Corrigendum I

Request for Proposal (RFP) For Selection Of Last Mile Connectivity Agency (LMCA) On Service Model For Various Government Institutions Connectivity Through BharatNet Network

Reference No: GFGNL/GFG/e-file/263/2024/0095/Commercial-Utilization Gujarat Fibre Grid Network Limited (GFGNL)

19th September 2024



Issued By : Gujarat Fibre Grid Network Limited (GFGNL) A Government of Gujarat Company Block No: 6, 5th Floor, Udyog Bhavan, Sector-11, Gandhinagar 382010

Fact Sheet:

#	Particular	Details		
8.	Last date for submission of Bid/proposal	18/09/2024 08/10/2024 at 06:10 pm		
9.	Last date for submission of Bid/proposal	21/09/2024 11/10/2024 at 03:00 pm (Date		
	(Physical copy excluding financial bid	of submission of bid + 4 working Days)		
	only if asked based on nature of RFP)	In event of particular ask of submitting		
		physical copy then logical portion of the bid		
		should be appropriate in the respective		
		sealed cover for maintaining		
		confidentiality.		
11.	Submission of Integrity Pact, EMD, RFP	21/09/2024 11/10/2024 at 03:00 pm (Date		
	Document Fee and Letter of	of submission of online bid + 4 working		
	Authorization	Days) for physical copy		

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Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1	3.1(A)	3.1(A) Scope of Work (SoW) for the Bidder	20	GFGNL may ask Bidders to change the last mile technology & adopt the safer technology based on the field conditions and future aspects. Selected Bidders will have to abide the same and execute the project accordingly without further cost to GFGNL	 We Urge you to include DDI technology and safe gured DNS infrastructure with mitigate zero- day vulnerability and eliminate single point of failure. As Government is planning to roll out the project with the intend of connecting the last mile connectivity to Gram panchayats, LM offices and villagers, providing security to that network is utmost important, With DDI technology we can secure against threats to the DNS infrastructure. DNS, DHCP, and IPAM, Enhancing Network Automation and DNS Security. DDI Technology is already present in APSFL and TANFINET, we strongly request you to add DDI technology While GFGNL is also planning to take online payments from its customer, keeping data of DNS, DHCP, IPAM is utmost criticial. Furthermore, it is madate from cybersecurity and guidlines from RBI -RBI/2015-16/418 DBS.CO/CSITE/BC.11/33.01.001/ 2015-16 & Master Direction DNBS.PPD.No.04/66.15.001/201 6-17 to keep DDI in order to mitigate zero-day vulnerability. 	No Change-As per RFP

Annexure-I : Pre-Bid query Response/Clarification

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
2	3.1.5 - (xv)	3.1.5 Public Wi-Fi Connec tivity	29	xv) Bidder will be responsible for following but not limited to, a secured connection by means of Firewall, Security testing of the network, Security audit every quarter during the contract period, Integration and management of the SMS and Payment Gateway, reconciliation, and resolution of any integration issues during the project duration.	 We Urge you to include DDI technology and safe gured DNS infrastructure with mitigate zero- day vulnerability and eliminate single point of failure. As Government is planning to roll out the project with the intend of connecting the last mile connectivity to Gram panchayats, LM offices and villagers, providing security to that network is utmost important, With DDI technology we can secure against threats to the DNS infrastructure. DNS, DHCP, and IPAM, Enhancing Network Automation and DNS Security. DDI Technology is already present in APSFL and TANFINET, we strongly request you to add DDI technology While GFGNL is also planning to take online payments from its customer, keeping data of DNS, DHCP, IPAM is utmost criticial. Furthermore, it is madate from cybersecurity and guidlines from RBI -RBI/2015-16/418 DBS.CO/CSITE/BC.11/33.01.001/ 2015-16 & Master Direction DNBS.PPD.No.04/66.15.001/201 6-17 to keep DDI in order to mitigate zero-day vulnerability. 	No Change-As per RFP

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3	3.1.5 - (xvii)	3.1.5 Public Wi-Fi Connec tivity	29	xvii)The Bidder shall ensure the uniqueness of mobile numbers for the use under free session, multiple logins shall not be allowed in any case. Wireless access points shall be configured with relevant cryptographic keys to ensure that only authorized and authenticated users can use the wireless service. Proposed wireless network shall be secure and in compliance to relevant industry standard security requirements.	 We Urge you to include DDI technology and safe gured DNS infrastructure with mitigate zero- day vulnerability and eliminate single point of failure. As Government is planning to roll out the project with the intend of connecting the last mile connectivity to Gram panchayats, LM offices and villagers, providing security to that network is utmost important, With DDI technology we can secure against threats to the DNS infrastructure. DNS, DHCP, and IPAM, Enhancing Network Automation and DNS Security. DDI Technology is already present in APSFL and TANFINET, we strongly request you to add DDI technology While GFGNL is also planning to take online payments from its customer, keeping data of DNS, DHCP, IPAM is utmost criticial. Furthermore, it is madate from cybersecurity and guidlines from RBI -RBI/2015-16/418 DBS.CO/CSITE/BC.11/33.01.001/ 2015-16 & Master Direction DNBS.PPD.No.04/66.15.001/201 6-17 to keep DDI in order to mitigate zero-day vulnerability. 	Public Wi-Fi Scope Removed

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4	3.3.3 (i)	3.3.3 Audit and Securit y Service s	36	The LMCA shall be responsible in getting the required readiness built in the network during audit for physical and logical security solutions.	 We Urge you to include DDI technology and safe gured DNS infrastructure with mitigate zero- day vulnerability and eliminate single point of failure. As Government is planning to roll out the project with the intend of connecting the last mile connectivity to Gram panchayats, LM offices and villagers, providing security to that network is utmost important, With DDI technology we can secure against threats to the DNS infrastructure. DNS, DHCP, and IPAM, Enhancing Network Automation and DNS Security. DDI Technology is already present in APSFL and TANFINET, we strongly request you to add DDI technology While GFGNL is also planning to take online payments from its customer, keeping data of DNS, DHCP, IPAM is utmost criticial. Furthermore, it is madate from cybersecurity and guidlines from RBI -RBI/2015-16/418 DBS.CO/CSITE/BC.11/33.01.001/ 2015-16 & Master Direction DNBS.PPD.No.04/66.15.001/201 6-17 to keep DDI in order to mitigate zero-day vulnerability. 	No Change-As per RFP

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5	7.1.25	7.1.25 Service Terms	87	The Bidder shall ensure that security measures, policies and procedures implemented are adequate to protect and maintain the confidentiality of the Confidential Information. Bidder also agrees and acknowledges that it shall adhere to reasonable security practices over all sensitive personal information of the said project as prescribed by various rules under I.T.Act, 2000 (as amended from time to time).	 We Urge you to include DDI technology and safe gured DNS infrastructure with mitigate zero- day vulnerability and eliminate single point of failure. As Government is planning to roll out the project with the intend of connecting the last mile connectivity to Gram panchayats, LM offices and villagers, providing security to that network is utmost important, With DDI technology we can secure against threats to the DNS infrastructure. DNS, DHCP, and IPAM, Enhancing Network Automation and DNS Security. DDI Technology is already present in APSFL and TANFINET, we strongly request you to add DDI technology While GFGNL is also planning to take online payments from its customer, keeping data of DNS, DHCP, IPAM is utmost criticial. Furthermore, it is madate from cybersecurity and guidlines from RBI -RBI/2015-16/418 DBS.CO/CSITE/BC.11/33.01.001/ 2015-16 & Master Direction DNBS.PPD.No.04/66.15.001/201 6-17 to keep DDI in order to mitigate zero-day vulnerability. 	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
6	Annexur e – A: Technica l Specifica tions	12F Optical Fibre Cable(Under Ground and Aerial)	65	Under Ground: ITU- T-G.657 (TEC GR Standard No.: TEC 85170:2011) TEC 85190:2022 (Loose tube with jelly compound & Water swellable tape / yarn)	For Under Ground 12F Armored Optical Fibre Cable reference TEC GR shall be with latest ammendment with TEC 85170:2024 (Supersedes No. TEC/GR/TX/OFC-20/01/MAR- 2011). For Aerial 12F ADSS unarmored cable please clarify requirement is for Type A-I Semi Dry core cable without ice loading or Type A-II Semi Dry core cable with ice loading	Modified Clause: 12F G.657.A1 cable will be accepted considering high bending redius for both aerial and underground cable. 1. For Under Ground: ITU-T- G.657 (TEC GR Standard No.: TEC 85170:2011 or with latest amendment any). 2. For Aerial 12F ADSS unarmored TEC 85220:2022 (Aerial Drop) (Loose tube with jelly compound & Water swellable tape / yarn) 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,

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						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 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 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

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						shall be accepted which shall have to be obtained before supply.

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7	Annexur e – A: Technica l Specifica tions- Optical Splitter (1:4 & 1:8)	Splitter TEC GR	73	1. 1. SPLITTERS 1:4: As per TEC GR No. TEC/GR/TX/O PT-001/01/ APRIL-12 with latest amendments. 2. 2. SPLITTERS 1:8: As per TEC GR No. TEC/GR/TX/O PT-001/01/ APRIL-12 with latest amendments.	For the mentioned splitter requirement kindly clarify the type of splitter to be provided. Below splitter types for your reference: 1. Type 1- Bare splitter: Bare splitter with 900µm Fiber in input and output (Without Connector) 2. Type 1- Bare splitter: Bare splitter with 900µm Fiber in input and output (With Connector) Confirm (SC/LC APC/PC) 3. Type 2: Rack mounted splitter 4. Type 3: Box mounted Splitter	Splitter must be Type 2: Rack Mounted Splitter

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8	SECTION -3 Scope Of Work Caluse No- 3.1.5 (iv)	Public WiFi Connec tivity	28	Bidder has to understand the existing network of GFGNL where the NOC/SDC comprises of various Network components like Core Switch, Router, Server, firewall, Controller (open-source software based), etc. capable to command and control the Wi-Fi Sites and its user management.	Please share the details of existing controller and available resources (RAM, Core, Storage).	Public Wi-Fi scope removed

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9	SECTION -6 Financial Criteria Clause no-6.1 (3)	Financi al Bid Format	59	Wireless: Implementati on of P2MP(includi ng/supporting 3 minimum UBR LM customers) wireless UBR link including termination of Wi-Fi router at last mile customer.This includes all types of integration of all necessary wireless accessories including but not limited to , elements of networking, earthing, lightening arrester, clamps, RF & electrical and networking cables/other accessories.	The RFP does not provide the exact count of BTS & CPE devices location out of the asked 3675 quantities of P2MP UBR. Kindly provide the same as the commercials are different for BTS & CPE devices.	Modified Clause: Refer in Revised Clause Annexure- Financial Criteria

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1 0	Annexur e – A: Technica l Specifica tions (Sr No-4)	Public WiFi	66	i) Standard : 802.11ac	Since 802.11ac (Wi-Fi 5) has already reached end of life, we recommend WiFi-6 based Access Point backward compitable to older standards like 802.11a/b/g/n/ac, as this is a 5 years contract and this will ensure necessery upgradation and support during contract period.	Public Wi-Fi scope removed

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1 1	Annexur e – A: Technica l Specifica tions (Sr No-5)	Public WiFi	66	iv) Solution should have provision for extended Wi- Fi coverage through Wi-Fi Repeater Mode Minimum 300 Mtrs (using inbuilt capability or separate repeater device) i.e. the solution should be able to extend the backhaul to the second AP which would be at a distance of Minimum 100 Meters.	Please confirm the deployment topology is based on Omnidirectional or Sectorial antenna. In Public WiFi deployment normally Omni antenna is used to give 360 deg coverage where achieving 300 mtr is not possible. The distance of 300 mtr can be achieved with sector antenna with requisite gain.	Public Wi-Fi scope removed

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12	Annexur e – A: Technica l Specifica tions (Sr No-8)	Public WiFi	67	V) Should compatible with existing centralized controller of GFGNL	We understand that the exisitng Controller is TIP open WiFi compliant. Please confirm if this understanding is correct because If the existing Controller is not TIP Open WiFi compliant, only the existing OEM whose controller is deployed can meet this criteria & it will be restrictive condition for other WiFi OEMs.	Public Wi-Fi scope removed

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1 3	Annexur e – A: Technica l Specifica tions (Sr No-2)	P2P & P2MP unlicen sed radio	67	Distance support : P2P/ P2MP-Up to 10Km	Request to segregate link distance requirement for P2P & P2MP. While P2P supports long distance links, P2MP is suitable for link distance upto 5 KM.	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications

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1 4	Manage ment	SNMP V3, Remot e manag ement, should have facility to set passwo rd for local & remote login	Pa ge 71	Simple Network Management Protocol (SNMP) is a widely used protocol for network management that provides a standardized framework for monitoring and managing network devices such as routers, switches, servers, and printers.	Requesting to add TR-069 for remote mgmt	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications
1 5	Operatio n Temper ature	0°C to 50 °C	Pa ge 71	Requesting to change 0 to 40 °C	Requesting to change 0 to 40 °C	No Change - As per RFP

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1 6	Power input	230 V AC, 50- 60 Hz	Pa ge 71	As per the industry standard router support external power adapter	As per the industry standard router support external power adapter	No Change-As per RFP
1 7	Safety standard	UL / IEC	Pa ge 71	Government of India latest certificate MTCTE .	Requesting to add UL / IEC/MTCTE	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 8	No. of Ports	24 ports of 10/100 /1000 BaseT (out of 24 ports, 12 ports should be PoE suppor ted with PoE power suppor t of minim um 80W) and 2 Uplink ports of 1GE	Pa ge 71	This switch is deployed at CPE location 500 Active VLAN is not required at CPE side. Most OEMs don't support 500 Active VLAN.Request ing you remove or replace 500 Active VLANs with 250 Active VLANs	Requesting you remove or replace 500 Active VLANs with 250 Active VLANs	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 9	Features	DHCP, IGMP V3, IEEE 802.1Q VLAN encaps ulation, 802.1d (Spanni ng tree), 802.1w (RSTP), 802.1s (MSTP) Should suppor t minim um 500 active VLANs.	Pa ge 72	Government of India latest certificate MTCTE	Requesting to add MTCTE	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
20	Features	DHCP,I GMP V3,IEEE 802.1Q VLAN encaps ulation, 802.1d (Spanni ng tree), 802.1w (RSTP), 802.1w (RSTP), 802.1s (MSTP) Should suppor t minim um 500 active VLANs.	Pa ge 72	This switch is deployed at CPE location 500 Active VLAN is not required at CPE side. Most OEMs don't support 500 Active VLAN.Request ing you remove or replace 500 Active VLANs with 250 Active VLANs	Requesting you remove or replace 500 Active VLANs with 250 Active VLANs	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
2 1	Addition al Clause	SECTIO N-4 Qualific ation Criteria 4.1. Eligibili ty Criteria	Pa ge 50 of 11 0	6.1 The Sole Bidder- and OEM 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 23rd July 2020 issued by Department of Expenditure, Gol Self- certification from sole and OEMs on Non- Judicial stamp of Rs. 300/- in the prescribed format (Annexure – II), separately.	Supplier need to comply to Public Procurement (Preference to Make in India) Order 2017 DoT letter No. 1609/2018-IP-Part(3) dated 8062021	The provisions of the Public Procurement (Preference to Make in India) Order 2017 dated June 15, 2017 (or subsequent revisions, if any) by Department of Industrial Policy and Promotion, GoI shall apply to this tender to the extent feasible. However, the participation is open to all i.e. Class-I, Class-II and to Non-local suppliers including foreign suppliers.

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22	Addition al Clause	SECTIO N-4 Qualific ation Criteria 4.1. Eligibili ty Criteria	Pa ge 49 of 11 0	5.1 The Sole Bidder or lead Bidder (in case of consortium) 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/co mponents/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	As per Department of Telecommunication notification no. 18-10/2017-IP dated 29th August 2018 on Page No. 6 of 12, SI No. 18 of Table A mentions minimum local content of 55% for Microwave Radio System(IP/Hybrid) from 2019-20 onwards	No change- As per RFP, Make In India Products are also allowed to particiate.

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				cost to the Tenderer and without impacting the performance of the solution in any manner whatsoever. 5.2 Bidder has to ensure the procurement of latest products. GFGNL will disallowing products having manufacturing dates older than a year from the date of submission of the RFP.		

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2 3	SECTION -3	Scope Of Work	17	LMCA Bidder has to consider approximately 5% cases of entire scope for preparation of earthing and any other additional activities in this tender only.	Clarification required on the type of earthing: should it be Pipe Earthing standard or Chemical Road Earthing only	For long life/duration and safety precautions on the given requirements in the RFP Chemical Rod earthing will be suggested.

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2 4	vii)	SECTIO N-3 Scope Of Work	18	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 also remotely monitor to know atleast the OFC Cut Issue, Power Issue(Utility),E quipment- cold Start, warm Start, link Down, linkUp, authentication Failure, and Neighbor Loss status of each	Could you please confirm if a manageable media converter is necessary? There seems to be a discrepancy between the Datasheet ,financial bid and requirement.	For the last mile connectivity Unmanageable Media Converters are proposed. Modified Clause: Refer in Revised Clause Annexure

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				equipment from day-01 of device integration in network and mapped in Bidder's NMS on day-01.		

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25	SECTION -3	Scope Of Work	19	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 also remotely monitor to know atleast the OFC Cut Issue, Power Issue(Utility),E quipment- cold Start, warm Start, link Down, linkUp, authentication Failure, and Neighbor Loss status of each equipment from day-O1	As per our understanding the bidder must provide an EMS (Element Management System) for all active components as specified in the attached clause. This means that a Managed Optical Media Converter is required with Manage + EMS capabilities. We request you to amend the data sheet accordingly. Note : All SNMP-based information should be managed by the EMS Clarification required on who will provide the server, storage space, required OS, and resources for the newly installed active components.	The bidder must provide Licensed EMS (Element Management System) for all active components as specified in the clause, excluding media converter(as its unmanaged). Bidder has to refer Pre-bid Query(24th) answer. Providing required infrastructure will be in the scope of the GFGNL. Bidder has to integrate the all EMS with existing NMS of GFGNL only through API or any suitable mechanism.Cloud based EMS will not be suggested looking at critical and sensitive government data. Selected bidder has to follow all GoG/GoI data policy /law.

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				of device integration in network and mapped in Bidder's NMS on day-01. GFGNL may ask API or any other suitable mechanism to integrate them with GFGNL's NMS and Bidder has to support for end to end integration.		

