Reference No: GFGNL/GFG/e-file/263/2022/0113/Commercial-Utilization

26th May 2023





Gujarat Fibre Grid Network Limited (GFGNL) A Government of Gujarat Company Block No: 1, 8th Floor, Udyog Bhavan, Sector-11, Gandhinagar 382010

A. Invitation to Bid

- a. Gujarat Fibre Grid Network Limited (GFGNL) is inviting bids from the eligible bidders for "Request for Proposal (RFP) for Selection of Project Implementation Agency (PIA) for Various Connectivity through BharatNet Network (Reference No: GFGNL/GFG/efile/263/2022/0113/Commercial-Utilization)". GFGNL intends to select the agency by inviting the proposals through open tender process. Bids complete in all respects should be uploaded on or before the bid due date mentioned in the RFP document.
- b. The Bid Security and non-refundable bid processing fees in a separate sealed envelope super scribed with the bid document number to be submitted to GFGNL office before the last date & time of submission of bids as mentioned in the RFP document.
- c. Tender documents are available only in electronic format which Bidders can download free of cost from the website <u>https://www.dst.gujarat.gov.in</u>, <u>https://bharatnet.gujarat.gov.in</u>, <u>https://gil.gujarat.gov.in/ & https://www.gfgnl.nprocure.com</u>
- d. The bids have been invited through e-tendering route i.e. the eligibility criteria, technical bid document and financial stages shall be submitted online on the website https://gfgnl.nprocure.com
- e. Bidders who wish to participate in this bid will have to register online. Bidders who wish to participate in online bids will have to procure Digital Certificate as per Information Technology Act, 2000 using which they can sign their electronic bids.
- f. Bidders can procure the same from (n) code solutions a division of GNFC Ltd., or any other agency licensed by Controller of Certifying Authority, Government of India. Bidders who already have a valid Digital Certificate need not procure a new Digital Certificate.
- g. In case of any clarifications required, please email your queries as per the format prescribed in the RFP to <u>ite-ho8@bharatnet.gujarat.gov.in</u>, <u>pmc@bharatnet.gujarat.gov.in</u> & <u>pmc3@bharatnet.gujarat.gov.in</u> e-mail IDs on or before the date mentioned in the RFP document.
- h. Accessibility of Tender Document: The Tender Document to participate in e-Tender shall be available for downloading from <u>https://gfgnl.nprocure.com</u>. The Tender document shall not be available for download on or after its submission/ closing date as mentioned in the RFP document.

B. Notice Inviting Proposal and Necessary Instruction

Applications in prescribed proforma are invited by Gujarat Fibre Grid Network Limited (GFGNL) from eligible parties for establishing various connectivity from Gram Panchayats (GPs) connected in BharatNet Network.

1.	Scope of Work	Establishing various connectivity from Gram Panchayats (GPs) connected in BharatNet Network and O&M of connectivity for entire contract period.	
2.	Tender submission Cost	Rs. 15,000 /- (Rs. Fifteen Thousand Only) In the form of Demand Draft in favor of "Gujarat Fibre Grid Network Limited" drawn on any scheduled bank and payable at Ahmedabad/Gandhinagar. (Tender submission cost is Total Rs 15,000/- in form of Demand Draft irrespective of Zones being participated by the bidder)	
3.	EMD (bid Security / Security deposit)	 participated by the bidder). Rs. 5,00,000 /- (Rs. Five Lacs Only) per zone Demand Draft in favor of "Gujarat Fibre Grid Network Limited" drawn on any scheduled bank and payable at Ahmedabad/Gandhinagar OR EMD in the form of bank guarantee with validity of 180 days from the last date of bid submission in favor of "Gujarat Fibre Grid Network Limited "from All Nationalized banks including the Public sector banks - IDBI Ltd. Private sector banks - AXIS Bank, ICICI Bank and HDFC Bank 	
4.	Office issuing RFP	Chief Finance Officer (CFO), Gujarat Fibre Grid Network Limited (GFGNL), Block No: 6, 5th Floor, Udyog Bhavan, Sector-11, Gandhinagar: 382010.	
5.	Contract Period	3 years from the date of issue of WO which can be extended further for next 2 years.	
6.	Bid validity days	180 days from the last date of submission of bids	
7.	Issue of Tender	The tender can be downloaded from below websites. <u>https://www.gfgnl.nprocure.com, https://www.dst.gujarat.gov.in,</u> <u>https://gil.gujarat.gov.in/, https://bharatnet.gujarat.gov.in</u>	

8.	Pre-Bid	Pre-bid will be held on 05.06.2023 at 03:00 pm at Gujarat Fibre Grid Network Limited (GFGNL), Block No: 6, 5th Floor, Udyog Bhavan, Sector-11, Gandhinagar: 382010
9.	Proposal due date (last date & time of Tender submission)	Tender should be submitted before 19.06.23 at 02:00 pm. Bidder shall upload their bids on <u>https://www.gfgnl.nprocure.com</u>
10.	Date & Time of opening of Tender	Technical Qualification documents will be opened on 19.06.2023at 03:00 pm in the presence of bidders' representatives. Qualified bidders would be subsequently informed later about the date, time, and venue for price bid opening.
11.	Contact persons (For any Clarifications)	GM, Commercial Gujarat Fibre Grid Network Limited (GFGNL), Block No: 6, 5th Floor, Udyog Bhavan, Sector-11, Gandhinagar: 382010

C. Clarifications on the RFP

A prospective bidder requiring any clarification on the RFP Document may submit its queries, via email only, to <u>ite-ho8@bharatnet.gujarat.gov.in</u>, <u>pmc@bharatnet.gujarat.gov.in</u> & <u>pmc3@bharatnet.gujarat.gov.in</u> on or before the date of pre-bid meeting as mentioned in the RFP document. GFGNL will host a Pre-Bid meeting as mentioned for queries (if any) by prospective bidders. GFGNL encourages prospective bidders to clarify their doubts/seek clarification or additional information necessary for them to submit their bid. The representatives of the bidders may visit the GFGNL office at their own cost for any clarification(s). The queries should necessarily be submitted before pre-bid meeting date in the following softcopy format and **should be in Microsoft Excel only** (.xls or .xlsx formats):

Sr.	RFP Document Clause/ Section No.	Clause Title	Page No.	Content of the RFP Requiring Clarification	Clarification Sought

(No PDF or Scanned images)

Queries submitted post the above-mentioned deadline, or which do not adhere to the abovementioned format may not be responded to. All the responses to the queries (clarifications / corrigendum) shall be made available on the website mentioned in the necessary instructions and shall not be communicated through print media.

D. Proposal/Bid Submission & Evaluation

- a) Proposal preparation:
 - i. The proposal should be short, concise & include all points indicated in the document.
 - ii. The Proposal shall be typed or written in indelible ink and should be in English. Proposal in other language would not be accepted. The pages and volumes of each part of the Proposal shall be clearly numbered. The Proposal shall contain all the information required herein and references of previous submissions shall not be considered
 - iii. The bidders shall bear all costs associated with the preparation and submission of their proposals.
 - iv. At any time before the submission of Proposals, GFGNL may amend this document by issuing an addendum / cancel the process of procurement, which shall be binding on the bidders.
- b) Proposal Submission:
 - i. Bids (Technical bid & Financial bid) shall be submitted online on <u>https://www.gfgnl.nprocure.com</u>
 - ii. The participating Bidders in the tender should register themselves on e-procurement portal, if not registered earlier.
 - iii. The Bidders can login to e-procurement portal in secure mode only by signing through the Digital certificates.
 - iv. The Bidders should scan and upload the respective documentary evidence as mentioned in Eligibility Criteria.
 - v. The bidders shall sign on all the statements, documents, certificates uploaded by them, owning responsibility for their correctness/authenticity.
 - vi. The financial bid details should be quoted in the financial bid format attached with the tender and upload online only.
 - vii. Bidders are required to upload the scanned copy of Bank Guarantee and/or Demand draft for EMD and Tender Fee (as mentioned in this RFP) at online bidding portal. Further, original Bank Guarantee and/or Demand Draft for EMD and Tender Fee must be submitted in a sealed envelope mentioning "EMD and Tender fee" to GFGNL office before due Date and Time for Submission of Bids as mentioned in RFP.

- c) Proposal Evaluation:
 - i. The evaluation of the bid will be considered of only those bidders who
 - have furnished bid fee and security deposit of prescribed amount as per the tender
 - meet the eligibility criteria as mentioned in the RFP document and have furnished documentary proof in respect of the same
 - ii. The bids of the non-conforming bidders to above shall be rejected without evaluation.
 - iii. The proposal shall be evaluated in three (3) stages. In Stage 1, EMD & DD shall be verified. Bidders whose EMD & DD are valid will be considered for Stage 2. In Stage 2, technical documents will be verified. Only those bidders who will be qualified in Stage 1 & 2 will be eligible for Stage 3 i.e., financial evaluation.
 - iv. The evaluation of proposals shall be on the principle of Lowest Bid (L1) based on quoted rates as per the financials submitted as part of the bid.
 - v. Agency/Bidder is required to furnish the commercial quote as mentioned under financial bid format. Revelation of commercial details elsewhere in the bid documents other than the specified price bid format shall lead to disqualification of the bid.
 - vi. GFGNL reserves the right to discard bids which are deviating from the specified formats mentioned in the RFP.

E. Sections Comprising Bids

The proposal shall be submitted online and shall comprise of following sections:

Part – I : Bid Security

a. Bidders are required to upload the scanned copy of Bank Guarantee (Annexure – IV) and/or Demand draft for EMD and Tender Fee (as mentioned in this RFP) at online bidding portal. Further original Bank Guarantee and/or Demand Draft for EMD and Tender Fee must be submitted in a sealed envelope mentioning "EMD and Tender fee" to GFGNL office before due Date and Time for Submission of Bids as mentioned in "Notice Inviting Proposal and Necessary Instruction".

Part – II : Pre-qualification cum Technical Bid: Pre-qualification bid must contain the following information in pdf format.

- a. Bid document checklist (Annexure I)
- b. Bid submission Cover Letter (Annexure II)
- c. Bidder's information sheet (Annexure III)
- d. Copy of valid GST registration
- e. Copy of valid PAN card
- f. Undertaking by the bidder for not being barred by any State/ Central Government/PSU (Annexure VI)

g. Response to Eligibility criteria: All required documents for compliance as mentioned in section of "Eligibility Criteria".

Part – III: Financial Bid:

a. Financial Bid (Annexure – VII)

Note: All pages of the bid documents must be signed by the authorized signatory of company.

F. Naming Convention for files

The bidders need to strictly follow the below mentioned File Nomenclature rules while uploading the documents in the bidding portal. For documents mentioned under Eligibility Criteria, the file naming should be Eligibility Criteria_ [Document_Name] For example:

- Eligibility_Criteria_Copy_of_Certification_of_Incorporation
- Eligibility_Criteria_PAN_Card
- Eligibility_Criteria_GST Registration
- Eligibility_Criteria_Financial_Statement_Turnover
- Eligibility_Criteria_Financial_Statement_Networth
- Eligibility_Criteria_OEM_PO Copy
- Eligibility_Criteria_OEM_Undertaking Letter
- Eligibility_Criteria_Self_Declaration_Blacklisting

For the documents in Annexures, the file naming should be: Anx_[S.no of Annexure]_[Annexure Name]

For example:

- Anx_I_CoverLetter
- Anx_II_Bidder Information Sheet

In case of any large file (exceeding 3MB) which need to be split in two parts or more, the naming should be:

- Anx_I_CoverLetter _Part_1
- Anx_I_CoverLetter _Part_2

For any other file not covered under this, should be named appropriately as per its contents. All files should be in pdf formats and should not be password protected or encrypted. The files should not be zipped. Any other format of the file other than pdf shall not be considered as part of the submitted bid.

1. Introduction

- 1.1. Gujarat Fibre Grid Network Limited (GFGNL) is an SPV established under aegis of Department of Science & Technology (DST), Government of Gujarat to implement BharatNet Phase II Project. GFGNL is planning to extend BharatNet connectivity from respective Gram Panchayat (GP) to various offices/Locations of GoG at the village level.
- 1.2. GFGNL has implemented BharatNet Phase II network in Gujarat in two different packages. Package – A has 3 islands in Rest of Gujarat and Package – B has 1 island in Saurashtra region. Package – A has 12 districts & Package – B has 10 districts. Further, both the packages are divided into two zones. Package A has two zones i.e., Vadodara zone & Surat zone and Package B has two zones i.e., Ahmedabad zone & Rajkot zone. Detailed information of block wise no. of GPs for each district will be provided to the selected bidders after contract signing with GFGNL. Bidders are also requested to get the technical information about the network implemented by GFGNL by referring to the RFP (Request for Proposal (RFP) for Selection of Project Implementing Agency for BharatNet Phase-II project in the State of Gujarat under Gujarat Fibre Grid Network Limited (Package A &B)). GFGNL's Network comprises of the various technology equipment including GPON, DWDM, Ethernet & RFMS.

Name of district of Package - A		
Vadodara Zone	Surat Zone	
Aravalli	Dang	
Banaskantha	Narmada	
Dahod	Bharuch (only Ankleshwar block)	
Mahisagar	Surat	
Panchmahal	Тарі	
Vadodara (only Padra block)	Valsad (only Pardi, Valsad, Umbergaon & Dharampur blocks)	

Details of zone wise districts for Package A & Package B

Name of district of Package - B		
Ahmedabad Zone	Rajkot Zone	
Ahmedabad	Devbhoomi Dwarka	
Botad	Jamnagar	
Gir Somnath	Morbi	
Junagadh	Rajkot	
Mehsana (only Kadi block)	Surendranagar	

1.3. GFGNL intends to select zone wise bidder(s) who can perform "Scope of Work" as mentioned

in below clause to extend BharatNet network beyond GP (Gram Panchayat).

- 1.4. There are 7900+ GP locations covered under BharatNet Phase II. Selected bidders shall have to connect various offices/locations of Government departments like Health department, Home department, Education department, Finance department, Electricity department etc. with BharatNet Phase II network to get internet & intranet connectivity with Gujarat SDC. BharatNet Phase II Network covers almost 50% of geography of Gujarat state. This information is provided to bidders so that they can get an idea about the likely scope available under this RFP. The scope of this RFP is not limited to above.
- 1.5. GFGNL / DST / GoG is not giving any guarantee to any bidders about the timeline to provide the Government office / school locations for connectivity. These locations will be offered to selected bidders for connectivity as per the requirement & fund availability with the respective departments. Selected bidders will be free to connect these locations based on technical feasibility & approval available from GFGNL.

2. Scope of Work (SoW) for the bidder

- 2.1. Selected bidders will be responsible to carry out below mentioned activities (not limited to) for successfully connecting & integrating customer location with GFGNL's Network and activating the services.
 - 2.1.1. Submission of detailed site connectivity plan with topology and media (kmz / kml file showing proposed connectivity and media details of proposed connectivity in excel file) to GFGNL for site execution approval. GFGNL official may suggest changes in connectivity plan of any site / location w.r.to details of connectivity media considering any future requirements. Selected bidder(s) will implement connectivity as per final instruction & approval given by GFGNL officials.
 - 2.1.2. Implementation of last mile connectivity through wireline (UG OFC / aerial drop fibre cable / Cat 6 cable) / wireless (P2P / P2MP unlicensed band radio) media provided all necessary approvals are available from competent authority in India to deploy the equipment of newer technology. In the event of national security related concerns, GFGNL will ask selected bidders to change the last mile technology & adopt the safer technology and selected bidders will have to abide to the same.
 - 2.1.3. In respective areas the HPIAs shall lay wireline or wireless media and set up electronics along with all functionalities including the responsibility of O&M support for 5 years.
 - 2.1.4. Supply, installation, testing & commissioning, and acceptance testing (field AT) of the required network components like OFC drop cables, HDPE PLB duct, radios, rack, pole, mast, CPE (router, switch), media converter (Optical to Ethernet and ethernet to optical converter), mini-OLT, required accessories, any intermediate devices and other items required for the provisioning of the services as per site requirement. In case if any

material will be rejected in field AT by GFGNL official /official of any designated third party (TPA) appointed by GFGNL due to non-compliance to RFP requirement, then selected bidder will have to replace that material by supplying & installing fresh material as per the terms & conditions of the RFP without any additional cost to GFGNL.

