

# POWER INFORMATION TECHNOLOGY COMPANY (PITC)



**TENDER DOCUMENT No: PITC/G-224(39)/12-2019**

## **Request for Proposal (RFP)**

Installation, Testing, Commissioning and Maintenance of CIR  
(Uncompressed and Unshared) MPLS Connectivity  
Complete (PTA Regulated Wireless Links or Optical Fiber) in all respects.

**Note:** Bidders are expected to examine Bidding Document carefully, including all instructions, forms, terms, specifications etc. Failure to furnish all information required in the Bidding document or submission of a Bid not substantially responsive to Bidding Document in every respect would result in the rejection of the Bid.

**Director General (ISDS)**

**402, WAPDA House, Lahore Pakistan**

**Tel: 042-99202163, 042-99202211 Ext.2064, Fax # 042-99202799**

<b>Sr. No.</b>	<b>Summary</b>	<b>Description</b>
1.	Recipient	DG (ISDS) PITC
2.	Venue	PITC, Conference Hall Lower Ground Building No.03 Aiwan-e-Iqbal Lahore
3.	Pre-Bid Conference Date and Time	10-01-2020, 11:00 A.M
3.	Closing Date & Time of Bids (Technical & Financial)	31-01-2020, 11:00 A.M
4.	Technical Bids shall be opened in the presence of bidder or authorized representatives	31-01-2020, 11:30 A.M
5.	Public Opening Date & Time of Financial Bids	Technical responsive firms shall be informed to participate in the opening process of financial bids with date/time.
6.	Bid Money	For WAPDA/PEPCO/DISCO Registered Firms 2% of the total value of quoted cost (Please enclose bid money with financial bid envelope)
		For non-registered firms 5% of the total value of quoted cost (Please enclose bid money with financial bid envelope)
7.	Performance Security	For WAPDA/PEPCO/DISCO Registered Firms 5% of the total value of Purchase Order
		For non-registered firms 10% of the total value of Purchase Order
8.	Type of Tender	<b>Single Stage Two Envelope</b>
9.	Cost of Tender Document	Rs. 5,000/- to be deposited with FD (PITC), 401 – WAPDA House, Lahore before closing date and time
10.	Requirement	Installation, Testing, Commissioning and Maintenance of CIR (Uncompressed and Unshared) MPLS Connectivity Complete (PTA Regulated Wireless Links or Optical Fiber) in all respects
11	Mailing address, Emails & Contact No.	Chief Executive Officer, Power Information Technology Company (PITC) 406-WAPDA House, Lahore  Phone : 042-99202163, 99202666 / Fax No: 042-99202048  <b>Email: <a href="mailto:dgisds@pitc.com.pk">dgisds@pitc.com.pk</a></b>
12	Website	<b><a href="http://www.pitc.com.pk">http://www.pitc.com.pk</a></b>

# TABLE OF CONTENTS

S.No.	Contents	Page No's
1.	INTRODUCTION OF PITC .....	3
2.	CONFIDENTIALITY .....	3
3.	DISCLAIMER.....	3
4.	ELIGIBILITY .....	3
5.	PROPOSAL.....	4
6.	AMENDMENT OF RFP .....	4
7.	SUPPORT AND WARRANTY .....	4
	7.1Warranty Certificate: .....	5
8.	INSTRUCTIONS TO THE BIDDER.....	5
9.	TECHNICAL SPECIFICATIONS .....	9
	9.1 Scope & Specifications .....	9
	9.2 Network Monitoring.....	10
	9.3 Network Expandability.....	11
	9.4 Traffic details.....	11
	9.5 Types of Reports.....	12
10.	TERMS AND CONDITIONS .....	12
11.	EXTENSION OF BANDWIDTH.....	14
12.	PENALTY .....	14
	12.1Penalties Against Banwidth Services Covered Under This Contract.....	14
13.	SCHEDULE OF SUPPLY/ DELIVERY.....	15
14.	EXTENSION OF TIME FOR COMPLETION.....	15
15.	EVALUATION CRITERIA .....	15
16.	EVALUATION FORMULA/ AWARD CRITERIA.....	16
17.	TERMS OF PAYMENT.....	17
18.	PRICE VARIATION.....	17
19.	PAYMENT MODE.....	17
20.	ADVANCE PAYMENT .....	17
21.	TECHNICAL EVALUATION CRITERIA .....	18
22.	CONTRACT DURATION AND TERMINATION NOTICE .....	19
23.	ARBITRATION .....	19
24.	INTEGRITY PACT .....	19
25.	ANNEXURES.....	21
25.1	(ATTACHMENT-I).....	21

*Technical Requirements:* ..... 21  
*Router Detailed Specification:*..... 21  
**25.2(ATTACHMENT II) BID FORM**.....**23**  
**25.3(ATTACHMENT III)** .....**25**  
*List of Locations* ..... 25  
**25.4(ATTACHMENT IV)**.....**27**  
*Schematic diagram of proposed connectivity* ..... 27

## **1. INTRODUCTION OF PITC**

Power Information Technology Company (PITC) being the part of the system and technology provider for all the DISCOs for multiple ICT solutions will be an enabler of the solution in order to ensure the uniformity and smooth transfer of technology to each end user i.e. DISCO.

To facilitate DISCOs in improving their billing system and customer support services PITC intend to deploy new state of the art online integrated billing system (IBS). This IBS is one of the major applications of the company which provides software support to ten DISCOs of Pakistan for processing of electricity bills, revenue collection and other commercial activities of about 22.0 million consumers monthly at 25 data processing centres.

## **2. CONFIDENTIALITY**

This RFP is a confidential document and is not to be reproduced, transmitted or made available by the recipient to any other entity without written permission of PITC.

## **3. DISCLAIMER**

This RFP is not an agreement and is not an offer by PITC. This RFP does not claim to contain all the information each bidder may require. Each bidder may conduct its own independent investigations and analysis and is free to check the accuracy, reliability and completeness of the information in this RFP. PITC makes no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFP. The information contained in the RFP is selective and is subject to update, expansion, revision and amendment. PITC does not undertake to provide any Bidder with access to any additional information or to update the information in the RFP or to correct any inaccuracies therein, which may become apparent. The PITC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP. The PITC reserves the right of discretion to change, modify, add or alter any or all of the provisions of this RFP and/or the bidding process, without as signing any reasons whatsoever.