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2 6	SECTION -3	Scope Of Work	19	LMCA needs to integrate all EMS with existing NMS of GFGNL only and no need to develop new NMS.	Please confirm the API type of the existing NMS (Network Management System)	Existing GFGNL NMS (NMSWorks) will support interfaces such as SNMP/JAVA/COR BA/XML/REST API
27	xii)	SECTIO N-3 Scope Of Work	19	LMCA has to ensure to terminate media (with any of the wireline/wirel ess media) along with 1 WiFi router at customer end	It is understood that for locations where delivery is planned with a WiFi-ONT, the installation of a separate WiFi router is not required	Yes. Correct.

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2 8	xv)	SECTIO N-3 Scope Of Work	19	During outage of any link or damage due to any field circumstances / wireless link interference does not necessarily restore in same media, but LMCA has to keep it in mind with permanent solution and high network uptime to customer	We assume that in the event of interference issues, any resulting changes in media costs will be covered by GFGNL	As it is EPC based contract, Hence bidder has to ensure media selection considering all the affected factors. For the cases, Where Change in Connectivity is required for the situation beyond the control of the LMCA(Cross negligence during the design factor is to be ensure by the LMCA) and submission of valid best efforts evidances, the difference amount of the BOQ at 60% of the quoted price will be paid.However, Bidder is solely responsibile for the free material from site to be used at new site without any additional cost of transportation/se rvice cost to GFGNL.

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29	3.1	3.1 Plan, Design, Implem ent and Commi ssion Phase	20	Implementati on of last mile connectivity through wireline (UG OFC / aerial drop fibre cable / Cat 6 aerial cable, mini OLT/splitter(1: 8)/media converter/ 8 port L2/L3 manageable switch) considering optical PON port (at feasible site) or RJ45 ports (10/100/1000 Mbps) interface available at GP end or wireless (P2P / P2MP unlicensed band radio) considering backhaul availability at GP on RJ45 ports (10/100/1000 Mbps). provided all necessary approvals are available from	Clarification required: Is the 8- port switch an L2 or L3 switch? As per the SOR, only an L2 switch is required	Proposed Switch is L2 Only. Modified Clause: Refer in Revised Clause Annexure.

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				competent authority of India to deploy the equipment of newer technology. v) LMCA has to consider approximately 5% of sites required 8 Port L2/L3 manageable switch. However, scope may vary +/- 15%. In the event of national security related concerns or availability customer orders.		

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3 0	x)	3.1 Plan, Design, Implem ent and Commi ssion Phase	21	On wireline/wirel ess connectivity, Preparation of the asbuild drawing (wherever applicable) for the installed link & facilitating GFGNL's existing vendor to update details of the customer connectivity in GFGNL's GIS and NMS application as per GFGNL's requirement.	It is understood that LMCA is only responsible for providing the necessary details to GFGNL for GIS implementation. The responsibility for updating the GIS will rest solely with GFGNL?	Yes, Correct. GFGNL has its own GIS.

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3	xvi)	3.1 Plan, Design, Implem ent and Commi ssion Phase	21	In case of repairing or upgradation of existing links Bidder will be responsible without any additional cost to the GFGNL	We have assumed that the repair work will fall within the scope of LMCA at no additional cost to GFGNL. However, GFGNL will be responsible for bearing the costs associated with upgrading the existing links/hardware.	Modified Clause: Refer in Revised Clause Annexure.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
32	x) I	3.1.1. OFC installa tion throug h open trenchi ng & ducting and HDD	23	ix) Intimation in "Call before you Dig" application to be ensure by Bidder prior to digging work. x) In case, trench depth is not achieved because of any utilities present or any other reason, Bidder will have to apply below mentioned protection. All related depth and protection will be certified by GFGNL authorized person Sr. No. Depth of Trench Recommende d 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	Please confirm whether any deductions will be made due to reduced efforts during execution.If any please share calculation	Modified Clause: Refer in Revised Clause Annexure- Penalty on UG Fibre laying Depth deviation.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				mm *100 mm on site PCC		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
33	xxvii)	3.1.1. OFC installa tion throug h open trenchi ng & ducting and HDD	25	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/letter received from other Bidder will be levied to LMCA.	We assume that the deducted amount of ₹10,000 will be released upon receipt of the No Objection Certificate (NOC) from the respective authority.	In Event of Damaging others owners/asset agency assets/utilities, the penalty provisions mentioned in the RFP is essential. So that due care mentality is enforced. Modified Clause: For both the wireline and Wireless connectivity, during execution/O&M of the work utmost care should be taken by the Bidder, so that the existing road shoulders/equip ments/cables/util ities/Civil Infrastructre/hou ses are not damaged or cut. In-case any damage/ cut incidents duely reported to the GFGNL in writing specifically from owner/asset

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
						agency a penalty of Rs. 2,000/- per instances with addition to DN amount/letter received from other asset owners/agency will be levied to LMCA.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
3 4	i)	3.1.3 Installa tion of Wireles s Radios	26	Bidder will carry out LoS (Line of Sight) survey for all the locations to be connected on wireless media and prepare & submit a detailed report to GFGNL mentioning the minimum requirement but not limited to, height of pole / mast required to be installed, location to be installed, end to end connectivity details, along with proposed equipment details, feasibility report from 3 GPs/GFGNL PoP.	We assume that Line of Sight (LOS) feasibility for 3 GPs is required only for locations that are not feasible from the nearest GP. If the location is feasible from the nearest GP, then a single LOS assessment is sufficient, and 3 GP feasibility is not required.	Modified Clause: Refer in Revised Clause Annexure.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
3 5	ix)	3.1.3 Installa tion of Wireles s Radios	27	Refer minimum specification mentioned in this RFP, 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.	Please exclude this clause, as it would introduce extra costs to the project. The management and execution of the project, including operations, are covered under LMCA's scope	Modified Clause: Refer in Revised Clause Annexure.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
3 6	3.1.5	Public Wi-Fi Connec tivity	30	xii) User Management Module should be given as a software package and should be without any licensing or time limitation of its usage. It should support features such as user authentication , access etc. through OTP (One Time Password) on mobile no. and email.	Clarification required on the SMP, SMS Gateway, Email Gateway, and Payment Gateway: Will these be provided by GFGNL, or should they be supplied by the new PIA?	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
37	3.1.5	Public Wi-Fi Connec tivity	30	xv) Bidder will be responsible for following but not limited to, a secured connection by means of Firewall, Security testing of the network, Security audit every quarter during the contract period, Integration and management of the SMS and Payment Gateway, reconciliation, and resolution of any integration issues during the project duration.	The central infrastructure, Wi-Fi controller, and core and access networks are utilized by GFGNL. A clear scope is required for the following aspects of the Wi-Fi network: firewall , security testing, security audits during the contract period	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
3 8	3.1.5	Public Wi-Fi Connec tivity	30	The Bidder shall ensure a secure Internet connection and access through OTP to all the subscribers with centralized authentication mechanism.	What is the required OTP plan(No of SMS), and for how many years should it be provided	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
3 9	3.1.5	Public Wi-Fi Connec tivity	30	v) Bidder has to ensure to deliver the solution with compatible Wi-Fi access point which can support to existing Wi-Fi controller.	Please provide details of the existing Wi-Fi controller.	Public Wi-Fi scope removed
4 0	ii)	3.1.6 Networ k Design options	30	Bidder also has to plan the public Wi- Fi atleast one hotspot for public in their scope	It is understood that the hotspot locations will be exclusively at GP (Gram Panchayat) locations	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
4	i.	3.2.1 Networ k Invent ory	34	To mitigate risk from power fluctuation, or aging or other causes of device failure, the LMCA would be required to maintain an inventory of all the components used in the network and the minimum 5% spares quantities must available at the different levels of geographical regions(distric t/zones/nearb y locations) to manage the SLA and customer uptime of all elements during the entire contract duration	It is understood that a 5% spare quantity will be provided for active devices only or remove these clause as SLA is already mention in RFP.	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
4	i)	3.3.2 Periodi cal Mainte nance	34	The LMCA shall carry out periodical maintenance of the network commissioned with such frequency that each customer is covered once in every month.	We kindly request that the Preventive Maintenance (PM) be scheduled on a quarterly basis, ensuring that each customer receives coverage once every quarter	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
43	vii)	3.3.2 Periodi cal Mainte nance	35	LMCA has to provide O&M services to existing customer delivered by GFGNL, O&M charges will be given with 10% of capex rate discovered by distance criteria through this RFP.	We understand that this clause will apply to customers who are currently receiving services.	Clause Modified: Based on technical, financial, security analysis and cost benefit in favour of Govt. or technlogical products, GFGNL may ask New selected LMCA to take over existing GFGNL connected/delive red link(Reference No: GFG/DST/Bharat Net/Connectivity through Bharatnet/2021/ 642) and GFGNL will pay 10% of capex rate per site /location every year as per O&M charges based on the rate dicovered in this RFP and bidder has to rectify/manage the existing setup with the scope, terms and conditions mentioned in this RFP document.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
4 4	viii)	3.3.2 Periodi cal Mainte nance	35	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/wate r pipeline project etc) or aerial damage due	It is understood that reimbursement will be based on the pricing discovered in this RFP	Query Answered - Please refer response in Question:91

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				to major EB pole shifting work / by any third party /due to any other field challenges within defined timeline. However, the Bidder can raise a reimburseme nt request in particular cases where the situation is beyond the control of Bidder. The GFGNL competent authority will take further decision on reimburseme nt request based on valid proof submission.Th e decision made by GFGNL will be considered as		
				final.		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
4 5	iv	3.4 Scope of Work (SoW) for GFGNL	39	GFGNL will provide raw AC power supply at Gram Panchayat (GP) for the last mile equipment to be installed by the Bidder based on available facilities at site	We assume that GFGNL will provide a UPS-regulated AC power supply	Considering the criticality of services and network uptime,GFGNL will provide raw AC Power supply with UPS backup wherever feasible at Gram Panchayat(GP)/G FGNL PoP only.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
4 6	iv)	3.6 Implem entatio n timelin e and penalti es	43	No. of approved locations in a lot = X T3 = (T0+1 Month = 20% of X, To+2 Month = 30% of X, To+3 Month = 40% of X, T0+4 Month= balance 10% of X) Note: Remaining balanced 10% might be problematic cases and for that mutual progress with bast effort- basis will be considered with upper ceiling of T0+6 Months	Please include a material mobilization period of 20 days in this clause	Looking at remote and distributed locations,10 days mobilizations can be accepted, refer modified annexure- Implementation timelines and penalty section.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
47	b)	Penalty for rando m inspect ion	45	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.	We assume that the aviation lamp will be applicable solely to the mast tower	Yes-Correct. However, Bidder will solely responsible to follow the GOI,GoG law,wireless,SACF A Guidelines, border policy at concern areas and share to tenderer whenver asked.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
48	Note:3	3.6 Implem entatio n timelin e and penalti es	45	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.	It is understood that this clause will apply only if LMCA deems the project feasible during the survey. If the situation is later found to be non-feasible due to reasons such as poor workmanship, no penalties will be imposed if the situation is beyond LMCA's control.	As this is solution/EPC based project, this clause will be applicable based on end to end deliveriable only.And will be applicable where, Customer raise the concern on poor workmanship and cancelling the site due to low quality deliverable/comp lain and same will be recovered.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
49	i)	5.1 O&M SLA & Penalti es	55	Proposed quarterly SLA Uptime / Availability of link per location & penalties thereof Sr. No Uptime Penalty $1 \ge 98.50\%$ Nil, However If Uptime is $\ge 99\%$ then Bidder will get 0.5% incentive in OPEX charges $\ge 99.5\%$ then Bidder will get 1% incentive in OPEX charges $2 \ge 97.00\%$ & < 98.50% 5% of quarterly opex charges will be deducted for respective site $3 \ge 96.00\%$ & < 97.00% 7% of quarterly opex charges will be deducted for respective site $3 \ge 96.00\%$ & < 96.00% 10% of quarterly	We assume that the Service Level Agreement (SLA) will be calculated based on customer complaints raised through the GFGNL helpdesk	Refer rfp clause: 5.1,Note:(2) - SLA measurement through helpdesk, observation with evidance, complain from customer or competent authority/tender er, any other escalation mode through e-mail on quality/deliverabl es.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				opex charges will be deducted for respective site 5 >= 94.00% & < 95.00 % 13% of quarterly opex charges will be deducted for respective site 6 >= 90.00% & < 94.00 % 15% of quarterly opex charges will be deducted for respective site 7 < 90% 20% of quarterly opex charges will be deducted for respective site		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
50	1	6.1 Financi al Bid Format	59	Wireless: Implementati on of P2P wireless UBR(upto 12 Mtr Mast/Pole) link including termination of Wi-Fi router at last mile customer.This includes all types of integration of all necessary wireless accessories including but not limited to , elements of networking, earthing, lightening arrester, clamps, RF & electrical and networking cables/other accessories.	We kindly request that the pole and mast categories be listed as separate line items	Refer Revised Financial Bid in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
5 1	3	6.1 Financi al Bid Format	59	Wireless: Implementati on of P2MP(includin g/supporting 3 minimum UBR LM customers) wireless UBR link including termination of Wi-Fi router at last mile customer.This includes all types of integration of all necessary wireless accessories including but not limited to , elements of networking, earthing, lightening arrester, clamps, RF & electrical and networking cables/other accessories	Please clarify whether the rate discovered applies exclusively to P2MP UBR or if it also includes pole and mast towers. Additionally, please specify the sizes of poles and masts considered in this section	Refer Revised Financial Bid in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
52	4	6.1 Financi al Bid Format	59	Wireline:diggi ng,laying,pulli ng 12F UG OFC with 1mtr depth including junction point of Splicing activities, 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) ,CPE(MC/ONT /etc) including termination of Wi-Fi router at last mile customer including earthing of equipments. This includes all types of integration of wireline accessories of networking	Please remove the earthing elements from this section, as they are not required for the WiFi router.	Refer Revised Financial Bid in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				and electrical cables/other accessories.		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
53	8	6.1 Financi al Bid Format	60	Public Wi-Fi	We assume that the cost of the desired pole (planned for hotspot locations) should also be considered with this line item	Public Wi-Fi scope removed
54	9	6.1 Financi al Bid Format	60	LAN Cabling per FE (LAN) port	We assume that the cost of cables, up to 90 meters in length, and the WiFi router should be incorporated into this line item	Refer Revised Financial Bid in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
55	14	6.1 Financi al Bid Format	60	Installation, integration and commissionin g of Electronics (Mini OLT)*	We assume that LMCA is required to supply a fully loaded OLT. Please clarify whether this refers to the cost of a mini OLT or if it includes ONTs as well. If ONTs are included, please confirm the number of ONTs considered under this line item	Refer Revised Financial Bid in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
56	SeCTION -6	Financi al Criteria	61	Sno - 6&7 - Wireless: Installation, configuration, commissionin g and acceptance testing of point to point Li-Fi / FSO link upto 5 Km including Tower/Pole/ Mast, earthing cable, lightening arrester, clamps/fixture s, optical patch cord & electrical cables etc includes Wi-Fi router at last mile customer.	Please include the clause specifying the minimum pole/tower height requirements as per the RF link clause: UBR (up to 12 meters mast/pole) or above 12 meters (GBT/RTT/Mast).	Refer Revised Financial Bid in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
57	SeCTION -6	Financi al Criteria	61	Sno 14 - Installation, integration and commissionin g of Electronics. (Mini OLT)*	We assume that the scope should include the supply, installation, integration, and commissioning of electronics Mini OLT. ONT Spacification is not mention and	Refer Revised Financial Bid in Annexure and Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
58	6.1	Financi al Bid Format	66	Clarification Required on financial Bid Format UOM	Based on our understanding, the unit of measurement (UoM) for CPE (Customer Premises Equipment), P2P (Point-to-Point), and P2MP (Point-to-Multipoint) links shall be in 'Numbers,' while the UoM for fiber laying shall be in 'Meters. Please Confirm.	No Change-As per RFP.(As bid is on EPC model, and sites are geographically distributed UoM is based on the approximate number of Sites only)

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
59	4	Pole & mast for aerial cable & radio installa tion	72	Foundation should be constructed to support above mentioned wind speed	We assume that this applies exclusively to the mast tower	Considering the safety of villagers/citizens, This will be applicable to all wireless inventroy installed infrastructure like pole, Tower,Mast,etc. excluding wall mount pole.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
6 0	Annexur e – A: Technica I Specifica tions	Mini GPON OLT	74	Mini GPON OLT 4 Port - Compatible with GFGNL Device – OLT, ONT, Switch,etc.	We assume that the ONT will be compatible with the existing GFGNL OLT. The bidder may plan for any 4- port GPON Mini OLT according to TEC GR for the new network. The bid should ensure that the ONT is also compatible with the existing GFGNL OLT. Specifications for the ONT are required	Clause Modified: Refer Revised Clause Annexure in-Technical Specification

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
6 1	General Query			TEC Complince	We assume that all active and passive components shall comply with TEC GR. No TSEC certification is required. However, MTCT/Trusted Source certification is mandatory	Yes,Correct, However mentioned in relevant technical specifications criteria should be meet

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
6 2	4.2	Techni cal Qualific ation Criteria	54	Point no 3 and 4 are same. A total of 100 marks is acceptable; only 4 points are covered, however the RFP mentions 5 points.	kindly clarify the total marks divided by points in the Technical Qualification Criteria.	Clause Modified: Refer Revised Clause Annexure in-Technical Qualification
63	3.1 (A) i)	Scope of Work (SoW) for the Bidder	16	LMCA Bidder has to consider approximately 5% cases of entire scope for preparation of earthing and any other additional activities in this tender only.	Please clarify any other activities	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
6 4	Annexur e – A	Techni cal Specific ations	73	Mini GPON OLT 4 Port - Compatible with GFGNL Device – OLT, ONT, Switch,etc.	Sr. No. 5 to 8 - Tender Specifications points are missing	No Change- As per RFP- Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
65	Annexur e A Technica I Specifica tions	P2P & P2MP unlicen sed radio	67	The Equipment should be type approved by WPC. NSDTS and MTCTE certified.	National Security Directive on Telecom Sector(NSDTS) is applicable to Telecom License holders as per Department of Telecommunication File No. 20- 1236/2021-AS-I dated March 30, 2021.Hence request you to remove this from Unlicened radio requirement.	Clause Modified: Refer Revised Clause Annexure in-Technical Qualification