- 2.1.5. GFGNL may appoint third party agency. HPIA will have to complete his roles and responsibilities as mentioned in this RFP with supervision from his own team. GFGNL may select one agency as TPA (Third Party Auditor) who will carry out supervision of all relevant activities of HPIA but not limited to site verification, validation of equipment and delivered link connectivity, and 100% site audit.HPIA will have to extend all required support to TPA and GFGNL officials for audit.
- 2.1.6. HPIA has to plan and execute last mile connectivity with quality services. HPIA has to ensure 100Mbps throughput at last mile connectivity. HPIA can execute last mile on any of the media mentioned in this RFP scope document and bid cost.
- 2.1.7. Scope mentioned is only to discover the rate and the scope may be vary in future by +/-25% of given scope, selected bidder will get the workorder of those additional sites based on same rate quoted during this RFP based on eligibility criteria.
- 2.1.8. Software upgrades for the last mile networking components such as routers, switches wireless UBR links, media converter (Optical to Ethernet and ethernet to optical converter), etc. installed by the bidder for smooth functioning of the Network & customer link.
- 2.1.9. Preparation of the as build drawing (wherever applicable) for the installed link & facilitating GFGNL / GFGNL's existing vendor to update details of the customer connectivity in GFGNL's GIS and NMS application as per GFGNL's requirement.
- 2.1.10. Selected bidder will have to supply EMS (Element Management System) for each active components like but not limited to radios, router, switch, media converter (Optical to Ethernet and ethernet to optical converter), Mini-OLT/ONT etc. used in network, so that required alarms can be monitored and the up / down status of the equipments.Further, selected bidder & their OEM partners will have to facilitate the integration of all these EMSs with GFGNL's existing NMS (Network Management System), ERP system, through API or any other suitable mechanism as per the requirement of GFGNL's NMS application and up to the satisfaction of GFGNL.
- 2.1.11. Carry out operation & maintenance of the last mile link including all the field activities required (preventive & corrective maintenance) to keep all the links up & running. It will be successful bidder(s)' responsibility to rectify / restore the link in case any cable is damaged due to road widening / by any third party.
- 2.1.12. Commissioning and acceptance testing of the installed components to establish last mile connectivity. All documentation generated during planning, installation and

commissioning phase shall always be made available to GFGNL and TPA. Link testing report must be signed by last mile customer, HPIA, TPA/GFGNL. Acceptance of link delivered will be only authorized by TPA/GFGNL's authority.

- 2.1.13. Maintenance, support services, warranty, annual maintenance contract etc. in respect of equipment supplied to the customer. All the active equipment, voltage stabilizer, UPS,6U/3U/2U rack and Mini OLT/ONT must be supplied with warranty of 5 years and all required licenses. UPS battery must have 3 years of warranty.
- 2.1.14. Bidder will have to fulfill all the RoW / permission related formalities of all the Government departments for the implementation of last mile connectivity including preparing & submitting RoW / permission applications, liasoning & follow up, collecting payment from GFGNL offices & submitting to department's offices, receipt of permission letter from department's offices, refund of BG / SD from respective department within 6 months of work completion or as per guideline of respective department (whichever is earlier) etc. In case bidder fails to get refund of BG / SD amount from the payables / PBG of the selected bidder. If bidder damages any assets of any of the department / 3rd party organization & department / organization issues any notice / demand note to GFGNL / selected bidder, than selected bidder will have to rectify the damages at earliest as per instruction of the respective department / organization / GFGNL official failing which GFGNL will have all the rights to recover demand note amount from the payables / PBG of the selected bidder, than selected bidder will have to rectify the damages at earliest as per instruction of the respective department / organization / GFGNL official failing which GFGNL will have all the rights to recover demand note amount from the payables / PBG of the selected bidder.
- 2.1.15. The Bidder has to consider approximately 5% of sites of allocated zone in shifting scope in near future due to various reasons like customer dependency. Selected bidder has to shift the services to customer new sites within agreed timeline without additional cost to GFGNL.
- 2.1.16. To handle day to day operations, proper escalation matrix to be pasted /fixed at respective Government institutes and it must be properly visible to customer. Escalation matrix must be latest as per GFGNL needs and must be certified by GFGNL authorities.
- 2.1.17. All the customer locations falling in any particular block boundary will be served by the selected bidder to whom the block is awarded. Selected bidder can serve the customer location from the nearest Gram Panchayat (GP) location even if the nearest GP is falling in neighboring block / district which may have been allotted to other selected bidder.
- 2.1.18. Detailed report is required to be submitted for the work under progress and for functional performance, throughput of the connectivity. The same have to be certified by TENDERER or its representative agency/TPA. Bidder shall submit the installation plan for each location to respective local GFGNL in charge, who in turn shall approve the plan

before execution. Bidder will have to fill up an installation and commissioning report and get the same duly signed by concern officer of respective offices and Tenderer's representative with their seal and remarks if any and submit the same in original to respective zone in charge.

- 2.1.19. Successful bidder(s) will have to supply all required optical & Cat 6 patch cords, SFP (if any), all required accessories with active / passive equipment to make the customer link live & all required licenses for all the ports & services of active equipment for entire contract period.
- 2.1.20. The bidder shall not be allowed to dump the empty cable drums/waste materials in Govt/public place, which may cause inconvenience to Govt/ Public. If the bidder does not dispose off the empty cable drums/waste materials within 3 days of becoming empty, TENDERER is at liberty to dispose off the drum/waste material in any manner deemed fit and the costs incurred by the TENDERER in disposing off such materials shall be borne by the Bidder. Over and above TENDERER may also levy a penalty up to Rs 10,000 for each such default.
- 2.1.21. For the UG wireline connectivity, during excavation of trench utmost care should be taken by the bidder, so that the existing underground cables/utilities are not damage or cut. In-case any damage/ cut is done to the existing cables/utilities, a penalty of Rs. 10,000/- per cut with addition to DN amount will be levied to HPIA.
- 2.1.22. Besides the above penalty, the bidder shall carry out such repairs for restoration of the damaged cable/utilities free of charge. The cost of the jointing kit shall also be borne by the bidder. If bidder fails to repair the damage, the cost of repair (including cost of labor + Jointing kit) shall be recovered from the bidder.
- 2.1.23. HPIA has to ensure to terminate media (with any of the wireline/wireless media) along with 1 Wi-Fi router or any other CPEs required by the customer.
- 2.1.24. The bidder shall be responsible for providing Software (System Software, Application Software, Device Drivers, IOS, etc.) required, if any, to meet any additional requirements during the currency of the Agreement without any additional cost to Tenderer. All license software must be in the name of GFGNL, Gujarat.
- 2.1.25. Cable Tagging shall be at both side and at both end (i.e., node side and rack side and inside and outside of I.O port and Patch panel)
- 2.2. Selected bidders will have to adhere to below guidelines (not limited to) while executing the work.
 - 2.2.1. OFC installation through open trenching & ducting and HDD

2.2.1.1 In Field execution route optimization, due diligence; supply of fibre, duct,

electronics, including all the accessories; RoW applications follow-ups till receipt of permissions, Mini OLT/Optical splitter/ media converters(Optical to Ethernet / Ethernet to Optical), trenching, duct laying, wireless point to point / point to multipoint radios, providing necessary protection as per Engineering Instructions wherever required, back filling, fibre blowing, splicing of fibre, live line installation and commissioning of UG / aerial optical fibre or Cat-6 cable, arranging permission for building wherever possible will be in the scope of selected bidder. For UG cable route indicators (cemented Routed Indicator), joining chambers, manhole chamber, termination of remaining fibres at FDMS/FTB at Government institutes. If need arises for additional new poles (to facilitate aerial cabling) to follow optimal path/route, such additional new poles shall be installed by the HPIA.

- 2.2.1.2 Implementation of last mile connectivity through wireline (UG OFC / aerial drop fibre cable /Cat 6 cable(aerial), splitter(1:8)/media converter/mini OLT, 8 port L2/L3 manageable switch(Optional)) or wireless (P2P / P2MP unlicensed band radio considering backhaul availability at GP on RJ45 interface(10/100/1000Mbps)). provided all necessary approvals from GFGNL the competent authority to deploy the equipment.
- 2.2.1.3 In the event of national security related concerns, GFGNL will ask selected bidders to change the last mile technology & adopt the safer technology and selected bidders will have to abide the cost of the same
- 2.2.1.4 Selected bidder will have to excavate a trench of 1 mtr depth from the top of the surface with minimum trench width of 300 mm at the bottom of the trench.
- 2.2.1.5 Intimation in "Call before you Dig" application to be ensure by bidder prior to digging work.
- 2.2.1.6 In case, trench depth is not achieved because of any utilities present or any other reason, selected bidder will have to apply below mentioned protection. All related material line items will be certified & paid to selected bidder for the protection used and service cost of excavation of trench (Financial bid table line item A1) will be reduced proportionately for reduced depth.

Sr. No.	Depth of Trench	Recommended Protection
1.	800 mm to 1000 mm	No protection required
2.	500 mm to 800 mm	65 mm DWC pipe
3.	Less than 500 mm	100 mm *100 mm on site PCC

2.2.1.7 Selected bidder shall de-coil 40 mm HDPE pipe with the help of mechanical de-coilers.

- 2.2.1.8 Selected bidder shall use simplex plugs to close the duct openings to avoid ingress of mud, water, or dust. Selected bidder shall use duct coupler & other accessories as per field requirement & instruction from GFGNL official / any other designated official.
- 2.2.1.9 Selected bidder shall do necessary co-ordination with other utility companies prior to the excavation works and shall be fully responsible for damage (if any) caused to any utilities of other organization due to negligence. Selected bidder will indemnify GFGNL from all the claims of other organization in such cases of damage.
- 2.2.1.10 Selected bidder shall ensure manufacturer's guidelines for minimum bend radius and tension are followed while installing the OFC.
- 2.2.1.11 Selected bidder shall keep minimum total 20 mtr loop in each Manhole & Hand hole, properly coiled and tied with cable ties.
- 2.2.1.12 Selected bidder shall use Mid-Span Access Buffer Tube Slitter during mid-span splicing (for last mile location connectivity) to ensure that buffer jackets of fiber tubes are cut longitudinally to access all fibers inside tube and then only required fiber cores will be cut for splicing with fiber cores of last mile cable.
- 2.2.1.13 Selected bidder shall carry out bi-directional OTDR & LSPM testing of all fibre cores. Acceptable link attenuation/loss in dB per link (between 2 locations) to be calculated as per below. Bidder will have to ensure timely calibration of testing devices. For 1310 nm: 0.34 dB attenuation / Km + 0.1 dB / splice + 1 dB connector loss
 For 1550 nm: 0.22 dB attenuation / Km + 0.1 dB / splice + 1 dB connector loss
- 2.2.1.14 Selected bidder will prepare & submit all required reports like ITP sheet, OFC blowing report, splicing report, testing report, As build drawing etc. for all OFC connectivity. Report formats will be provided to selected bidder after contract signing.
- 2.2.1.15 During maintenance of the network, selected bidder shall ensure that all fibre cores are spliced at the cut location (and not only live fibre cores) during rectification process. State/SIA/any third party as appointed may audit the health / continuity of all fibre cores at any time and PIA will have to facilitate this exercise by performing LSPM and OTDR testing in presence of this team.
- 2.2.1.16 For OFC installation through HDD method, selected bidder will have to prepare & submit required graph showing the details of HDD shot, OFC depth etc.
- 2.2.1.17 It will be sole responsibility of the selected bidder to inspect GP and Government Institute prior start of the field activities, this includes but not limited to the power availability at GP and at Government institute, building structure strength and stability, water seepage, earthing, etc. Bidder has to update GFGNL official for building infra issue, non-use of building or any field challenge prior to installation, if any.

- 2.2.1.18 Proper precautions need to take in advance while implementing UG OFC cable to avoid cut by animals (rat/squirrels/etc.) and/or other third-party vendors etc.)
- 2.2.1.19 The bidder is responsible for obtaining RoW permissions wherever applicable. The office of GFGNL will facilitate in coordination with respective Government agencies, however, the HPIA shall have to prepare proposals in requisite format, submit it to relevant agencies for approval, and do necessarily follow up. In case, there are penalties for executing work without ROW permission, then HPIA shall bear that. State government has waived ROW charges. However, approval for alignment with state agencies still needs to be done. HPIA shall obtain ROW permissions from the central and state agencies such as national highways, Oil and gas pipelines, Railways etc. The HPIA has to pay ROW charges to any agencies (Except Penalties for violation which HPIA has to bear), then the GFGNL shall reimburse within 30 days on receipt of complete and relevant documents.
- 2.2.1.20 Fibre Loop at UG MH(Manhole) must keep at every 1 Km or based on requirement like major road crossing, railway crossing etc.
- 2.2.1.21 Route indicators for OFC cable are to be placed for every 100 mtrs
- 2.2.1.22 In case of cable cut due to any reason the fault to be rectified by the PIA and services to be restored as per SLA
- 2.2.1.23 Carry out operation & maintenance of the last mile link including all the field activities required (preventive & corrective maintenance) to keep all the links up & running. It will be successful bidder(s)' responsibility to rectify / restore the link in case any cable/link is damaged due to road widening, construction of bridges, culvert more than 100m sections or change in RoW due to utility (like in case of drainage/water pipeline project etc) or aerial damage due to major EB pole shifting work / by any third party /due to any other field challenges within defined timeline
- 2.2.1.24 If bidder damages any assets of any of the department / 3rd party organization & department / organization issues any notice / demand note to GFGNL then selected bidder will have to rectify the damages at earliest without any further cost as per instruction from the respective department / organization / GFGNL. Failing to this, GFGNL will have all the rights to recover demand note amount from the payables/SD/PBG of the selected bidder.
- 2.2.1.25 All the customer locations falling in any particular block boundary will be served by the selected bidder to whom the block is awarded. Selected bidder can serve the customer location from the nearest Gram Panchayat (GP) location even if the nearest GP is falling in neighboring block / district which may have been allotted to other selected bidder.

- 2.2.1.26 In case of repairing or upgradation of existing links bidder will be responsible for removal of existing old/faulty cables or material without any additional cost to the purchaser
- 2.2.1.27 Warning tap to be laid in trench as per industry standard.
- 2.2.1.28 Any penalties/expenditure from respective authorities to GFGNL for the damage of asset during execution as well as O&M duration will be sole responsibility to HPIA.
- 2.2.1.29 Service delivery report needs to sign from Customer with agreed format of GFGNL
- 2.2.1.30 HPIA has to include all elements including but not limited to like own OSS, BSS, etc.
 - 2.2.1.31 To ensure cable management and also strain relief, cables shall be properly dressed using Velcro cable ties. However, cables ties should never be over tightened. On vertical runs, the cables shall be dressed and tied from the bottom up, thus putting minimum strain on the cables.
 - 2.2.1.32 The bidder shall be responsible for providing Software (System Software, Application Software, Device Drivers, IOS, etc.) required, if any, to meet any additional requirements during the currency of the Agreement without any additional cost to Tenderer. All license software must be in the name of GFGNL, Gujarat.
- 2.2.1.33 Service delivery report needs to sign from Customer with agreed format of GFGNL

2.2.2 Aerial drop OFC installation

- 2.2.2.1 Selected bidder will have to install drop fibre aerial cable on existing pole / new pole / suitable structure as per requirement of field and instruction of GFGNL official / any other designated official. (1. Bidder will have to use aerial drop cable installation accessories like Anchoring (Dead End) Assembly, Suspension Clamp Assembly, Adjustable Cable Storage Bracket, Stainless Steel Strap with Buckle etc. as mentioned in TEC GR : TEC/GR/TX/OFC-024/01/MAR-15 and as per field requirement & instruction of GFGNL official.)
- 2.2.2.2 Selected bidder shall ensure manufacturer's guidelines for minimum bend radius and tension are followed while installing the OFC.
- 2.2.2.3 Selected bidder shall keep approx. total 10 mtr loop on each pole as per field feasibility.
- 2.2.2.4 All guidelines related to splicing & testing will be applicable as mentioned in section2.2.1 above, additional tolerance of 10% is allowed here.
- 2.2.2.5 All necessary arrangement for aerial connectivity needs to be arranged by HPIA.
- 2.2.2.6 The bidder can explore sites on the aerial OFC network subject to the following

conditions:

- a. Cable lengths more than 1500Mtr cannot be explored on aerial for single continuous stretch. However, it will be based on case-to-case and prior approval from GFGNL competent authority
- b. The desirable architecture is to have field manageable aerial OFC network else HPIA needs to explore underground cabling.
- c. In aerial fibre connectivity if the pole does not have requisite bearing strength, then the HPIA will have to bring and set up his own poles dedicated for the OFC installation along with necessary accessories as per the Engineering Instructions.
- d. For best suitability to serve customer on long term and on field challenges
- 2.2.4.7 In case of repairing or upgradation of existing links bidder will be responsible for removal of existing old/faulty cables or material without any additional cost to the purchaser
- 2.2.4.8 Warning tap to be laid in trench as per industry standard.
- 2.2.4.9 Any penalties/expenditure from respective authorities to GFGNL for the damage of asset during execution as well as O&M duration will be sole responsibility to HPIA.