## **4. ELIGIBILITY**

The Proposal should be from the Telecommunication Companies or ISP which have their own last mile. The Bidder should have capability to provide MPLS connectivity with allied hardware and routers as required by this RFP to locations specified herein as Attachment-III

within the time and period specified in this RFP. The Bidder should have exclusive support infrastructure for maintenance of items proposed to supply by the Bidder in locations as stated above and be able to provide & maintain Hardware and Services with their competent support engineers.

Should have the similar experience of (3) or more installations in reputed organizations. The Bidder will produce necessary evidence / testimonials for these along with the proposal.

## **5 PROPOSAL**

The Bidder is expected to examine all instructions, forms, terms & conditions and Technical Specifications stated in the RFP. The Proposal not substantially responsive to the RFP may result in rejection without any reference to the Bidder. The Proposal should be devoid of ambiguity and should not contain any statement resulting in hidden cost, any misleading statement and any incomplete information. The proposal shall strictly adhere to the specifications mentioned herein. Suppression of any material information that may adversely affect the interest of the PITC will invalidate the Proposal. If such matter is found out after empanelment, it can cause delisting of vendor and PITC initiating legal and other remedies for any type of loss suffered or cause to suffer by PITC.

## **6 AMENDMENT OF RFP**

At any time prior to finalization of bidding process, PITC may at its discretion modify the RFP in the interest of FESCO and such amendment will be conveyed through mail/fax to all prospective Bidders who have received the RFP and such amendments shall be construed as part and parcel of the original RFP. In order to provide reasonable time to Bidder to take the amendments in to account for submission of Proposal, the PITC may, at its discretion, extend the last date of submission of Proposal mentioned elsewhere in this RFP.

## **7 SUPPORT AND WARRANTY**

The support & warranty period shall be minimum 03(three) year from the date of installation of MPLS connectivity and allied hardware. After the expiry of support & Warranty, PITC may engage the vendor to provide Annual Maintenance Contract (AMC) for a period up to 03 (Three) years. The payment of AMC will be given on Monthly basis after the expiry of support & warranty. The AMC service shall be onsite and comprehensive after the expiry of warranty. The Bidder may provide minimum documented mean time between failures

(MTBF) for the hardware. The maximum downtime for MPLS link shall be 2 hours, backup link be provided during down time.

### **7.1 Warranty Certificate:**

Successful Bidder will furnish a warranty certificate, certifying that the goods supplied conform exactly to the specifications laid down in the contract and are brand new and that in the event of the material being found defective or not conforming to the specification/particulars governing supply at the time of delivery and for a period of three (3) years or as per the original warranty provided by OEM (whichever is higher) from the date of completion of supply/delivery, bidder will be held responsible for all losses and unacceptable goods shall be substituted with the acceptable goods at bidder expenses and cost.

## **8 INSTRUCTIONS TO THE BIDDER**

- i. Rates should be quoted on the FCS basis (Free delivery at Consignee's Store).
- ii. The bidders are required to submit technical and financial bids in separate sealed envelopes, clearly marking "Technical" and "Financial", two copies of each (marked as Original and Copy). Soft copies of bids will also be required. Firms will be short listed on the basis of scrutiny of the technical bids. Financial bids of the short-listed firms will be opened in the presence of bidders or their authorized representatives.
- iii. The bidder shall carefully study the terms and conditions laid down in the RFP notice and these RFP documents. The bidder shall submit with their offer all required certificates, information's and securities without which the offer shall not be acceptable.
- iv. The bidder shall avoid conditional, incomplete and confusing offers; as such offers shall be liable to be rejected. The offers shall be clearly worded, self-explanatory, completed in all respect and rates shall be quoted in complete understanding of the scope and specification defined in the bid documents.
- v. Rates shall be clearly offered on the prescribed page (Bid Form) be provided in the RFP document and over-writing etc. shall be treated as disqualification.
- vi. Once Company/Firm have completed the proposal, signature of a duly authorized individual of Company must be affixed on bids, to acknowledge the fact that Company/Firm have read the RFP thoroughly and have completed the proposal within the stipulated guidelines.
- vii. Date of opening of the financial bids will be informed well in time to technically qualified firms.
- viii. The bidders shall furnish 2% bid money as a part of their tenders in form of Bank Guarantee in favour of CEO, PITC, to be enclosed in the envelop of **financial bid**.

- ix. SEALING & MARKING OF BIDS:
- i. The bidder shall seal the original and each copy of the bid in an inner envelope, duly marking the envelope as “Original” or “Copy”. The inner envelope shall then be enclosed in an outer envelope. In the event of discrepancy between them the Original shall prevail.
  - ii. The inner and outer envelopes shall be:
    - a) Addressed to the purchaser at the following address.
    - b) Chief Executive Officer, Power Information Technology Company (PITC) 405-WAPDA House, Lahore, RFP No: PITC/G-224(39)/12-2019 and the words “DO NOT OPEN BEFORE 11:30 AM on 31-01-2020” shall be written on them.
    - c) In addition to above, the inner envelope shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared “Late.”.
  - iii. If the outer envelope is not sealed and marked, the purchaser will assume no responsibility for the bid’s misplacement or its premature opening.
  - x. A pre Bid Conference will be held on the date and time mentioned at Key Information Sheet of this RFP for information/clarification regarding the Project. No further clarification/ information will be offered other than the proposed date. Interested bidders are required to confirm their attendance and send their queries through email at [dgisds@pitc.com.pk](mailto:dgisds@pitc.com.pk) at least 72 hours before pre-bid conference. Representatives of only those prospective bidders who purchased the bidding documents will be allowed to attend the pre-bid conference.
  - xi. All queries will be answered during pre-bid conference and amendments to RFP will be issued for their clarification (if required) which will be integral part of this RFP.
  - xii. Successful bidder shall deposit performance security, as described in rate contract or PO, minimum 10% of the value of the proposed purchase order in shape of bank guarantee issued by any scheduled bank having AA rating, in favour of indenter. The same shall be released after expiry of warranty period or contract.
  - xiii. Competent authority reserves the right to accept or reject any offer or a part thereof or increase/decrease quantity up to 15% without assigning any reason. The offer received incomplete or not in accordance with the conditions/specifications will not be entertained. Bid offered is likely to be ignored if: -
    - a) The tender is unsigned (all pages should be signed).
    - b) It is received after the time and date fixed for its receipt.
    - c) Offer is ambiguous or conditional.

