) with all accessories	170	238	nos
48 Port Jack Panel	170	238	nos
Cat6 Cable Roll	170	510	nos
Cat6 Patch Cord 3m	170	8500	nos
Cat6 Patch Cord 1m	170	8500	nos
I/O Box (Dual)	170	8500	nos
Structured Cable laying with conduit/casing/capping etc. (Average 20 meter per Desktop)	170	189550	mtrs

Technical Specifications

Optical Fiber Cable (OFC)

Specification	Description
Type	All-Dielectric Self-Supporting (ADSS)
Category	SM G652D
Cores	12 Core
Roll Length	Minimum 2km
Tension	Minimum 720N
Wind Speed	Minimum 100km per hour
Extra Load	Minimum 0.250Kgs/m
Compliance/Certification	For OEM:ISO 9001:2015
Manufacturer Criteria	Minimum 5 Years fiber product manufacturing experience in India

FTTO Aggregator/OLT Device

Specification	Description
Form Factor	Minimum 1RU, Rack Mountable
Interfaces	8 x PON Ports (all populated with GPON Modules)
	2x1G Ethernet Ports
	Console & OOB Management Port
Forwarding Rate	Minimum 10 Gbps
Total MAC Addresses	16K
Routing Table Entries	2K
ARP Table Entries	8K
VLAN IDs	4K
ONT ranging Distance	Up to 20 KM
Splitter ratio	1:128
Jumbo Frames	9000 Bytes
RAM/System Memory	1GB RAM
ONT/ONU Authentication	Password enabled
manufacturer Criteria	Minimum 5 Years ONT/ONU manufacturing experience.
Warranty	3 Years onsite advance hardware replacement.

FTTO CPE/ONU Device

Specification	Description
Form Factor	Rack/Wall Mountable
Interfaces	8 x PON Ports (all populated with GPON Modules)
	2x1G Ethernet Ports
	Console & OOB Management Port
forwarding Rate	Minimum 1Gbps
Total MAC Addresses	1K
VLAN	802.1q
ONU ranging Distance	Up to 20km
Splitter ration	1:128
Jumbo Frames	1500 bytes
RAM/System Memory	32MB RAM
ONT/ONU Authentication	Password enabled
Manufacturer Criteria	Minimum 5 Years ONT/ONU manufacturing experience.
Warranty	3 years onsite advance hardware replacement

Fiber Patch Cord

Item	Specification
Interface/Connector	Single Mode SC/LC as per ONU port
Category	SM G652D
Length	1m/2m (as per site requirement)
Jacket	Unjacketed
Cable retention Strength	Minimum 1.0lb @ 0 degree
Compliance/Certification	For OEM: ISO 9001:2015
Manufacturer Criteria	Minimum 5 Years fiber product manufacturing experience

Layer 3 Device

Features	Technical specification
General	The Switch Should have Minimum 24 Port 10/100/1000 Mbps Base T and 4 Gigabit SFP Uplink ports.
	The Switch should support non-blocking architecture with minimum switching capacity of 56 Gbps
	The Offered switch should support minimum 41.66 mpps of forwarding rate (64- byte packets)
	1 RJ45 Console Port, 1 Micro-USB Console Port
	The Offered switch should have 32 MB flash and 256 MB CPU memory
	IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet; IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)
Layer 2 Switching features	<p>Up to 8 groups, Up to 8 ports per group with 8 candidate ports for each (dynamic) 802.3ad LACP link aggregation</p> <ul style="list-style-type: none"> • VLAN Group <ul style="list-style-type: none"> - Max 4K VLAN Groups • 802.1Q Tagged VLAN • MAC VLAN: 12 Entries (30 Entries for TL-SG3428 V2.0 & TL-SG3428MP V2.0) • Protocol VLAN: Protocol Template 16, Protocol VLAN 16 • Private VLAN • GVRP • VLAN VPN (QinQ) <ul style="list-style-type: none"> - Port-Based QinQ - Selective QinQ • Voice VLAN
Layer 3 Switching features	<ul style="list-style-type: none"> • 16 IPv4/IPv6 Interfaces • Static Routing <ul style="list-style-type: none"> - 48 static routes • Static ARP <ul style="list-style-type: none"> - 128 static entries • 316 ARP Entries (512 ARP Entries for TL-SG3428 V2.0 & TL-SG3428MP V2.0) • Proxy ARP • Gratuitous ARP • DHCP Server • DHCP Relay <ul style="list-style-type: none"> - DHCP interface relay - DHCP VLAN relay • DHCP L2 Relay
Security features	<ul style="list-style-type: none"> • IP-MAC-Port Binding <ul style="list-style-type: none"> -512 Entries - DHCP Snooping - ARP Inspection