2.2.3 Installation of radios

- 2.2.3.1 Submission of detailed site connectivity plan with topology and media (kmz / kml file showing proposed connectivity and media, height of proposed pole/mast, other equipment, and site details of proposed connectivity in excel file) to GFGNL for site execution approval of given lot. GFGNL official may suggest changes in the connectivity plan of any site / location w.r.to details of connectivity media considering any future requirements. Selected bidder(s) will implement connectivity as per final instruction & approval given by GFGNL officials.
- 2.2.3.2 As per the space feasibility & instruction of GFGNL official / any other Government official, selected bidder will install pole / mast for the link.
- 2.2.3.3 Selected bidder will have to comply to all the rules & regulations of DoT / TRAI / GoI / WPC / SACFA / any other statutory body for wireless links. Applicable charges shall be borne by GFGNL or reimbursed on the discretion of GFGNL.
- 2.2.3.4 Selected bidder will install radio equipment with proper insulation to avoid rainwater going inside radio equipment & damaging it.
- 2.2.3.5 After link installation, selected bidder will have to perform link testing to ensure adequate signal strength of received signal as per test schedule defined by GFGNL

and instruction of GFGNL official / other designated official.

- 2.2.3.6 Selected bidder will be responsible to restore the link as a scope of O&M of the link if radio equipment is damaged due to issues like rain, cyclone, lightening, earthing issue, voltage surge etc.
- 2.2.3.7 Any penalties/expenditure from respective authorities to GFGNL for the damage of asset during execution as well as O&M duration will be sole responsibility to HPIA.
- 2.2.3.8 Refer RFP Annexure X for minimum specification. Bidder will be responsible for designing of suitable foundation for various poles installed. Bidder will have to submit soil test report from authorized laboratory, foundation drawing must be approved by authorized structural engineer & quality of executed foundation work must be certified by authorized civil engineer.
 - 2.2.4 Installation of indoor & outdoor Cat 6 cable
 - 2.2.4.1 All the locations falling near to the Gram Panchayat (GP) location will be connected using 4 pair unshielded twisted pair Cat 6 cable wherein the total cable length required to connect the location from L2 switch available at GP will not be more than 90 Mtr.
 - 2.2.4.2 It is selected bidder's responsibility to use either indoor or outdoor Cat 6 cable as per field suitability & requirement and as per instruction of GFGNL's official.
 - 2.2.4.3 Outdoor Cat 6 cable must have HDPE jacket so that it can be installed underground (wherever required) & the cable must be rugged, durable & rodent resistant.
 - 2.2.4.4 High power electrical plant may produce switching transients and radio frequency emissions that may induce interference on the Cat 6 cable. Therefore, in addition to the rules imposed by the IEE Regulations, data cables shall not run parallel to ables, especially where these cables may carry heavy switching loads. If, however, this is unavoidable it is advisable to keep cables as far as possible.
 - 2.2.4.5 All acceptance test (FAT/link AT/NE AT/etc.) will be certified based on NOC performance report and as build submission. The performance report for each site / customer location shall be generated from the measurement tools (GFGNL's NMS & Helpdesk tool).
- 2.2.4.6 Proper precautions need to take in advance while implementing cable to avoid cut by animals (rat/squirrels/etc.) and/or other third-party vendors etc.
 - 2.2.4.7 Any penalties/expenditure from respective authorities to GFGNL for the damage of asset during execution as well as O&M duration will be sole responsibility to HPIA.

2.1 MIS Reports

Details of MIS reports to be submitted by HPIA during execution and O&M phase is provided with agreed format with state/GFGNL official. Following are few samples but not limited to,

Sr. No.	Report Type	Periodicity			
Reports Duri	Reports During Execution Phase				
1	Summary and brief field activity wise progress tracker	Daily			
2	Summary of issues/ complaints including resolved / unresolved / RCA/escalation status	Fortnightly			
3	Summary of fault/complain reported and pending at State/SIA end along with brief data details	Weekly			
4	Component wise IT infrastructure availability and resource utilization/ Total manpower deployed status including sub vendor if any	Weekly			
5	Execution SLA / (non) conformance report	Weekly			
6	Billing status reports including number of bills raised with bill value, bills accepted, bills under process, bills paid etc.	Quarterly			
7	Material status report including material availability at central warehouse, material availability etc.	Fortnightly			
8	Network design documents including Network plan, fibre layout, GIS inventory, OTDR, ABD (As-Built drawing), etc. (with Summary).	Monthly / as and when required			
9	Link testing, Delivery Report, link acceptance report	Daily			
10	Manpower attendance	Daily			
11	Any other reports- As and when required by Tenderer				
Note: The HPIA shall submit the periodical reports as mentioned above on a regular basis over e- mail and Project Management tool as per the prescribed formats provided by the State/SIA. Delay					

in the billing process due to non-adherence of above compliances/report submission will be sole responsibility of the bidder.

MIS reports during O&M:

Sr.	Depart Turne	Deviedicity	
No.	Report Type	Periodicity	
1.	Availability of Devices live vs faulty		
2.	Total No. of complaints raised		
3.	Ageing Report of issues/Complaints/Incidents	Weekly	
4.	Receive Signal Strength at LM including connectivity media (indicating an		
	alert if the signal strength is below the defined threshold)		
5.	Bandwidth Utilization (max, min, and average)	Weekly	
6.	Software upgrade/enhancement reports per network element		
7.	Configuration change reports Monthly		
8.	Attendance report of field manpower		
9.	SLA compliance reports		
10.	Preventive maintenance reports		
11.	Scheduled maintenance reports		
12.	Inventory reports	Quarterly	
	Service Availability, Downtime, Usage/Utilization, Fault & rectification,		
13.	Performance statistics-, Log of Network parameters along with Service		
	down time and % uptime achieved		
Note:	The HPIA shall submit all above reports as mentioned on a regular basis over	er e-mail and as	
per th	ne prescribed formats provided by the State/SIA. Delay in the billing proce	ess due to non-	
adher	ence of above compliances/report submission will be sole responsibility of the	e bidder.	

3. Scope of Work (SoW) for GFGNL

- 3.1. To build / extend the OFC Network up to Gram Panchayat. List of service ready Gram Panchayats will be shared with the selected bidder on routine basis. As on date, GFGNL has already lit up >99.99% GPs.
- 3.2. To implement & maintain BharatNet GPON Network up to Gram Panchayat.
- 3.3. GFGNL will provide raw AC power supply and earthing (if required) at Gram Panchayat (GP) for the last mile equipment to be installed by the selected bidder. In case, proper earthing is not available at GP/customer location, GFGNL's official / any other designated official will instruct selected bidder to implement new earthing pit and accordingly the line item quantity will be certified and paid. In case of new earthing, earthing value should be <=0.5 Ohm. Selected bidder will be responsible to supply & install power cable from tapping point to rack as per site requirement at no additional cost to GFGNL.
- 3.4. Other end (other than GP end) of the Last Mile network will be the end customer location. Providing AC power & space at customer location will be Government department's responsibility. If proper earthing will not be available at customer location, GFGNL official will instruct selected bidder to implement new earthing pit (as per technical feasibility at customer premise) for the protection of equipment like radio unit / media converter / router / switch, accordingly financial bid line item will be certified and paid to selected bidder.
- 3.5. GFGNL will provide space to install one 6U wall mount rack (if required) at GP location. GFGNL will also facilitate for fibre cable entry inside GP building. Bidders are requested to note that GFGNL discourages fresh installation of 6U rack at GP location. Bidders will have to analyze the space availability inside GFGNL's rack which is already available at GP location & will have to make all the efforts to install new equipment for customer connectivity into existing rack. Only in case of technical non-feasibility, GFGNL will allow bidders to install new 6U rack.
- 3.6. For wireless links, GFGNL / concerned Government Department official will allow to install 3 mtr pole on the terrace of the GP building if civil structure of the GP building seems capable to take a load of the pole. In such case, selected bidder will have to ensure no water seepage after pole installation. In case water seepage happens, selected bidder will have to implement all required remedial action(s) at his own cost to the satisfaction of Gram Panchayat Department official / GFGNL official / any other Government official.
- 3.7. For wireless links requiring installation of >3 mtr pole, GFGNL / concerned Government Department official will try to facilitate availability of required space in the GP campus for the installation of pole. However, it is expected from the bidder to adopt technology that is commensurate with the available infrastructure at site.
- 3.8. GFGNL will be responsible to provision required bandwidth in the BharatNet Phase II Network between L2 switch installed at GP location and SDC (State Data Centre). GFGNL will provide electrical ethernet port on L2 switch at all GP locations for connecting customers.

- 3.9. GFGNL will support the selected bidder to get RoW permission from respective Government departments. All type of RoW charges, BG/SD require by RoW agency will be paid by GFGNL.
- 3.9 For Wireless and/or Cat-6 aerial Connectivity: GFGNL will provide electrical Ethernet port (10/100/1000 Mbps RJ45) on L2 switch at all GP locations for connecting customers on any wireless and/or aerial cat-6 media.
- 3.10 For optical Wireline (aerial/UG) Connectivity: GFGNL will provide electrical Ethernet port (10/100/1000 Mbps RJ45) on L2 switch at all GP locations or for certain feasible site GFGNL will provide optical interface at GP end from existing FDMS where HPIA has to connect optical patch cord and rack mount Splitter to serve nearby Government institutes on optical fibre with LM termination of ONT (manageable Wi-Fi router) at each customer end.
- 3.11 At OLT, providing patch cords with suitable length will be in HPIA's (selected bidder's) scope. (Optical patching in between OLT co-located rack mounted existing Splitter (1:4) towards GP FDMS will be in scope of existing PIA). At GP end, Optical patch cord with rack mounted splitter, material, and optical patching activities in between GP end existing FDMS port to rack mounted Optical splitter will be in scope of bidder. Bidder has to bare this cost of material and services during this bid. Selected Bidder can explore field execution topology only after the GFGNL official approval based on technical, field feasibility and availability of infrastructure.
- 3.12 For horizontal customer connectivity on optical fibre(aerial/UG) with media converter or mini-OLT to be installed at existing GP, GFGNL will provide backhaul from the existing L2 switch 10/100/1000 Mbps RJ 45 interface at GP end.
- 3.13 HPIA has to note that in Package-A geographical area of GFGNL, OLT make is CDOT (CDOT SCM) while in Package-B OLT make is Tejas(TJ1400_Type-7SR) are used. And hence new ONT planning for horizontal customer connectivity can be plan by HPIA with compatibility of parented OLT make and model.

4. Fraud and Corrupt Practices

The Bidders and their respective officers, employees, agents, and advisers shall observe the highest standards of ethics during the Bidding Process and subsequent to the issue of the Award of Work and during the subsistence of the Contract. Notwithstanding anything to the contrary contained herein, or in the Award of Work or the Contract, the Purchaser shall reject a Bid, withdraw the Award of Work, or terminate the Contract, as the case may be, without being liable in any manner whatsoever to the Bidder as the case may be, if it determines that the Bidder, as the case may be,

has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, the Purchaser shall forfeit and appropriate the Bid Security or Performance Security as mutually agreed genuine pre-estimated compensation and damages payable to the Purchaser towards, inter alia, time, cost, and effort of the Purchaser, without prejudice to any other right or remedy that may be available to the Authority hereunder or otherwise.

Without prejudice to the rights of the Purchaser hereinabove and the rights and remedies which the Purchaser may have under the Award of Work or the Contract, if a Bidder, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or

indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the Award of Work or the execution of the Contract, such Bidder shall not be eligible to participate in any RFP issued by the Purchaser during a period of 2 (two) years from the date such Bidder, as the case may be, is found by the Purchaser to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.

For the purposes of this, the following terms shall have the meaning hereinafter respectively assigned to them:

(a) "Corrupt Practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Purchaser who is or has been associated in any manner, directly or indirectly with the Bidding Process or the Award of Work or has dealt with matters concerning the Contract or arising therefrom

(b) "Fraudulent Practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;

(c) "Coercive Practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding Process;

(d) "Undesirable Practice" means (i) establishing contact with any person connected with or employed or engaged by the Purchaser with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and

(e) "Restrictive Practice" means forming a cartel or arriving at any understanding or arrangement among Bidder with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

In case of Non-Compliance of RFP Specification:

a) Any time during the warranty period it is found that the materials supplied/Installed/commissioned are not as per the specification of the RFP/work order TENDERER/DDO reserves the right to ask the successful bidder to replace all such material at free of cost.

b) Successful bidder requires to attend and rectify the non-compliance within seven (7) days of receipt of such notice/information from the Tenderer/DDO. If, successful bidder fails to attend and rectify the same, then successful bidder shall reimburse Tenderer/DDO all costs and expenses incurred for such defect rectification.

5. Eligibility Criteria

- 5.1 Bidders qualifying against below mentioned criteria will be eligible to participate in this RFP.
- 5.2 As Bidder is allowed to make a consortium, "Lead Bidder" in below table & note under the table will be read as Sole Bidder in case of no consortium & Lead Bidder in case of consortium.

Sr. No.	Criteria			Documents Required
1.	The Lead Bidder and Consortium member must be registered in India under Companies Act 1956 or 2013 at least for 3 years as on 31/03/2023.			Certificate of Incorporation
2.	The Lead Bidder's Average Annual Turnover &Net worth must be as per below during last 3years. (Purely from Telecom service business)Bidder'sAverageNet worthparticipatingAnnualinTurnover (Rs.)		Copy of the last Three years (i.e., 2019- 20,2020-21,2021-22) audited financial statements /Audited Balance Sheet along with Statutory auditor's Certified Statement for turnover & net	
	1 zone 2 zones	>= Rs. 10 Cr >= Rs. 20 Cr	>=Rs. 1.5 Cr >=Rs. 2 Cr	worth.
	3 zones	>= Rs. 30 Cr	>=Rs. 3Cr	
	4 zones	>= Rs. 40 Cr	>=Rs. 4 Cr	

Sr. No.	Crit	eria	Documents Required
3.	The Lead bidder or Consortium member must have experience of Laying, Installation, Testing, Commissioning & Maintenance of Optical Fibre Cable (Underground or Aerial), Duct and accessories as per below in last 5 years as on bid submission date.		(Work order / Purchase order / Contract) And Work Completion Certificate Note – 1: Bidder will have to produce necessary supporting documents other than mentioned above to
	Bidder's participating in 1 zone 2 zones 3 zones 4 zones	n Experience (Km) >= 1000 Kms >= 2000 Kms >= 3000 Kms >= 4000 Kms	clearly prove completion of work in last 3 years. Note – 2: Bidder can submit separate documents for Project and O&M experience.
4.	The Lead bidder or Consortium member must have experience of Installation, Configuration, Testing, Commissioning & Maintenance of wireless links (licensed or unlicensed band radio) as per below in last 5 years as on bid submission date.		(Work order / Purchase order / Contract) And Work Completion Certificate Note – 1: Bidder will have to produce necessary supporting documents other than mentioned above to
	2 zones 3 zones	Experience >= 200 links >= 250 links >= 300 links >= 350 links	clearly prove completion of work in last 3 years. Note – 2: Bidder can submit separate documents for Project and O&M experience.
5.	The Lead bidder or Consortium member must have experience of Installation, Configuration, Testing, Commissioning & Maintenance of customer premise equipment (CPE) as per below in last 5 years as on bid submission date.Bidder's participating inExperience = 600 CPEs > = 1200 CPEs 3 zones2 zones>= 1200 CPEs = 1800 CPEs = 2400 CPEs		(Work order / Purchase order / Contract) And Work Completion Certificate Note – 1: Bidder will have to produce necessary supporting documents other than mentioned above to clearly prove completion of work in last 3 years. Note – 2: Bidder can submit separate documents for Project and O&M experience.