- d) The offer is from a firm who is blacklisted by PEPCO, FESCO, NTDC, PITC, WAPDA or any other government organization, or is in litigation with any government organization or is defaulter in any previous order and/or contract.
  - e) The offer is unsolicited.
  - f) The bid is not accompanied with full earnest money.
- xiv. The tenders prepared by the bidders should comprise of the following documents:-
- a) Covering letter.
  - b) Receipt of tender document cost.
  - c) Bid Money.
  - d) Bill of quantities (BOQ) provided with tender document duly filled, signed and stamped. Bids with partial BOQ will be rejected; all major items must have been quoted. The items that are not quoted will be considered free of cost. Partially filled bids not allowed.

## **8.1 CORRUPT PRACTICES**

- The Purchaser requires bidders, Consultants, and contractors to observe the highest standard of ethics during the execution of such contracts.
- The following definitions apply:
- “Corrupt practice” means the offering, giving receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any party in the procurement process or the execution of a contract.
- “Collusive practice” means a scheme or arrangement between two or more bidders, designed to influence the action of any party in a procurement process or the execution of a contract;
- “coercive practices” means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;
- The Purchaser will reject a proposal for award if determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practice in competing for the Contract.

## **8.2 GOVERNING LAW**

The Contract shall be governed by and interpreted in accordance with the laws of the Islamic Republic of Pakistan. The Courts in Faisalabad shall have exclusive

jurisdiction with respect of the tendering process, award of Contract and execution of the Contract.

### **8.3 ADHERENCE TO SAFETY PROCEDURES, RULES, REGULATIONS & RESTRICTIONS:**

- Contractor shall comply with the provision of all laws including labour laws, rules, regulations and notifications issued there under from time to time. All safety and labour laws enforced by statutory agencies and by Purchaser shall be applicable in the performance of this Contract and consultant's Team shall abide by these laws.
- The Contractor shall take all measures necessary or proper to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. Contractor's Team shall adhere to all security requirement /regulations of the Purchaser during the execution of the work. Purchaser's employee also shall comply with safety procedures /policy.
- The Contractor shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.
- The Purchaser will be indemnified for all the situations.

### **8.4 Force Majeure**

Notwithstanding any provision to the contrary contained for damages or be deemed in default of the provisions of the contract for the failure to perform or delay in the performance of obligations assumed by such party pursuant hereto in so far as the said affected party can clearly establish that its performance has been prevented or delayed by force majeure. The term "Force Majeure" as employed herein shall mean acts of Government in their sovereign capacity, riots, strikes, lock outs, fires occurring in the supplier's establishment, political disturbances, mobilization, acts of terrorism, wars, unprecedented flood, storms hurricanes or other acts of God.

If a party wishes to claim relief of by reasons of Force Majeure, it shall within ten days of its occurrence serve written notice of occurrence of such a Force Majeure in the other party through registered posts. The two parties shall consult each other and agree upon the measures to be taken. As soon as the Force Majeure ends, the affected party shall promptly resume performance of its obligations under the agreements and intimate the other party about this.

## **9 TECHNICAL SPECIFICATIONS**

The tender is for Installation, Testing, Commissioning and Maintenance of CIR (Uncompressed and Unshared) MPLS Connectivity (Layer 3 any to any) complete in all respects between PITC WAPDA HOUSE LAHORE and FESCO sites as per the Attachment III.

### **9.1 Scope & Specifications**

- a. MPLS commissioning (MPLS Connectivity complete in all respects.)**
- b. Connectivity has to be Layer 3 MPLS solution on dedicated ports with a 1:1 committed information rate with end point as Ethernet. At least 1 ethernet with ducting till ending device i.e. PC or switch.
- c. The circuit should be available in full duplex mode with sending and receiving available on the same circuit. For example, on a 128kbps circuit, 128kbps sending and 128kbps receiving should be possible simultaneously.
- d. Preferred last mile should be on Fiber Optics. PITC NOC will be the aggregation point / hub location with auto failover(Backup) configuration on Optical fiber from different routes or radio links having same Bandwidth capacity
- e. The other locations (as per list attached in Attachment-III) will be the sub locations. In case if the last mile on Fiber is not feasible/available, service provider should provide backup link of same bandwidth on RF. Not more than 30% links/ Connectivity can be on RF.
- f. In case of a last mile on wireless link, the vendor will ascertain that there is no interference in the channel provided to Hub and sub Locations by other Radio devices in the neighbourhoods. Line of sight should be clear. Tower erection will be vendor responsibility; which will not be charged in onetime cost (OTC) to FESCO/PITC, as it will not become the asset of FESCO/PITC, shall be charged in monthly recurring charges (MRC) as separate head. In case the channel provided has interference, then the vendor will apply and make available a licensed channel and compatible Radio Modems at its own cost and authorized by PTA. PITC will not bear any extra cost towards the same.
- g. The bidders are expected to do a complete site survey for feasibility for positioning of the terminating equipment. They should clearly state the equipment that will be deployed with its physical, electrical & any other related requirement. Estimation of the cabling & related activities should be also clearly specified. The charges towards

cabling & other activities should be included in the Rate format. Any extra material /quantity required for the project execution not mentioned in the rate format shall be supplied and deployed by the vendor at no extra cost to PITC.