	<ul style="list-style-type: none"> - IPv4 Source Guard: 100 Entries • IPv6-MAC-Port Binding -512 Entries - DHCPv6 Snooping - ND Detection - ND Snooping - IPv6 Source Guard: 100 Entries • DoS Defend • DHCP Filter • Static/Dynamic Port Security - Up to 64 MAC addresses per port • Broadcast/Multicast/Unicast Storm Control - kbps/ratio/pps control mode • 802.1X - Port base authentication - Mac base authentication - VLAN Assignment - MAB - Guest VLAN - Support RADIUS authentication and accountability • AAA (including TACACS+) • Port Isolation • Secure web management through HTTPS with SSLv3/TLS 1.2 • Secure Command Line Interface (CLI) management with SSHv1/SSHv2 • IP/Port/MAC based access control
Quality of Services features	<ul style="list-style-type: none"> • 8 priority queues • 802.1p CoS/DSCP priority • Queue scheduling - SP (Strict Priority) - WRR (Weighted Round Robin) - SP+WRR • Bandwidth Control - Port/Flow based Rating Limiting • Smoother Performance • Action for Flows - Mirror (to supported interface) - Redirect (to supported interface) - Rate Limit - QoS Remark
IPv6 features	<ul style="list-style-type: none"> • IPv6 Dual IPv4/IPv6 • Multicast Listener Discovery (MLD) Snooping • IPv6 ACL • IPv6 Interface • Static IPv6 Routing • IPv6 neighbor discovery (ND) • Path maximum transmission unit (MTU) discovery • Internet Control Message Protocol (ICMP) version 6 • TCPv6/UDPv6 • IPv6 applications - DHCPv6 Client - Ping6 - Tracert6 - Telnet (v6) - IPv6 SNMP - IPv6 SSH - IPv6 SSL - Http/Https

	- IPv6 TFTP
Management features	<ul style="list-style-type: none"> • Web-based GUI • Command Line Interface (CLI) through consoleport, telnet • SNMPv1/v2c/v3 - Trap/Inform - RMON (1, 2, 3, 9 groups) • SDM Template • DHCP/BOOTP Client • 802.1ab LLDP/LLDP-MED • DHCP Auto Install • Dual Image, Dual Configuration • CPU Monitoring • Cable Diagnostics • EEE • Password Recovery • Sntp • System Log
SDN Support	<ul style="list-style-type: none"> • Support Omada Hardware Controller (OC200/OC300), Software Controller, Cloud-Based Controller • Automatic Device Discovery • Batch Configuration • Batch Firmware Upgrading • Intelligent Network Monitoring • Abnormal Event Warnings • Unified Configuration • Reboot Schedule • ZTP (Zero-Touch Provisioning)*

Layer 2 Devices

Features	Technical specification
General	The Switch Should have Minimum 24 Port 10/100/1000 Mbps Base T and 4 Gigabit SFP Uplink ports.
	The Switch should support non-blocking architecture with minimum switching capacity of 56 Gbps
	The Offered switch should support minimum 41.66 mpps of forwarding rate (64- byte packets)
	1 RJ45 Console Port, 1 Micro-USB Console Port
	The Offered switch should have 32 MB flash and 256 MB CPU memory
	IEEE 802.3i:10BASE-T Ethernet; IEEE 802.3u:100BASE-X Fast Ethernet; IEEE 802.3ab:1000BASE-T Gigabit Ethernet; IEEE 802.3z:1000BASE-X Gigabit Ethernet (Optical fiber)
Layer 2 Switching features	<p>Up to 8 groups, Up to 8 ports per group with 8 candidate ports for each (dynamic) 802.3ad LACP link aggregation</p> <ul style="list-style-type: none"> • VLAN Group - Max 4K VLAN Groups • 802.1Q Tagged VLAN • MAC VLAN: 12 Entries (30 Entries for TL-SG3428 V2.0 & TL-SG3428MP V2.0) • Protocol VLAN: Protocol Template 16, Protocol VLAN 16 • Private VLAN • GVRP • VLAN VPN (QinQ) - Port-Based QinQ - Selective QinQ • Voice VLAN
Layer 3 Switching features	<ul style="list-style-type: none"> • 16 IPv4/IPv6 Interfaces • Static Routing - 48 static routes