Sr. No.	Criteria	Documents Required
6.	The Lead bidder or Consortium member must have minimum 1 (One) operational office in each district of the zone(s) for which bidder wants to participate in this RFP. In case bidder does not have office in District(s), bidder should give an undertaking to open an office in District(s) within 45 days from the date of award of work order.	Copies of any two i.e., Property Tax /Electricity /Telephone Bill/ GST Registration/ Lease agreement OR undertaking to open Office in District(s), if selected within 45 days.
7.	The Lead bidder and Consortium member must not have been blacklisted / banned / barred / declared ineligible / declared having dissatisfactory performance by any government / quasi-government authority in India for supply of materials/ carrying out Operations and maintenance work of similar nature.	An undertaking by an authorized signatory of the company needs to be submitted in this regard
8.	The Lead Bidder should submit valid letter from each of the OEM (one and only one OEM for each component) - confirming the following: OEM shall ensure that all equipment / components / sub- components being supplied by them shall be supported for entire contract period. If the same is de-supported by the OEM for any reason whatsoever, the bidder shall replace it with an equivalent or better substitute that is acceptable to Tenderer without any additional cost to the Tenderer and without impacting the performance of the solution in any manner whatsoever.	Authorization letters / MAF (as per Annexure) from OEM/Vendors whose products are being quoted by the Bidder (only applicable to OFC, duct, radio, rack, media converter, router, switch, UPS & voltage stabilizer)Copy of valid Technical Specification Evaluation Certificate (TSEC) / Type Approval Certificate / AT certificate or copy of Application for fresh TSEC/TAC/AT certificate as applicable from each OEM whose products are being quoted by the Bidder (only applicable to OFC, duct, DWC & radio). Note: Bidder should have valid Type Approval Certificate (TAC) from Telecom Engineering Centre (TEC) / WPC, New Delhi or Technical Specification Evaluation Certificate (TSEC) from Quality Assurance Circle, BSNL, Bengaluru, against the respective technical specifications of this RFP. In case any of the quoted models does not have TAC/ TSEC then it should be applied for TSEC to Quality Assurance Circle, BSNL, Bengaluru

Sr. No.	Criteria	Documents Required
		or to TEC/WPC, New Delhi for the model against the technical specifications, at least one day before the bid submission date. The registration number allotted for the TSEC purpose by Quality Assurance Circle, BSNL, Bengaluru or for TAC purpose by TEC/WPC, New Delhi shall be submitted along with the bid. However, only type approved/TSEC approved products as per above specifications shall be accepted which shall have to be obtained before supply.
9.	The Lead bidder must have minimum 50 technical team working for bidder directly on their role.	Self-certification by the bidder's HR head on bidder's letter head
10.	Bidder and OEMs of proposed solution from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with Competent Authority as per OM No. 6/18/2019-PPD dated 23 rd July 2020 issued by Department of Expenditure, Gol	Self-certification from bidder and OEMs on Non-Judicial stamp of Rs. 300/- in the prescribed format (Annexure – IX), separately.
11.	The Sole Bidder or the Lead Bidder must have positive net worth in last three (3) financial years.	Certificate from statutory Auditor for positive net worth of last three Financial years (i.e., 2019-20,2020- 21,2021-22)

Note – 1:

1. If any Lead bidder applying in more than 1 zone defaults on any qualification criteria, then bidder's entire bid will be disqualified for all the zones.

Note – 2 : Consortium Criteria

- 1. Bidder is allowed to make a consortium with only one other bidder.
- 2. One Consortium partner can tie up with only one lead bidder for this RFP irrespective of number of zones considered by the Consortium for bidding.
- 3. Any lead bidder or member of consortium cannot participate as a bidding entity (lead or consortium member) in any other consortium in this RFP.

- 4. Parent or child organization including a group company of any lead bidder & consortium partner cannot participate as a bidding entity (lead or consortium member) in any other consortium in this RFP.
- 5. In case of consortium, the Lead Bidder must be specified by the bidder.
- 6. In case of a consortium, applicant consortia shall have a valid Memorandum of Understanding (MoU) / Consortium Agreement among all the members signed by the CEO / Country Head / Authorized Signatories of the companies dated prior to the submission of the bid. The MoU / Consortium Agreement shall clearly state the composition of the consortium who shall be the Lead bidder, the complete description of the partner and roles & responsibilities of the partners.
- 7. The consortium bid submitted without valid MoU / Consortium Agreement shall be treated as non-responsive.
- 8. The contract shall be signed with the Lead Bidder only and the Lead Bidder shall be single Point of Contact for this Project. PBG shall be submitted by the Lead Bidder.
- 9. The payments for the said project shall be released only in the name of Lead Bidder.
- 10. Lead Bidder shall be solely responsible for any failure liable to the Government for the execution of the project in accordance with the terms & conditions of the bid document and a statement of this effect shall be included in the MoU / Consortium Agreement.

6. Selection criteria & allotment of work

- 6.1 Bidder can submit bid(s) for as many zones as they want, but any successful bidder will be selected only for maximum 2 zones. If any bidder wins in more than 2 zones, then bidder will have to decide & convey to GFGNL within 2 days the 2 zones where he wants to accept WO and successful bidder's quotes for other zones will become null & void. For ex.: If any bidder wins in Zone A, B & C and GFGNL allots work in zones A & B, in this case L2, L3,...Ln bidders of zone C will be given a chance sequentially to match L1 price of zone C & whosever first matches will be allotted work for zone C. If no bidder from zone C matches L1 price, than L1, L2, L3,...Ln bidders of zone D and L2, L3,...Ln bidders of all other zones (A & B) will be given a chance to match L1 price of zone C in chronological order (from lowest price to highest price) & whosever first matches will be allotted work for zones.
- 6.2 There are separate financial bid tables provided for each zone on (n)Procure website. Bidder wanting to participate in multiple zones will have to submit financial bids for each zone separately in respective table. Evaluation will be done separately for each zone. The bidder with lowest bid (L1 lowest sum total of "Grand Total C0" in financial bid of any zone) will be selected for each zone. GFGNL reserves the rights to negotiate the rate of any line item(s) with selected bidder(s).

6.3 In case GFGNL will find any issue in the implementation work of any successful bidder in terms of quality or implementation timeline, GFGNL will have sole rights to exclude already allotted sites / customer locations from the scope of that bidder and "Risk Purchase" clause will be applied in such situation.

7. General Terms and Conditions

7.1 Agreement

- 7.1.1 The selected System integrators have to sign an agreement with GFGNL as per the format specified in the Annexure C.
 - 7.1.2 **Duration of Agreement:** This agreement shall be valid for a period as mentioned in Sr. No. 5 of clause B (Notice Inviting Proposal and Necessary Instruction) above. If at any stage during the tenure of this agreement, it comes to the notice of GFGNL, directly or through some other complaint, that the Business Partner had misrepresented the facts or submitted any false information or hidden any information which could have affected the signing of this agreement with the Business Partner, this agreement shall stand terminated immediately under intimation to the Business Partner.
 - 7.1.3 **Restrictions on Transfer of agreement:** The Business Partner shall not assign or transfer its right in any manner whatsoever under this agreement to a third party or enter into any agreement for sub-contracting and/or partnership relating to any subject matter of the agreement to any third party either in whole or in any part i.e., no sub-contracting/ partnership/ third party interest shall be created.
 - 7.1.4 **Liability:** Except as provided in this Agreement, hereinabove, neither party shall be liable to other party or any other party by virtue of termination of this Agreement for any reason whatsoever for any claim for loss or profit or on account for any expenditure, investment, leases, capital improvements or any other commitments made by the other party in connection with their business made in reliance upon or by virtue of this Agreement.
 - 7.1.5 The successful bidder shall sign a contract with GFGNL within 7 days of receipt of proforma contract from GFGNL; failing which their EMD and/or performance bank guarantee (PBG) shall be forfeited and GFGNL's decision to scrap the tender or negotiate with the second bidder (as per the final ranking) shall be binding on the first bidder.

7.2 Suspension of agreement:

7.2.1 GFGNL reserves the right to suspend the operation of this agreement, at any time, due to change in its own license conditions or upon directions from the competent government authorities. In such a situation, GFGNL shall not be responsible for any damage or loss caused or arisen out of aforesaid action. Further, the suspension of the agreement will not be a cause or ground for extension of the period of the agreement and suspension period will be taken as period spent.

7.3 Performance Bank Guarantee

- 7.3.1 The successful bidder who is awarded the Work Order in any particular zone, that bidder shall be required to deposit a Performance bank guarantee (refer annexure V) of Rs. 25 Lacs for that particular zone in the form of unconditional Bank Guarantee from any scheduled bank in favor of "Gujarat Fibre Grid Network Limited, Gandhinagar (from all Nationalized banks including the public sector banks IDBI Ltd. Or Private sector banks AXIS Bank, ICICI Bank and HDFC Bank) within 7 days of award of work, covering the period of contract and 180 days beyond the contract period. In case, the contract is further extended beyond the initial period, the Bank Guarantee will have to be accordingly extended/renewed by the successful agency/bidder. All incidental charges whatsoever such as premium, commission etc. with respect to the Bank Guarantee shall be borne by the successful bidder. Non-deposit of PBG within the stipulated time shall render the award of work invalid at the discretion of GFGNL.
- 7.3.2 If any bidder is selected in more than one zone, then bidder can submit one PBG with total amount required for all the zones (Rs. 25 Lacs * no. of zones) for which bidder is selected.

7.4 Earnest Money Deposit (EMD)

- 7.4.1 The EMD of unsuccessful bidders will be returned by the GFGNL, without any interest, as promptly as possible on signing of contract with the selected bidder or when GFGNL cancels the bidding process.
- 7.4.2 The Selected Bidder's EMD will be returned, without any interest, upon the Selected Bidder signing the Agreement and furnishing the performance guarantee in accordance with the provision thereof.
- 7.4.3 The decision of GFGNL regarding forfeiture of the EMD and rejection of bid shall be final and shall not be called upon question under any circumstances.
- 7.4.4 The EMD may be forfeited:
 - a) If a bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any; or
 - b) In the case of a successful bidder, if the bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time.
 - c) During the bid process, if a bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
 - d) During the bid process, if any information found wrong/manipulated/hidden in the bid.

7.5 Terms and Conditions of Bidders

7.5.1 Printed terms and conditions of the Bidders shall not be considered as forming part of their Bids.

7.6 Revelation of Prices

7.6.1 Prices in any form or by any reason before opening the Financial Bid should not be revealed, failing which the offer shall be liable to be rejected.

7.7 Tenderer's Right to vary Scope of Contract

7.7.1 The quantities mentioned in financial bid tables are indicative and provided to enable the bidders to take a judgement about the volume of the scope of work in any zone. GFGNL doesn't provide any guarantee about the total number of locations to be allotted and timeline of allotment. GFGNL will keep issuing intimation orders to all the selected bidders as per the requirement of the respected Government departments and fund availability.

7.8 Confidentiality

- 7.8.1 The SI shall not use Confidential Information, the name, or the logo of the Tenderer except for the purposes of providing the Service as specified under this RFP;
- 7.8.2 The SI shall not, either during the term or 6 months after expiration of this Contract, disclose any proprietary or confidential information relating to the Services, Contract or the network architecture, Tenderer's business plan or operations without the prior written consent of the Tenderer.
- 7.8.3 The SI may only disclose Confidential Information in the following circumstances to a member of the SI's Team ("Authorized Person") with the prior written consent of the Tenderer if:
 - a. the Authorized Person needs the Confidential Information for the performance of obligations under this contract;
 - b. the Authorized Person is aware of the confidentiality of the Confidential Information and is obliged to use it only for the performance of obligations under this contract
- 7.8.4 The SI shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidential agreement with the members of the subcontractors and other service provider's team members to the satisfaction of the Tenderer.

- 7.8.5 The SI shall be responsible for any breach of the confidentiality clause by its antecedents or delegates or its subcontractors.
- 7.8.6 The SI shall notify the Tenderer promptly if it is aware of any disclosure of the Confidential Information otherwise than as permitted by this Contract or with the authority of the Tenderer.
- **7.8.7** The Tenderer reserves the right to adopt legal proceedings, civil or criminal, against the SI in relation to a dispute arising out of breach of obligation by the SI under this clause.

7.9 Severance

7.9.1 In the event any provision of this Contract is held to be invalid or unenforceable under the applicable law, the remaining provisions of this Contract shall remain in full force and effect.

7.10 Compliance of laws

- 7.10.1 SI shall perform their duties in strict compliance with all applicable laws in India along with rules & regulations of the duly constituted Government authorities in India and shall obtain all licenses and necessary approvals, if any, required by laws in India in connection with the services to be rendered hereunder.
- 7.10.2 Services provided to the customers shall be subject to Indian Telegraph Act 1885 and DoT / TRAI directions.
- 7.10.3 SI shall be responsible for monitoring of data traffic from their customers w.r.to unlawful activities.
- 7.10.4 SI shall be responsible to set up all required Networking equipment for lawful interception (LI) and provide all the required logs necessary for lawful interception (LI) to any of the law enforcement agencies as and when required.

7.11 Indemnity

- 7.11.1 The SI shall indemnify and defend GFGNL and its representatives & employees and hold GFGNL, its representatives, employees harmless from:
 - a) Damages and losses caused by its negligent or intentional act or omission, or any damages and losses caused by the negligent act of any third party or sub-contractor or agency engaged by the SI;
 - b) Damages and losses resulting from the non-compliance with the established obligations; Third Party claim against GFGNL or its nominated agency that any Deliverables/Services/Equipment provided by the SI infringes a copyright, trade secret, patents, or other intellectual property rights of any third party in which

case the SI shall defend such claim at its expense and shall pay any costs or damages that may be finally awarded against GFGNL or its nominated agency.

- c) Any environmental damages caused by SI and/or its representatives or employees or employees of any third party or sub-contractor or agency engaged by the SI.
- d) Breach (either directly by SI or through its representatives and/or employees) of any representation and guarantee declared herein by SI;
- e) Any and all claims, actions, suits, proceedings, taxes, duties, levies, costs, expenses, damages, and liabilities, including attorneys' fees, arising out of, connected with, or resulting from or arising in connections with the services provided due to neglect, omission or intentional act.

7.12 Arbitration

7.12.1 Except otherwise provided in this RFP in the event of any question or interpretation of any clause, dispute or difference or to any other claim, right, matter or thing whatsoever in any way arising out or relating to this RFP whether arose during the progress of the work or after the cancellation, termination, completion or abandonment thereof, shall be settled by the parties amicably through negotiation within a period of 30 days of the notice by other party, failing which, the dispute shall be referred to a three member committee appointed by the BOD (Board of Directors), GFGNL. The arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act, 1996 or any statutory modification of re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceedings. In case of dispute not getting resolved by the aforementioned three-member committee, the Chief Secretary of Government of Gujarat shall appoint an arbitrator. The arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and shall give reasons for the award. The fee payable to arbitrator shall be paid equally by both the parties.

7.13 Clarification

- 7.13.1 When deemed necessary, during the tendering process, the Tenderer may seek clarifications whenever, wherever required during the bid evaluation process on any aspect from any or all the Bidders. However, that would not entitle the Bidder to change or cause any change in the substance of the tender submitted or price quoted.
- 7.13.2Tenderer reserves the right to seek clarifications on the already submitted documents.

7.14 Taxes

- 7.14.1 Taxes shall be paid extra on actual by SI, as applicable while making all types of payment to GFGNL. The taxes prevailing at the time of raising the invoice shall be paid.
- 7.14.2 Payment for GST portion of Invoice will be released once GST Credit will be reflected in GSTR2A/GSTR2B of GFGNL.

7.15 Rejection Criteria

7.15.1 Besides other terms & conditions highlighted in the RFP, bids may be rejected under following circumstances:

General Rejection Criteria

- a. Bids submitted without or improper Tender fee and EMD.
- b. Bids received through Telegraphic / Fax / E-Mail / Hard copies except, wherever required.
- c. Bids which do not conform to unconditional validity of the bids as prescribed in the RFP.
- d. If the information provided by the Bidder is found to be incorrect / misleading at any stage / time during the bid evaluation process or during Contract period after selection of the bidder.
- e. Any effort on the part of a Bidder to influence the Tenderer's bid evaluation, bid comparison or contract award decisions.
- f. Bids received by the Tenderer after the last date & time for receipt of bids prescribed by the Tenderer in RFP.
- g. Bids without Power of Attorney and any other document consisting of adequate proof of the ability of the authorized signatory to bind the Bidder.

Technical Rejection Criteria

- a. Technical Bid containing financial details.
- b. Revelation of Prices in any form or by any reason before opening of the Financial Bids.
- c. Failure to furnish all information mentioned in the RFP or submission of a bid not substantially responsive to the RFP in every respect.
- d. Bidders not quoting for the complete scope of work as indicated in the RFP, addendum (if any) and any subsequent information given to the Bidder.