- h. Supply, Installation and configuration of end equipment's like routers, modems, last mile equipment's etc. would be done by the vendor to provide the solution. For termination of the MPLS circuit, the bidder has to provide CISCO ISR 1111-4P or equivalent series routers with the necessary CISCO or equivalent adapters, cables etc required. The router should be having 2 WAN ports. The router would become the property of FESCO. This router will carry a three year warranty.
- i. The vendor will be responsible for the configuration of the router. To understand the current networking scenario kindly refer to Attachment IV.
- j. LAN IP shall remain same as per the current schema implemented in FESCO and PITC at all the locations.
- k. The bidders must submit detailed technical solution as part of his technical bid. The documentation should include configuration code for each scenario for seen. The vendor is liable for achieving the objectives at each instance. The vendor should undertake to update this information as when there is a change. Submission of detailed project documentation to FESCO/PITC Network project team within 2 weeks of date of Purchase Order.
- l. All queries related to the scope and specification may be sought from office of the CEO PITC WAPDA House Lahore during office hours from 9:00 AM to 5:00 PM on all working days.
- m. The interested bidders may visit these sites and carry out a site survey with prior information and approval from FESCO team. No separate site survey charges shall be paid to any bidder, irrespective of whether the vendor is awarded the contract or not.

## **9.2 Network Monitoring**

- a. The bidder should have state-of-art Network management centre for troubleshooting round the clock to ensure uninterrupted services with auto monitoring toll. This NOC should be managed by technical staff (24x7) and have call logging and escalation procedures.
- b. Network monitoring & reports: The bidder should provide statistics for the Different COS statistics as specified. Application wise reports are desirable. The reports could be provided on a monthly basis per link. The bidder should also specify the access to

its systems for auditing or monitoring of its links. The comprehensive list of reports is defined in clause 9.5.

- c. The bidder will provide a web view of the network available at its NOC. This view should show all the locations with zooming facility to see a part of it in detail. It must also be able to show the locations in at least three colors – red (down), yellow (critical), green (up). FESCO/PITC would require 7 different views. View at HUB location should have all the locations displayed whereas other views should have only the locations attached to them in the view. Vendor would ensure the view at HUB location to be accessible from more than one PC simultaneously. MRTG graphs / Utilization graph will be required at PITC and FESCO site.
- d. The Vendor will have to demonstrate the availability of NOC, NMS and the possibility of generation of reports to FESCO/PITC officials during the technical review of the bids. The same NOC certified by FESCO shall be used for actual monitoring by the vendor on being awarded the tender.
- e. Alerts through email and SMS shall be provided. Routine maintenance alerts to FESCO NOC team and node down & up or other critical to FESCO NOC as well as PITC admin shall be sent. Auto monitoring tool will be used for timely maintenance and alerts.

### **9.3 Network Expandability.**

- a. The last mile bandwidth capacity for all the locations to Service providers MPLS PoP should be min. of 30 Mbps considering future scalability. It should be limited to the actual required bandwidth. BIDDER should be able to add new Branches to the network and to carry out all up-gradations on-line without bringing down the network for any reason. The equipment provided at premises for the MPLS circuit should be able to support bandwidth as per requirement.
- b. In case of an increase in bandwidth of any circuit, the rate of the increased bandwidth will be paid to the vendor on a pro rate basis.
- c. In case of a change in location required by PITC at a later date, necessary charges shall be paid as quoted by the vendor in the rate format. No other charges shall be paid apart from those quoted.

### **9.4 Traffic details**

- a. The basic services that are used are:
  - 1. IP Messaging
  - 2. Http, Https
  - 3. SNMP, ICMP, FTP, Telnet, SSH

b. Advanced services

1. IP Telephony
2. Video Conferencing

## 9.5 Types of Reports

The types of reports that are required for the monitoring of the links are as follows:

- a) Link Utilization
- b) Link errors (CRC, Input errors, drops etc)
- c) Link Availability (Bifurcation of link downtime & other causes of link being down to be specified
- d) Link Latency
- e) Reports of link uptime should be provided per location per node & over connectivity. The same should also be configurable w.r.t to time.
- f) Router CPU utilization
- g) The data for above reports for all the links should be available for a period of one year. Also, it should be possible to take reports for a configurable time period ranging from a day to a year. It should also be possible to take reports on peaks, average values of the above parameters.

Reports of Call logs as per the following:

- (1) W.r.t time i.e. fixed time period such as daily, weekly monthly etc
- (2) W.r.t to calls i.e Logged, pending & Completed within a specified time frame. Call log should have standard classification for categorization of faults, this will be useful to get an insight with the statistics on the types of problem occurring.

Miscellaneous reports: The bidder should also provide for the following reports on periodic / on demand basis

- (1) Hardware classification reports
- (2) Location wise detailed hardware reports
- (3) Hardware availability reports w.r.t to location, time & asset
- (4) Asset movement / alteration or changed reports

## 10 TERMS AND CONDITIONS

- i. Vendor will provide complete turn-key solution.
- ii. All the equipment must be brand new (Hardware should be original and not refurbished), operable directly on 220  $\pm$ 5 volts and 50 MHz frequency.

- iii. The quoted price must be firm's final, inclusive of all taxes/duties, transportation charges etc. and should be in Pak Rupees.
- iv. The purchaser is not bound to accept the lowest offer not fulfilling the requisite criteria. The reasons for rejecting the lowest or any offer shall not necessarily be communicated.
- v. Price will remain valid for 120 days from the date of opening of tender.
- vi. The supplier shall be liable for liquidated damages (LD) @ 2% Per Month, if he fails to deliver the equipment within delivery period/ supply schedule, the maximum LD will be the 10% of contract price.
- vii. **Joint Inspection of Routers** will be carried out at DG(IT) Office FESCO, Faisalabad by the Chief Executive officer PITC, WAPDA House, Lahore OR his authorized representative along with D.G (IT), FESCO or his authorized representative. Notice in writing for inspection of goods shall have to be given to the Chief Executive officer PITC, WAPDA House, Lahore as well as to DG(IT) FESCO office 15-days prior to the due date. All reasonable facilities as provided in the specifications or followed by the industry OR Trade in general shall have to be provided /afforded to the inspecting Officers by you at your expenses for carrying out the inspection. The inspection charges @ Rs.0.5 % (non-reimbursable) of the cost of material will be paid by you to PITC WAPDA House Lahore, while offering the material for inspection. Rest of the installation/ deployment and MPLS Connectivity will be verified remotely or randomly (nearby site visits) as per inspection committee/ representatives of FESCO and PITC satisfaction after due period of deployment/configuration as per Clause 13 of delivery schedule. Onward link shall be monitored by PITC/FESCO but managed by Bidder and upon satisfaction, monthly payment claim will be vetted and approved by DG (IT) FESCO.
- viii. All the cables/Patch cords (Fiber/Ethernet), accessories needed for installation of the devices will be provided by the vendor.
- ix. Vendor will install the devices at FESCO sites mentioned as (Attachment-III) in FESCO region, and will configure devices for all the requirements provided by PITC.
- x. Vendor will be liable to provide Low-Level Design (LLD) and High-Level Design (HLD) documents to FESCO at the end of the project.
- xi. Each cable must be terminated properly and tagged at both ends.
- xii. Vendor will provide all the detailed technical and configuration manuals at the time of hand over.
- xiii. Vendor will be liable to do any additional tasks/Configurations of these devices as per FESCO requirement if found necessary/unavoidable.
- xiv. Vendor must provide the valid Partnership certificate from Principal & MAF (Manufacturer Authorization Form)