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
6 6	Make in India Complia nce				we assume that, Supplier need to comply to Public Procurement (Preference to Make in India) Order 2017 DoT letter No. 1609/2018-IP-Part(3) dated 8062021	Make In India Products are also allowed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
67	Departm ent of Telecom municati on complia nce				As per Department of Telecommunication notification no. 18-10/2017-IP dated 29th August 2018 on Page No. 6 of 12, SI No. 18 of Table A mentions minimum local content of 55% for Microwave Radio System(IP/Hybrid) from 2019-20 onwards	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
68	SECTION -4 Qualifica tion Criteria	4.1. Eligibili ty Criteria	46	Additional clause	As per the DPIIT guideline P- 45021/2/2017-PP/BE-II- Part(4)/Vol.II dated 19-07-2024, procurement through Class-1 OEM is mandatory, hence we are requesting you to add a clause as "The OEM of the proposed solution should fall under Class-1 Category of Make in India".	The OEM of the proposed solution should fall under Class-1 Category of Make in India and Trusted Telecom Portal (TTP): Policy regarding input of data pertaining to Non-India Registered (NIR) OEMs

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
69	Annexur e – A: Technica I Specifica tions	Public Wi-Fi	66	Additional clause	All Wi-Fi devices (i.e., Public Wi- Fi and CPE routers) and Managed switches should be from the same OEM. Additionally, the Wi- Fi and switches should be centrally managed with existing controller.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
70	Annexur e – A: Technica l Specifica tions	Public Wi-Fi	66	Additional clause	A product with radio or Wi-Fi functionality manufactured in India is mandatory to have a WPC (ETA) certificate according to DoT guideline. Hence, requesting to add the clause as "Should be WPC (ETA) certified."	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
71	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) router – (Wi- Fi CPE)	72	Additional clause	All Wi-Fi devices (i.e., Public Wi- Fi and CPE routers) and Managed switches should be from the same OEM. Additionally, the Wi- Fi and switches should be centrally managed with existing controller.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
72	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) router – (Wi- Fi CPE)	72	12. Safety standard	A product with radio or Wi-Fi functionality manufactured in India is mandatory to have a WPC (ETA) certificate according to DoT guideline. Hence, requesting to add the clause as "Should be WPC (ETA) certified."	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
73	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) L2 manag eable switch – 24 ports	66	Additional clause	All Wi-Fi devices (i.e., Public Wi- Fi and CPE routers) and Managed switches should be from the same OEM. Additionally, the Wi- Fi and switches should be centrally managed with existing controller.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
7 4	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) L2 manag eable switch – 8 ports	73	Additional clause	All Wi-Fi devices (i.e., Public Wi- Fi and CPE routers) and Managed switches should be from the same OEM. Additionally, the Wi- Fi and switches should be centrally managed with existing controller.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
7 5	SECTION -6 Financial Criteria	CPE (custo mer premis e equipm ent) router – (Wi- Fi CPE)	60	-	The CPE router's specifications are provided; however, the quantity is not mentioned in the BoQ. Kindly review and provide the quantity.	Please Refer Financial Bid.All Line items are included with LM(Last mile) CPE Termination.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
76	New Clause	Proof of Concep t	N. A	New Clause	Query: Need of Proof of Concept Questions for the PreBid Meeting: Is a Proof of Concept (POC) mandatory for participating in the bidding, given that the last- mile connection from Panchayat to Village is planned to be wireless, with an estimated volume of approximately 7,000 radios? If POC is mandatory then which features to be demonstrated? What will be the scale of POC?	No Change-As Per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
7 7	Section 6	Financi al Criteria	59	P2MP (including/sup porting 3 minimum UBR LM customers	Query: The total count is 3675 units. Questions for the PreBid Meeting: Could you provide a breakdown of the quantities for Point-to-Multipoint (P2MP) Sector Radios and PTP Remote Radios?	Clause Modified: Refer Revised Clause Annexure in - Financial Bid

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
78	P2P & P2MP unlicens ed radio	Additio nal feature s/Adva nce Techno logy suppor t	68	The final alarm/alert or message sent by a device before it shuts down or loses power or power shut down alert /GPS-Real time synchronizatio n/MAC level authentication s.	Query: The three clauses are not interlinked and should be treated separately Questions for the PreBid Meeting: 1) Are all the mentioned features—final alarm/alert before shutdown, power shutdown alert, GPS real-time synchronization, and MAC-level authentication—mandatory, or is it sufficient to have any one of them? 2) MAC Spoofing is easy now a days so it is recommanded to use Link Password. SSID should not be broadcasted Recommanded to use RADIUS authentication for user authentication and RADIUS authorization for user access to unit configration.	Clause Modified: Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
79	P2P & P2MP unlicens ed radio	Electric al require ment	67	Power over Ethernet (PoE) injector (maximum upto 15W)	Query: Power over Ethernet (PoE) injector (maximum upto 15W) 1) This should be left to OEM/bidder to consider the PoE injector suitable for the product offered. 2) Can we offer a product with < 30W can be offered considering the best performance and reduced total cost of ownership. For example covering 360 degree using typical base station sector there would be requirement of around 60 W power consumption for the single site where as a single radio can be offered to cover 360 degree coverage consuming <30W power or less than half the power of conventional solutions.	Clause Modified: Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
8 0	New Clause	Link Perfor mance	N. A	New Clause	1) We recommand to consider an option which trigger an alarm if the system start experiencing the degration in the link performance from a defined thrashold value.	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
8	New Clause	Sector Covera ge/One Box Solutio n	N. A	New Clause	1)As per requirement we have to use separate radios for different directions which will increase cost, weight , power, noice or shall we consider an option for a single box solution that covers 360 degrees. Implementing a single BTS radio to provide 360- degree coverage could potentially save on both CAPEX and OPEX.	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
82	3.2 For Wireless UBR/Li- Fi links	3.2 For Wireles s UBR/Li- Fi links	47	3.2 For Wireless UBR/Li-Fi links	Given the need for numerous radios, the OEM should demonstrate substantial experience by providing certificates of smooth operations from 2-3 customers and proof that their radio sales in the past 3 years were 2-3 times the quantity requested in this RFI.	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
83	3.3 For CPE	3.3 For CPE	47	3.3 For CPE	Given the need for numerous radios, the OEM should demonstrate substantial experience by providing certificates of smooth operations from 2-3 customers and proof that their radio sales in the past 3 years were 2-3 times the quantity requested in this RFI.	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
8 4	Annexur e A Technica I Specifica tion Ports	Public WiFi	Pg 65 Sn 3	2 nos. (1 - WAN+1- LAN) of 10/100/1000 Base-T auto sensing RJ45 based Ethernet ports	It is not recommended to lay two ethernet cables on outdoor tower/pole to avoid unnecessary ethernet surge, instead it is recommended to provide additional ethernet port at IDU indoor.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
85	Annexur e A Technica I Specifica tion Other mandat ory paramet ers	Public WiFi	Pg 67 Sn 8	i) Should support Signal rejection for 3G/LTE/WiMA X in a co- Located environment.	As the required equipments operates of license free 5Ghz and 2.4 GHz bands, it is not allowed to operate or interfere on any other frequency (3G/LTE/WiMAX), thusit is requested that this point should be removed	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
8 6	Annexur e A Technica I Specifica tion ports	P2P & P2MP unlicen sed radio	Pg 67 Sn 4	1 x 10/100/1000B aseT Ethernet (Auto negotiation) & 1 x 10/100 Base-Tx (RJ- 45) (Auto negotiation)	It is not recommended to lay two ethernet cables on outdoor tower/pole to avoid unnecessary ethernet surge, instead it is recommended to provide additional ethernet port at IDU indoor.	For WAN: 1 x 10/100/1000Base T Ethernet (Auto negotiation) & For LAN: 1 x 10/100 Base- Tx (RJ-45) (Auto negotiation), Clause Modified: Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
87	Annexur e A Technica l Specifica tion Addition al features /Advanc e Technol ogy support	P2P & P2MP unlicen sed radio	Pg 68 Sn 20	• The final alarm/alert or message sent by a device before it shuts down or loses power or power shut down alert	To reduce cost it is recommended to provide UPS PoE indoor instead of dying gasp, as it not only boost link availability during power failure but also eliminate and reduce rist of equipment failure, and is also a cheaper and viable option then dying gasp alarm.	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
8 8	SECTION -4 Qualifica tion Criteria average annual turnover	Eligibili ty Criteria	Pg 46 Sn 2	1 Zone 7, 2 Zone 14, 3 Zone 21, 4 Zone 28	Request to you modified average annual turnover 1 Zone 3.5, 2 Zone 5, 3 Zone 10, 4 Zone 15, so we are easyly applied all 4 zones	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
89	SECTION -4 Qualifica tion Criteria For Optical Fibre	Eligibili ty Criteria	Pg 46 Sn 2	1 zone 1000 Kms, 2 zone 2000 Kms, 3 zone 3000 Kms, 4 zone 4000 Kms.	Request to you modified average annual turnover 1 Zone 500 Kms, 2 Zone 1000 Kms, 3 Zone 1500 Kms, 4 Zone 2000 Kms, so we are easyly applied all 4 zones • Validated Data from Government sources (DoT /TRAI reports, portal log, reputed enterprice Etc.) • The details of ISP nodes or points of presence with their locations and number of broadband/ leased subscribers.	No Change- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
9 0	Public Wi-Fi Connecti vity		Pg 28 Sn 4	Controller (open-source software based)	Request to bidder's installed his WLC free of cost, if not complitible exisitng WLC.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
9					GEB/DISCOMS and Local cable opratiores damage of cable & then recovery by them, kinldy intemate to the department being government organitation then not to damange our fiber.	Since we are providing O&M payments , thus it is escpected that LMCA would be proactive to prevent damages. In case of advance intimation to the GFGNL about anticipated damages then GFGNL will facilitated and communicate to the respective agency for taking care of the assets. If the damage assets. If the damage assets is lesser then 40 mtr of the length then the restoration/ repair of the assets is part of the regular O&M activities. And hence no payment will be given. In Case, upon advance intimation and unavoidable circumstances if damage asset is more than 40 mtr, then GFGNL will reimburse the cost of cable

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
						material with Rs 1,000/- logistical cost as per the i) Rs 1000/- logistical / repair cost ii) Cable cost per mtr= Rs 20 /- per meter iii)Aerial Pole : Rs 1000/- each

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
92					Clarification for the mode of connectivity either ratio and fiber need to be confirmed (without confirmation again others will quote less on radio and high on fiber) because they want to do on fiber only Example 100 Link order 70% on Wireless & 30% Fiber.	Please refer the network planning on solution design criteria in Annexure for better understanding.

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
93	Annexur e – A: Technica l Specifica tions (Sr No-3)	Public WiFi (Ports)	65	2 nos. (1 - WAN+1- LAN) of 10/100/1000 Base-T auto sensing RJ45 based Ethernet ports	We understand that APs shall be connected with switch / rout which will have LAN port, thus there is no used case of LAN port in Wi-Fi access Point. Request please relook into this port requirement of LAN port and remove it.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
9	Annexur e – A: Technica l Specifica tions (Sr No-4)	Public WiFi	66	iV) Must support SSH & SNMPv3 protocol	There are other protocols for communication between AP & Controller like https based . So request to allow other equivalent technologies as per TIP Open WiFi standard.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
95	Annexur e – A: Technica l Specifica tions (Sr No-4)	Public WiFi	66	NA	In the RFP, TEC standard of OFC is mentioned & compliance for TEC is asked . For your information, TEC standard for Access Points is also available. Request you to kindly ask for TAC/TSEC of Access Points as per latest TEC standards	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
9 6	Annexur e – A: Technica l Specifica tions (Sr No-4)	P2P & P2MP unlicen sed radio	67	Ports 1 x 10/100/1000B aseT Ethernet (Auto negotiation) & 1 x 10/100 Base-Tx (RJ- 45) (Auto negotiation)	Request to remove additional port requirement of 1x10/100 Base-Tx(RJ-45). Two Ethernet ports are not required in UBR as it will work in bridge mode to extend Ethernet signal over wireless media.	2 x 10/100/1000Base T Ethernet (Auto negotiation) Both Port 10/100/1000 Base T Ethernet (RJ45)(Auto negotiations) at PoE/IDU port for 1 WAN and 1 LAN

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
97	Annexur e – A: Technica l Specifica tions (Sr No-11)	P2P & P2MP unlicen sed radio	68	System must provide alarm and control capabilities via Simple Management Protocol (should support SNMPv3) this should be following but not limited. Power Issue (Utility), Equipment- Cold Start, Warm Start, Link Down, Link Up, authentication Failure, and egp Neighbor Loss, etc.	We request below amendment in this clause. 1. Request to remove egp neighbour loss as it is used in case of routers whereas UBR is a L2 brdge device and egp neoghbour loss is not applicable. 2. Please allow SNMPv2 also as management protocol.	Clause Modified: Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
9 8	Annexur e – A: Technica l Specifica tions (Sr No-19)	P2P & P2MP unlicen sed radio	68	Latency 3-5 ms(for link)	Request to relax latency upto 10 ms which is industry standard as latency depends upon various external factors like site condition, interference etc	Clause Modified: Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
9 9	Annexur e – A: Technica I Specifica tions	P2P & P2MP unlicen sed radio	73	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 active VLANs.	Request to please reduce the active VLANs requirement to 250 as it is good enough to meet the operational requirement and will also allow more OEM participation.	It is not part of P2P/P2MP Radios

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 0	Annexur e – A: Technica l Specifica tions	P2P & P2MP unlicen sed radio - 20	68	• The final alarm/alert or message sent by a device before it shuts down or loses power or power shut down alert / GPS-Real time synchronizatio n / MAC Level authentication s.	Request to remove GPS real time synchronization.	Clause Modified: Refer Revised Clause Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 1	Annexur e – A: Technica l Specifica tions	P2P & P2MP unlicen sed radio - 12 (Mana gemen t)	68	Automatic Channel selection immediately switches to the best suitable channel in case of interference/d ynamic auto optimization of channel and bandwidth. Various radio interference mitigation technic.	Auto optimisation of channel Bandwith is supported by very specific OEMs. Request Please remove this specifications for participation of more OEMs	No Change - As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 2	Annexur e – A: Technica I Specifica tions	P2P & P2MP unlicen sed radio - 12 (Mana gemen t)	68	NA	In the RFP, TEC standard of OFC is mentioned & compliance for TEC is asked . For your information, TEC standard for Unlicensed Band Radio is also available. Request you to kindly ask for TAC/TSEC of Access Points as per latest TEC standards	No Change - As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 3	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) L2 manag eable switch – 24 ports - 4 (featur es)	73	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 active VLANs.	Request to amend clause as "DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 250 active VLANs."	Query Already Answered above- Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 4	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) L2 manag eable switch – 8 ports - 4 (featur es)	73	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 active VLANs.	Request to amend clause as "DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 250 active VLANs."	Query Already Answered above- Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 5	Annexur e – A: Technica I Specifica tions	12F Optical Fibre Cable(Under Ground and Aerial)	65	Under Ground: ITU- T-G.657 (TEC GR Standard No.: TEC 85170:2011) TEC 85190:2022 Aerial: TEC 85190:2022 (Loose tube with jelly compound & Water swellable tape / yarn)	For Under Ground 12F Armored Optical Fibre Cable reference TEC GR shall be with latest ammendment with TEC 85170:2024 (Supersedes No. TEC/GR/TX/OFC-20/01/MAR- 2011). For Aerial 12F ADSS unarmored cable please clarify requirement is for Type A-I Semi Dry core cable without ice loading or Type A-II Semi Dry core cable with ice loading	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 6	Annexur e – A: Technica l Specifica tions- Optical Splitter (1:4 & 1:8)	Splitter TEC GR	73	1. 1. SPLITTERS 1:4: As per TEC GR No. TEC/GR/TX/O PT-001/01/ APRIL-12 with latest amendments. 2. 2. SPLITTERS 1:8: As per TEC GR No. TEC/GR/TX/O PT-001/01/ APRIL-12 with latest amendments.	For the mentioned splitter requirement kindly clarify the type of splitter to be provided. Below splitter types for your reference: 1. Type 1- Bare splitter: Bare splitter with 900µm Fiber in input and output (Without Connector) 2. Type 1- Bare splitter: Bare splitter with 900µm Fiber in input and output (With Connector) Confirm (SC/LC APC/PC) 3. Type 2: Rack mounted splitter 4. Type 3: Box mounted Splitter	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 7	SECTION -3 Scope Of Work Caluse No- 3.1.5 (iv)	Public WiFi Connec tivity	28	Bidder has to understand the existing network of GFGNL where the NOC/SDC comprises of various Network components like Core Switch, Router, Server, firewall, Controller (open-source software based), etc. capable to command and control the Wi-Fi Sites and its user management.	Please share the details of existing controller and available resources (RAM, Core, Storage).	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 8	SECTION -6 Financial Criteria Clause no-6.1 (3)	Financi al Bid Format	59	Wireless: Implementati on of P2MP(includi ng/supporting 3 minimum UBR LM customers) wireless UBR link including termination of Wi-Fi router at last mile customer.This includes all types of integration of all necessary wireless accessories including but not limited to , elements of networking, earthing, lightening arrester, clamps, RF & electrical and networking cables/other accessories.	The RFP does not provide the exact count of BTS & CPE devices location out of the asked 3675 quantities of P2MP UBR. Kindly provide the same as the commercials are different for BTS & CPE devices.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 0 9	Annexur e – A: Technica l Specifica tions (Sr No-3)	Public WiFi (Ports)	65	2 nos. (1 - WAN+1- LAN) of 10/100/1000 Base-T auto sensing RJ45 based Ethernet ports	We understand that APs shall be connected with switch / router which will have LAN port, thus there is no used case of LAN port in Wi-Fi access Point. Also in case LAN Port is used for connecting another AP, it is not clear how the second AP will be powered on. Request please relook into this additional LAN port requirement in WI-Fi Access Points and remove this requirement.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 0	Annexur e – A: Technica l Specifica tions (Sr No-4)	Public WiFi	66	iV) Must support SSH & SNMPv3 protocol	There are other protocols for communication between AP & Controller like https based . So request to allow other equivalent technologies as per TIP Open WiFi standard.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 1 1	Annexur e – A: Technica l Specifica tions (Sr No-5)	Public WiFi	66	iv) Solution should have provision for extended Wi- Fi coverage through Wi-Fi Repeater Mode Minimum 300 Mtrs (using inbuilt capability or separate repeater device) i.e. the solution should be able to extend the backhaul to the second AP which would be at a distance of Minimum 100 Meters.	As we discussed during pre-bid, we understand the Wi-Fi coverage requirement is 80 meter radial through external / internal antenna. Please confirm.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 2	Annexur e – A: Technica l Specifica tions (Sr No-8)	Public WiFi	67	V) Should compatible with existing centralized controller of GFGNL	Compatibility with exisitng Controller is possible only if the existing controller is TIP open WiFi compliant. Please confirm the same because If the existing Controller is not TIP Open WiFi compliant, only the existing OEM whose controller is deployed can meet this criteria & it will be restrictive condition for other WiFi OEMs.	Public Wi-Fi scope removed