- e. Bidders not complying with the material, specifications and General Conditions of the Contract as stated in the RFP.
- f. The Bidder not conforming to unconditional acceptance of all the terms and conditions set out in the RFP (and subsequent clarification/corrigendum, if any) document.
- g. If the bid does not conform to the timelines indicated in the RFP.

Financial Rejection Criteria

- a. Incomplete Financial Bid
- b. Financial Bids that do not conform to the RFPs' financial bid format.
- c. If there is an arithmetic discrepancy in the financial bid calculations, the Tenderer shall rectify the same. If the Bidder does not accept the correction of the errors, it may be rejected.

7.16 Time is of Essence

7.16.1 Time shall be of the essence in respect of any date or period specified in this RFP or any notice, demand or other communication served under or pursuant to any provision of this RFP and in particular in respect of the completion of the delivery of services to Government offices / locations / Government schools by the SI by the completion date.

7.17 Publicity

7.17.1 The SI shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Tenderer first gives the SI its written consent.

7.18 Force Majeure

7.18.1 If, at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or act of God (hereinafter referred to as events) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such an event come to an end or cease to

exist, and the decision of the Tenderer as to whether the deliveries have been so resumed or not shall be final and conclusive. Further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may, at its option, terminate the contract.

7.19 Risk Purchase

- 7.19.1 If the selected bidder of any particular zone (referred to as P1 zone here in this clause) fails to perform its obligations (or any part thereof) under this scope of this RFP or if the scope of this RFP is terminated by the Tenderer due to breach of any obligations of the selected bidder under scope of this RFP, the Tenderer reserves the right to procure the same or equivalent Hardware / Services / Deliverables from other sources as per options mentioned below.
 - 1. from successful bidder of other zones who agrees to execute the work at L1 discovered rate of P1 zone or L1 discovered rate of their respective zone(s) whichever is lower.
 - from L2 / L3 /...Ln bidder of the P1 zone (where n is the total number of bids received in P1 zone) with the first bidder out of L2 / L3 /...Ln who agrees to match the price of L1 discovered rate of P1 zone.
 - 3. from any other "alternate source". The procurement from "alternate source" shall be done, as far as possible, through Government's procurement guidelines as deemed appropriate by the tenderer.
- 7.19.2 Above mentioned procurement will be done at the selected bidder's (who has failed to perform its obligations & thus defaulted) risk, cost and responsibility. Any incremental cost borne by the Tenderer in procuring such Hardware / Services / Deliverables shall be borne by the selected bidder (who has failed to perform its obligations & thus defaulted). Any such incremental cost incurred in the procurement of such Hardware / Services / Deliverables from other source will be recovered from the pending due and payable Payments / Security Deposit / Bank Guarantee provided by the selected bidder (defaulted bidder) under this scope of this RFP and if the value of the Hardware / Services / Deliverables under risk purchase exceeds the amount of pending payable payments / Security Deposit and / or Bank Guarantee, the same may be recovered, if necessary, by due legal process.
- 7.19.3 In this case of risk purchase, L1 bidder(s) of other zone(s) or L2 / L3 /...Ln bidder of the P1 zone or any alternate source will have to submit performance bank guarantee @ 10% of the total value of the work allotted to the bidder.

7.20 Termination

- 7.20.1 The Tenderer may, terminate this Contract in full or in part by giving the PIA a prior and written notice indicating its intention to terminate the Contract under the following circumstances:
 - a) Where the Tenderer is of the opinion that there has been such Event of Default on the part of the PIA which would make it proper and necessary to terminate this Contract and may include failure on the part of the PIA to respect any of its commitments with regard to any part of its obligations under its Bid, the RFP or under this Contract including the following:
 - i. failure to perform the obligations under the Contract;
 - ii. the PIA and its team have failed to conform with any of the service specifications as set out in the RFP and the Contract;
 - iii. the PIA has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Proposal, the RFP and this Contract;
 - iv. The PIA has failed to comply with any terms and conditions of this RFP & the Contract;
 - v. There is an undue delay in achieving the agreed timelines for delivering the services under this Contract due to reasons solely attributable to the PIA;
 - vi. If it comes to knowledge of the Tenderer that the PIA or any of their personnel have been involved in any fraudulent or corrupt practices or any other practice of similar nature;
 - vii. Where it comes to the Tenderer's attention that the PIA (or the PIAs' Team) is in a position of actual conflict of interest with the interests of the Tenderer, in relation to any of the terms of the PIA's Bid, the RFP or this Contract.
 - viii. Where the HPIA's ability to survive as an independent corporate entity is threatened or is lost owing to any reason whatsoever, including inter-alia the filing of any bankruptcy proceedings against the PIA, any failure by the PIA to pay any of its dues to its creditors, the institution of any winding up proceedings against the HPIA or the happening of any such events that are adverse to the commercial viability of the HPIA. In the event of the happening of any events of the above nature, the Tenderer shall reserve the right to take any steps as are necessary, to ensure the effective transition of the project to a successor PIA and to ensure business continuity.
 - b) Where there has been an occurrence of such Event of Defaults, inter alia, as stated above, the GFGNL shall issue a notice of default to the PIA, setting out

specific defaults / deviances / omissions and providing a period of up to thirty (30) days to enable the PIA to remedy the default/ deviances / omissions committed. It shall be the responsibility of the PIA to maintain the agreed Quality of Service, even during the period when the notice for termination of agreement is pending and if the Quality of Performance of Solution is not maintained, during the said notice period, it shall be treated as material breach liable for termination at risk and consequent of PIA and Performance Bank Guarantee shall be forfeited, without any further notice.

- c) Termination for Insolvency: The Tenderer may at any time terminate the Contract by giving written notice to the PIA, without compensation to the PIA, if the PIA becomes bankrupt or otherwise insolvent, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued or shall accrue thereafter to the Tenderer.
- d) **Termination for Convenience:** The Tenderer, may, by prior written notice sent to the PIA at least 3 months in advance, terminate the Contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the Tenderer's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.
- 7.20.2 The PIA may, subject to approval by the Tenderer, terminate this Contract before the expiry of the term by giving the Tenderer a prior and written notice at least 6 months in advance indicating its intention to terminate the Contract.

7.21 Consequences of termination

- 7.21.1 In the event of termination of this contract due to any cause whatsoever, the contract with stand cancelled effective from the date of termination of this contract.
- 7.21.2 In case of exigency, if the Tenderer gets the work done from elsewhere, the difference in the cost of getting the work done shall be borne by the PIA as mentioned in clause 6.19 (Risk Purchase) unless the Termination is due to any act and/or omission by the reason solely attributable to Tenderer.
- 7.21.3 Where the termination of the Contract is prior to its stipulated term on account of a Default on the part of the PIA or due to the fact that the survival of the PIA as an independent corporate entity is threatened/has ceased, or for any other reason, whatsoever, the Tenderer through re-determination of the consideration payable to the PIA as agreed mutually by the Tenderer and the PIA or through a third party acceptable to both the parties may pay the PIA for that part of the Services which have been authorized by the Tenderer and satisfactorily performed by the PIA up to the date of

termination. Without prejudice to any other rights, the Tenderer may retain such amounts from the payment due and payable by the Tenderer to the PIA as may be required to offset any losses caused to the Tenderer as a result of any act/omissions of the PIA. In case of any loss or damage due to default on the part of the PIA in performing any of its obligations with regard to the execution of the scope of work under this Contract, the PIA shall compensate the Tenderer for any such loss, damages, or other costs, incurred by the Tenderer. Additionally, other members of its team shall perform all its obligations and responsibilities under this Contract in an identical manner as were being performed before the collapse of the PIA as described above in order to execute an effective transition and to maintain business continuity. All third parties shall continue to perform all/any functions as stipulated by the Tenderer and as may be proper and necessary to execute the scope of work under the Contract in terms of the PIA's Bid, the RFP, and this Contract.

- 7.21.4 Nothing herein shall restrict the right of the Tenderer to invoke the Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity, and pursue such other rights and/or remedies that may be available to the Tenderer under law.
- 7.21.5 The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of this Contract that are expressly or by implication intended to come into or continue in force on or after such termination.
- 7.21.6 Actions pursuant to Termination of Agreement:
 - Notwithstanding any other rights and remedies provided elsewhere in the agreement, upon termination of this agreement.
 - a) Neither Party shall represent the Other Party in any of its dealings.
 - b) Neither Party shall intentionally nor otherwise commit any act(s) as would keep a third party to believe that the other Party is still the former Party's service provider, as the case may be.
 - c) Each party shall stop using the other Party's name, trademark, etc., in any audio or visual form.

7.22 Insurance

7.22.1 The Goods supplied & installed under this Contract shall be fully insured by the selected bidder, against any loss or damage at the Tenderer's designated location for entire contract period. The insurance taken should cover risks such as flood, theft, fire, earthquake, and cyclone (for wind speeds up to 120 kmph). The bidder shall submit to the GFGNL, certificate of insurance issued by the insurance company, indicating that such insurances have been taken against entire solution & certificate has to be submitted by bidder to GFGNL. Bidder shall be designated as the 'loss payee' in such

insurance policies; bidder shall be liable to pay premium for the insurance policy & shall ensure that each & every policy shall keep updated from time to time till end of contract period. In case of delayed procurement of insurance from selected bidder, all responsibilities of all supplied and/or installed equipment will be on bidder before taking the insurance.

- 7.22.2 The Bidder shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the goods during their shipment from respective manufacturing / shipment site of the OEM to the port of landing.
- 7.22.3 All charges like transportation charges, octroi, etc. that may be applicable till the goods are delivered at the respective site of installation shall also be borne by the bidder.
- 7.22.4 The bidder during the term of this contract undertakes to ensure that it has taken or shall take up all appropriate insurances for the delivery of goods that it is required to undertake under law as well as to adequately cover its obligations under this Contract: shall take out and maintain, at his own cost insurance with IRDA approved insurers against the risks, and for the coverage, as specified below: shall pay all premium in relation thereto and shall ensure that nothing is done to make such insurance policies void or voidable at the Tenderer's request, shall provide certificate of insurance to the Tenderer showing that such insurance has been taken out and maintained. Employer's liability and workers' compensation insurance in respect of the Personnel of the bidder / bidder's Team, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and Insurance against loss of or damage to (i) equipment or assets procured in full or in part for fulfilment of obligations under this Contract (ii) the bidder's assets and property used in the performance of the Services.
- 7.22.5 In case of theft of any asset, successful bidder(s) will have to carry out all required process to lodge police complain / FIR. GFGNL will assist bidder(s) wherever required.

7.23 General

- 7.23.1 Relationship between the Parties
 - a. Nothing in this Contract constitutes any fiduciary relationship between the Tenderer and PIA / PIAs' Team or any relationship of employer employee, principal and agent, or partnership, between the Tenderer and PIA.
 - b. No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms & conditions of this Contract.

c. The Tenderer has no obligations to the PIA's Team except as agreed under the terms & Conditions of this Contract.

7.23.2 No Assignment

The PIA shall not transfer any interest, right, benefit or obligation under this Contract without the prior written consent of the Tenderer.

7.23.3 Survival

The provisions of the clauses of this Contract and RFP in relation to documents, property, Intellectual Property Rights, indemnity, publicity and confidentiality and ownership survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless the Tenderer notifies the PIA of its release from those obligations.

7.23.4 Entire Contract

The terms & conditions laid down in the Contract and all the Annexures thereto as also the Bid and any attachments/annexes thereto shall be read in consonance with and form an integral part of this Contract. This Contract supersedes any prior Contract, understanding or representation of the Parties on the subject matter.

7.23.5 Governing Law

This Contract shall be governed in accordance with the laws of India.

7.23.6 Jurisdiction of Courts

The courts of India at Gandhinagar/Ahmedabad have exclusive jurisdiction to determine any proceeding in relation to this Contract.

7.23.7 Compliance with Laws

The PIA shall comply with the laws in force in India in the course of performing this Contract.

7.23.8 Notices

- a) A "notice" means:
- i. A notice; or

ii. A consent, approval or other communication required to be in writing under this Contract.

All notices, requests or consents provided for or permitted to be given under this Contract shall be in writing and shall be deemed effectively given when personally delivered or mailed by pre-paid certified/registered mail, return receipt requested, addressed as follows and shall be deemed received two days after mailing or on the date of delivery if personally delivered:

To Tenderer at:

GFGNL

Attn: Managing Director (MD), GFGNL [Phone:]

[Email:] md@bharatnet.gujarat.gov.in

[Fax:] To PIA at: Attn: [Phone:] [Email:] [Fax:]

Any Party may change the address to which notices are to be directed to it by notice to the other parties in the manner specified above.

A notice served on a Representative is taken to be notice to that Representative's Party.

7.23.9 Waiver

a. Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights.

b. A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision.

c. The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

7.23.10 Modification

Any modification of this Contract shall be in writing and signed by an authorized representative of each Party.

7.23.11 Application

These General Conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them.

7.24 Transfer of Ownership

- 7.24.1 The bidder must transfer all titles to the assets and goods procured for the purpose of this project to the Tenderer upon acceptance of each customer link & equipment.
- 7.24.2 The asset(s) so created shall be fully owned by the Government of Gujarat and held on its behalf by GFGNL.

8. Implementation timeline and penalties

- 8.1 GFGNL will give intimation order to selected bidder with the list of number of locations to be connected with BharatNet Phase II Network.
- 8.2 GFGNL will approve locations' connectivity based on capex & final requirement of respective departments and fund availability.

- 8.3 Bidder will have to submit implementation strategy with media connectivity and details for each location & each site's distance and connectivity from GFGNL PoP, i.e., GramPanchayat to Government Institute or in very few cases where sites co-located and submit the details to GFGNL for approval.
- 8.4 Bidder has to ensure not to plan or execute wireless repeater to serve government institutes.
- 8.5 Bidder will have to adhere to below mentioned timeline for implementation of connectivity (deliverable of Sr. No. 3 below), otherwise penalty will be applicable for each delayed site / location as per details mentioned in below table.

Mileston e	Milestone Description	Timeline	Penalty	Maximum Penalty
	Date of issuance of Work Order	T0 (which marks start of contract period for 5 years)	NA	NA
1	Date of issuance of intimation order for locations to be connected (Zone wise)	т	NA	NA
2	Approval of final link topology by GFGNL for a given lot (lot consists of sites from intimation orders) request submitted by HPIA	T1	NA	NA
3	Establishing end to end connectivity of location with SDC and successful testing of internet & intranet connectivity and signing of WCC (work completion certificate) from GFGNL (Deliverable: ITP sheets for completed work for OFC/wireless connectivity, link AT report for all type of connectivity- wireless/wireline, WCC)	No. of approved locations in a lot a) <= 100 lot size, T+1 Month 100% locations b) > 100 & <= 1000 lot size, T1+1 Month 60% locations T1+2 Month Balance Locations c) > 1000 lot Size or part thereof T1+1 Month 50% locations T1+2 Month 30 % locations T1+3 Month Balance Locations	Rs. 1000per day per location	Maximum penalty ceiling for any site / location shall be equal to 20% of the actual payable capex value certified for that site / location based on executed work

Note:

- 1. All the timeline mentioned in above table will be calculated from the actual date of completion of respective previous milestone.
- *For bulk lot intimation order size is more than 3000 locations, selected bidder has to deliver within 3 months and no sites go beyond 3 months. Above all, if in any case lot size high (For example, 7000 sites) and if selected bidder maintain end to end monthly delivery of 1000 sites, there will be no penalty to HPIA
- GFGNL will take few days to approve sites on submitted topology and media request by HPIA, after consultation with respective departments and other relevant parameters. HPIA has to ensure to submit the approval request in fixed format including all sites of execution order lot in single request.
- 4. Delay penalty (if any) for all non-feasible & cancelled sites will be recovered from the bills of the other sites of the respected intimation order. GFGNL will keep recovering penalty amount from all the running bills as per calculation and process requirement.
- 5. No payment will be applicable for all non-feasible & cancelled sites.
- 6. Formats of ITP sheet, link AT reports, WCC etc. will be finalized with selected bidder(s) as per technical requirements.
- i) Penalty for random inspection
 - a) On random inspection of UG wireline OFC depth: Tenderer or its representative will do random inspection / check of actual depth of cable laid against the data recorded in ITP sheets on sample basis from received lot. If any wrong data entry for depth is found in ITP sheets (all those recorded depth points deviated by more than 10 cm than actual depth found in a pit will be considered as a wrong data entry. For ex.: if 900 mm depth is recorded on ITP sheet column & 780 mm depth is found in a trial pit, then this case will be applicable for penalty. GFGNL will decide the mechanism later on with selected bidder(s) about no. of pits to be excavated for checking, averaging out the reading of various pits etc.), than a random penalty of rupees 50,000/- will be levied per instance. Selected bidder(s) will have to support GFGNL in excavating the inspection pits as per instruction of GFGNL's official without any additional cost to GFGNL.
 - b) On Random inspection of wireless: Tenderer or its representative will do random inspection/check of wireless connectivity on sample basis from received lot. On field if any deviation found on guideline suggested in this document, including but not limited to tower/mast earthing, aviation lamp, weather and/or water proofing, cable

tie, cable loop, conducting activities etc. and air distance and/or any of the wrong data entry for distance found in received documents

- c) On Random inspection of **aerial wireline**: Tenderer or its representative will do random inspection/check of aerial wireline connectivity on sample basis from received lot. On field if any deviation found on guideline suggested in this document, including but not limited to execution guidelines, cable tie, cable loop, conducting activities etc. and air distance and/or any of the wrong data entry for distance found in received documents
- 9. O&M SLA & Penalties

	Proposed quarterly SLA Uptime / Availability of link per location & penalties thereof					
Sr. No	Uptime Penalty					
1	>= 99.50%	Nil				
2	>= 97.00% & < 99.50%	2% of quarterly opex charges to be paid for respective site				
3	>= 96.00% & < 97.00 %	3% of quarterly opex charges to be paid for respective site				
4	>= 95.00% & < 96.00 %	5% of quarterly opex charges to be paid for respective site				
5	>= 94.00% & < 95.00 %	7% of quarterly opex charges to be paid for respective site				
6	>= 90.00% & < 94.00 %	10% of quarterly opex charges to be paid for respective site				
7	< 90%	20% of quarterly opex charges to be paid for respective site				

- 9.1. In addition to the above-mentioned penalty wherein average quarterly uptime % will be calculated for each site / location, below mentioned penalty will also be applicable.
- 9.2. If any site / location will be down for more than 24 Hrs. due to any reason attributable to the selected bidder(s), an additional penalty of Rs. 500 per day per location will be levied.