- xv. Installation and Configurations done by vendor will be tested and verified by PITC Officers/Officials.
- xvi. Vendor must be in similar business for at least last Three (3) years.
- xvii. Principal Manufacturer of product must have local warehouses in Pakistan for sparing, (To support the Hardware Replacement timely).

**11 EXTENSION OF BANDWIDTH**

FESCO may place order for expansion of bandwidth any time at the unit rate of per mbps, quoted at the time of bid/quotation evaluation.

**12 PENALTY**

The purchaser (contracting officer) will have the right to withhold the Payment (against this or any other service) or impose penalty to recover loss. LD as per Clause 10(vi) for SUPPLY AND WARRANTY shall be charged and below Clause 12.1 shall be applicable for bandwidth services.

- i. Supplier failed to supply the equipment & quality of services within the time specified in quotation.
- ii. Commits any breach of Contract
- iii. For other reasons specified in the Contract by the contracting officer.

**12.1 Penalties Against Bandwidth Services Covered Under This Contract**

Internet Services uptime commitment must be 99.9% on aggregation/hub site and 98% on remote sites. In case of deviation from said commitment, penalty will be charged as per following penalty matrix:

12.1.1 The Maximum limit of penalties under this Work Order’s Network availability are classified as under:

*Network Availability (% of 2160 hours)	Deduction from the Quarterly Recurring Service Charges
99.99% - 99.50%	No Deduction
99.49% - 97.00%	1 % Deduction
96.99% - 95.00%	3 % Deduction
94.99% - 93.00%	5% Deduction
92.99% - 91.00%	7% Deduction
90.99% - 89.00%	9 % Deduction
Less than 89.00%	10% Deduction

\* Maximum Liquidated Damages shall be 10% of Monthly Recurring Charges (MRC)/ Quarterly Recurring Charges (QRC) in excess to performance security.

12.1.2 The penalties shall be deducted once in a quarter.

### **13 SCHEDULE OF SUPPLY/ DELIVERY**

The Installation and configuration of MPLS connectivity, allied hardware and routers will be completed with following schedule after issuance of purchase order.

S.No.	Site Name	Schedule	Remarks
1.	<b>Fiber Deployment at PITC NOC (Wapda House Lahore) with auto failover (Backup)</b>	Within 20 Days	Hub Site
2.	Fiber Deployment at FESCO Computer Centre Faisalabad		
3.	Fiber and Wireless link Deployment at All other required site's should be completed within 30 days after issuance of purchase order, ping test of all sites should complete till this stage.		
4.	Delivery of equipment (Router) and all type of commissioning, installation, configuration and testing shall be made within 2 months after issuance of purchase order. But the billing and connectivity should be started after a request by PITC on each individual site (after 1-week satisfactory demo per site in case of Fiber and 2 weeks satisfactory demo in case of wireless).		

Delivery period is the essence of the contract and delivery (complete solution) must be completed not later than the date specified; Order/Contract will be cancelled automatically, after which FESCO may serve the same to the next lowest bidder.

### **14 Extension of Time for Completion**

If the scope or duration of the Goods and Services is increased:

- (a) The Contractors shall inform FESCO/PITC of the circumstances and probable effects;
- (b) The increase in goods and services shall be regarded as Additional Goods and Services; and
- (c) FESCO/PITC may extend the time for completion of the Goods and Services if satisfied.

### **15 EVALUATION CRITERIA**

The PITC will award the Contract to the successful Bidder who has been determined to qualify to perform the Contract satisfactorily and whose proposal has been determined to be substantially responsive.

A technical evaluation committee using the criteria shown below will evaluate the proposals. When evaluating the competing proposals, PITC will consider the written technical/capability

information provided by the bidders, and any other information obtained by PITC through its own research.

Bidder as a part of his bid shall provide the following depending upon applicability.

- i. Complete specifications with supporting document, brochures of the offered items. Specifications do not meet the tender requirements; offered material shall not be entertained.
- ii. A list showing the location of head office along with those of branch offices.
- iii. A list of technical expertise and qualified maintenance engineers/staff to handle the hardware maintenance task efficiently along with their qualification
- iv. List of clients to whom the bidder has done or been doing business during last 3 years along with their Names, Addresses and Phone Numbers.
- v. A certificate describing the guaranteed response time after a link goes down. The maximum expected down time must not be more than 2 hours. In case link / hardware remains down beyond that duration, the bidder must have the demonstrated capability to replace faulty equipment.
- vi. Credential showing warranty of any allied hardware used in MPLS connectivity for minimum three years with parts and labour or as given by manufacturer whichever is higher.
- vii. A clear written commitment to the effect that if any component of equipment supplied is damaged during warranty period it shall be replaced with the same or superior compatible component.
- viii. List of consumables/exclusives (where applicable) which are not covered under warranty
- ix. Manufacturer's authorization certificate, if authorized

## **16 EVALUATION FORMULA/ AWARD CRITERIA**

- i. Technical bids will be evaluated as per given criteria in clause 21. The bidder will be declared technically qualified if score of technical factors is 70% or more.
- ii. The financial bids will be opened only of those firms who will be technically qualified.
- iii. The bid will be awarded to bidder who is technically qualified and quoted lowest price based on 3 years total cost (One Time Cost+ Monthly Recurring Cost).