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 3	Annexur e – A: Technica l Specifica tions (Sr No-2)	P2P & P2MP unlicen sed radio	67	Distance support : P2P/ P2MP-Up to 10Km	Request to segregate link distance requirement for P2P & P2MP. While P2P supports long distance links, P2MP is suitable for link distance upto 5 KM.	Modified Clause: Refer in Revised Clause Annexure- Technical Qualification

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 4	Annexur e – A: Technica l Specifica tions (Sr No-3)	P2P & P2MP unlicen sed radio	67	Throughput support - Minimum 100 Mbps per link Base station Throughput support for P2MP link: Minimum 1 Gbps	Request to segregate throughput requirement for P2P & P2MP. While P2P can meet 100 Mbps throughput requirement,For P2MP please change this to 50 Mbps.	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 5	Annexur e – A: Technica l Specifica tions (Sr No-4)	P2P & P2MP unlicen sed radio	67	Ports 1 x 10/100/1000B aseT Ethernet (Auto negotiation) & 1 x 10/100 Base-Tx (RJ- 45) (Auto negotiation)	Request to remove additional port requirement of 1x10/100 Base-Tx(RJ-45). Two Ethernet ports are not required in UBR as it will work in bridge mode to extend Ethernet signal over wireless media. Also this is restricting condition for many OEMs to participate.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 6	Annexur e – A: Technica l Specifica tions (Sr No-11)	P2P & P2MP unlicen sed radio	68	System must provide alarm and control capabilities via Simple Management Protocol (should support SNMPv3) this should be following but not limited. Power Issue (Utility), Equipment- Cold Start, Warm Start, Link Down, Link Up, authentication Failure, and egp Neighbor Loss, etc.	We request below amendment in this clause. 1. Request to remove egp neighbour loss as it is used in case of routers whereas UBR is a L2 brdge device and egp neoghbour loss is not applicable. 2. Please allow SNMPv2 also as management protocol.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 7	Annexur e – A: Technica l Specifica tions (Sr No-19)	P2P & P2MP unlicen sed radio	68	Latency 3-5 ms(for link)	Request to segregate latency requirement for P2P & P2MP. While P2P complies with 3-5 ms latency,For P2MP please change this to 10 ms which is industry standard also.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 8	Annexur e – A: Technica l Specifica tions	P2P & P2MP unlicen sed radio - 12 (Mana gemen t)	68	Automatic Channel selection immediately switches to the best suitable channel in case of interference/d ynamic auto optimization of channel and bandwidth. Various radio interference mitigation technic.	Auto optimisation of channel Bandwith is supported by very specific OEMs. Request Please remove this specifications for participation of more OEMs	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 1 9	Annexur e – A: Technica I Specifica tions	CPE (custo mer premis e equipm ent) L2 manag eable switch – 24 ports (Point no-4)	72	Features - Should support minimum 500 active VLANs.	Request to please reduce the active VLANs requirement to 250 as it is good enough to meet the operational requirement and will also allow more OEM participation.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 0	Annexur e – A: Technica l Specifica tions	CPE (custo mer premis e equipm ent) L2 manag eable switch – 8 ports (Point no-4)	72	Features - Should support minimum 500 active VLANs.	Request to please reduce the active VLANs requirement to 250 as it is good enough to meet the operational requirement and will also allow more OEM participation.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 1	New Clause	Proof of Concep t	N. A	New Clause	Query: Need of Proof of Concept Questions for the PreBid Meeting: Is a Proof of Concept (POC) mandatory for participating in the bidding, given that the last- mile connection from Panchayat to Village is planned to be wireless, with an estimated volume of approximately 7,000 radios? If POC is mandatory then which features to be demonstrated? What will be the scale of POC?	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 2	Section 6	Financi al Criteria	59	P2MP (including/sup porting 3 minimum UBR LM customers	Query: The total count is 3675 units. Questions for the PreBid Meeting: Could you provide a breakdown of the quantities for Point-to-Multipoint (P2MP) Sector Radios and PTP Remote Radios?	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 3	P2P & P2MP unlicens ed radio	Additio nal feature s/Adva nce Techno logy suppor t	68	The final alarm/alert or message sent by a device before it shuts down or loses power or power shut down alert /GPS-Real time synchronizatio n/MAC level authentication s.	Query: The three clauses are not interlinked and should be treated separately Questions for the PreBid Meeting:1) Are all the mentioned features—final alarm/alert before shutdown, power shutdown alert, GPS real-time synchronization, and MAC-level authentication—mandatory, or is it sufficient to have any one of them? 2) MAC Spoofing is easy now a days so it is recommanded to use Link Password. SSID should not be broadcasted Recommanded to use RADIUS authentication for user authentication and RADIUS authorization for user access to unit configration.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 4	P2P & P2MP unlicens ed radio	Electric al require ment	67	Power over Ethernet (PoE) injector (maximum upto 15W)	Query: Power over Ethernet (PoE) injector (maximum upto 15W) 1) This should be left to OEM/bidder to consider the PoE injector suitable for the product offered. 2) Can we offer a product with < 30W can be offered considering the best performance and reduced total cost of ownership. For example covering 360 degree using typical base station sector there would be requirement of around 60 W power consumption for the single site where as a single radio can be offered to cover 360 degree coverage consuming <30W power or less than half the power of conventional solutions.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 5	New Clause	Link Perfor mance	N. A	New Clause	1) We recommand to consider an option which trigger an alarm if the system start experiencing the degration in the link performance from a defined thrashold value.(Proactive warning)	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 6	New Clause	Sector Covera ge/One Box Solutio n	N. A	New Clause	1)As per requirement we have to use separate radios for different directions which will increase cost, weight , power, noice or shall we consider an option for a single box solution that covers 360 degrees. Implementing a single BTS radio to provide 360- degree coverage could potentially save on both CAPEX and OPEX.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 7	3.2 For Wireless UBR/Li- Fi links	3.2 For Wireles s UBR/Li- Fi links	47	3.2 For Wireless UBR/Li-Fi links	Given the need for numerous radios, the OEM should demonstrate substantial experience by providing certificates of smooth operations from 2-3 customers and proof that their radio sales in the past 3 years were 2-3 times the quantity requested in this RFI.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 8	3.3 For CPE	3.3 For CPE	47	3.3 For CPE	Given the need for numerous radios, the OEM should demonstrate substantial experience by providing certificates of smooth operations from 2-3 customers and proof that their radio sales in the past 3 years were 2-3 times the quantity requested in this RFI.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 2 9	Ports	P2P & P2MP unlicen sed radio	s	1 x 10/100/1000B aseT Ethernet (Auto negotiation) & 1 x 10/100 Base-Tx (RJ- 45) (Auto negotiation)	This requirement is not understood clearly. Please explain the requirement considering requirement of the tender is of 1 Gbps radio & requirement of 10/100/100BaseT RJ45(Auto Negotiation) port is not in contrast of tender requirement of 1 gbps. However generally the Power over Ethernet(PoE) intectors are available with 1 or 2 10/100/1000BaseT Ethernet (Auto negotiation) POE interface for proving power and data to device. In addition to this a LAN interface is also available in POE 10/100/1000BaseT auto negotiation. This requirement also can be complied via the switch installed so recommand to remove this OEM specific feature.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 0	Manage ment	P2P & P2MP unlicen sed radio	68	egpNeighborL oss	It's a feature of Switch so request to remove this from UBR radio requirement.	Duplicate Query

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 1	SECTION -4 Qualifica tion Criteria	4.1. Eligibili ty Criteria	47 - 48	The Sole Bidder or Lead Bidder in case of a consortium should have demonstrable experience with following: 3.1 For Optical Fibre :The Sole Bidder or Lead Bidder or Case of a consortium should have experience of Laying, Installation, Testing and Commissionin g and O&M of Optical Fibre Cable (Underground or Aerial), Duct and accessories as mentioned below in last 5 years, as on bid submission date: 1 Zone: >=1000 Kms 2 Zones: >=2000 Kms 3 Zones: >=3000 Kms	For completed projects • If WO date is older than Five (5) years from bid released date(excluding bid released date), then work completion certificate must not be older than 4 years from bid released date. Request you to consider 8 year from bid released date(excluding bid released date), then work completion certificate. For the completed project please consider WO copy/ completion certificate. for Bulk delivery single order please consider self declaration.	No- As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				>=4000 Kms 3.2 For Wireless UBR /Li-Fi links : Experience of wireless UBR/Li-Fi equipment installation,co mmissioning or O&M of at least in last 5 years- Bidder's Participating In Experience In UBR Links 1 Zone>= 40 links 2 Zone>=100 links 3 Zone>=150 links 3.3 For CPE: The Lead Bidder or Consortium member must have experience of Installation, Configuration, Testing, Commissionin g & Maintenance of customer premise		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				equipment (CPE) as per below in last 5 years as on bid submission date. Bidder's participating in Experience 1 zone >= 600 CPEs 2 zones >= 1200 CPEs 3 zones >= 1800 CPEs 4 zones >= 2400 CPEs For completed projects • If WO date is older than Five (5) years from bid released date(excludin g bid released date(excludin g bid released date), then work completion certificate must not be older than 4 years from bid released date. • If WO date & Work completion certificate must not be older than 4 years from bid released date. • If WO date & Work completion date falls within five (5) years from bid released		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				date(excludin g bid released date), it is ok. For ongoing projects For ongoing projects • WO date must be earlier than one (1) year from bid released date(excludin g bid released date(excludin g bid released date). (WO copy / LOI / LOA contract copy), Note 1: The Sole Bidder or members of the Consortium, should meet the Technical Capability requirements either on their own or jointly for the works awarded directly by the TSPs, Category-A ISPs, IP-1, Central Government, State Government,		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				Municipal Corporations for Smart City Projects, BharatNet SPVs, PSUs for their own network and not sub- contracted works and not sub- contracted works. However, for installation and commissionin g of active nodes, the experience certificate issued by the OEMs for the works awarded by the TSPs/ISPs to the OEMs shall also be considered. The above experience conditions can be met either through single project or multiple projects executed during last 5 years as on date of submission of bid. Note 2:		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
				The technical experience for work executed in foreign countries for TSPs or Government shall also be considered.		

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 2	SECTION -4	Qualific ation Criteria	47	3.2 For Wireless UBR /Li-Fi links : Experience of wireless UBR/Li-Fi equipment installation,co mmissioning or O&M of at least in last 5 year	As we developed our Optical LiFi product only 3 years before, Experiance Criteris should be Amended to 3 Years from 5 Years as asked in RFP	No Change-As per RFP
1 3 3	SECTION -6	ANNEX URE-A: Techni cal Specific ation	74 & 75	Throughput support: Should support Minimum 1 Gbps per link and support upto 10Gbps per link	Need modification Throughput support only as "1 Gbps " in both 5km & 10 km Optical products	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 4	SECTION -6	ANNEX URE-A: Techni cal Specific ation	74	Latency : <1 ms	Need modification Latency in 5Km OPtical system from <1 ms to < 3 ms	Modified Clause: Refer in Revised Clause Annexure- Technical Specifications
1 3 5	CPE (custom er premise equipme nt) L2 manage able switch – 24 ports	Switch Perfor mance & Throug hput	Pa ge 71 of 11 0	The Switch should support a minimum of 50 Gbps Switching Fabric Capacity. • The switch should have forwarding rate of min 40 Mpps	Better performance, Flexibility & reliability of 24 port Switch, Please modify the Clause as Should have Min 128 Gbps fabric capacity with dedicated stacking Port	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 6	CPE (custom er premise equipme nt) L2 manage able switch – 24 ports CPE (custom er premise equipme nt) L2 manage able switch – 8 ports	Add New Clause		Add New Clause	By using SFP ONT as an uplink to the Switch , CPE can direct part of OLT , Hance Request include Switch to loaded min 1*SFP ONT & Switch Should Support SFP ONT as uplink,	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 7	CPE (custom er premise equipme nt) L2 manage able switch – 24 ports	No. of Ports	Pa ge 71 of 11 0	24 ports of 10/100/1000 BaseT (out of 24 ports, 12 ports should be PoE supported with PoE power support of minimum 80W) and 2 Uplink ports of 1GE	Better POE budget, performance, Flexibility & reliability of 24 port POE Please modify clause as Switch should support per port POE configuration & persistence POE . support of minimum 370W budget and 4 Uplink ports SFP of 1/10GE	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 8	CPE (custom er premise equipme nt) L2 manage able switch – 24 ports	MAC	Pa ge 71 of 11 0	Support for minimum 8K MAC entries	for Better the flexibility of Switch no of MAC capacity should be better scale , Request you please change cluse to Switch should Support for a minimum of 16K MAC entries	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 3 9	CPE (custom er premise equipme nt) L2 manage able switch – 24 ports	Featur es	Pa ge 71 of 11 0	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 active VLANs.	we request you to modify the Clause DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP), ERPS Ring protection Should support minimum 4K VLANs.	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 0	CPE (custom er premise equipme nt) L2 manage able switch – 24 ports	Operati on Tempe rature		0 to 50 °C	As per the network design proposed Switches will be placed at the GP level, Mostly temperature uncontrolled sites there is no AC and As per Gujrath's highest temperature/Humid condition 45'C , As per Practical conditions, Equipment temperature +- 5/precision to 45 'C to Outside, It is suggested to change Temperature support to 50 'C, Hence We modify Temperature Specification as " The switch should support Operating Temperature Normal: 0 degC to +55 degC	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 1	CPE (custom er premise equipme nt) L2 manage able switch – 8 ports	2. No. of Ports	Pa ge 72 of 11 0	8 PoE ports of 10/100/1000 BaseT with PoE power support of minimum 60W	Better POE budget, performance, Flexibility & reliability of 8 port POE Please modify the clause as Switch should support per port POE configuration & persistence POE. support of minimum 120W & Maximum 240W Poe budget and 4 Uplink SFP ports of 1GE	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 2	CPE (custom er premise equipme nt) L2 manage able switch – 8 ports	MAC	Pa ge 72 of 11 0	Support for minimum 4K MAC entries	For better the flexibility of Switch no of MAC capacity should be better scale , Request you to please change to Switch Support for a minimum of 16K MAC entries	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 3	CPE (custom er premise equipme nt) L2 manage able switch – 8 ports	Featur es	Pa ge 72 of 11 0	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 active VLANs.	we request you to modify the Clause DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP), ERPS Ring protection Should support minimum 4K VLANs.	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 4	CPE (custom er premise equipme nt) L2 manage able switch – 8 ports	Operati on Tempe rature	Pa ge 72 of 11 0	0 to 50 °C	As per the network design proposed Switches will be placed at the GP level, Mostly temperature uncontrolled sites there is no AC and As per Gujrath's highest temperature/Humid condition 45'C , As per Practical conditions, Equipment temperature +- 5/precision to 45 'C to Outside, It is suggested to change Temperature support to 50 'C, Hence We modify Temperature Specification as " The switch should support Operating Temperature Normal: 0 degC to +55 degC	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 5	Mini GPON OLT 4 Port -	Add New Clause	Pa ge 73 of 11 0	Add New Clause	We Request you to please add ITU-T G.8032: Ethernet Ring Protection Scheme will be required as a protection Mechanism when OLT is interconnected in Ring or Dual hand off Two Different OLTs as Open ERPS defined in this Recommendation enables protected point-to-point, point-to-multipoint, and multipoint- to-multipoint connectivity within a ring or interconnected rings, Open Rings, request you to please Add a clause as, OLT Should Support ERPS (ITU-T G.8032,) with 50ms protection"	No Change-As per RFP
1 4 6	Mini GPON OLT 4 Port -	Add New Clause	Pa ge 73 of 11 0	Add New Clause	OEM OLT Should support 3rd party deployed ONT/ (TSEC approved)	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 7	Mini GPON OLT 4 Port -	Add New Clause	Pa ge 73 of 11 0	Add New Clause	OLT to Support Broadcast Storm Control	Refer Revised Clause in Annexure in - Technical Specifications
1 4 8	Mini GPON OLT 4 Port , L2 Switch	Add New Clause	Pa ge 73 of 11 0	Add New Clause	The instructions regarding supply of 'Trusted products' as mandated by DoT vide File no- 20-271/2010 AS-I (Vol-III) dated 10.3.2021, along with its amendments, issued from time to time,. TheOEM should have approval as a Trusted Source from the National Security Council Secretariat (NSCS) as per extant Government of India guidelines.	Refer Revised Clause in Annexure in - Technical Specifications

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 4 9	Mini GPON OLT 4 Port -	Equipm ent Warran ty	Pa ge 73 of 11 0	Clarification	Equipment warranty is mention 5 Years and some place 7 Years in RFP, Kindly provide us the clarification	Refer Revised Clause in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 5 0	NMS /EMS Integrati on			Add New Clause /Note	Kindly Add this Note "EMS /NMS solutions not be cloud-based, cloud based NMS solutions may not be the best choice for Govt organizations has specific needs regarding performance, and security, Where in real-time network monitoring and quick response times and Security are critical. On-premises solutions can often provide faster data processing and response times because they operate within the local network & Secured , There is no Internet Dependence:If the connection is lost, you may lose access to the NMS, : Sensitive network information stored in a cloud-based NMS might be at risk if the cloud provider's security is compromised ."	Refer answer in Question25 All required physcial infrastructure will be provided by the GFGNL

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 5 1	Public Procure ment (Prefere nce to Make in India):			Add New Clause /Note	As per Order No:P- 45021/2/2017-PP(BE)- Part(4)Vol.II dated 19.7.2024 DPIT GOI, Mandatory Sourcing Of Items, With Sufficient Local Capacity And Competition, From Class-1 Local Suppliers In SI/EPC/Turnkey/ Service Tenders is mandated.	Refer additional Related Clause in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 5 2	ISO 9001 & TL9000			Add New Clause /Note	The OEM should be ISO 9001 and TL 9000 certified. (Copy of certifications). TL 9000 certifications are required for GPON, and Switches Products (OLT and Switches). If the OEM does not possess valid certification, then OEM should provide a declaration that the same will be certified before delivering the products.	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 5 3	OEM- Local software IP			Add New Clause /Note	OEM vendor should have local Software IP with Source Code and SDK & Vendor should be able to support any modification asked by GFGNL Fiber, with the help of India-based Software team.	No Change-As per RFP
1 5 4	OEM- Local R&D, IPR			Add New Clause /Note	"OEM shall have R&D, IPR in India , local spares and repair facilities in India	Refer Related Clause in Annexure

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 5 5	TSEC/TA C	Docum entary Proof	Pa ge 49 /	Two TEC GRs are mentioned, on page 49 as "PON OLT & ONT- Functional and technical requirement of ONT Family shall be as per TEC/GR /TX/PON- 02/01/ May 2013 or With latest)." and on Page 74 as "- As per TEC GR no. TEC- GR FA-PON- 002-02-NOV- 18 or latest with all amendments"	Request to revise as "GPON OLT & ONT-Functional and technical requirement of ONT Family shall be as per TEC/GR /TX/PON- 02/01/ May 2013 or with latest. Also if the offered product from the same family /Series is TSEC certified under same TEC/GR /TX/PON-02/01/ May 2013 in the last 5 years, it will be considered for qualification purpose. However, certification as per TEC GR no. TEC-GR-FA- PON-002-02-NOV-18 or latest will be obtained before supply"	No Change-As per RFP

Sr .N o	RFP Docume nt Clause/ Section No.	Clause Title	Pa ge N o.	Content of the RFP Requiring Clarification	Clarification Sought	Response / Revised Clause
1 5 6	Annexur e A Technica I Specifica tions	P2P & P2MP unlicen sed radio	67	The Equipment should be type approved by WPC. NSDTS and MTCTE certified.	WPC and MTCTE are mandatory requirements. However National Security Directive on Telecom Sector(NSDTS) is to be applied by Telecom service providers /ISPs, hence request you to remove as this is retricting class 1 local suppliers like us to participate	Refer Revised Clause in Annexure in - Technical Specifications

Annexure-II Revised Clauses:

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
1	SECTION-4 Qualification Criteria 4.1. Eligibility Criteria	 5.1 The Sole Bidder or lead Bidder (in case of consortium) 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. 5.2 Bidder has to ensure the procurement of latest products. GFGNL will disallowing products having manufacturing dates older than a year from the date of submission of the RFP. 	5.1 The Sole Bidder or lead Bidder (in case of consortium) 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. 5.2 Bidder has to ensure the procurement of latest products. GFGNL will disallowing products having manufacturing dates older than a year from the date of submission of the Work Order assigned by the Tenderer(GFGNL).