Sr.	Fault Work	Time	Penalty
No	Type	Duration	
1	Site Down More than 24 Hrs. in EMS/NMS*	1 Day	If any site / location will be down for more than 24 Hrs. due to any reason attributable to the selected bidder(s), an additional penalty of Rs. 500 per day per location will be levied

*Till the GFGNL NMS Bucket finalized GFGNL may track the ticket based on helpdesk TT report.

9.3. Penalty for random inspection of depth: Tenderer or its representative will do random inspection / check of actual depth of cable laid against the data recorded in ITP sheets. If

any wrong data entry for depth is found in ITP sheets (all those recorded depth points deviated by more than 10 cm than actual depth found in a pit will be considered as a wrong data entry. For ex.: if 900 mm depth is recorded on ITP sheet column & 780 mm depth is found in a trial pit, then this case will be applicable for penalty. GFGNL will decide the mechanism later on with selected bidder(s) about no. of pits to be excavated for checking, averaging out the reading of various pits etc.), then a random penalty of rupees 50,000/- will be levied per instance. Selected bidder(s) will have to support GFGNL in excavating the inspection pits as per instruction of GFGNL's official without any additional cost to GFGNL.

Other Criteria			Penalty	Maximum Penalty
Random inspection of UG wireline depth/ Aerial wireline/wireless connectivity/	Random site inspection and identifications per site from sample lot are eligible for penalty within one month of site execution	i) ii)	Random penalty of rupees 50,000/- per site in UG wireline depth Random penalty of rupees 5,000 per site in wireless and aerial connectivity method	NA

9.4. Selected bidder(s) will have to deploy minimum 2 suitable manpower resources per zone (resource must be BE (Bachelor of Engineering) / B. Tech degree holder and must have >=3 years of total telecom experience) in GFGNL's office / NOC who will be responsible for assigning trouble tickets to field resources, coordination with their field manpower for fault resolution, coordination with GFGNL NOC & other Project stakeholders etc. Selected bidder(s) will have to deploy at least 1 manpower once total 50 connections are established by the bidder in a particular zone. 2nd manpower will be deployed once total 200 connections are established by the bidder in a particular zone. Bidder may increase manpower count in future if required at his own cost.

Number of		A codoraio	Experience		
Resources (per Zone)	Location	Academic Qualification	(In Years)	Responsibilities	
2	At Backoffice- Gandhinagar	BE (Bachelor of Engineering)/B. Tech in Electronics and Communications or equivalent	>=3 Years in suitable field	For assigning trouble tickets to field resources, coordination with their field manpower for fault resolution, coordination with GFGNL NOC & other Project stakeholders etc.	

Note:

- 1. For the Calculation of SLA's, the site / customer location shall be taken as unit.
- 2. The performance report for each site / customer location shall be generated from the measurement tools (GFGNL's NMS & Helpdesk tool).
- 3. Maximum penalty ceiling for any particular site / location shall be equal to 20% of the total quarterly opex charges to be paid for respective site.
- 4. Bidder may increase manpower counts in the future including field FRT Team if required to maintain field activities and to maintain the SLA with approval from GFGNL without any cost to GFGNL.
- 5. New selected HPIA has to take over existing GFGNL connected/delivered link and GFGNL will pay 8% of capex (based on discover rate through this bid) per site /location every year as per O&M charge for that old site/location.

10. Payment Schedule

Capex payment:

- 10.1. Selected bidder will be allowed to submit 1 bill every fortnight. Bidder will add all those locations in the bill for which WCC (work completion certificate) is signed by end customer.
- 10.2. All payments shall be released after certification of Delivery and Implementation Milestones by GFGNL official and/or Appointed TPA from GFGNL.
- 10.3. GFGNL will make payment of the bill within 1 month once all required documents are submitted by the bidder along with bill to the satisfaction of GFGNL. GFGNL will make payment after deduction of any applicable penalties.

Opex payment:

- 10.4. GFGNL will pay to selected bidder 8% of capex amount of any particular active site / location every year as an O&M charge for operation & maintenance activities for that location. GFGNL will make O&M payment after deduction of any applicable penalties. For calculation of 8% O&M amount, total actual capex will be considered irrespective of any project phase penalties levied on bidder for any particular site as per Milestones 2 & 4 of clause "Implementation timeline and penalties".
- 10.5. Bidder will be allowed to submit quarterly bill for O&M. Bidder will add all those active locations in quarterly O&M bill for which WCC (work completion certificate) is signed & thus the location has entered into O&M phase.
- 10.6. For any particular quarter, pro-rata O&M amount will be calculated for all those locations for which WCC is signed within same quarter.
- 10.7. Subcontracting Selected bidder(s) will be allowed to sub-contract only labour work like trenching & ducting, cable blowing / pulling, aerial cable installation etc. where labours execute the work in field. Selected bidder(s) will not be allowed to sub-contract the entire Project work to other organization, therefore selected bidder(s) will be responsible to execute & Project manage the work through its own on role team members. Sub-contracting the labour work shall also not relieve the selected bidder(s) from any liability or obligation under the Contract.

Annexure – I : Bid Document checklist

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
Quali	fication Criteria	•	
1.	Demand Draft as bid processing fee		
2.	EMD as Bid Security (DD/ BG as per Annexure V)		
Techr	nical Qualification		
3.	Cover Letter (Annexure I)		
4.	Bidder's information sheet (Annexure II)		
5.	Enclose copy of Certificate of Incorporation/ Registration Certificate of the firm		
6.	Copy of Certificate from the Statutory auditor/CA clearly specifying the annual turnover for the specified years. (2019-20,2020-21,& 2021-22).		
7.	Copy of proof of office address		
8.	Acknowledgement/ Copies of Income tax refund (ITR) filed for last three financial years i.e., 2019-20,2020-21,& 2021-22		
9.	Copy of valid GST registration		
10.	Copy of valid PAN card		
11.	Undertaking by the bidder for not being barred by any State/ Central Government/PSU		
12.	Self-certification by the bidder's HR heads on bidder's letter head mentioning no. of employees		
Finan	cial Proposal		
13.	Commercial bid		

Annexure – II: Cover Letter

(To be Signed and submitted by the agency on their letter head)

To, Chief Finance Officer (CFO) Gujarat Fibre Grid Network Limited (GFGNL), Block No: 6, 5th Floor, Udyog Bhavan, Sector-11, Gandhinagar -382010

Sir,

I have carefully gone through the Terms & Conditions contained in "**Request for Proposal (RFP) for Selection of Project Implementation Agency (PIA) for Various Connectivity through BharatNet Network (Reference No:** GFGNL/GFG/e-file/263/2022/0113/Commercial-Utilization)" and declare that all the provisions mentioned in the RFP document are acceptable to my Company.

I/We agree for unconditional acceptance of all the terms and conditions set out in the RFP (and subsequent clarification/corrigendum, if any) document. I/we agree that you are not bound to accept any RFP response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products / services specified in the RFP response.

I/We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Annexure – III : Bidder Information Sheet

(To be filled for both members in case of consortium)

(To be Signed and submitted by the agency on their letter head)

Particulars to be provided	Responding	Firm's / Company		
l'alticulars to be provided	Details to be provided			
c details				
Name of the Bidder				
Correspondence details of the Bidder:	Corporate Office	Local Office		
Telephone No & Email Address				
Contact person details (Name, Designation Contact number etc.), to whom all references shall be made regarding this RFP				
Details of ownership (Name and Address of the Board of Director, Partners etc.)				
Name of the authorized Signatory who is authorized to sign all the relevant documents				
Address of office in Ahmedabad/ Gandhinagar (if any)				
ails for registration under Companies Act, 1956				
Registration Number of the Bidder in case of company/LLP				
Place of registration				
Date of registration				
Product/service for which firm is registered				
Validity Period, if applicable				
ails for registration with appropriate authorities				
GST registration details (Registration number and details)				
PAN No				
	Correspondence details of the Bidder: Telephone No & Email Address Contact person details (Name, Designation Contact number etc.), to whom all references shall be made regarding this RFP Details of ownership (Name and Address of the Board of Director, Partners etc.) Name of the authorized Signatory who is authorized to sign all the relevant documents Address of office in Ahmedabad/ Gandhinagar (if any) ails for registration under Companies Act, 1956 Registration Number of the Bidder in case of company/LLP Place of registration Date of registration Product/service for which firm is registered Validity Period, if applicable ails for registration with appropriate authorities GST registration details (Registration number and details)	Particulars to be providedDetails toc detailsImage: Composition of the BidderCorporateCorrespondence details of the Bidder:OfficeCorrespondence details of the Bidder:CorporateContact person details (Name, Designation ContactImage: Contact person details (Name, Designation Contactnumber etc.), to whom all references shall be madeImage: Contact person details (Name and Address of the Board ofDetails of ownership (Name and Address of the Board ofImage: Contact person details (Name, Designation ContactName of the authorized Signatory who is authorized toSign all the relevant documentsAddress of office in Ahmedabad/ Gandhinagar (if any)Image: Company/LLPPlace of registration under Companies Act, 1956Image: Company/LLPPlace of registrationImage: Company/LLPPlace of registrationImage: Company/LLPProduct/service for which firm is registeredImage: Company/LLPValidity Period, if applicableImage: Company/LLPGST registration details (Registration number and details)Image: Company/LLP		

Authorized Signatory

Seal of the Company

Name & Designation

Date

Annexure – IV: Format for Bank Guarantee for Earnest Money Deposit (EMD)

(To be typed on non-judicial stamp paper of Rs. 300)

То				Dated	:	
••••••						
•••••	•••••					
•••••						
••••••	•••••					
Whereas				_ (here in after c	alled "the Bid	lder") has
				e to the "Reques t		
Selection of	of Project Im	plementation	Agency (PIA) fo	r Various Connect	ivity through E	3haratNet
Network (Reference N	o: GFGNL/G	FG/e-file/263/20	022/0113/Commer	cial-Utilization	ı)" KNOW
ALL	MEN	by	these	presents	that	WE
						having
our registe	ered office at				(hereinat	fter called
"the Bank") are bound	unto the	, Guja	arat Fibre Grid Net	work Limited i	n the sum
of	for	which paymer	nt well and trul	y to be made Guja	arat Fibre Grid	l Network
Limited, t	he Bank bin	ds itself, its su	iccessors and a	ssigns by these pr	esents. Sealed	l with the
Common S	eal of the sai	d Bank this	day	of	2023.	

THE CONDITIONS of this obligation are:

The EMD may be forfeited, In case of a Bidder if:

- 1) The bidder withdraws its bid during the period of bid validity.
- a. The Bidder does not respond to requests for clarification of their Bid.
- b. The Bidder fails to co-operate in the Bid evaluation process.
- c. The bidder, fails to furnish Performance Bank Guarantee in time.
- 2) The bidder fails to Sign the contract in accordance with this RFP
- 3) The bidder is found to be involved in fraudulent and corrupt practices

We undertake to pay to the GFGNL up to the above amount upon receipt of its first written demand, without GFGNL having to substantiate its demand, provided that in its demand GFGNL will specify that the amount claimed by it is due to it owing to the occurrence of any of the above-mentioned conditions, specifying the occurred condition or conditions.

This guarantee will remain valid up to 180 days from the last date of bid submission. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the GFGNL and further agrees that the guarantee herein contained shall continue to be enforceable till the GFGNL discharges this guarantee

The Bank shall not be released of its obligations under these presents by any exercise by the GFGNL of its liability with reference to the matters aforesaid or any of them or by reason or any other acts of omission or commission on the part of the GFGNL or any other indulgence shown by the GFGNL or by any other matter or things.

The Bank also agree that the GFGNL at its option shall be entitled to enforce this Guarantee against the Bank as a Principal Debtor, in the first instance without proceeding against the BIDDER and not withstanding any security or other guarantee that the GFGNL may have in relation to the BIDDER's liabilities.

Dated at ______ on this ______ day of ______ 2023.

Signed and delivered by

For & on Behalf of Name of the Bank & Branch & Its official Address with seal

Approved Bank: Guarantee issued by following banks will be accepted as SD or EMD on permanent basis

1. All Nationalized banks including the public sector banks - IDBI Ltd.

2. Private sector banks - AXIS Bank, ICICI Bank and HDFC Bank

Annexure – V: Format for Bank Guarantee for Performance Bank Guarantee (PBG)

(To be typed on non-judicial stamp paper of Rs. 300)

In consideration of the having agreed to exempt (hereinafter called 'the said agency') from the demand under the terms & conditions of an agreement/ Advance Work Order No dated _____ made between ______ and _____ for the "Request for Proposal (RFP) for Selection of Project Implementation Agency (PIA) for Various through BharatNet (Reference GFGNL/GFG/e-Connectivity Network No: file/263/2022/0113/Commercial-Utilization)" (hereinafter called "the said Contract"), of security deposit for the due fulfilment by the said agency of the terms & conditions contained in the said Contract, on production of the bank guarantee for (name of the bank) we, (hereinafter refer to as "the bank") at the request of (agency) do hereby undertake to pay to the State/SIA an amount not exceeding against any loss or damage caused to or suffered or would be caused to or suffered by GFGNL by reason of any breach by the said agency of any of the terms & conditions contained in the said Contract.

We (name of the bank) _______ do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the State/SIA by reason of breach by the said agency' of any of the terms &conditions contained in the said Contract or by reason of the agency' failure to perform the said Contract. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of State/SIA in these counts shall be final and binding on the bank. However, our liability under this guarantee shall be restricted to an amount not exceeding ______.

We undertake to pay to the GFGNL any money so demanded notwithstanding any dispute or disputes raised by the agency in any suit or proceeding pending before any court or tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the agency shall have no claim against us for making such payment.

We (name of the bank)______ further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the State/SIA under or by virtue of the said Contract have been fully paid and its claims satisfied

or discharged or till GFGNL certifies that the terms &conditions of the said Contract have been fully or properly carried out by the said agency and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before <u>(expiry date of PBG)</u> (as specified in Work Order) from the date hereof, we shall be discharged from all liabilities under this guarantee thereafter.

We (name of the bank)_______ further agree with the GFGNL that the State/SIA shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms &conditions of the said Contractor to extend time of performance by the said agency from time to time or to postpone for any time or from time to time any of the powers exercisable by the GFGNL against the said agency and to forbear or enforce any of the terms & conditions relating to the said Contract and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said agency or for any forbearance, act or omission on the part of the GFGNL or any indulgence by the GFGNL to the said agency or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee shall not be discharged due to the change in the constitution of the Bank or the agency.

We (name of the bank) ______ lastly undertake not to revoke this guarantee during its currency except with the previous consent of the GFGNL in writing.