## **17 TERMS OF PAYMENT**

The Service provider (Vender) will submit invoice to office of Director General (IT). DG (IT) will verify the claim and approve for payment and then submit the claim/invoice along with following documents to the Finance Directorate, Faisalabad for payment.

- i. Invoice in triplicate.
- ii. Delivery challan and G.R.N. duly stamped and signed by D.G (IT), FESCO or his authorized representative.
- iii. Warranty Certificate.
- iv. Inspection Certificate.
- v. Non-payment certificate.
- vi. Confirmation of DG (IT) FESCO, Faisalabad about acceptance of Performance Bank Guarantee.
- vii. Copy of Sales Tax Invoice.

### **PAYMENT OF SALE TAX/PST:**

- i. Sale Tax / PST invoice duly approved by DG (IT).
- ii. Copy of G.R.N. duly stamped and signed by D.G (IT), FESCO or his authorized representative.
- iii. Sales Tax return cum payment Challan for the month of delivery of services/material.
- iv. In case the vender who pays Lump sum Sales Tax they shall also submit an affidavit on non-judicial paper separately that "Challan includes the amount of Rs. \_\_\_\_\_ of sales tax for supply of material/services to FESCO against P.O No. \_\_\_\_\_ dated: \_\_\_\_\_".

## **18 PRICE VARIATION**

Prices are firm and final and shall not be escalated for any reason what so ever. Price variation after three year may be renegotiated by either party, on the agreed rates.

## **19 PAYMENT MODE**

Payment mode will be post payment only (payment within 15 days after receiving invoice). Service will not be disrupted in any case unless requested by FESCO.

## **20 ADVANCE PAYMENT**

No advance payment will be made without 100% Bank Guarantee, equal to the advance amount, from a scheduled Bank having minimum credit rating AA. The Bank Guarantee should be valid till 1month after the completion of the contract period.

## 21 TECHNICAL EVALUATION CRITERIA

The Technical responsiveness will be determined by evaluating the following factors.

Sr. No	Factors					Max. Score	
I.	<b>Company profile</b>					20	
	i.	<u>Type of Company</u> Pvt Limited = 05 marks Partnership = 03 marks Proprietary = 02 marks				5	
	ii.	No. of Branches in Pakistan (1 mark per 5 branch in Pakistan)				5	
	iii.	Age of Company (0.5 Mark per year)				5	
	iv.	Similar Experience with WAPDA/PEPCO/FESCO /DISCOs/NTDC				5	
II.	<b>Technical responsiveness of quoted items</b>					25	
III.	i.	Support by Manufacturer			(5 Marks)	5	
	ii.	Principal Engineer			(4 Marks)		
	iii.	Support through Vendor			(3 Marks)		
IV.	<u>Financials (Financial Statement)</u>					10	
	Annual Turnover > Rs. 200 Min (10 Marks)						
	Annual Turnover >= Rs.150Min and < Rs. 200 Min (08Marks)						
	Annual Turnover >= Rs.100Min and < Rs. 150 Min (06Marks)						
	Annual Turnover >= Rs.50 Min and < Rs. 100 Min (04 Marks)						
V.	<b>A list of clients with proof</b> (other than WAPDA/PEPCO/FESCO/DISCOs/NTDC) to whom the bidder has done or been doing similar business during last 5 years along with their Names, Addresses, Phone Numbers, . List is to be provided bifurcating in following slabs: At least 10 clients with business of amounting 500 Min (05 Marks) At least 04 clients with business of amounting 200 Min (02 Marks)					05	
	<b>Qualified staff position of the firm (attach list).</b> <ul style="list-style-type: none"> <li>• 16 Years of Education in Similar Field having experience more than10 years (3 marks for each individual).</li> <li>• 16 Years of Education in Similar Field having experience more than 05 years (2 marks for each individual).</li> <li>• 16 Years of Education in Similar Field having experience more than03 years (1 marks for each individual).</li> </ul>						10
	Sr. No.	Name	Post	Qualification	Total Experience		
VII.	%age of FESCO sites (as per Attachment-II) coverage through fiber connectivity till last mile.					25	
	<ul style="list-style-type: none"> <li>• 90% to 100% sites on fiber connectivity till last mile. (25 marks)</li> <li>• 80% to 90% sites on fiber connectivity till last mile. (15 marks)</li> <li>• 70% to 80% sites on fiber connectivity till last mile. (10 marks)</li> </ul>						
	Max. score						100

## **22 CONTRACT DURATION AND TERMINATION NOTICE**

Initial contract period against this work order is 03 years. But may be terminated any time (fully or partially) due to dissatisfaction and may be renegotiated after 01 year in case of decreasing price trend of market. Disputes against this account will not affect other accounts (if any).

## **23 ARBITRATION**

- (1) FESCO and the selected Bidder shall make every effort to resolve amicably by direct and informal negotiation in case of any disagreement or dispute arising between them under or in connection with the Contract.
- (2) If, after thirty (30) days from the commencement of such informal negotiations, FESCO and the selected Bidder have been unable to amicably resolve dispute, either party may require that the dispute be referred to arbitration under the Arbitration Act, 1940. The arbitration shall be conducted by a sole arbitrator appointed by FESCO, or in the sole discretion of FESCO, by the parties through mutual consent. The award of the arbitrator shall be final and the Parties agree to be finally bound by such award. The language of the arbitral proceedings shall be English. The venue of arbitration shall be Faisalabad, Pakistan.

## **24 INTEGRITY PACT**

- The Consultant hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative sub division or agency thereof or any other entity owned or controlled by it (GOP) through any corrupt business practice.
- Without limiting the generality of the foregoing the Consultant represents and warrants that it has fully declared the brokerage, commission, fees, etc paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of

obtaining or including the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever from GOP, except that which has been expressly declared pursuant hereto.