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
2	3.1 (A) Scope of Work (SoW) for the Bidder-III-r-vii	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 also remotely monitor to know atleast the OFC Cut Issue, Power Issue(Utility),Equipment- cold Start, warm Start, link Down, linkUp, authentication Failure, and Neighbor Loss status of each equipment from day-01 of device integration in network and mapped in Bidder's NMS on day- 01.	Bidder will have to supply license 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), Li-Fi, Mini-OLT/ONT etc. used in network so that required alarms can be monitored and also remotely monitor to know atleast the OFC Cut Issue, Power Issue(Utility), Equipment- cold Start, warm Start, link Down, linkUp, authentication Failure, latency, Jitter and Neighbor Loss status related performance parameters, Proactive alarms of each equipment from day-01 of device integration in network and mapped in Bidder's NMS on day- 01. Bidder has to provide all active elements and its network performance like but not limited to, Services, link performance- Availability(Up/Down) including reason of outage-alarm Management, Throughput, latency,packet drops, jitter,Tx-Rx level ,For Wireless (RSSI) etc. through EMS (preferably licencense based EMS) and integrate with GFGNL's NMS either through API or by providing suitable mechanism without any additional cost to GFGNL.

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
3	3.1 Plan, Design, Implement and Commission Phase(iv) & (v)	 iv) Implementation of last mile connectivity through wireline (UG OFC / aerial drop fibre cable / Cat 6 aerial cable, mini OLT/splitter(1:8)/media converter/ 8 port L2/L3 manageable switch) considering optical PON port (at feasible site) or RJ45 ports (10/100/1000Mbps) interface available at GP end or wireless (P2P / P2MP unlicensed band radio) considering backhaul availability at GP on RJ45 ports (10/100/1000Mbps). provided all necessary approvals are available from competent authority of India to deploy the equipment of newer technology. v) LMCA has to consider approximately 5% of sites required 8 Port L2/L3 manageable switch. However, scope may vary +/- 15%. In the event of national security related concerns or availability customer orders. 	 iv) Implementation of last mile connectivity through wireline (UG OFC / aerial drop fibre cable / Cat 6 aerial cable, mini OLT/splitter(1:8)/media converter/ 8 port L2/L3 manageable switch) considering optical PON port (at feasible site) or RJ45 ports (10/100/1000Mbps) interface available at GP end or wireless (P2P / P2MP unlicensed band radio) considering backhaul availability at GP on RJ45 ports (10/100/1000Mbps). provided all necessary approvals are available from competent authority of India to deploy the equipment of newer technology. v) LMCA has to consider approximately 5% of sites required 8 Port L2/L3-manageable switch. However, scope may vary +/- 15%. In the event of national security related concerns or availability customer orders.
4	3.1 Plan, Design, Implement and Commission Phase(xvi)	In case of repairing or upgradation of existing links Bidder will be responsible without any additional cost to the GFGNL	The repair work will fall within the scope of LMCA at no additional cost to GFGNL. However, GFGNL will be responsible for bearing the costs associated with upgrading only if the change in media or hardware.
5	3.1.1. OFC installation through open trenching & ducting and HDD(2.3)(ix) & (x)	 ix) Intimation in "Call before you Dig" application to be ensure by Bidder prior to digging work. x) In case, trench depth is not achieved because of any utilities present or any other reason, Bidder will have to apply below mentioned protection. All related depth and protection will be certified by GFGNL authorized person Sr. No. Depth of Trench Recommended Protection 1. 800 mm to 1000 mm No 	 Penalty on UG Fibre laying Depth deviation: In case, the Successful Bidder does not adhere to the mentioned Engineering Instructions and does not provide requisite protection, then the Bidder is liable to penalty as per below as per below criteria : 1. PIA has to do a self-declaration of depth achieved in GIS report and installation report submitted

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
	Name	protection required 2. 500 mm to 800 mm 65 mm DWC pipe 3. Less than 500 mm 100 mm *100 mm on site PCC	and separate marking shall be done for depth achieved as per the soil strata type. 2. For penalty calculation purpose under this clause, Per Km. approved rate shall be considered at rate of 1,50,000/- Rs. per Km. 3. Based on random inspections and sample pits if non adherence to the depth is identified then penalty will be applied on per running Km. basis as per below table and the identified amount shall be deducted against the invoice raised during that billing payment cycle. Depth between (For No Protection) (Category-A) Depth between (with DWC Pipe)(Or change in DWC Pipe -65mm) (Category-B) Depth between (on site PCC)(Or change in 100mm*100mm PCC) (Category-C) Less payment through Reduction in rates in case of self-declaration of non- achievement of required depth (Deduction Amount) Penalty and less payment in billing through reduction in rates in case of non- compliance identified by TPA/3rd Party Agency or GFGNL officials during inspection without prior declaration <800mm. to > 750mm. <500mm. to > 450mm 10% of approved rate 12% of approved rates for per Km. + Rs. 10,000/ Per pit with deficiency <750mm. to > 650mm. <450mm. to > 350mm 20% of approved rate 20% of approved rates + Rs. 10,000/ Per pit with deficiency <650mm. to > 500mm. <350mm.

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
			rate 35% of approved rates + Rs. 10,000/- Per pit with deficiency <(Bellow)500 mm. <300 mm < 100mm*100mm 40% of approved rates 45% of approved rates + 10000/- Rs. Per pit with deficiency 4. Penalty for deviation from Standard Engineering Instructions for fibre laying (Underground), is capped at 10% of CAPEX cost of the package. This penalty is separate and applicable in addition to 20% of penalty capping applied for non-compliance in delivery timeline or in O&M during the entire contract duration. Example: If the standard depth required is 1000 mm and as per consideration of fibre laying charges per running kms. is Rs.1,50,000/- for the standard depth (applicable for standard depth for different soil strata type as well). Based on the field sampling and random inspection if a deviation identified in 2 pits per kms. and average depth identified for category -A, is 650 mm., then penalty applicable is = (1,50,000*0.20)+(10,000)+(10,000) for that span and this penalty shall be deducted from the invoice raised by PIA during that billing period.
	3.1.3 Installation of Wireless Radios(i)	Bidder will carry out LoS (Line of Sight) survey for all the locations to be connected on wireless media and prepare & submit a detailed report to GFGNL mentioning the minimum requirement but not limited to, height of pole / mast required to be installed, location to be installed, end to end	Bidder will carry out LoS (Line of Sight) survey for all the locations to be connected on wireless media and prepare & submit a detailed report to GFGNL mentioning the minimum requirement but not limited to, height of pole / mast required to be installed, location to be installed, end to end

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
	connectivity details, along with proposed equipment details, feasibility report from 3 GPs/GFGNL PoP.		connectivity details, along with proposed equipment details, feasibility report from 2 GPs/GFGNL PoP .
6 3.1.3 Installation of Wireless Radios(ix) 3.1.3 Wireless Radios(ix) 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		-	Refer minimum specification mentioned in this RFP, 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. As an expert on services mentioned in the RFP document,Bidder has to understand the services are for the public domain and the safety of the public related aspects are to be fully complied. With the cost of the repeation , bidder will be solely responsible to the safety of public and accordingly suitable process bidder has to follow.
7	Section :3(3.1(A)-L)- Pg.17The Bidder has to consider approximately 5% of delivered sites of particular zones in shifting scope in near future due to customer dependency. Bidder has to shift the services to customer new sites within agreed timeline without additional cost to GFGNL, within 500 mtr of existing delivered sites coverage inspite of change in media. Beyond this, shifting case considered as a new link and payment will be made accordingly.		The Bidder has to consider approximately 5% of delivered sites of particular zones in shifting scope in near future due to customer dependency. For Shifting activities fixed Rs 1200/- amount to be paid to bidder withing old delivered village boundary. Bidder has to shift the services to customer new site/location within agreed timeline without any additional cost to GFGNL. Beyond this village boundary, and change in media in shifting case considered as a new link and payment will be made accordingly.

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
8 3.1 (A) Scope of Work (SoW) for the Bidder (I) 3.1 (A) Scope of without within 50 delivered change i shifting of link and		The Bidder has to consider approximately 5% of delivered sites of particular zones in shifting scope in near future due to customer dependency. Bidder has to shift the services to customer new sites within agreed timeline without additional cost to GFGNL, within 500 mtr of existing delivered sites coverage inspite of change in media. Beyond this, shifting case considered as a new link and payment will be made accordingly.	The Bidder has to consider approximately 5% of delivered sites of particular zones in shifting scope in near future due to customer dependency. For Shifting activities fixed Rs 1200/- amount to be paid to bidder withing old delivered village boundary. Bidder has to shift the services to customer new site/location within agreed timeline without any additional cost to GFGNL. Beyond this village boundary, and change in media in shifting case considered as a new link and payment will be made accordingly.
9	6.2 Selection criteria & allotment of work(i)	 i) Bidder can submit bid(s) for as many zones as they want, but any successful Bidder will be 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. That means, if L-2 reject, chance will be given to L-3 and if L-3 rejects chance will be given to L-4 and son on till Ln. 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 	Bidder can submit bid(s) for as many zones as they want, but any successful bidder will get 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. If the bidder will wins for any three(3) zones, then bidder will get the two zones which are part of single package, i.e. Package-A (Zone- Baroda, Surat) or Package-B(Zone-Rajkot, Ahmedabad). 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. That means, if L-2 reject, chance will be given to L-3 and if L- 3 rejects chance will be given to L- 4 and son on till Ln. If no Bidder from zone – C matches L1 price, than L1, L2, L3,Ln Bidders of

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
		for zone – C provided no Bidder gets work for more than 2 zones	zone – D (Of same package) 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 zone – C provided no Bidder gets work for more than 2 zones.
10		Additional Clause	Bidder has to ensure to fulfill the requirement with all features encorporated in this Bid document/RFP from OEM during the integration of site, failure of the features Bidder will be solely responsible to give the new product with define specifications and eligibility criterias to deliver the services with upgraded products without any further cost and delay in project to GFGNL, disallowing on the requirement will be the base ground to initiate the termination of contract or forfit the PBG.
11	Section 3.1(xi)/3.3.1	xi) Maintenance, support services, warranty, annual maintenance contract etc. in respect of equipment supplied to the customer. All the active equipment including 3U rack must be supplied with warranty of atleast 5 years and all required licenses.	Maintenance, support services, warranty, annual maintenance contract etc. in respect of equipment supplied to the customer. All the active equipment(both for wireline & wireless supportive), voltage stabilizer, ,6U/3U rack, Media Converters and Mini OLT/ONT must be supplied with warranty of 7 years and all required licenses.
12		Additional Clause	For better uptime and customer/citizens critical services,OEM shall have R&D , local spares and repair facilities in Gujarat or in India if OEM does not have , OEM should give undertaking to open office in

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
			Gujarat within 45 days from the date of issuance of work order .
13		Additional Clause	Details of zone wise districts for Package A & Package B
14	Section 3.1.3- Installation of Wireless Radios	ii) As per the space feasibility & instruction of GFGNL official / any other Government official, Bidder will install pole / mast / wall mount for the link.	 ii) As per the space feasibility & instruction of GFGNL official / any other Government official/customer authorized persons approval, Bidder will install Wall mount pole, floor mount pole, Roof top tower (MAST), Ground base Tower (GBT)for the link.
15	3.5 Payment Schedule(b)Opex Payment	iii) 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.	 iii) 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 100% go-live and completion of Field AT is signed and all- submission of valid documentation mentioned asked in the RFP Document& thus the location has entered into O&M phase.
16		Additional Clause	The EMD of successful bidder would be returned upon successful demonstration of PoC and submission of Performance Bank Guarantee as per the format provided in Annexure V. However, if successful bidder is not able to successfully demonstrate the proposed solution then EMD submitted along with the bid will be forfeited.

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
17		Additional Clause	MSE (Micro & Small Enterprise) bidders are exempted from payment of Tender Fee/Bid Security provided they submit current and valid Udyam Registration Certificate (URC) issued from the Ministry of MSME. Udyam Registration Certificate (URC), submitted by MSE bidder in their online bid for claiming exemption from Tender Fee & Bid Security, must be current & valid on the date of opening of Technical bid part. Micro and Small Enterprises (MSEs) registered under Udyam Registration are eligible to avail the benefits under the policy. In case of bid by a Consortium, all the members of the Consortium should be MSE to avail the exemption from payment of Tender Fee/Bid Security.
18	5.1 O&M SLA & Penalties(iii)	If any site / location will be down for more than 48 Hrs due to any reason attributable to the Bidder(s), an additional penalty of Rs. 1,000 per day per location will be levied	If any site / location will be down for more than 48 Hrs due to any reason attributable to the Bidder(s), an additional penalty of Rs. 1,000 Rs 500/-per day per location will be levied

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
19	Section 3.5	 ii) 100% Go-live: i. Clearing all observations come from above partial-live stage or during field observations, customer feedback, etc. ii. Completion of Field AT and submission of all valid documentations mentioned above and asked in this RFP. iii. All payments shall be released after certification of Delivery and Implementation Milestones by GFGNL official and/or Appointed agency from GFGNL. iv. GFGNL will make payment of the bill within 1 month once all required all valid documents are submitted by the Bidder along with bill to the satisfaction of GFGNL. GFGNL will make payment after deduction of any applicable penalties. 	 ii) 100% Go-live: a). Clearing all observations come from above partial-live stage or during field observations, customer feedback, etc. b) Completion of Field AT Final acceptance test by virtual inspections (to all field items Photos/Videos(including GPS co- ordinates linked) (which covers all field site's elements including but not limited to site Rack, CPE terminations ,For Wireline trench/OFC laid from source to destination with lat-long, depth measurement at every 100 mtrs, link throughput, For Wireless Photos/images with lat-long linked on network connectivity link from Source/GFGNL POP to end Site/customer end pole/mast setup including all related safety and guidelines mentioned in the RFP, integration of all network elements(both Active/Passive devices))and/or sample base Field AT and submission of all valid documentations mentioned above and asked in this RFP. c). All payments shall be released after certification of Delivery and Implementation Milestones by GFGNL official and/or Appointed agency from GFGNL. d). GFGNL will make payment of the bill within 1 month once all required all valid documents are submitted by the Bidder along with bill to the satisfaction of GFGNL. GFGNL will make payment after deduction of any applicable penalties. e). To simplify payments for laying the fiber and to do away with cumbersome process of physical network of small quantities like

Sr No.	RFP Clause/Item Name	Original Clause	Revised Clause/Clarifications
			but not limited to MH,fibre loop,etc., the real route distance measured with GIS is multiplied by 1.25, considering potential obstacles. This adjusted distance is used for cost calculations.
20	Additional Clause		Products to be supplied under this tender, should comply "Trusted Products" before delivery. In case, the make/ model is not approved as "Trusted Product", then, the bidder shall provide all documents/ information to GFGNL for application on trusted portal, in their technical bid. The format for submission of information (to be submitted with technical bid) and undertaking are enclosed at APPENDIX.

Annexure-III

Details of zone wise districts for Package A & Package B

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)	

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	

Note:

GFGNL will be authorized to extend the connectivity of adjoining district locations, which may fall in the future phases of BharatNet / GFGNL, through selected bidder from this RFP. Based on the performance of the bidder, GFGNL may ask to extend connectivity work as per this RFP Scope.