Place:	
Date:	(Signature of the Bank Officer)
Rubber stamp of the bank:	
Authorized Power of Attorney Number:	
Name of the Bank officer:	
Designation:	
Complete Postal address of Bank:	
Telephone Numbers	
Fax numbers	

<u>Approved Bank:</u> Guarantee issued by following banks will be accepted as SD or EMD on permanent basis

1. All Nationalized banks including the public sector banks - IDBI Ltd.

2. Private sector banks - AXIS Bank, ICICI Bank and HDFC Bank

Annexure – VI: Self-declaration / Undertaking of not being barred by any State / Central Government / PSU

(To be submitted by agency on their letterheads)

To, Chief Finance Officer (CFO) Gujarat Fibre Grid Network Limited (GFGNL), Block No: 6, 5th Floor, Udyog Bhavan, Sector-11, Gandhinagar -382010

Sir,

In response to the "Request for Proposal (RFP) for Selection of Project Implementation Agency (PIA) for Various Connectivity through BharatNet Network (Reference No: GFGNL/GFG/e-file/263/2022/0113/Commercial-Utilization)" as an Owner / Partner / Director of _______, I/We hereby declare that presently our Company / Firm _______ have not been barred from participating in any tender / providing services / procurement process or supply of materials by an organization by any department / office / PSU / board or corporation of either Government of India or any state government.

I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours Truly,	
Name:	 _
Designation:	
Company:	 _
Address:	
Seal:	

Annexure – VII: Financial Bid Format

- 1. Below mentioned financial bid format is for one zone. Same table would be available for each zone on (n)procure website.
- 2. Bidder is requested to refer clause 5 (Selection criteria & allotment of work).

Financial bid format for each zone:

Sr. No.	Description	UoM	Quantity	Rate (excluding tax)	Amount (Rs.)
			(A)	(B)	(C=A*B)
Α	Services - Passive Infrastructure for underground OFC laying				
1	Excavation of trench with 1 Mtr depth including HDPE-PLB duct laying, backfilling, compaction, reinstatement after laying of HDPE-PLB pipe and installation of protection mechanism (DWC pipe, on-site PCC etc. for the cases of low depth as per RFP)	Mtr	250000		
2	Horizontal directional drilling including duct pulling	Mtr	25,000		
3	Manual mauling / borring including duct pulling	Mtr	12,500		
4	OFC blowing in duct / pulling of any size of cable with size of less than or equal to 24F	Mtr	2,50,000		
5	Installation of MH / HH	No.	1,250		
6	Installation of route indicator	No.	1,250		
В	Services - Passive Infrastructure for aerial OFC laying				
1	Aerial cable laying on existing pole / new pole including required accessories	Mtr	30,00,000		
2	Installation of new pole	No.	600		
с	Services - Passive Infrastructure for wireless link				

1	Installation of 3 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.	338	
2	Installation of 6 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.	338	
3	Installation of 9 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.	338	
4	Installation of 12 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	45	
5	Installation of 15 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	23	
6	Installation of 18 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	14	
7	Installation of 21 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	14	
8	Installation of 24 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	14	

9	Installation of 27 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	14	
10	Installation of 30 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.	14	
D	Services - Passive Infrastructure			
1	Splicing of loose tube fibre with loose tube fibre including cable preparation of both cables and acceptance testing	Each fiber joint	6,000	
2	Splicing of loose tube fibre with ribbon fibre including cable preparation of both cables and acceptance testing	Each fiber joint	750	
3	Installation of compass (WSC) for fibre termination including splicing of up to 8 fibre cores with pigtails and acceptance testing	No.	6,750	
4	Installation of 6U wall mounted rack including supply of electrical cable for power connection, MCB and energizing the rack with electrical power	No.	13,500	
5	Installation of DWC pipe at / inside customer premise	Mtr	2250	
6	Installation of PVC pipe at / inside customer premise	Mtr	33,750	
7	Preparation of earthing pit for road earthing/chemical earthing including supply of all required material for earthing & successfully achieving desired earth value as per RFP	Each	1875	
8	Installation of outdoor Cat 6 cable including required accessories, connector etc.	Mtr	18,000	

9	Installation of indoor Cat 6 cable including required accessories, connector etc.	Mtr	18,000	
E	Services - Active Infrastructure			
1	Installation, configuration, commissioning and acceptance testing of a pair of Optical to Ethernet converter(s)	Pair	6,750	
2	Installation, configuration, commissioning and acceptance testing of a pair of Managable Optical to Ethernet converter(s)	Pair	3,000	
3	Installation, configuration, commissioning and acceptance testing of point to point UBR radio link including earthing, lightening arrester, clamps, RF & electrical cables etc.	No.	50	
4	Installation, configuration, commissioning and acceptance testing of Base Station site radio for point to multipoint radio link including earthing, lightening arrester, clamps, RF & electrical cables etc.	No.	50	
5	Installation, configuration, commissioning and acceptance testing of Remote Station site radio for point to multipoint radio link including earthing, lightening arrester, clamps, RF & electrical cables etc.	No.	200	
6	Installation, configuration, commissioning and acceptance testing of point to point Li-Fi / FSO link including earthing cable, lightening arrester, clamps/fixtures, optical patch cord & electrical cables etc	Each	13	

7	Installation, configuration, commissioning and acceptance testing of CPE (customer premise equipment – L3 router & L2 switch)	No.	7,500	
F	Material Supply - Passive Infrastructure			
1	Optical fibre cable - 48F loose tube	Mtr	1,00,000	
2	Optical fibre cable - 24F loose tube	Mtr	7,50,000	
3	Optical fibre cable - 12F loose tube	Mtr	6,00,000	
4	Optical fibre cable - 8F loose tube	Mtr	6,00,000	
5	Optical fibre cable - 6F loose tube	Mtr	6,00,000	
6	Optical fibre cable - 4F loose tube	Mtr	6,00,000	
7	Optical fibre cable - 2F loose tube	Mtr	6,00,000	
8	HDPE - PLB duct	Mtr	2,50,000	
9	MH / HH (joint / loop chamber)	No.	1,250	
10	Route indicator	No.	1,250	
11	6U wall mounted rack including fan, power strip & cable manager	No.	1000	
12	3U wall mounted rack including fan, power strip & cable manager	No.	500	
13	2U wall mounted rack including fan, power strip & cable manager	No.	500	
14	DWC pipe	Mtr	750	
15	RCC half round pipe	Mtr	12,500	
16	New pole for aerial cable installation	No.	200	
17	Miscellaneous items required at customer location like MCB, electrical cable, earthing cable, compass, PVC pipe, patch cord (optical & Cat 6) etc.	Lot	2,500	

18	3 mtr pole including all accessories	No.	340	
19	6 mtr pole including all accessories	No.	340	
20	9 mtr pole including all accessories	No.	340	
21	12 mtr mast including all accessories	No.	40	
22	15 mtr mast including all accessories	No.	25	
23	18 mtr mast including all accessories	No.	15	
24	21 mtr mast including all accessories	No.	15	
25	24 mtr mast including all accessories	No.	15	
26	27 mtr mast including all accessories	No.	15	
27	30 mtr mast including all accessories	No.	15	
28	Outdoor Cat 6 cable including required accessories, connector etc.	Mtr	18000	
29	Indoor Cat 6 cable including required accessories, connector etc.	Mtr	18000	
30	Optical Splitters (1:8)	No.	375	
31	Optical Splitters (1:4)	No.	375	
32	Optical Splitters (1:2)	No.	375	
G	Material Supply - Active Infrastructure			
1	CPE (customer premise equipment) L3 router – Option 1	No.	3900	
2	CPE (customer premise equipment) L3 router – Option 2	No.	2700	
3	CPE (customer premise equipment) L2 manageable switch – 24 ports	No.	300	
4	CPE (customer premise equipment) L2 manageable switch – 8 ports	No.	600	

5	Pair of Optical to Ethernet converter(s) (1 no. OtoE + 1 no. EtoO)	Pair/Set	6,750		
6	Pair of Optical to Ethernet converter(s) (1 no. OtoE + 1 no. EtoO)	Pair/Set	3,375		
7	Point to point UBR radio set including earthing cable, lightening arrester, clamps/fixtures, RF & electrical cables etc.	Pair/Set	50		
8	Base Station site radio for point to multipoint radio link including earthing cable, lightening arrester, clamps/fixtures, RF & electrical cables etc.	Each	50		
9	Remote Station site radio for point to multipoint radio link including earthing cable, lightening arrester, clamps/fixtures, RF & electrical cables etc.	Each	200		
10	Voltage stabilizer	No.	2,500		
11	UPS 1KVA	No.	500		
12	Point to point Li-Fi / FSO link set including earthing cable, lightening arrester, clamps/fixtures, optical patch cord & electrical cables etc.	Each	13		
13	Mini GPON OLT (4 Port GPON)	No.	250		
14	Mini GPON OLT (2 Port GPON)	No.	250		
	Grand Total – C0				

Note:

- 1. Payments shall be made by the GFGNL as per the terms and conditions of the RFP and no extra charges shall be paid by GFGNL.
- 2. For financial evaluation, Price excluding Tax shall be taken into consideration.
- 3. The taxes shall be mentioned separately and will be applicable as actual as per the time of billing.

- 4. All invoices should be raised from Gujarat.
- 5. The quantity mentioned above for all line items is notional for evaluation purpose only. Actual payment will be made to selected bidder(s) based on number of locations awarded by GFGNL and successfully connected by bidder & certified by GFGNL.
- 6. Quoted rates will be valid for 3 years from the date of issuance of Work Order which can be mutually extended further for 2 years at the same terms & condition.

Annexure – VIII : MAF (one and only one OEM for each component).

Manufacturer's Authorization Format (MAF) From OEM

Ref:	Date:
То	
Subject: Manufacturer Authorization Letter for RFP No	
Sir,	

We, <OEM Name> having our registered office at <OEM address>, hereinafter referred to as OEM are an established manufacturer of the following items quoted by <Bidder Name> having their registered office at <Bidder address>, hereinafter referred to as Bidder. Item – 1 : _____

We <OEM Name> authorize <Bidder's name> to quote our above-mentioned product for above mentioned tender.

We confirm that we have understood the delivery & installation timelines defined in the tender. We confirm that we have worked out all necessary logistics and pricing agreement with <Bidder name>, and there won't be any delay in delivery, installation and support due to any delay from our side. Our full support is extended in all respects for supply, warranty, and maintenance of our products. We also ensure to provide the required spares and service support for the supplied equipment as per tender terms. In case of any difficulties in logging complaint at bidder end, user shall have option to log complaint at our call support Centre. We hereby declare that the proposed product complies with all the specifications defined and desired in this RFP and subsequent corrigenda.

If any product is declared end of sale, we shall proactively ensure that a suitable equivalent or higher roll over product is offered through the existing bidder <(Bidder)> to GFGNL for due approval, contract, and order executions thereafter without any additional cost to the GFGNL.

Thanking You For **<OEM/ Manufacturer name> < (Authorized Signatory)>** Name: Designation: Contact Details: Seal of the Company

NOTE:

1. The letter should be submitted on the letter head of the manufacturer / OEM and should be signed by the authorized signatory.

Annexure – IX: Self Certification by Bidder and OEM

(This shall be provided on Rs.300/- non-Judicial stamp paper.)

Date: DD/MM/YYYY

Tender Ref No.

Τo,

<<<Client Name & Address>>

With reference to above referred tender, I, undersigned <<Name of Signatory>>, in the capacity of <<Designation of Signatory>>, is authorized to give the undertaking on behalf of <<Name of the bidder/OEM>>.

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that <<Name of Bidder/OEM>> is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that <<Name of Bidder/OEM>> fulfills all requirements in this regard and eligible to be considered. [Where applicable, evidence of valid registration by Competent Authority shall be attached.]

If given information is found to be false, this would be ground for immediate termination and further legal action in accordance with law.

Authorized Signatory: Name: Designation: Name of the Bidder/OEM:

Address:

Company Seal:

Annexure – X: Technical Specifications

Bidder must comply to the below mentioned minimum specifications for each element. Bidders are free to select suitable product with higher specifications to meet the technical & functional requirements of this RFP.

2F / 4F / 6F / 8F / 12F / 24F/ 48F Optical Fibre Cable

Sr. No.	Parameters	Minimum Specifications
1.	Fibre count	2F / 4F / 6F / 8F / 12F / 24F/ <mark>48F</mark>
2.	Standard	ITU-T-G.657.A1
3.	Cable construction	Loose tube with jelly compound
4.		Water swellable tape / yarn
5.	Jacket Material	HDPE
6.	Strength member	FRP
7.		Cable must be suitable for outdoor as well as indoor
		applications.
8.	Application	Cable must be suitable for machine blowing as well
0.	Application	as manual pulling in duct in case of UG application.
9.		Cable must be suitable for UG as well as aerial
Э.		installation.

HDPE Duct

Sr. No.	Parameters	Minimum Specifications
1.	Material of construction	HDPE pre lubricated duct
2.	Diameter	Outer: 40 mm, inner: 32 / 33 mm
3.	Color	Blue or any other
4	Compliance	TEC GR No. TEC/GR/TX/CDS-008/03/MAR-11 with
4.	Compliance	latest amendments, if any.

P2P & P2MP unlicensed radio

Sr. No.	Parameters	Minimum Specifications
1.	Operating frequency band	2.4 GHz / 5.X GHz
2.	Distance support	P2P-Up to 10 Km
Ζ.		P2MP-Up to 5 Km
		Minimum 100 Mbps per link Base station
3.	Throughput support	Throughput support for P2MP link: Minimum 1
		Gbps
4.	Ports	1 x 10/100/1000BaseT Ethernet & & 1 x 10/100
4.		Base-Tx (RJ-45)
5.	VLAN support	802.1Q,
		System should support WPA/WPA2, WPA-PSK
6.	Security	Encryption (Security: System should support AES
		128 Encryption.)
7.	Electrical requirement	Power over Ethernet (PoE) injector
8.	Compliance	The Equipment should be type approved by WPC.
9.		System should be remotely manageable
10.		System should have GUI interfaces
11.	Management	System must provide alarm and control capabilities
11.	Wanagement	via Simple Network Management Protocol (SNMP).
12.		Software upgrade to system should be done
12.		through the network.
13.		Operating Temperature support: -10 degrees C to
13.		+60 degrees C (in installed condition)
14.		Working Humidity support: between 10% - 95%,
17.	Environment requirements	non-condensing at all operating temperatures
15.		It should be IP65 and wind survivability for
10.		minimum 150 Kmph
16.		System should be suitable to withstand continuous
10.		exposure to rain and sunlight.
17.	Protection	Radio system should have built in surge protection
		mechanism.

MH / HH (joint / loop chamber)

Sr. No.	Parameters	Minimum Specifications
1 Matarial of	Material of construction	Pre-cast RCC chambers with cement concrete mix
1.		of 1:2:4 (1: cement, 2: coarse sand, 4: stone

		aggregate 20 mm nominal size)
2.	Thickness of chamber wall	Minimum 5 cm
3.	Size	600 mm inner diameter with 1 mtr depth
4.	Foundation	PCC – M15 grade with 50 mm height
		6 mm dia horizontal iron round rings – minimum 8
5.	Reinforcement	nos.
		6 mm dia vertical iron bars – minimum 8 nos.
6.	Cover	1 no. with thickness of minimum 5 cm & two
0.	Cover	handles to facilitate easy lifting
7.	Marking on cover	"GFGNL OFC" should be engraved on it.
8.	Other	Chamber must be able to take vehicular load.

Route & Joint indicator

Sr. No.	Parameters	Minimum Specifications
1.	Material of construction	Pre-cast RCC with cement concrete mix of 1:2:4 (1:
		cement, 2: coarse sand, 4: stone aggregate 20 mm
		nominal size)
2.	Size	Base - 250 mm x 150 mm, Top - 200 mm x 75 mm,
		Height - 1250 mm
3.	Reinforcement	6 mm dia horizontal iron bars – minimum 10 nos.
		6 mm dia vertical iron bars – minimum 4 nos.
4.	Color	Grey for joint indicator & blue for route indicator
5.	Marking on route marker	"GFGNL OFC" should be engraved on it.