- The Consultant certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GOP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.
- The Consultant accepts full responsibility and strict liability for making any false declaration, no making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GOP under any law contract or other instrument, be voidable at the option of GOP.
- Notwithstanding any right and remedies exercised by GOP in this regard, the Consultant agrees to indemnify GOP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GOP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Consultant as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GOP.
- Please acknowledge receipt in token of acceptance at the earliest, but not later than 15 days from the date of purchase order.

## 25 ANNEXURES

### 25.1 (Attachment-I)

#### Technical Requirements:

<b>Particular</b>
Cisco 1000 Series Router (CISCO ISR 1111-4P) or equivalent or higher.
Both Ends (BIB Combo Router)
Switches and allied hardware.
Optical Fiber Cable (OFC) Laying/Joint/Splicing & Media Converter.
Router Installation.

#### Router Detailed Specification:

<b>Branch Router</b>	Hardware Router that provides up to 6 built-in 10/100/1000 Ethernet ports for WAN or LAN (minimum two WAN full routed) 4GB RAM and 4GB Flash. With Rack Mount Kit
<b>Software Defined WAN</b>	SD-WAN ready and able to seamlessly integrate with SD WAN console in future. The ability to deploy applications in minutes, on any enterprise platform, with a consistent user experience. Delivering predictable performance for applications residing in the data center or in the cloud. Zero Day Zero touch solution should able to support strong encryption algorithms, PKI for authentication and system integrity with signed certificate.
<b>Protocols</b>	IPv4, IPv6, static routes, Routing Information Protocol Versions 1 and 2 (RIP and RIPv2), Open Shortest Path First (OSPF), Border Gateway Protocol (BGP), BGP Router Reflector, Intermediate System-to-Intermediate System (IS-IS), Multicast Internet Group Management Protocol Version 3 (IGMPv3), Protocol Independent Multicast Sparse Mode (PIM SM), PIM Source-Specific Multicast (SSM), Resource Reservation Protocol (RSVP), Discovery Protocol, Call Home, Internet Key Exchange support (IKE), Access Control Lists (ACL), Dynamic Host Configuration Protocol (DHCP), DNS, RADIUS, Authentication, Authorization, and Accounting (AAA), Application Visibility and Control (AVC), Distance Vector Multicast Routing Protocol (DVMRP), IPv4-to-IPv6 Multicast, Multiprotocol Label Switching (MPLS), MPLS Layer 2 and Layer 3 VPN, Bidirectional Forwarding Detection (BFD), IEEE 802.1ag, and IEEE

	802.3ah equivalent or higher.
<b>Encapsulation</b>	Generic Routing Encapsulation (GRE), Ethernet, 802.1q VLAN, Point-to-Point Protocol (PPP), Multilink Point-to-Point Protocol (MLPPP), Frame Relay, Multilink Frame Relay (MLFR) and PPP over Ethernet (PPPoE).
<b>QoS/Traffic Management</b>	Quality of Service (QoS), Weighted Random Early Detection (WRED), Hierarchical QoS, Policy-Based Routing (PBR), and Network-Based Application Recognition (NBAR) equivalent or higher technology protocol i.e. RFC 5101 or RFC 7011/7012
<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Round-the-clock, global access to the TAC</li> <li>• Unrestricted access to the extensive knowledge base and tools</li> <li>• 3 Yr Next-business-day, advance hardware replacement and onsite parts replacement and installation.</li> <li>• Ongoing operating system software updates within the licensed feature set</li> </ul>

**25.2 (Attachment II)****BID FORM**

Name of Bidder \_\_\_\_\_

NTN / STN No. \_\_\_\_\_

GST No. \_\_\_\_\_

Mailing Address \_\_\_\_\_

Sr.	Site Name	B.W Mbps	<sup>[1]</sup> Type of link (Fiber / Wireless)	<sup>[2]</sup> OTC Cost (as per Attachment-I) On F.C.S Basis (PKR)	Other Charges (If Any) (PKR)	<sup>[3]</sup> Monthly Recurring Cost (PKR)	Total Amount (PKR)
00	<b>PITC (Wapda House Lahore) Aggregate Site</b>	<b>HUB</b>					
01	FESCO Head Office Faisalabad.	16					
02	FESCO Computer Centre, Sargodha	8					
03	FESCO Computer Centre, Jhang	8					
04	RO Office, Civil Line.	4					
05	RO Nazimabad	4					
06	Wapda Office P Colony 1	4					
07	XEN Abdullah Pur	4					
08	RO Office Gm-abad	4					
09	RO Office ChakJumara.	4					
10	RO Chiniot	4					
11	RO Office DIV 1 Jhang	4					
12	RO Office DIV 2 Jhang	4					
13	Wapda Gojra	4					
14	Revenue Office Kamalia	4					
15	Revenue Office Toba Tek Sing	4					
16	XEN Office Tandilawala	4					
17	Wapda House Samundari	4					
18	Revenue Office Darya Khan	4					
19	Revenue Office, Bakkhar	4					
20	RO Sargodha 2nd Div. Sargodha	4					
21	RO Sargodha 1st DIV Sargodha	4					
22	RO Sargodha 3rd Div. Sargodha	4					
23	RO Office Lalian	4					
24	RO Office Bhalwal	4					
25	RO Office Sultan Bahu	4					
26	Revenue Office Jauhrabad	4					
27	Wapda Office Mianwali	4					
28	Revenue Office Kalabagh	4					
29	Revenue Office Jaranwala	4					

	<b>Total on Turn Key basis:</b>				
	<sup>[4]</sup> Taxes if Applicable:				
	<b>Grand Total on Turn Key basis:</b>				

<sup>[1]</sup>Preferable link is Fiber

<sup>[2]</sup> Includes laying & configuring of fiber, media converter, router, ducting, cabling, erecting of tower/pole from ground etc. as per standard. No substandard work shall be acceptable.

<sup>[3]</sup> includes Bandwidth charges, Tower/pole charges, Management charges and etc. Unit rate of bandwidth i.e per MB rate for future extension will be extracted from the same.

<sup>[4]</sup> All Federal/Provincial Taxes will be applicable as per prevailing law.