	<ul style="list-style-type: none"> • Static ARP - 128 static entries • 316 ARP Entries (512 ARP Entries for TL-SG3428 V2.0 & TL-SG3428MP V2.0) • Proxy ARP • Gratuitous ARP • DHCP Server • DHCP Relay - DHCP interface relay - DHCP VLAN relay • DHCP L2 Relay
Security features	<ul style="list-style-type: none"> • IP-MAC-Port Binding -512 Entries - DHCP Snooping - ARP Inspection - IPv4 Source Guard: 100 Entries • IPv6-MAC-Port Binding -512 Entries - DHCPv6 Snooping - ND Detection - ND Snooping - IPv6 Source Guard: 100 Entries • DoS Defend • DHCP Filter • Static/Dynamic Port Security - Up to 64 MAC addresses per port • Broadcast/Multicast/Unicast Storm Control - kbps/ratio/pps control mode • 802.1X - Port base authentication - Mac base authentication - VLAN Assignment - MAB - Guest VLAN - Support RADIUS authentication and accountability • AAA (including TACACS+) • Port Isolation • Secure web management through HTTPS with SSLv3/TLS 1.2 • Secure Command Line Interface (CLI) management with SSHv1/SSHv2 • IP/Port/MAC based access control
Quality of Services features	<ul style="list-style-type: none"> • 8 priority queues • 802.1p CoS/DSCP priority • Queue scheduling - SP (Strict Priority) - WRR (Weighted Round Robin) - SP+WRR • Bandwidth Control - Port/Flow based Rating Limiting • Smoother Performance • Action for Flows - Mirror (to supported interface) - Redirect (to supported interface) - Rate Limit - QoS Remark
IPv6 features	<ul style="list-style-type: none"> • IPv6 Dual IPv4/IPv6 • Multicast Listener Discovery (MLD) Snooping • IPv6 ACL • IPv6 Interface

	<ul style="list-style-type: none"> • Static IPv6 Routing • IPv6 neighbor discovery (ND) • Path maximum transmission unit (MTU) discovery • Internet Control Message Protocol (ICMP) version 6 • TCPv6/UDPv6 • IPv6 applications - DHCPv6 Client - Ping6 - Tracert6 - Telnet (v6) - IPv6 SNMP - IPv6 SSH - IPv6 SSL - Http/Https - IPv6 TFTP
Management features	<ul style="list-style-type: none"> • Web-based GUI • Command Line Interface (CLI) through consoleport, telnet • SNMPv1/v2c/v3 - Trap/Inform - RMON (1, 2, 3, 9 groups) • SDM Template • DHCP/BOOTP Client • 802.1ab LLDP/LLDP-MED • DHCP Auto Install • Dual Image, Dual Configuration • CPU Monitoring • Cable Diagnostics • EEE • Password Recovery • Sntp • System Log
SDN Support	<ul style="list-style-type: none"> • Support Omada Hardware Controller (OC200/OC300), Software Controller, Cloud-Based Controller • Automatic Device Discovery • Batch Configuration • Batch Firmware Upgrading • Intelligent Network Monitoring • Abnormal Event Warnings • Unified Configuration • Reboot Schedule • ZTP (Zero-Touch Provisioning)*

CAT6 Patch cord

Specification	Description
Cate6PatchCordStandard	Cate6patchcordconformingtoANSI/TIA/EIA-568C.2orISO/IEC:11801latest
Cable category:	CAT6U/UTP
Conductor diameter	23 to26AWG
Conductor count (in Nos.)	8
Length of Patch Cord	1/3 meters (quantity as per BoM)
Termination type/Connection type	Insulation Piercing Connection(IPC)
Conductor Material	Stranded copper
Conductor Insulation Material	Polyethylene
Storage temperature range	Minus 20 degree C to plus 60 degree C
Operating temperature range	Minus 20 degree C to plus 60 degree C

Specification of 48 Port Patch Panel

Specification	Description
Cate6 Patch Panel Standard	CAT6 patch Panel conforming to ANSI/TIA/EIA-568C.2 latest or ISO/IEC:11801 latest
Patch panel suitability	CAT6U/UTP
Height of patch panel	2U
No. of ports(RJ45)	48 Ports Loaded
Cable Management Tray/Clamps	Rear Side
Material of patch panel	Cold rolled steel
Plug insertion durability	≥750 mating cycles
Holder for connector/module	Yes
Dust protection for information outlet	Yes

Components	Specification
Cat6 Information Outlet	Cat6UTPRJ45 SocketsvTool Less Crimping, Should have transparent shutter for protection against dust.
Face Plate Dual	Supply, Installation, termination & testing of Two Port Face Plate 2Module in white colour.