6U wall mounted rack

Sr. No.	Parameters	Minimum Specifications
1.	Size	19-inch rack of 6U usable space with minimum
		depth of 450 mm.
2.	Material of construction	Corrosion proof steel cabinet
3.	Other	To be provided with minimum one fan (Should have
		sufficient perforation for ventilation of air), power
		strip (with min. 5 no. 5A socket), cable manager &
		min 1 no. equipment Fixed tray
4.		Rack should be vented at both sides, front, top and

	bottom for proper ventilation of air
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3U wall mounted rack

Sr. No.	Parameters	Minimum Specifications
1	Size	7.8-inch rack of 3U usable space with minimum
1.	5126	depth of 400 mm.
2.	Material of construction	Corrosion proof steel cabinet
	Other	To be provided with minimum one fan (Should have
3.		sufficient perforation for ventilation of air), power
5.		strip (with min. 5 no. 5A socket), cable manager &
	Other	min 1 no. equipment Fixed tray
4		Rack should be vented at both sides, front, top and
4.		bottom for proper ventilation of air

2U wall mounted rack

Sr. No.	Parameters	Minimum Specifications
1	Size	6.8-inch rack of 2U usable space with minimum
1.	5126	depth of 215 mm.
2.	Material of construction	Corrosion proof steel cabinet
		To be provided with minimum one fan (Should have
3.		sufficient perforation for ventilation of air), power
5.	Other	strip (with min. 5 no. 5A socket), cable manager &
	other	min 1 no. equipment Fixed tray
4		Rack should be vented at both sides, front, top and
4.		bottom for proper ventilation of air

Optical to Ethernet media converter

Sr. No.	Parameters	Minimum Specifications
		1000Base-X optical ethernet port – 1 no.
1.	Optical port	Must support bi-directional wavelengths (BIDI) on single fibre

2.	Ethernet port	10/100/1000Base-T RJ45 – 1 no. (should at least support Cat 5e cable)
3.	Distance support	Up to 20 Km
4.	Operating temperature	0° to 50°C
5.	Others	10/100/1000Mbps auto-negotiation
6.		Support auto MDI/MDIX
7.	Others	Should support half duplex & full duplex
7.		communication
0	8. LEDs	Should show status of link, full / half duplex, speed,
0.		and power on
9.	Manageability	
10.	Power	Should be supplied with power adapter so that it
10.		can work on 230 V AC power

Optical to Ethernet media converter (Manageable)

Sr. No.	Parameters	Minimum Specifications
		1000Base-X optical ethernet port – 1 no.
1.	Optical port	Must support bi-directional wavelengths (BIDI) on
		single fibre
2.	Ethernet port	10/100/1000Base-T RJ45 – 1 no. (should at least
2.		support Cat 5e cable)
3.	Distance support	Up to 20 Km
4.	Operating temperature	0° to 50°C
5.		10/100/1000Mbps auto-negotiation
6.	Others	Support auto MDI/MDIX
7.	Others	Should support half duplex & full duplex
7.		communication
8.	LEDs	Should show status of link, full / half duplex, speed,
0.	LEDS	and power on
	Manageability	MQTT/Modbus TCP/IP, Simple Network
9.		Management Protocol (SNMP) ,support SSH,
		SNMPv3, Telnet, and HTTPS
10.	Power	Should be supplied with power adapter so that it
10.	rower	can work on 230 V AC power

Sr. No.	Parameters	Minimum Specifications
		ITU-T G.984, with 2.488 Gbps Downstream and
1.	Optical port	1.244 Gbps Upstream , SMF single port interface,
		28dB (Class B+)
2.	Ethernet port	10/100/1000 Mbps -4 port and 1* PON (SC/APC)
3.	Distance support	Upto 20Km (depending on Splitting Ratio)
4.	Operating temperature	0 to 50 °C
		Dual band Wi-Fi (802.11/ac/n/b/g)supports ONT,
		minimum 1 year domestic warranty, support Up to
		1023 MAC address support, support upto 64 VLAN
5.		support, including but not limited to VLAN tag
э.		mode -VLAN transparent mode-VLAN trunk mode-
		VLAN translation mode- VLAN QinQ mode &
		compatible with GFGNL devices, Support
	Others	Multicast,QoS, security features and SBA/DBA.
6.		Should work in non AC environment
		Support IPv4, IPv6, SNMP V3, Remote
		management, OMCI, TR69 should have facility to
7.		set password for local & remote login, ITU-T
7.		G.984.1/2/3/4, 32 Tcont,128 Gemport, Support FEC
		(Forward Error Correction) downstream and
		upstream, support SBA/DBA
8.	LEDs	Should show status of link, full / half duplex, speed,
0.		and power on
9.	Manageability	MQTT/Modbus TCP/IP, Simple Network
		Management Protocol (SNMP), support SSH,
		SNMPv3, Telnet, and HTTPS, support WEB
		/TR069/TELNET/CLI, support DHCP functions like
		DHCP Server and DHCP Relay
		Should be supplied with power adapter so that it
10.	Power	can work on 230 V AC power, compatible with all
		India Power Standards.

ONT(Optical Network Terminal) (Manageable)

Sr. No.	Parameters	Minimum Specifications
1.	Aggregate Throughput	100 Mbps
2.	No. of WAN port (1GE RJ45 port)	2 nos.
3.	LAN Port (10/100/1000 BaseT ports)	2 nos.
4.	Flash Memory	1 gb/128mb/64mb
5.	Routing protocol	Static IPv4 routing, static IPv6 routing
6.	Management	SNMP V3, Remote management, should have
0.		facility to set password for local & remote login
7.	Encapsulation	802.1q VLAN, PPPoE
8.	Footure support	IPv6 support, Quality of Service (QoS), IPSEC, DHCP,
δ.	Feature support	IGMP V3, NAT and Firewall Services
9.	Operation Temperature	0 to 50 °C
10.	Power input	230 V AC, 50-60 Hz
11.	Safety standard	UL / IEC

CPE (customer premise equipment) L3 router – Option 1

CPE (customer premise equipment) L3 router – Option 2

Sr. No.	Parameters	Minimum Specifications
1.	No. of WAN port (1GE RJ45 port)	1 no.
2.	LAN Port (10/100 BaseT ports)	2 nos.
3.	Flash Memory	128 MB/64MB
4.	Routing protocol	Static IPv4 routing, static IPv6 routing
5.	Annagement	SNMP V3, Remote management, should have
э.	Management	facility to set password for local & remote login
6.	Encapsulation	802.1q VLAN, PPPoE
7.	Wi-Fi support	802.11/ac/n/b/g
8.	Wireless security	WPA/WPA2, WPA-PSK Encryption
9.	Feature support	IPv6 support, Quality of Service (QoS), IPSEC, DHCP,
9.		IGMP V3, NAT and Firewall Services
10.	Operation Temperature	0 to 50 °C
11.	Power input	230 V AC, 50-60 Hz

CPE (customer premise equipment) L2 manageable switch – 24 ports

Sr. No. Parameters	Minimum Specifications
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		The Switch should support a minimum of 50 Gbps
1.	Curitale Daufamaan oo Q Thursushuut	Switching Fabric Capacity.
1.	Switch Performance & Throughput	• The switch should have forwarding rate of min 40
		Mpps
		24 ports of 10/100/1000 BaseT (out of 24 ports, 12
2.	No. of Ports	ports should be PoE supported with PoE power
Ζ.	NO. OF POILS	support of minimum 80W) and 2 Uplink ports of
		1GE
3.	MAC	Support for minimum 8K MAC entries
	Features	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation,
4.		802.1d (Spanning tree), 802.1w (RSTP), 802.1s
4.	reatures	(MSTP)
		Should support minimum 500 active VLANs.
		• IEEE 802.1x, RADIUS.
5.	Security	• Telnet, Secure Shell (SSH) Protocol, and Simple
5.		Network Management Protocol Version 3
		(SNMPv3).
6.	Operation Temperature	0 to 50 °C
7.	Power input	230 V AC, 50-60 Hz

CPE (customer premise equipment) L2 manageable switch - 8 ports

Sr. No.	Parameters	Minimum Specifications
		The Switch should support a minimum of 16 Gbps
1.	Switch Performance & Throughput	Switching Fabric Capacity.
1.	Switch Performance & Throughput	• The switch should have forwarding rate of min 10
		Mpps
2.	No. of Ports	8 PoE ports of 10/100/1000 BaseT with PoE power
Ζ.		support of minimum 60W
3.	MAC	Support for minimum 4K MAC entries
		DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation,
4.	Features	802.1d (Spanning tree), 802.1w (RSTP), 802.1s
4.	Features	(MSTP)
		Should support minimum 500 active VLANs.
		• Telnet, Secure Shell (SSH) Protocol, and Simple
5.	Security	Network Management Protocol Version 3
		(SNMPv3).
6.	Operation Temperature	0 to 50 °C
7.	Power input	230 V AC, 50-60 Hz

Voltage stabilizer

Sr. No.	Parameters	Minimum Specifications
1.	Power rating	1 KVA
2	Input Voltage Dange	170 V – 270 V AC (minimum support range), 50 Hz
2.	Input Voltage Range	single phase
3.	Output Voltage	230V AC +/- 1%, 50 Hz
4.	Operating Frequency	47 to 53 Hz (minimum support range)
5.	Type of cooling	Should be natural air cooled
6.	Efficiency	> 95%

Pole & mast for aerial cable & radio installation

Sr. No.	Parameters	Minimum Specifications
1.	Material of construction	Mild steel
2.	Other	Should be hot-dip galvanized
3.		Should withstand wind speed of minimum 150
5.		Kmph
4. 5.		Foundation should be constructed to support above
	Wind survivability	mentioned wind speed
		Foundation bolt, foundation plate, other
		accessories must be supplied to support above
		mentioned wind speed

UPS

Sr. No.	Parameters	Minimum Specifications
1.	Capacity	1 KVA or more Line Interactive
2.	Technology	Automatic Voltage Regulation
3.	Input Frequency Range	50 Hz +/- 5%
4.	Output Frequency Range	50 Hz +/- 2%
5.	Output Voltage	200VAC - 250VAC (Output range should be in between this)
6.	Voltage Regulation	With variation against rated, the outer bounds (Output

		Voltage: 200 - 250 V) should not be crossed
7.	Output Waveform	Modified sine Wave
8.	Output Power Factor	0.6 or more
9.	Battery Backup	Minimum backup of 120 Minutes on full load @ 0.6 pf or better
10.	Battery Type	Lead acid Sealed Maintenance Free (SMF) (UPS battery should be replaced after 3 years of installation and installed new battery should have minimum 3 years warranty.)
11.	General Operating Temperature	0 to 45 Degree Celsius
12.	Alarms & Indications	All necessary alarms & indications essential for performance monitoring of UPS like mains fail, low battery
13.	Bypass	Automatic and Manual Bypass Switch
14.	Protection	Fuse protection

Mini GPON OLT 2 Port - Compatible with GFGNL Device – OLT, ONT, Switch,..etc

SI. N o.	Parameter	Tender Specifications
1	Management Ports	1# 1G BASE-T Management port, 1#RJ45 CONSOLE port, 1#USB2.0, User friendly GUI Management
2	No. of Ports	2# 1G BASE-T Ports, 2# 10G SFP+ Ports, 2# GPON/PON Ports
3	MAC	Support upto 32K MAC address

SI.		
Ν	Parameter	Tender Specifications
о.		
4	GPON Features	Connector Type – Class C+/Class C++/Class C+++ splitting ratio - 1:128 or better Transmission Distance - 20KM Performance - Upstream 1.244Gbps, Downstream 2.488Gbps Wavelength - RX 1310nm and TX 1490nm Connector - SC TYPE Fibre support - Single Mode 9/125µm TX Power +4.5~+10dBm Rx Power: - 27 dBm Compliant to ITU-T984.x standard
5	Management Features	 WEB, HTTP, CLI, Telnet, SNMP v1/v2c, v3, SSH ONT configuration and management User and Alarm Management Support 802.1X, Radius, Tacacs+/or similar authentication protocols User friendly GUI utility Firmware and configuration upgradable via utility Remote ONU management ONU auto discovery, link detection, remote upgrade of software
6	VLAN	4K Vlan support, Port based VLAN, Protocol Based VLAN, Port Isolation, IEEE 802.1Q tagged based VLAN,802.1ad Q-in-Q tunnelling (VLAN stacking), VLAN transparent transmission
7	L2 Features	DHCP server, DHCP relay, DHCP snooping, IGMP snooping, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP), LACP, Rate Limit, QoS based on port, QoS based on TOS, port, VID, Mac addresses, ACL, IEEE802.x flow control, 1024 Multicast Groups, broadcasting storm control
8	L3 Features	static route, RIP, OSPF
9	Operation Temperature	: -5 °C to 65 °C
1	Physical	Power Indicator, system Indicator, port indicator (ACT/Link), PON port indicator,

SI. N o.	Parameter	Tender Specifications
0	Indicator	(power Consumption indicator-optional)
1 1	Other	-Deployed indoor or in cabinets

Mini GPON OLT 4 Port - Compatible with GFGNL Device – OLT, ONT, Switch,...etc.

SI N o	Parameter	Tender Specifications
1	Manageme nt Ports	1# 1G BASE-T Management port, 1#RJ45 CONSOLE port, 1#USB2.0, User friendly GUI Management
2	No. of Ports	2# 1GE SFP base Ports, 2# 10G SFP+ Ports, 4# GPON/PON Ports 4#Copper 10/100/1000M auto-negotiation
3	MAC	Support upto 32K MAC address

SI N o	Parameter	Tender Specifications
4	GPON Features	Connector Type - Class C+/Class C++/Class C+++ splitting ratio - 1:128 or better Transmission Distance - 20KM Performance - Upstream 1.244Gbps, Downstream 2.488Gbps Wavelength - RX 1310nm and TX 1490nm Connector - SC TYPE Fibre support - Single Mode 9/125μm TX Power +4.5~+10dBm Rx Power: - 27 dBm Compliant to ITU-T984.x standard
5	Manageme nt Features	WEB, HTTP, CLI, Telnet, SNMP v1/v2c, v3, SSH ONT configuration and management User and Alarm Management Support 802.1X, Radius, Tacacs+ / or similar authentication protocols User friendly GUI utility Firmware and configuration upgradable via utility Remote ONU management ONU auto discovery, link detection, remote upgrade of software
6	Vlan	4K Vlan support, Port based VLAN, Protocol Based VLAN, Port Isolation, IEEE 802.1Q tagged based VLAN,802.1ad Q-in-Q tunnelling (VLAN stacking), VLAN transparent transmission
7	L2 Features	DHCP server, DHCP relay, DHCP snooping, IGMP snooping, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP), LACP, Rate Limit, QoS based on port, QoS based on TOS, port, VID, Mac addresses, ACL, IEEE802.x flow control, 1024 Multicast Groups, broadcasting storm control
8	L3 Features	static route, RIP, OSPF
9	Operation Temperatu re	: -5 °C to 65 °C
1 0	Physical Indicator	Power Indicator, system Indicator, port indicator (ACT/Link), PON port indicator, (power Consumption indicator-optional), over temperature sensors/indicator and

SI N 0	Parameter	Tender Specifications
		shut down
1 1	Other	-Deployed indoor or in cabinets

Optical Wireless Communication (OWC) / FSO

Sr. No.	Parameters	Minimum Specifications
1	Operating Optical Wavelength	1550 / 730-780 nm
2	Distance support	Up to 10 Km
3	Throughput support	Minimum 1 Gbps per link and support upto 10Gbps per link
4	Ports	1 X 10/100/1000-BASE-T Ethernet or Fiber interfaces with SC multi or single mode options,Interface with 10G SFP+
5	Electrical requirement	AC 100 – 240 V, 50 – 60 Hz or DC 48 ± 12 V
6	Management	System must provide alarm and control capabilities via Simple Network Management Protocol (SNMP) / MIB File / IP-Firmware, IP monitoring, Spatial stabilization system (autotracking), Full duplex
7		Operating Temperature support : -20 degrees C to +60 degrees C (in installed condition)
8	Environment requirements	Working Humidity support : between 10% - 95%, non- condensing at all operating temperatures
9		It should be IP65 and wind survivability for minimum 150 Kmph
10		System should be suitable to withstand continuous exposure to rain and sunlight.
11	Safety Classification	Laser safety IEC 60825, Class 1M

Optical Splitter

1. SPLITTERS 1:2: As per TEC GR No. TEC/GR/TX/OPT-001/01/ APRIL-12 with latest amendments.(Rack Mounted)

2. SPLITTERS 1:4: As per TEC GR No. TEC/GR/TX/OPT-001/01/ APRIL-12 with latest amendments. (Rack Mounted)

3. SPLITTERS 1:8: As per TEC GR No. TEC/GR/TX/OPT-001/01/ APRIL-12 with latest amendments. (Rack Mounted)