**Note:** Monthly recurring cost at aggregate site will not be paid. Include in site cost.

**Total Offered Charges per month (excluding All Taxes) (In words:**

Rs. \_\_\_\_\_ ) Amount of Bid Bond: \_\_\_\_\_

(Equal to 2% of offered rate per annum including All Taxes)

**Bid Money:**

Name of Bank: \_\_\_\_\_ Valid Up To : \_\_\_\_\_

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Note: Over writing or Cutting is not allowed while quoting the rates above**

## 25.3 (Attachment III)

### List of Locations

S.No	Site Name	City	Address	Latitude	Longitude	Band Width (mbps)
0	Wapda House Lahore.	Lahore	Aggregation Site -Wapda House, Mall Road Lahore.	31°33'36.10"N	74°19'33.06"E	Hub site 32 Mbps
1	FESCO Head Office Faisalabad.	Faisalabad.	FESCO Computer Center, Canal Road Faisalabad.	31.428697	73.112147	16 Mbps
2	RO Office, Civil Line.	Faisalabad.	RO office, Goraya Road. Near Iqbal Stadium, Faisalabad.	31°25'51.05"N	73° 5'22.27"E	4 Mbps
3	RO Nazimabad	Faisalabad.	RO Office Nazimabad near police station factory Area, Faisalabad.	31°24'11.68"N	73° 4'36.04"E	4 Mbps
4	Wapda Office P Colony 1	Faisalabad.	Wapda Office Peoples colony No 1, FSD	31°24'59.04"N	73° 6'11.95"E	4 Mbps
5	XEN Abdullah Pur	Faisalabad.	XEN abdullah pur, Jumara Road Faisalabad.	31°25'32.57"N	73° 6'22.69"E	4 Mbps
6	RO Office Gm-abad	Faisalabad.	RO Office, Gmabad Faisalabad.	31°26'29.85"N	73° 2'48.78"E	4 Mbps
7	Wapda Office Mianwali	Mianwali	RO office, fesco wapda mianwali, near lari adda, tufail chowk, Mianwali	32°34'40.43"N	71°32'44.99"E	4 Mbps
8	RO Chiniot	Chiniot	Wapda Office Lahore Road Chiniot.	31°43'15.54"N	72°59'35.12"E	4 Mbps
9	FESCO, Computer Center	Jhang	FESCO, Computer Center , JHANG.	31°15'37.19"N	72°19'27.67"E	8 Mbps
10	RO Office DIV 1 Jhang	Jhang	FESCO circle complex, Railway station, Gala Mandi.	31°15'35.32"N	72°19'25.69"E	4 Mbps
11	RO Office DIV 2 Jhang	Jhang	RO Office Div 2 Jhang	31°15'36.47"N	72°19'26.29"E	4 Mbps
12	Wapda Gojra	Gojra	Wapda House Gojra. Dijkot Road Gojra	31° 8'56.57"N	72°41'30.54"E	4 Mbps
13	RO Office Lalian	Lalian	Revenue Office, Lalian	31°51'18.84"N	72°47'19.35"E	4 Mbps
14	RO Toba	Toba Tek	RO toba tek sing, main gojra road. railway underpass, TT sing	30°58'25.82"N	72°29'2.64"E	4 Mbps
15	Wapda House Samundari	samundari	FSD road, Wapda House, beside Football ground. Samundari.	31° 3'54.42"N	72°57'58.78"E	4 Mbps
16	Revenue Office, Bakkhar	Bakkhar	Bhakkar-Jhang Rd, Madina Housing Society, larri adda, bakkhar.	31°36'43.36"N	71° 5'4.42"E	4 Mbps
17	FESCO, Computer Center	Sargodha	FESCO, Computer Center , near jhang mor, sargodha.	32° 5'28.27"N	72°39'12.22"E	8 Mbps
18	RO Sargodha 2nd Div.	sargodha	1 b, settlite town. Near gillwala chowk. Sargodha	32° 5'20.21"N	72°41'33.76"E	4 Mbps
19	RO Sargodha 1st DIV	sargodha	Revenue office, wapda 1st Div, Mohni Road, Factory	32° 4'44.05"N	72°39'46.86"E	4 Mbps

			Area,Sargodha.			
20	RO Sargodha 3rd Div.	sargodha	Revenue office, wapda 3rd, session road Sargodha.	32° 4'29.81"N	72°40'9.94"E	4 Mbps
21	XEN Office Tandilawala	Tandilawala	Tayba Town,Office of XEN tandlewala. FSD Bypass road.	31° 2'20.99"N	73° 8'6.14"E	4 Mbps
22	RO Office Bhalwal	Bhalwal	RO Office, bhera road,Near chak No 7, besidev132 grid station. Bhalwal	32°17'43.91"N	72°53'25.28"E	4 Mbps
23	RO Office	Sultan bahu,	RO Office, Cant road, Tahsil Chowk, Near Canal road.	30°49'32.41"N	72°4'57.13"E	4 Mbps
24	Revenue Office Jauhrabad	Jauhrabad	29, awan town Near Izhar limited Factory. Jauhrabad.	32°17'26.46"N	72°16'41.26"E	4 Mbps
25	Revenue Office Kamalia	Kamalia	RO Kamalia, rajana road, kamalia	30°43'38.34"N	72°39'19.93"E	4 Mbps
26	Revenue Office Kalabagh	Kala Bagh	kot chandna,kala bagh road,near jinnah biraag. Kala Bagh	32°56'39.57"N	71°30'13.44"E	4 Mbps
27	Jaranwala	Jaranwala	Revenue Office Jaranwala.	31°22'17.33"N	73°21'27.05"E	4 Mbps
28	RO Darya Khan	Darya Khan	RO Darya Khan, Near Darya Khan Sugar Mills	31°47'15.85"N	71°7'14.56"E	4 Mbps
29	RO Chak Jhumra	Jhumra	R.O Office, Khurrianwala Road Chak Jhumra	31°33'24.12"N	73°11'40.38"E	4 Mbps

## **25.4 (Attachment IV)**

### **Schematic diagram of proposed connectivity**

To be provided by the bidder.