Back Box	Supply, Installation, termination & testing of Metal/Plastic Flush Mounting Box1/2Module.
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Cat6 Cable Specification

Specification	Description
Cable category:	CAT6 U/UTP
Conductor diameter	0.57mm(23AWG)
Conductor count (in Nos.)	8
Length of cable in a bundle (Mtrs)	305 mtrs.
Maximum DC resistance	Max.100 Ohm /Km
Conductor Material	Bare Copper
Conductor Insulation Material	Polyethylene
Cable jacket material	Fire retardant PVC
Conductor stranding	Solid
Cable should have internal cross separator	Yes
Storage temperature range	Minus 20 degree C to plus 60 degree C
Operating temperature range	Minus 20 degree C to plus 60 degree C

Wall Mount Rack

Specification	Description
Form Factor	9U, Wall Mount, 480mm usable depth
Basic Frame	Steel
Construction	Welded/CKD
Top & Bottom Cover	Welded/CKD Frame with Cable entry exit cuts with fitted with rubbergrommets
Front Door	Toughened Glass Door with Lock & Key
19" Mounting Angle	Formed Steel
Std. Equipment Mounting	DIN Std 10mm sq Slots. Adjustable mounting depth
Standard Finish	Powder coated with Seven tank pre-treatment process meeting ASTMstandard
Standard Colour	Grey & Off White
Rack Standard	Conforms to DIN 41494 or equivalent standard
Static Load	30 Kg
Accessories	Cooling fan(230V AC/90 CFM) -2 Nos,PDU 230VAC- 1 No.Cable Manager Metal- 2 Nos, Mounting Hardware (20 sets of M6 screw, washer, cage nuts (nickel coated) - 1 No, Wall Screws(4 sets of 2" screws,(nickel coated)- 1 No, Door Lock-1 No,In the rack there must be maintained 1 U= 1.75 inches space,Rack ground Kit.

Payment Terms:

- Mobilization advance of 25% supply item against BG of equivalent amount. This BG will be returned immediately on completion of supply of the materials.
- Balance 75 % Payment for Supply of Items will be released on completion of supply of items at individual Govt. Office / District HQ / State Central Store Itanagar.
- 100 % Payment on Installation and Commissioning of Items on Basis of Installation report at individual Govt. Office, district HQ wise as per scope of work.
- FMS and AMC payment will be released on yearly basis
- Payment will be released based on the project completion at the site and the same should be attested Nodal Officer, ARUNACHAL PRADESH
- Penalty/deduction amount, if any, will be adjusted in the payment due to the successful bidder.
- All taxes and other levies imposed by Government in India/State Government will be paid at actuals as applicable.
- Successful Bidder shall have exclusive liability for remittance of Taxes to State and Central Governments as per the Statutes/Act ruling now or herein after enforced.

Covering Letter

Reference No.: TENDER:

[Bidders are required to submit the covering letter as given hereon their official letterhead]

To

**The Director-cum -Member Secretary, State
Council for IT & e-Governance, Department
of IT&C
Govt.. of Arunachal Pradesh,**

Madam,

We, the undersigned, have carefully examined the referred TENDER, offer to propose our services for the selection as Vendor/ party/ firm/ OEM for supply of FTTO Infrastructure (Networking, FTTO devices & accessories) and provides Network appliances and accessories, layout with connectivity to SCITeG, DITC, Government of Arunachal Pradesh, in full conformity with the said TENDER.

We have read all the provisions of TENDER and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our proposal shall not be given effect to.

We agree to abide by this Proposal, consisting of this letter, our Pre-qualification, Technical and Commercial Proposals, the duly notarized written power of attorney, and all attachments, for a period of 180 days from the date fixed for submission of Proposals as stipulated in TENDER and modifications resulting from contract negotiations, and it shall remain binding upon us and maybe accepted by you at any time before the expiration of that period.