Annexure-IV Technical Specifications:

12F Optical Fibre Cable(Under Ground and Aerial)

Sr. No.	Parameters	Minimum Specifications	
1.	Fibre count	12F G.657.A1 cable will be accepted considering high bending redius for both aerial and underground cable. Under Ground : 12F (Armored Optical Fibre Cable for underground application) Aerial : 12 F ADSS unarmored cable	

		 <u>Note:</u> Bidder has to ensure the minimum termination of 4 core(2 pair) from GFGNL ready GP/PoP to Customer Site and hence Bidder has to plan the connectivity accordingly.
2.	Standard	Under Ground: ITU-T-G.657 (TEC GR Standard No.: TEC 85170:2011 or with latest amendment if any TEC 85190:2022 Aerial: TEC 85190:2022 TEC 85220:2022 (Aerial Drop) (Loose tube with jelly compound & Water swellable tape / yarn)
3.	Jacket Material	HDPE
4.	Strength member	FRP
5.		Cable must be suitable for outdoor as well as indoor applications.
6.	Application	Cable must be suitable for machine blowing as well as manual pulling in duct in case of UG application.
7.		Cable must be suitable for UG as well as aerial installation.
<mark>8.</mark>	Cable/Making Indicator On Both Aerial & UG Cable	"GFGNL OFC" should be engraved on it.

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 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.

Public Wi-Fi

Sr. No.	Parameters	Minimum Specifications
1	Operating frequency band	2.4 GHz / 5.X GHz
2	Throughput support	Minimum 150Mbps throughput

Sr. No.	Parameters	Minimum Specifications
3	Ports	2 nos. (1 - WAN+1- LAN) of 10/100/1000 Base-T auto sensing RJ45 based Ethernet ports
4	Standard	 i) 802.11ac ii) Should support latest Open WRT/DD WRT/TR-069/WISP firmware or any other open Firmware. It should be compatible and be able to integrate with the Open-Source WLAN Controller (software Based). iii) If the Access Point comes with a proprietary firmware, a firmware compatible to the central infrastructure has to be loaded on to it. iv) Must support SSH & SNMPv3 protocol v) It should be Pre-configured/ Configurable with the necessary open source firmware such that it becomes a Plug and Play device and should be auto discoverable by Software based controller. vi) support Proactive Key Caching or other methods for Fast and Secure Roaming. vii) support IPv4 and IPv6 viii) Should support "802.3 af/at" standards i.e. of Power over Ethernet (PoE)
5	Coverage area	 AP's Should perform data transfer at Minimum 70 Meters radial coverage & Minimum 50 concurrent users at each radio channel. Solution should have provision for extended Wi-Fi coverage through Wi-Fi Repeater Mode Minimum 300 Mtrs (using inbuilt capability or separate repeater device) i.e. the solution should be able to extend the backhaul to the second AP which would be at a distance of Minimum 100 Meters.
6	Operating Temperature	-0° to 60°C

Sr. No.	Parameters	Minimum Specifications
7	Management	System should be remotely manageable
8	Other Mandatory Parameters	 i) Should support Signal rejection for 3G/LTE/WiMAX in a co-Located environment. ii) IP66 or better for water and dust protection. iii) Access point shall support Pole, Wall, and roof mounting options. iv) Should support interference detection and avoidance for both Wi-Fi and non-Wi-Fi interference. V) Should compatible with existing centralized controller of GEGNL
Ð	Safety standard	UL / IEC / MTCTE

P2P & P2MP unlicensed radio

Sr. No.	Parameters	Minimum Specifications
1.	Operating frequency band	5.X GHz
2.	Distance support	P2P / P2MP-Up to 10Km P2P – Upto 10 Km aerial distance minimum

Sr. No.	Parameters	Minimum Specifications			
		P2MP – Ensuring 360 ⁰ -degree radius coverage with multiple MIMO sectorial antennas coverage Upto 5 Km aerial radius minimum. *Bidder has to optimize the hardware (radio & Antennas based on the site feasibility)			
3.	Throughput support	Minimum 100 Mbps per P2P link , Base station Throughput support for P2MP link: Minimum 1 Gbps			
4.	Ports	1 x 10/100/100 BaseT Ethernet (Auto negotiation)2 x 10/100/1000BaseT Ethernet (Auto negotiation)Both Port 10/100/1000 Base T Ethernet (RJ45)(Auto negotiations) at PoE/IDU port for one WAN and one LAN			
5.	VLAN support	802.1Q , Q-in-Q, Access, Trunk, Transparent, and management VLAN,QoS			
6.	Security	System should support WPA-PSK Encryption (Security: System should support AES 128/256 Encryption.)			
7.	Electrical requirement	Radios should support IPv4 & IPv6 Power over Ethernet (PoE) injector (maximum upto 15W)			
8.	Compliance	The Equipment should be type approved by WPC. NSDTS [*] and MTCTE certified.			
9.	-	System should be remotely manageable			
10.	-	System should have GUI interfaces			
11.	Management	System must provide alarm and control capabilities via Simple Management Protocol (should support SNMPv3) this should be following but not limited, Power Issue(Utility),Equipment- coldStart, warmStart, linkDown, linkUp, authenticationFailure, and egpNeighborLoss link utilization, performance, latency,etc.			
12.		Automatic Channel selection immediately switches to the best suitable channel in case of interference/dynamic auto optimization of channel and bandwidth. Various radio interference mitigation technic.			
13.		Software upgrade to system should be done through the network remotely.			
14.	Environment	Operating Temperature support : -10 degrees C to +60 degrees C (in installed condition)			
15.	requirements	Working Humidity support: between 10% - 95%, non- condensing at all operating temperatures			

Sr. No.	Parameters	Minimum Specifications			
16.		It should be IP67 and wind survivability for minimum 150 Kmph			
17.		System should be suitable to withstand continuous exposure to rain and sunlight.			
18.	Protection	Radio system should have built in surge protection mechanism.(upto 2KVA)			
19.	Latency	<mark>3-</mark> <5 ms(for P2P link) 8-10 ms (for P2MP Link)			
20.	Additional features/Advance Technology support	 The final alarm/alert or message sent by a device before it shuts down or loses power or power shut down alert /, GPS-Real time synchronization/, MAC level authentications, For better link security -Link password/RADIUS authentication suggested. Wall /Pole/Mast Mount facilities There shall be Selectable channel bandwidth of 20, 40, 80,160 MHz without any SW licenses or restrictions and additional cost to GFGNL 			
21.	Product LifeCycle	7 years			

CPE (customer premise equipment) router – (Wi-Fi CPE)

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	Minimum 64Mb		
4.	Routing protocol	Static IPv4 routing, static IPv6 routing		
5.	Management	SNMP V3, Remote management, should have facility to set password for local & remote login, TR-069 for more comprehensive management.		
6.	Encapsulation	802.1g 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, IGMP V3, NAT and Firewall Services, WPC ETA (Equipment Type Approval) certificate		
10.	Operation Temperature	0 to 50 °C		
11.	Power input	230 V AC, 50-60 Hz		

Sr. No.	Parameters	Minimum Specifications
12.	12. Safety standard UL / IEC / MTCTE and NSDTS	

Note: In any case as of law/government guideline 802.11/ac/n/b/g will EoL, bidder has to ensure to upgrade the device or provide new hardware with upgraded to Wi-Fi 6 (802.11ax) without any additional cost to GFGNL.

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

Sr. No.	Parameters Minimum Specifications		
1.	Switch Performance & Throughput	The Switch should support a minimum of 50 Gbps Switching Fabric Capacity.The switch should have forwarding rate of min 40 Mbps	
2.	No. of Ports24 ports of 10/100/1000 BaseT (out of 24 ports, 12 ports should be PoE supported with PoE power support of minimum 80V and 2 Uplink ports of 1GE		
3.	MAC	Support for minimum 8K MAC entries	
4.	DHCP, IGMP V3, IEEE 802.1Q VL encapsulation, 802.1d (Spanning tr 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 250 a VLANs.		
5.	Security	 IEEE 802.1x, RADIUS. Telnet, Secure Shell (SSH) Protocol, and Simple Network Management Protocol Version 3 (SNMPv3). 	
6.			
7.	Power input	230 V AC, 50-60 Hz	
8.	Safety standard	UL / IEC / MTCTE and NSDTS* certified	
7. 8.		230 V AC, 50-60 Hz UL / IEC / MTCTE and NSDTS* certified	

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

Sr. No.	Parameters	Minimum Specifications	
1.	Switch Performance & Throughput	The Switch should support a minimum of16 Gbps Switching Fabric Capacity.The switch should have forwarding rate ofmin 10 Mbps	
2.	No. of Ports	8 PoE ports of 10/100/1000 BaseT with PoE power support of minimum 60W	
3.	MAC	Support for minimum 4K MAC entries	

Sr. No.	Parameters	Minimum Specifications	
4.	Features	DHCP, IGMP V3, IEEE 802.1Q VLAN encapsulation, 802.1d (Spanning tree), 802.1w (RSTP), 802.1s (MSTP) Should support minimum 500 250 active VLANs.	
5.	Security	 Telnet, Secure Shell (SSH) Protocol, and Simple Network Management Protocol Version 3 (SNMPv3). 	
6.	Operation Temperature 0 to 50 °C		
7.	Power input 230 V AC, 50-60 Hz		
8.	Safety standard UL / IEC / MTCTE and NSDTS* ce		

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

SI. No.	Paramete r	Tender Specifications	
1	Managem ent 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, 4# GPON/PON Ports 2#Copper 10/100/1000M auto-negotiation	
3	MAC	Support upto 16K MAC address	
4	GPON Features	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 OLT should Support Broadcast Storm Control	
5	Operation Temperat ure	0 °C to 60 °C	
6	Physical Indicator	Power Indicator, system Indicator, port indicator (ACT/Link), PON port indicator, (power Consumption indicator-optional), over temperature sensors/indicator and shut down	

SI. No.	Paramete r	Tender Specifications
7	Other	-Deployed indoor or in cabinets - Remote accessibility is required - As per TEC GR no. TEC-GR-FA-PON-002-02-NOV-18 or latest with all amendments
8	<mark>Safety</mark> standard	UL / IEC / MTCTE and NSDTS* certified

ONT(Optical Network Terminal) (Manageable)

<mark>Sr.</mark> No.	Parameters Minimum Specifications		
1.	Optical port	ITU-T G.984/G.988, with 2.488 Gbps Downstream and 1.244 Gbps Upstream, SMF single port interface, 28dB (Class B+)	
2.	Ethernet port	10/100/1000 Mbps -2 port and 1* PON (SC/APC)	
3.	Distance support	Upto 20Km (depending on Splitting Ratio)	
<mark>4.</mark>	Operating temperature	<mark>0 to 50 °C</mark>	
5.		Dual band Wi-Fi 6 supports ONT, Type 1. Home-ONT (H-ONT) for FTTH applications. 64 MAC addresses, 16 VLAN	
6. 7.	Others	Should work in non AC environment Support SNMP V3, Remote management, OMCI, TR69 should have facility to set password for local & remote login, ITU-T 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, 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	
10.	Power	Should be supplied with power adapter so that it can work on 230 V AC power, compatible with all India Power Standards.	
11.	GPON equipment:	As per TEC-GR-FA-PON-002-02-NOV-18 /TEC 72050:2021or latest with all amendments	

<mark>12.</mark>	Safety standard	UL / IEC / MTCTE and NSDTS* certified

Penalty on UG Fibre laying Depth deviation:

In case, the Successful Bidder does not adhere to the mentioned Engineering Instructions and does not provide requisite protection, then the Bidder is liable to penalty as per below as per below criteria :

- 1. PIA has to do a self-declaration of depth achieved in GIS report and installation report submitted and separate marking shall be done for depth achieved as per the soil strata type.
- 2. For penalty calculation purpose under this clause, Per Km. approved rate shall be considered at rate of 1,50,000/- Rs. per Km.
- 3. Based on random inspections and sample pits if non adherence to the depth is identified then penalty will be applied on per running Km. basis as per below table and the identified amount shall be deducted against the invoice raised during that billing payment cycle.

Depth between (For No Protection) (Category-A)	Depth between (with DWC Pipe)(Or change in DWC Pipe -65mm) (Category- B)	Depth between (on site PCC)(Or change in 100mm*100mm PCC) (Category-C)	Less payment through Reduction in rates in case of self- declaration of non- achievement of required depth (Deduction Amount)	Penalty and less payment in billing through reduction in rates in case of non- compliance identified by TPA during inspection without prior declaration
<800mm. to <u>></u> 750mm.	<500mm. to <u>></u> 450mm.	-	10% of approved rate	12% of approved rates for per Km. + Rs. 10,000/ Per pit with deficiency
<750mm. to <u>></u> 650mm.	<450mm. to <u>></u> 350mm.	-	20% of approved rate	20% of approved rates+ Rs. 10,000/ Per pit with deficiency
<650mm. to <u>></u> 500mm.	<350mm. to <u>></u> 300mm.	-	30% of approved rate	35% of approved rates + Rs. 10,000/- Per pit with deficiency
<(Bellow)500 mm.	<300 mm	< 100mm*100mm	40% of approved rates	45% of approved rates + 10000/- Rs. Per pit with deficiency

4. Penalty for deviation from Standard Engineering Instructions for fibre laying (Underground), is capped at 10% of CAPEX cost of the package. This penalty is

separate and applicable in addition to 20% of penalty capping applied for noncompliance in delivery timeline or in O&M during the entire contract duration.

Example:

If the standard depth required is 1000 mm and as per consideration of fibre laying charges per running kms. is Rs.1,50,000/- for the standard depth (applicable for standard depth for different soil strata type as well).

Based on the field sampling and random inspection if a deviation identified in 2 pits per kms. and average depth identified for category -A, is 650 mm., then penalty applicable is = (1,50,000*0.20)+(10,000)+(10,000) for that span and this penalty shall be deducted from the invoice raised by PIA during that billing period.

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 Kmph	
4.	Wind survivability	Foundation should be constructed to support above mentioned wind speed	
5.		Foundation bolt, foundation plate, other accessories must be supplied to support above mentioned wind speed	
<mark>6</mark>	For Wall Mount	With proper safety precautions (3mtr) minimum 2 C- Clamp support	

Pole & mast for aerial cable & radio installation

Li-Fi/ Optical Wireless Communication (OWC) / FSO

Sr. No.	Parameters	Minimum Specifications	
1	Operating Optical Wavelength	1550 / 730-780 nm	
2	Distance support	Up to 5 Km	
3	Throughput support	Should support Minimum 1 Gbps per link and support <mark>upto 10Gbps per link</mark>	
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) /	

Sr. No.	Parameters	Minimum Specifications	
		MIB File / IP-Firmware, IP monitoring, Spatial stabilization system (auto tracking), Full duplex	
7		Operating Temperature support: -20 degrees C to +60 degrees C (in installed condition)	
8	Environment	Working Humidity support: between 10% - 95%, non- condensing at all operating temperatures	
9	requirements	It should be IP67 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		
12	Latency	<mark><1 ms</mark>	

Li-Fi/ 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	Should support Minimum 1 Gbps per link and support <mark>upto 10Gbps per link</mark>
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	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 (auto tracking), Full duplex
7		Operating Temperature support: -20 degrees C to +60 degrees C (in installed condition)
8		Working Humidity support: between 10% - 95%, non- condensing at all operating temperatures
9	requirements	It should be IP67 and wind survivability for minimum 150 Kmph
10		System should be suitable to withstand continuous exposure to rain and sunlight.

Sr. No.	Winimum Specifications	
11	11 Safety Classification Laser safety IEC 60825, Class 1M	
12	Latency	<1 ms

Annexure-V :Eligibility Criteria:

#	Minimum Requirem	ent		Documentary Proof
1	be an 1.2 The Sole and should be registered Partnership Firm regions or a Proprietorship under Limited Liability the 1.3 The Sole and Lea have a registered nu 1.4 The Sole and eace	Indian Lead Bidder (in ca under the Companies istered under Indian F firm or Limited Liabi y Partnership Firm Ac ad Bidder (in case of umber of GST, Incom ch of the consortium of or a period of at	im members should a firm. ase of consortium) s Act 1956 /2013 or a Partnership Act, 1932 lity Partnership Firm ct 2008 at the time of bidding f consortium) should lie Tax / Pan number members should be least 5 years as on	 a) Copy of Certificate of Incorporation signed by Authorized Signatory of the Bidder or Lead Bidder (in case of Consortium) or A copy of the partnership deed/ instrument of partnership or a Copy of LLP agreement or Registration certificate b) Copy of PAN card c) Copy of GST registration
2	of at least following varses purely from Tel 2022-23, and FY 202 Bidder Participating In 1 Zone 2 Zone 3 Zone 4 Zone 2.1 The Sole Bidder profit-making in la 22, FY 2022-23, a Note: Turnover considered company i.e. A pare	3-24), Average Annual Turn Over (Rs In Cr) >= 7 >=14 >= 21 >= 28 must have positive ne ast three (3) financial and FY 2023-24) would be a consolid ent Company can us subsidiary of parent)		The Sole Bidder For Annual Turnover: a)Copy of audited Balance Sheet, audited Profit & Loss statements for each of the last 3 financial years b) Copy of Certificate from the statutory auditor / Charted Accountant (CA) clearly specifying the annual turnover for each of the last 3 financial years, i.e. (FY 2021-22, FY 2022-23, and FY 2023-24) For Positive net worth: a) Certificate from the Statutory Auditor on net worth (i.e. FY 2021-22, FY 2022-23, and FY 2023-24)
3	The Sole Bidder or Lead Bidder in case of a consortium should have demonstrable experience with following: 3.1 For Optical Fibre : The Sole Bidder or Lead Bidder in case of a consortium should have experience of Laying, Installation, Testing and Commissioning and O&M of Optical Fibre Cable			The Sole Bidder or Lead Bidder in case of a consortium • Validated Data from Government sources (DoT /TRAI reports, portal log Etc.)