On selection, until a formal final contract is prepared and executed between us, this Proposal, together with your written acceptance of our Proposal and notification of award, shall constitute a binding contract between us. We declare that we do not have any interest in downstream business, which may ensue from the empanelment for supply of FTTO Infrastructure (Networking, FTTO devices & accessories) and provides Network layout with connectivity through this assignment. We hereby declare that all the information and statements made in this proposal are true and accept that any misrepresentation or misinterpretation contained in it may lead to our disqualification.

We understand you are not bound to accept any proposal you receive, not to give reason for rejection of any proposal and that you will not defray any expenses incurred by us in bidding. DD/BG No.....dated.....

Drawn for (i).INR 20,00,000/- and 10,00,000/- (for APST) in the form of DD/BG

towards EMD fee .DD No.....dated drawn for Rs.5000/- is enclosed towards TENDER fee.

Authorized Signature:.....

In the capacity of:.....

Seal :.....

Date :.....

Place :.....

Undertaking of authenticity:

(To be signed by authority not lower than the Company Secretary/Director of the Vendor/Firm/Bidder **on its letterhead**)

With reference to the items along with accessories being quoted to you vide our quotation No:dated, we hereby undertake that all the components / parts / assembly used in the FTTO infrastructure under the above like Networking and FTTO accessories etc., shall be original new components/ parts/ assembly, from respective OEMs of the products and that no refurbished / duplicate / second hand components/ parts /assembly are being used or shall be used.

We hereby undertake to produce the MAF certificate from our hardware manufacturer in support of above undertaking at the time of Bid.

In case of default and we are unable to comply with the technical specification of materials at the time of delivery or during installation for the FTTO hardware already billed, we agree to take back the hardware and other non-compliant items along with accessories without demur, if already supplied and return the money with interest if any paid to us by you in this regard.

We (*Vendor name*) also take full responsibility of both parts & service as per the content even if there is any defect by our authorized service Centre/reseller/SI etc.

Name of the Firm/Vendor/Party/Bidder: Authorized Signature with Date:

Seal:

MAF FORMAT:

Ref No:

Dated

To,

The Director-cum -Member Secretary,
State Council for IT & e-Governance,
Department of IT&C

Sub: Manufacturer Authorization Form Letter

Sir/Madam,

I/We _____ who are established and _____ reputable _____ manufacturers
of _____ having factories _____ at _____ and

_____ Do hereby authorized M/s _____ [Name and address of vendor/firm/bidder] to submit a bid
and sign the contract with you for the goods manufactured by us against the above
Tender No. _____ dated _____.

We hereby extend our full guarantee and warranty as per the clauses of contract based on the terms and
conditions of the Tender for the goods and services offered for supply by the above firm against the Tender.

Yours sincerely

Name & Designation of Authorized Signatory:

Name of the manufacturer:

Seal:

Date:

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a
person competent and having the power of attorney to bind the manufacturer. It should be included by the
bidder in its bid.

Service Support Format

Ref No:

Dated:

To,

The Director,
State Council for IT & e Governance,
Department of IT & Communications.

Sub: **Selection of System Integrator for Supply, Installation and Maintenance of FTTO
Connectivity at Govt. Offices, Arunachal Pradesh**

Dear Madam,

This is in reference to your above-mentioned tender for procurement of FTTO devices along with accessories as per listed in annexure. Having examined the tender document, the receipt of which is hereby duly acknowledged, we the undersigned, hereby submit our proposal along with necessary supporting documents for service & support during entire warranty period of 3 (three) years from the date of delivery of FTTO infrastructure.

Further, we agree to abide by all the terms and conditions as mentioned in the tender document. We have also noted that IT & C Department reserves the right to consider/ reject any or all applications without assigning any reason thereof.

Yours sincerely,

Name & Designation of Authorized Signatory:

Name of the Firm:

Seal:

Date:

Particulars of the Bidders:

S. No.	Information Sought	Details to be Furnished
A	Name and address of the bidding Company	
B	Incorporation status of the firm(public limited/private limited, etc.)	
C	Year of Establishment	
D	Date of registration	
E	ROC Reference No.	
F	Details of company registration	
G	Details of registration with appropriate authorities for Goods & service tax	
H	Name, Address, email, Phone nos. and Mobile Number of Contact Person	