Minimum Requirement		Documentary Proof
(Underground or Aerial), Duct a	and accessories as mentioned	The details of ISP nodes or
below in last 5 years, as on bid		points of presence with their
1 Zone: >=1000 Kms		locations and number of
2 Zones: >=2000 Kms		broadband/ leased
3 Zones: >=3000 Kms		subscribers.
4 Zones: >=4000 Kms		Subscribers.
4 2011es. >=4000 Kills		Need to submit WO. Conv
		Need to submit WO Copy
	nke - The Cole Didder or Lood	/LOI/LOA/Contract agreement
3.2 For Wireless UBR /Li-Fi I		For completed projects :
Bidder in case of a consortium		(WO copy / LOI / LOA contrac
wireless UBR/Li-Fi equipment i		copy & client completion
O&M of at least in last 5 years-		Certificate), work completion
		certificate from end client
		mentioning satisfactory
Bidder's Participating In	Experience In UBR Links	performance & total Km of
1 Zone	>= 40 links	Fibre and Wireless UBR
2 Zone	>=100 links	
3 Zone	>=150 links	Links,CPEs with other
4 Zone	>=200 links	inventories/Equipment
		mentioned
3.3 For CPE: The Lead Bidder	or Consortium member must	implemented/managed
have experience of Installation,		(satisfactory performance &
	of customer premise equipment	functionalities implemented
(CPE) as per below in last 5 ye		may be mentioned separately
		as a performance certificate
Bidder's participating in Experie		from the client)
$1 \text{ zone } \ge 600 \text{ CPEs}$		Note:Bidder may submit clien
2 zones>= 1200 CPEs		certificate of completed Project
		scope experience (in case of
3 zones>= 1800 CPEs		partially completed project)
4 zones>= 2400 CPEs		and O&M experience with
For completed projects		Work order copy. If required
• If WO date is older than	Five (5) years from bid released	line item wise supporting
	date), then work completion	documents may asked by
	in 4 years from bid released date.	GFGNL , Bidder has to submi
	•	accordingly as a part of
	tion date falls within five (5) years	qualification criteria.
from bid released date(excludir	ng dia released date), it is ok.	gaamea.on ontona.
For ongoing projects		For ongoing projects
 WO date must be earlier th 	an one (1) year from bid released	(WO copy / LOI / LOA contra
date(excluding bid released dat		copy),
v	,	Performance certificate fro
	mbers of the Consortium, should	end client mentionir
	equirements either on their own	satisfactory performance & tot
	I directly by the TSPs, Category-	Km of Fibre, wireless UBR lin
A ISPs, IP-1, Central Governm		and CPEs with oth
Municipal Corporations for Sma		
SPVs, PSUs for their own netw		inventories/Equipment
works. However, for installation	and commissioning of active	mentioned implemented by the
nodes, the experience certificat	te issued by the OEMs for the	Sole/lead Bidder(in case
	Ps to the OEMs shall also be	consortium)
works awarded by the TSPs/IS		-
considered. The above experie	nce conditions can be met either le projects executed during last	

#	Minimum Requirement	Documentary Proof
	5 years as on date of submission of bid. <u>Note 2</u> : The technical experience for work executed in foreign countries for TSPs or Government shall also be considered.	
4	 The Sole/lead Bidder(in case of consortium) & OEM should: 4.1 Not have been blacklisted /banned / barred / declared ineligible / declared having dissatisfactory performance by Ministry of Communication or GFGNL or debarring order issued by any government / quasi-government authority in India for supply of materials/ Department of Expenditure (DOE), Ministry of Finance (MOF) covering all central Ministries/ Departments as per provision of OM No.F.1/20/2018-PPD by Department of Expenditure (DOE)/ MoF dated on 2nd Nov 2021/ Central Government / Any State Government / Urban Local Body (ULB) /SmartCity (SPV)/ Supreme Court of India / Any government / PSU in India as on the date of bid submission. 4.2 Not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons. 4.3 The Sole/lead Bidder(in case of consortium) should have at least one office in Gujarat and preferably support centres/logistics for the entire state. If the Bidder is not having any office in Gujarat, then Bidder should submit a letter of undertaking to open the office in Gujarat within 45 days from the date of issue of work order if he is awarded the work 4.4 Not have their directors and officers convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified. 4.5There must not be any criminal case booked by any Government authority against the sole/lead Bidder (in case of a consortium) in any court in last 5 years as on bid submission date. 	An undertaking signed by CEO/ Country Head/ Authorized Signatory of the company to be provided on Non – judicial stamp paper of INR 100/- or such equivalent amount and document duly attested by notary public. (or Self- declaration by the Bidder duly signed and stamped by the authorized signatory.)

#	Minimum Requirement	Documentary Proof
		Documentary evidences such as Authorization letters, MAF (Annexure XXX) from all OEM/Vendors whose products are being quoted by the Bidder need to be attached in the bid.
5		Copy of valid Mandatory Testing and Certification of Telecommunication Equipment(MTCTE)/ Type Approval Certificate or copy of Application for fresh MTCTE/TAC as applicable from each OEM whose products are being quoted by the Bidder.(only applicable to OFC, duct, radio, rack, media converter, router, switch) Copy of valid Mandatory Testing and Certification of Telecommunication Equipment(MTCTE)/Technical Specification Evaluation Certificate (TSEC) / Type Approval Certificate or copy of Application for fresh
	 5.2 OEM change may be allowed for below reason only;. OEM change with over and above RFP specifications 	MTCTE/TSEC/TAC/AT certificate as applicable from each OEM whose products are
	 Discontinuation of OEM support due to reasonable reasons In future any OEM change request may be incorporated by 	being quoted by the Bidder (only applicable to OFC, duct,
	tendered with 10% reduction in discovered cost.	DWC & radio,GPON OLT & ONT-Functional and technical requirement of ONT Family
	5.3 Bidder has to ensure the procurement of latest products. GFGNL will disallowing products having manufacturing dates older than a year from the	shall be as per TEC/GR /TX/PON-02/01/ May 2013 or With latest).
	date of submission of the RFP.	In order to meet the delivery timelines, the successful Bidder can procure and supply the material from one or more quoted OEMs in any combination. 5.2 Self Certification on latest products with dates not older than a year.
		Note: Bidder should have valid Type Approval Certificate (TAC) from Telecom Engineering Centre (TEC) /

#	Minimum Requirement	Documentary Proof
		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 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.
6	6.1 The Sole Bidder- and OEM 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 23rd July 2020 issued by Department of Expenditure, Gol	Self-certification from sole and OEMs on Non-Judicial stamp of Rs. 300/- in the prescribed format (Annexure – II), separately.
7	 7.1 The Bidder or OEM should submit at least one distinct certification from any of the below Certifications (valid at the time of bidding): CMMI- Process Level 3 or above ISO 9001:2015 ISO 27001 for Information Security Management Systems ISO/IEC 20000 	Copies of valid certificates in the name of the bidding entity
8	8.1 The Bidder should have at least 50 nos. of technical manpower (on-roll), continuously working for the past one year at different levels as on bid submission date.	 HR Certificate (dully notarized) confirming on the total no resources as per the clause Copy of EPF/ ESIC registration document copy of

#	Minimum Requirement	Documentary Proof
		last challan submitted to concerned authority.
9	The Bidder must have one office in Gujarat or in case, Bidder does not have office in Gujarat, Bidder should give undertaking to open office in Gujarat within 45 days from the date of issuance of work order.	Please upload the copies of any two of the following: Property Tax Bill of last year / Electricity Bills of last one year / Telephone Bills of last one year / G.S.T. Registration / Valid Lease Agreement.

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. Consortium will only for technological partner for lead Bidder.
- 3. One Consortium partner can tie up with only one lead Bidder for this RFP irrespective of zones (Geographical regions) considered by the Consortium for bidding.
- 4. Any lead Bidder or member of consortium cannot participate as a bidding entity (lead or consortium member) in any other consortium in this RFP.
- 5. 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.
- 6. In case of consortium, the Lead Bidder must be specified by the Bidder.
- 7. 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.
- 8. The consortium bid submitted without valid MoU / Consortium Agreement shall be treated as non-responsive.
- 9. 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.
- 10. The payments for the said project shall be released only in the name of Lead Bidder.
- 11. 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.

Annexure-VI: Technical Qualifications Criteria

#		Max. Marks	
		demonstrable experience of y and O&M for at least 5 such	
1	Note: On Annual turnove (With reference to Packa 4)	er Ige A/B eligibility criteria point	20
	a) 5 Project: 10 marks		
	b) 6-8 Projects: 15 marks		
	c) 9-10 Projects: 20 mark	S	
	The Bidder should have a audited financial years (2 22,2022-23 and 2023-24 Network Service Plannin) from Telecom Services	
	Bidder's Participating In	Average Annual Turnover(In	
2	1 Zones 2 Zones 3 Zones 4 Zones	Cr)>=7 Cr to < 8 Cr	20

4	experience of Install Commissioning & M band radio) & Wireli	rtium member must h ation, Configuration, T aintenance of wireless ne links as per eligibili st 5 years as on bid sub Experience on UBR Links >= 40 links to < 60 Links = 10 >= 60 links to < 80 Links = 15 >=80 links = 20 >= 100 links to < 120 links = 10 >=120 links to < 120 links = 10 >=120 links to < 120 links = 10 >=120 links to < 120 links = 10 >=140 links to < 120 links = 10 >=150 links to < 120 links = 10 >=160 links to < 120 links = 10 >=20 links to < 120 links = 10 >=20 links to < 220 links = 10 >= 220 links to < 220 links = 10 >=220 links to < 220 links = 15 >=240 links to = 20	esting, (unlicensed ty criteria	20
5	 Approach and Methodology (Presentation) of the firm a) Project Understanding :10 Marks b) Strategy on Plan of execution of the said scope within timeline : 15 Marks c) Likely challenges to be encountered, mitigation proposed, client references, network uptime manageability, support required ,etc. : 15 Marks 		40	
	Total Marks e:			100

Note:

Minimum absolute score to qualify for commercial evaluation is 70 marks out of total 100 marks.

Priced BoQ

- 1. Each bidder must submit Priced BOQ –Annexure A, The date of financial bid opening in a sealed envelope.
- Envelop of only L1 bidder of each package shall be opened and other bidder's envelops shall be returned back to them in received sealed condition only after 180 days from the date of opening of financial bid.
- 3. All bidder must submit hard copy of Priced BOQ financial bid opening in a sealed envelope.
- 4. Quantity for each line item in Column "A" to be filled by Bidder.

Note: All pages of the bid documents must be signed by the authorized signatory of company. In case the bid is signed by the person other than the authorized signatory of company, the bidder should enclose authorization letter from Company Secretary of the company for the officer, who signed the bid.

Sr. No.	Description	UoM	Quantity (A)	Rate (excluding tax) (B)	A Amount (Rs.) (C=A*B)
Α	Services - Passive Infrastructure for underground OFC laying				
1	Excavation of trench with 1 Mtr UG depth including HDPE-PLB duct laying, backfilling, compaction, reinstatement after laying of HDPE-PLB pipe and installation of protection mechanism (DWC pipe, RCC half round pipe etc. for the cases of low depth as per RFP)	Mtr			
2	Horizontal directional drilling including duct pulling	Mtr			
3	Manual mauling / borring including duct pulling	Mtr			
4	OFC blowing in duct / pulling of any size of cable with size of less than or equal to 12F	Mtr			
5	Installation of MH / HH	No.			
6	Installation of route indicator	No.			
В	Services - Passive Infrastructure for Structural aerial OFC laying				
1	Aerial cable laying on existing pole / new pole including required accessories	Mtr			
2	Installation of new 8mtr pole for structural Aerial Cabling	No.			
С	Services - Passive Infrastructure for wireless link				
1	Installation of 3 mtr wall mount pole including required RCC / foundation work & material required for same (excluding pole)				
2	Installation of 3 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.			
3	Installation of 6 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.			
4	Installation of 9 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.			
5	Installation of 12 mtr pole including required RCC / foundation work & material required for same (excluding pole)	No.			
6	Installation of > 12 mtr & <= 24 mtr mast including required RCC / foundation work & material required for same (excluding pole)	No.			

	Installation of > 24 mtr mast including required RCC			
7	/ foundation work & material required for same (excluding pole)	No.		
D	Services - Passive Infrastructure			
	Splicing of fibre core with other fibre core including	Each		
1	cable preparation of both cables and acceptance	fiber		
-	testing	joint		
	Installation of compass (WSC) for fibre termination			
2	including splicing of up to 8 fibre cores with pigtails	No.		
	and acceptance testing			
3	Installation of 6U wall mounted rack including	No.		
5	supply of electrical cable for power connection, MCB and energizing the rack with electrical power	NO.		
	Installation of DWC pipe at / inside customer			
4	premise	Mtr		
5	Installation of PVC pipe at / inside customer premise	Mtr		
	Preparation of earthing pit for road earthing			
6	including supply of all required material for earthing	Each		
	& successfully achieving desired earth value as per RFP			
	Installation of structural Cat 6 cable including			
7	required concelling ,caccessories, connector etc.	Mtr		
E	Services - Active Infrastructure			
-	Installation, configuration, commissioning and			
1	acceptance testing of a pair of Optical to Ethernet	No.		
	converter(s)			
	Installation, configuration, commissioning and			
2	acceptance testing of Wi-Fi CPE (customer premise	No.		
	equipment) Installation, configuration, commissioning and			
	acceptance testing of point to point UBR radio link			
3	including earthing, lightening arrester, clamps, RF &	No.		
	electrical cables etc.			
	Installation, configuration, commissioning and			
_	acceptance testing of Base Station site radio for	No		
4	point to multipoint radio link including earthing, lightening arrester, clamps, RF & electrical cables	No.		
	etc.			
	Installation, configuration, commissioning and			
	acceptance testing of Remote Station site radio for			
5	point to multipoint radio link including earthing,	No.		
	lightening arrester, clamps, RF & electrical cables			
	etc. Matarial Supply - Passivo Infrastructura			
F 1	Material Supply - Passive Infrastructure Optical fibre cable - 12F armoured	Mtr		
2	Optical fibre cable - 12F Arrifoured Optical fibre cable - 12F Aerial	Mtr		
2	Optical libre cable - IZF Aerial	IVILI		

3	HDPE - PLB duct	Mtr
4	MH / HH (joint / loop chamber)	No.
5	Route indicator	No.
6	6U wall mounted rack including fan, power strip & cable manager	No.
7	DWC pipe	Mtr
8	RCC half round pipe	Mtr
9	New pole for aerial cable installation	No.
10	Miscellaneous items required at customer location like MCB, electrical cable, earthing cable, compass, PVC pipe, patch cord (optical & Cat 5) etc.	Lot
11	3 mtr pole including all accessories	No.
12	6 mtr pole including all accessories	No.
13	9 mtr pole including all accessories	No.
14	12 mtr mast including all accessories	No.
15	15 mtr mast including all accessories	No.
16	18 mtr mast including all accessories	No.
17	21 mtr mast including all accessories	No.
18	24 mtr mast including all accessories	No.
19	27 mtr mast including all accessories	No.
20	30 mtr mast including all accessories	No.
21	Cat 6 cable including required accessories, connector etc.	Mtr
G	Material Supply - Active Infrastructure	
1	CPE (customer premise equipment) L3 router – Option 1	No.
2	CPE (customer premise equipment) L3 router – Option 2	No.
3	CPE (customer premise equipment) L2 manageable switch – 24 ports	No.
4	CPE (customer premise equipment) L2 manageable switch – 8 ports	No.
5	Pair of Optical to Ethernet converter(s) (1 no. OtoE + 1 no. EtoO)	Pair
6	Point to point UBR radio set including earthing cable, lightening arrester, clamps/fixtures, RF & electrical cables etc.	Each
7	Base Station site radio for point to multipoint radio link including earthing cable, lightening arrester, clamps/fixtures, RF & electrical cables etc.	Each
8	Remote Station site radio for point to multipoint radio link including earthing cable, lightening arrester, clamps/fixtures, RF & electrical cables,etc.	Each

9	Point to point Li-Fi / FSO link set including earthing cable, lightening arrester, clamps/fixtures, optical patch cord & electrical cables etc. including Installation, configuration, commissioning and acceptance testing	Each			
10	Wi-Fi CPE (customer premise equipment)	Each			
Grand Total – A0					

Annexure-VII: Financial Criteria

#	Description	UoM	Quantity (A)	Unit Rate (excluding tax) (Rs./-) (B)	Total Amount (Rs./-) (C=A*B) (Excluding Tax)
	Wireless: SITC(Supply, Installation, Testing and	Ea	1313		
	Commissioning) of P2P wireless UBR link(both at				
	PoP and Client end) including termination of Wi- Fi router at last mile customer.This includes all				
	types of integration of all necessary wireless				
1	accessories including but not limited to ,				
	antenna, elements of networking, earthing, ,				
	clamps, RF & electrical and networking				
	cables/other accessories, configuration and				
	services provisioning, testing, etc.				
	Wireless: SITC(Supply, Installation, Testing and	Ea	656		
	Commissioning) of P2MP wireless UBR base				
	station radio including antenna/s for 360°				
2	coverage for all types of integration of all				
2	necessary wireless accessories including but not				
	limited to , elements of networking, earthing, , clamps, RF & electrical and networking				
	cables/other accessories,configuration and				
	services provisioning , testing, etc.				
	Wireless: SITC(Supply, Installation, Testing and	Ea	1968		
	Commissioning) of P2MP wireless UBR at client				
	end radios including antenna/s, all types of				
	integration of all necessary wireless accessories				
3	including but not limited to , elements of				
	networking, earthing, , clamps, RF & electrical				
	and networking cables/other				
	accessories, configuration and services				
	provisioning, testing,etc.				

#	Description	UoM	Quantity (A)	Unit Rate (excluding tax) (Rs./-) (B)	Total Amount (Rs./-) (C=A*B) (Excluding Tax)
4	3 Mtr Wall Mount SITC(Supply, Installation,Testing and Commissioning) with all types of civil and service activities lincluding but not limited to, earthing, lightening arresters, clamps and all other accessories(earthquake resistance,150 KMPH wind speed support, weather proof structure, lighting arrester with proper earthing will be must)	Ea	2100		
5	6Mtr to 12 Mtr(6/9/12mtr) RTT/GBT SITC(Supply, Installation, Testing and Commissioning) with all types of civil and service activities lincluding but not limited to, Foundation, earthing, lightening arresters, clamps and all other accessories, earthquake resistance, 150 KMPH wind speed support, weather proof structure, Lighting arrester, aviation lamp, with proper earthing will be must	Ea	315		
6	8 Mtr of RCC Pole for Aerial Connectivity SITC(Supply, Installation, Testing and Commissioning) with all types of foundation activity, structure stability with 150 KMPH wind speed support, Foundation, safety standards, earthing, services/labour activities for structure aerial connectivity, etc.	Ea	50		
7	>12 Mtr(More then 12 Mtr) GBT/Mast SITC(Supply, Installation, Testing and Commissioning) with all types of civil and service activities lincluding but not limited to, Foundation, earthing, lightening arresters, clamps and all other accessories, earthquake resistance, 150 KPMPH wind speed, weather proof structure, Lighting arrester, aviation lamp, lighting arrester with proper earthing will be must	Ea	2200		
8	Wireless: SITC(Supply, Installation, Testing and Commissioning), Installation, configuration, commissioning and acceptance testing of point to point Li-Fi / FSO link upto 5Km including earthing cable, lightening arrester, clamps/fixtures, optical /cat-6 patch cord & electrical cables etc includes Wi-Fi router at last mile customer.	Ea	18		

#	Description	UoM	Quantity (A)	Unit Rate (excluding tax) (Rs./-) (B)	Total Amount (Rs./-) (C=A*B) (Excluding Tax)
9	Wireless: SITC(Supply, Installation,Testing and Commissioning), Installation, configuration, commissioning and acceptance testing of point to point Li-Fi / FSO link More than 5Km including earthing cable, lightening arrester, clamps/fixtures, optical patch cord & electrical cables etc includes Wi-Fi router at last mile customer.	Ea	18		
10	VIP/Ad-Hoc Events: Establishment(SITC(Supply, Installation, Testing and Commissioning)), Service(labour/transportation, etc.) and recovery(dismentle) Cost to maintain Tempory Connectivity during VIP / Major/ Ad-Hoc Events for Wireline on Fibre	Ea	200		
11	VIP/Ad-Hoc Events:Establishment SITC(Supply, Installation,Testing and Commissioning)), Service(labour/transportation, etc.) and recovery(dismentle) Cost to maintain Tempory Connectivity during VIP / Major/ Ad-Hoc Events For Wireless (upto 6 mtr (Factorial))	Ea	200		
12	VIP/Ad-Hoc Events:Establishment(SITC(Supply, Installation,Testing and Commissioning)), Service(labour/transportation, etc.) and recovery(dismentle) Cost to maintain Tempory Connectivity during VIP / Major/ Ad-Hoc Events For Wireless (above 12mtr (Factorial))	Ea	100		
13	Wireline: SITC(Supply, Installation, Testing and Commissioning), digging, laying, pulling 12F UG OFC with 1mtr depth including junction point of Splicing activities, MH, 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) , Installation of compass (WSC) for fibre termination including splicing of up to 8 fibre cores with pigtails at customer end, CPE(MC/ONT/etc) including termination of Wi-Fi router at last mile customer including the earthing of network elements wherever applicable. This includes all types of integration of	Mtr	1,50,000		

#	Description	UoM	Quantity (A)	Unit Rate (excluding tax) (Rs./-) (B)	Total Amount (Rs./-) (C=A*B) (Excluding Tax)
	wireline accessories of networking and electrical cables/other accessories.				
14	Wireline: SITC(Supply, Installation, Testing and Commissioning) , Laying, pulling 12F Structural Aerial OFC including Splicing activities laying, compaction, installation of protection mechanism (as per RFP) , CPE including termination of Wi-Fi router at last mile customer including earthing of all equipments. This includes all types of integration of wireline accessories of networking and electrical cables/other accessories. Installation of compass (WSC) for fibre termination including splicing of up to 8 fibre cores with pigtails at customer end, CPE(MC/ONT/etc) including termination of Wi-Fi router at last mile customer including the earthing of network elements wherever applicable. This includes all types of integration of wireline accessories of networking and electrical cables/other accessories.	Mtr	29,00,000		
15	Structured CAT 6 LAN cabling work (including Supply, installation and Termination ,testing,of CAT6 cables, PVC flexible Pipes and accessories,Conduiting, RJ45 termination at work station along with I/O boxes, Face Plates, Casing and Capping, conduits, RJ-45/RJ-11 Connector and configuring node in network) upto 8 user end points	Per User End Points	1000		

#	Description	UoM	Quantity (A)	Unit Rate (excluding tax) (Rs./-) (B)	Total Amount (Rs./-) (C=A*B) (Excluding Tax)		
16	Structured CAT 6 LAN cabling work (including Supply, installation and Termination,testing of CAT6 cables, PVC flexible Pipes and accessories, RJ45 termination at work station along with I/O boxes, Face Plates, Casing and Capping, conduits, RJ-45/RJ-11 Connector and configuring node in network) More than 8 user end points	Per User End Points	1000				
17	Installation of 6U wall mounted rack including supply of electrical cable for power connection, MCB and energizing the rack with electrical power	Ea	800				
18	Installation of 3U wall mounted rack including supply of electrical cable for power connection, MCB and energizing the rack with electrical power	Ea	7500				
19	Supply, Installation, configuration, commissioning and acceptance testing of CPE (customer premise equipment – L2 manageable switch)including integration of all accessories and earthing of equipments - CPE (customer premise equipment) L2 manageable switch – 8 ports*	Ea	400				
20	Supply, Installation, configuration, commissioning and acceptance testing of CPE (customer premise equipment – L2 manageable switch)including integration of all accessories and earthing of equipments - CPE (customer premise equipment) L2 manageable switch – 24 ports*	Ea	300				
21	Supply, Installation, configuration, commissioning and acceptance testing of Mini OLT* fully loaded with all accessories	Ea	1000				
22	SITC of Electronics ONT with all required accessories and cabling required to enable the services	Ea	4000				
23	SITC of 1U Cantilever Shelves / 1U cantilever shelf including supply of electrical cable for power connection,MCB required to energizing the equipment with electrical power cable.	Ea	7500				
	Total (INR)						

Annexure-VIII: Other Clauses:

Ad-Hoc / VIP Events Arrangement

- a) Timeline will be immediate basis (maximum to 24 Hrs to 48 Hrs) for deploy connectivity on temporary basis as per the requirement of GFGNL's customer.
- b) For New connectivity LMCA may opt for either aerial method or through proper UG method or through Wireless connectivity based on the site feasibility and service requirements, keeping the 100% network availability as the design criteria. For connectivity media GFGNL may be consulted prior to the execution by LMCA.
- c) Selected bidder has to maintain and reserve the sufficient spares materials in advance for these type of connectivity requirements.
- d) At the time of event, bidder has to ensure the 24*7 surveillance of the event and has to maintain 100% service network uptime. For this, sufficient resources field and backend support team for online close monitoring has to arrange without any additional cost to GFGNL. Failure to this penalty will be applicable with change in % slabs as mentioned in reference section. Failure to this penalty will be deducted 10% of service cost per instance of each site.
- e) For Site integration, payment will be given based on financial discovery rate in **VIP/Adhoc/ Major** site in Capex rate discovered in Financial bid line item -14/15/16.
- f) At the end of event, dismantle of site will be in scope of bidder with immediate basis or as instructed by the event authorized agency or as informed from the GFGNL.

3.5 Implementation timeline and penalties

- i) GFGNL will give intimation order to selected Bidder with the list of number of locations to be connected with BharatNet Phase II Network.
- ii) Bidder will have to carry out field survey for each location & the distance from GFGNL PoP, i.e., Gram Panchayat to Government Institute or in very few cases where sites co-located and submit the details to GFGNL for approval.
- iii) GFGNL will approve locations' connectivity based on feasibility report, capex, field situation & final requirement of respective departments and fund availability.
- iv) Successful Bidder has to complete the Installation/ Commissioning/ Acceptance of the ordered work within the time period (s) specified in the below table. However, in case of any delay solely on the part of successful Bidder TENDERER reserve the right to levy the appropriate penalties as per the below table:

Mile ston e	Deliverables	Timeline	Reference for Measurement	Maximum Penalty
1	Work Order/Lol shared by GFGNL	то	To be released to Selected Bidder by GFGNL	NA

Mile ston e	Deliverables	Timeline	Reference for Measurement	Maximum Penalty
2	Draft Contract Shared By GFGNL to selected Bidder	T1=T0+15 working days	To be released to Selected Bidder by GFGNL	NA
3	Signing Of Contract	T2=T1+15 Working days	Contract Signoff copy	Rs. 10,000/week or part thereof. GFGNL may terminate the contract and forfeit the PBG beyond delay of 5 weeks
4	Material Mobilization	<mark>T3= T0+10 calendar</mark> days	Submission of Valid Documentation, i.e; - Delivery Challan - Invoice Copy - warranty certificate issued by respective OEMs for each hardware	Penalty of 2% per week up to 4 week Delay Beyond 4 weeks from Schedule timeline, GFGNL may terminate the contract or Forfeit the PBG)
<mark>4-</mark> 5	Establishing end to end connectivity of location with SDC and successful testing of Services and signing of FAT from GFGNL. (Deliverable: ITP sheets for completed work for Wireline/wireless connectivity, link AT report for all type of connectivity- wireless/wireline, FAT)	No. of approved locations in a lot = X T3 4 = (T0 3+1) Month = 20% of X, T03 +2 Month = 30% of X, T03 +3 Month = 40% of X, T0-3 +4 Month= balance 10% of X) Note: Remaining balanced 10% might be problematic cases and for that mutual progress with bast effort- basis will be considered with upper ceiling of T0+6 Months	Device discovered in EMS and NMS. Submission of valid Site proper documentations/asbuilts including but not limited to all field items Photos/Videos(including GPS co-ordinates) (which covers all field site's elements including but not limited to like site Rack ,Wireline trench/OFC laid, Wireless network connectivity, with integration of all network elements(both Active/Passive) at GP and Customer End(logs of devices in applications with their duration and dates, etc. of all installed materials). Submission of deliverables	Rs. 200 /- per day per location

Mile ston e	Deliverables	Timeline	Reference for Measurement	Maximum Penalty
			& Reports mentioned as per RFP.	

Note:

- Maximum penalty ceiling falling in above three criteria for any site / location shall be equal to 20% of the actual payable capex value certified for that site / location
- Maximum Lot size = 1000, Number of lot will vary.
- In the event, Bidder may be given two lots and in that case the Bidder will execute the lot in parallel. However, the penalty will be half. Also, Bidder has to maintain the end-to-end site integration run rate minimum 300 sites per month. i.e., in the event of multiple lot assignment and if Bidder is able to maintain average run rate of 300 sites per month per Bidder lot there will be no penalty to Bidder.
- In case of average run rate is >300 sites settle in timeline of particular month if Bidder disposal/average rate end to end site integration rate is >300, then those excess counts would be credited in performance account that Bidder may claim and setup at later stage in case of lower performance.
- Delivery beyond 6 Month Bidder will be fall under 30% of the actual payable capex value certified for that site/location(This will be beyond the cap limit of overall installation phase)
- All the timeline mentioned in above table will be calculated from the actual date of completion of respective previous milestone.

For Network Solution and Media design

Bidder are pre permitted for below mentioned medium for last mile delivery. Priority medium will be as below.

- 1. LAN connectivity CAT-6 up to 100 Mtr
- 2. Structural Aerial 1.5 Km
- 3. P2P and P2MP RF Link 10Km and 5Km
- 4. Under Ground 500 Mtr

Beyond above design criteria GFGNL reserve rights for approval of last mile delivery

methodology for additional length or Li Fi technology.

Wireline			
Media	Fibre	Distance	
Under Ground(UG)	12F	500m	
Structural Aerial	12F	1.5Km	
Media	Copper (Cat-6)	Distance	
LAN Connectivity	Cat-6	<=100m	

Wireless				
Media	Connectivity	Distance		
UBR	P2P / P2MP	 P2P – Upto 10 Km aerial distance minimum (With Directional antenna) P2MP – Ensuring 360-degree radius coverage Upto 5 Km aerial distance 		
Li-Fi	Р2Р	Selected / not feasible location on wireline or UBR		

LAN Structured Cabling Works

All work shall conform to the Building Code, and all local codes and ordinances as applicable. Any exceptions to the above must have written authorization from Tenderer.

As mentioned above entire work has to be completed in turnkey/EPC manner. Further, below mentioned are the minimum tasks which Bidder will have to carry out during the work:

- a. To carry out the feasibility study for the deployment of required LAN.
- b. Bidder shall act as single Bidder to organize and manage the entire project including design, supply, installation and commissioning. The Bidder shall be in a position to test, demonstrate and certify the LAN connectivity in accordance with the contract.
- c. The Bidder shall carry out site survey and submit to Tenderer for approval along with a layout diagram indicating the location of equipment to be installed.
- d. The Bidder will be responsible to undertake and complete the works related to supply installation and commissioning services across the Gujarat state.
- e. 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.

- f. The Bidder shall be responsible to share the status report of existing infrastructure (i.e. Cable, network equipment, patch cord, OFC etc.), during resolving complaints.
- g. The Bidder shall provide one copy of the Network Diagram, warranty documents, manuals and FAT/UAT reports etc. to concern local authorities and another copy to Tenderer for further process of completion of orders.
- h. The Bidder will be responsible to provide the services at all the locations at the agreed price.
- i. Bidder is required to Supply and Install LAN components and commission LAN as per the requirements. The structured cabling works are to be completed on turnkey basis including installation of all required casing, conduits, flexi pipes, I/O boxes, Face Plates, removal of existing Lan infra if any, etc. To ensure quality of work done, no cable should be left bare or visibly exposed and the supplied equipment are required to be maintained for Flve years from the date of FAT.
- j. The Bidder shall be responsible for implementation of the work as defined. Delivered Solution must be tested and commissioned as per defined procedures before handing over the project to customer. Any hardware equipment's or software's required for those testing and commissioning procedures is the sole and full responsibilities of the bidder.
- k. All goods or materials shall be supplied strictly in accordance with the specifications, drawings, datasheets, other attachments and conditions stated in the RFP/Agreement/ SLA. All materials supplied by the Bidder shall be guaranteed to be of the best quality of their respective kinds and shall be free from faulty design, workmanship and materials.
- I. The Bidder shall provide details of site and infrastructure requirements (Power, earthing etc.) in a layout plan after making a site survey.
- m. Detailed report is required to be submitted for the work under progress and for functional performance of LAN, the connectivity, throughput. The same have to be certified by Tenderer/ PROJECT COORDINATOR. Bidder shall submit the installation plan for each location to PROJECT COORDINATOR, 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 with their seal and remarks if any.
- n. On acceptance of work, a work completion report must be prepared by the bidder and signed by both parties i.e. local authorities / customeror with sign stamp and date. During the warranty period, for each visit whether periodical or on call, whether preventive or corrective maintenance, the bidder contact person must inform to GFGNL team.
- o. The bidder should ensure that while installation or attending the complaints of LAN, day-today functioning of official work and existing network setup/connectivity/internet connectivity should not get disrupted.
- p. The bidder will be responsible to undertake and complete the works related to supply installation and commissioning services as indicated in the bid anywhere in state promptly and within the time duration prescribed by Tenderer/user department.

Following are the Structure LAN Cabling Best Practices but not limited to, follow by

bidder once onboarded

- i) For Cabling, the Cable used shall be Standard Branded CAT6A, 100ohm, 4 pair unshielded twisted pair (UTP).
- ii) All node should be connected to switch through I.O. Port and Patch panel only.
- iii) 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)
- iv) Care must be taken to not to stretch or abrade cables during installation, i.e. the pulling tension for cables must not be exceeded.
- v) Cables that pass through the infrastructure of the building shall be suitably protected against damage. Through walls and floors this shall involve an appropriate type of sleeve; through any form of metalwork or stiff plastic then a rubber grommet shall be used.
- vi) 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.
- vii) On vertical runs, the cables shall be dressed and tied from the bottom up, thus putting minimum strain on the cables.
- viii)Cables shall not run behind radiators.
- ix) In order that the system may be easily re-routed, or damaged sections quickly replaced, free access to the cable, where possible, is important
- x) Draw cords shall be left in ducting, piping etc. for future use.
- xi) Because of the nature of offices, dust sheets be used at all times.
- xii) Special care shall be taken to avoid contact with dangerous materials e.g. asbestos.
- xiii)Sharp bends in the cable will damage the insulating material thus causing unacceptable losses in the transmission medium. Therefore, the internal radius of every bend in a cable shall be such as not to cause damage to the cable, nor impair the characteristics of the cable.
- xiv) The cable shall be clearly labeled at both ends, as outlined in the documentation and/or drawing.
- xv) High power electrical plant may produce switching transients and radio frequency emissions that may induce interference on the UTP cable. Therefore, in addition to the rules imposed by the IEE Regulations, data cables shall not run parallel to power cables, especially where these cables may carry heavy switching loads. If, however, this is unavoidable it is advisable to keep cables as far as possible. (Like Transformer-100CM, Electric Meter- 100Cm Fluorescent Light-30Cm).
- xvi) Cable shall not be routed over pipes, conduits, other cabling, ceiling tiles, etc., but shall rest directly on the supporting surface so as to minimize the potential for sharp bends, kinks etc. Every cable used shall be supported in such a way that it is not 25 exposed to undue mechanical strain and so there is no appreciable mechanical strain on the terminations.

- xvii) For cables which are not continuously supported, the maximum distance between supports shall not exceed 50cm (horizontal or vertical).
- xviii) All newly installed Device must be capable of supporting CAT6a cabling.
- xix) Floor Plans, both hard copy and Soft Copy, suitably marked up to show location and I.O. of each and every data point, and detailing any deviation from the original plan.
- xx) Full Structured Cabling Test Results, via email or compact disc.

5.1 O&M SLA & Penalties

iii) #	Fault Work Type	Ti me Du rati on	Penalty
1	Site Down More than 48 Hrs in EMS/NMS	2 wor king Day s	If any site / location will be down for more than 48 Hrs due to any reason attributable to the Bidder(s), an additional penalty of Rs. 1,000-Rs 500/-per day per location will be levied

MTCT/Trusted Source certification

MTCT/Trusted Source certification is mandatory for product mentioned to be supplied under this tender, should comply "Trusted Products" before delivery. In case, the make/ model is not approved as "Trusted Product", then, the bidder/ OEM shall obtain the approval for the tendered products.

Format for essential information for applying to NSCS (Trusted Telecom Portal)

1	Project Name	:	
2	Type of Project	:	1. New Roll Out
			2. Expansion
			3. Upgrade

3	Are your procurements from India registered vendor only for this project?			:		YesNo	
4	Do you intend to procure from non- India registered vendor for this project?			:		YesNo	
5	Remarks on the Project Criticality, if any,						
6	Details of Equipment:						
	Asset (one to be selected)	Equipment Name	Comp Name	any /Vendo	r	Product Name	Model Name
	a) Support System b) Transport		Name of Contact person: E-mail ID: Mobile No.				

Undertaking for approval from Trusted source from the National Security Council Secretariat (NSCS)

Date: _____

Τo,

Sub: Undertaking for approval from Trusted source from the National Security Council Secretariat (NSCS)

 Ref:
 Tender Enquiry No.:

Dear Sir,

As the supply of network elements against this tender shall be done after approval as trusted product from National Security Council Secretariat (NSCS), as per extant Government of India guidelines, we ______ (Name of OEM) hereby confirm that before supply of the products we shall have approval as a Trusted source from the National Security Council Secretariat (NSCS) as per extant Government of India guidelines.

Thanking you,

For and on behalf of M/s					
Authorized Signatory					
Signature:					
Name:					
Designation:					