

**TENDER FOR ESTABLISHMENT OF CONTACT
CENTER, PURCHASE OF SERVER/DESKTOP
ROUTER/ VOICE GATEWAY, BRANCH ROUTER /
SWITCH HARDWARE/ COMMUNICATION RACK
AND OPERATING SYSTEM LICENSES FOR NIT
HEAD OFFICE**

NATIONAL INVESTMENT TRUST LIMITED

TABLE OF CONTENTS

| | |
|--|----|
| INTRODUCTION----- | 3 |
| INFORMATION FOR BIDDERS----- | 3 |
| SCOPE OF WORK----- | 4 |
| TERMS AND CONDITIONS----- | 4 |
| PROJECT COMPLETION TIMELINES ----- | 5 |
| PROCEDURE FOR BID SUBMISSION----- | 5 |
| EVALUATION CRITERIA----- | 6 |
| PAYMENT TERMS----- | 7 |
| | |
| FORM I: TECHNICAL INFORMATION FOR CONTACT CENTER----- | 8 |
| FORM II: TECHNICAL INFORMATION FOR SERVER----- | 15 |
| FORM III: TECHNICAL INFORMATION FOR DESKTOP PCS----- | 16 |
| FORM IV: TECHNICAL INFORMATION FOR SOFTWARE PACAKAGES----- | 17 |
| FORM V: TECHNICAL INFORMATION FOR ROUTER/ VOICE GATEWAY----- | 18 |
| FORM VI: TECHNICAL INFORMATION FOR BRANCH ROUTER ----- | 21 |
| FORM VII: TECHNICAL INFORMATION FOR SWITCH----- | 23 |
| FORM VIII: TECHNICAL INFORMATION FOR COMMUNICATION RACK----- | 25 |

LIST OF ANNEXURES

| | |
|---|----|
| Annexure I : BILL OF QUANTITY ----- | 26 |
| | |
| Annexure II : QUALIFICATION CRITERIA----- | 27 |

1. INTRODUCTION

- 1.1** National Investment Trust (NIT) is largest open end Mutual Fund in Pakistan. NIT has its Head Office located in Karachi, with its operation spread all over Pakistan through the presence of its 22 NIT branches and over 100 distributor's branches.
- 1.2** Sealed Tenders are invited from reputed and well established firms/companies, registered with Sales Tax and Income Tax Departments, to submit proposals for following.
- 1.2.1** Establishment of Contact Centre at NIT Had Office as per specification mentioned in FORM I of Tender Document.
- 1.2.2** Procurement of Branded Servers, Desktop Computers and Microsoft Licenses as per specification mentioned in FORM II, III and IV of Tender Document.
- 1.2.3** Procurement of Core Router (Voice Gateway), Switch and Branch Router as per specification mentioned in FORM V, VI & VII of Tender Document.
- 1.2.4** Procurement of Communication Rack as per specification mentioned in FORM VIII of Tender Document.

2. INFORMATION FOR BIDDERS

| | |
|------------------------------|--|
| Name of Procuring Agency: | National Investment Trust Limited National Bank Building, 6 th Floor, I.I. Chundrigar Road, Karachi. 74000, Pakistan. |
| Earnest money | Bank draft equal to 2% of the total bid value to be enclosed at the time of bid submission. |
| Last date for Bid Submission | November 08, 2012 at 11.00 A.M |
| Bid Opening Date and Time | November 08, 2012 at 11.30 A.M |
| Bid Opening Place | National Investment Trust Limited National Bank Building, 6 th Floor, I.I. Chundrigar Road, Karachi. 74000, Pakistan. |
| Contact Person | Mr. S. T. A. Quadri, AVP - Admin |
| Phone: | 021-32412056-9 (Ext : 235) |
| Direct Phone | 021-32425101 |
| Fax: | 021-32422719 |
| E-mail | avpadmin@nit.com.pk |

3. SCOPE OF WORK

3.1 To establish a Contact Center for achieving enhancement and consistency of customer experience across all attendants and communication channels. The working of the contact center will include – Inbound & Outbound communication, IVR based handling of queries, Quality Management of this service and scalability of offered solution to meet future need of the organization’s contact optimization. The solution requested will be deployed at NIT Head Office, with call agents co-located or at remote locations.

3.2 The scope of work includes designing, installation, deployment, integration, testing and training of Equipment / Services mentioned in this tender document.

4. TERMS AND CONDITIONS:

- 4.1.** The bidder should be registered with Sales Tax and Income Tax Department.
- 4.2.** Bid should be submitted in Pak Rupees only.
- 4.3.** Bidder firm has not been blacklisted by any Government/Semi Government organization.
- 4.4.** Bidders may quote, if compliant with qualification criteria Annexure III, as per one of the following combinations:
 - 4.4.1 Contact Center Solution mentioned in Form I
 - 4.4.2 Server and Desktops mentioned in Form II & III
 - 4.4.3 Software packages mentioned in Form IV
 - 4.4.4 Router/ Voice Gateway, Branch Router and Switch mentioned in Form V, VI, VII
 - 4.4.5 Communication Rack mentioned in Form VIII
 - 4.4.6 Combination of any of the above (4.4.1, 4.4.2, 4.4.3, 4.4.4 & 4.4.5).
- 4.5.** NIT reserves the right to accept/reject wholly or partially the tender at any stage of the tender process. Reasons may be provided upon written request.
- 4.6.** Validity period of the bids shall be for at least 30 days.
- 4.7.** The decisions of NIT will be binding on all concerned and will in no case be challengeable at any forum or any court of law.
- 4.8.** Bids are liable to be rejected if; they are not conforming the terms, conditions and specifications stipulated in this Tender.
- 4.9.** During the examination, evaluation and comparison of the bids, the NIT at its sole discretion may ask the bidder for clarifications of its bid. However, no change in the price or substance of the bid shall be sought, offered or permitted after bid submission.

- 4.10. The amount submitted as Earnest Money shall be refunded to the unsuccessful bidders after the decision for the award of said tender.
- 4.11. For this tender all updates/changes shall be communicated through email by NIT.
- 4.12. It is a turnkey project where all the equipment quoted in BOQ is to be installed by the bidder and handed over in an optimized condition. The price for installation where not specifically asked for in BOQ, is assumed to be included within the equipment cost by the vendor.
- 4.13. The bidder must provide Project Execution Plan, Design Proposal with layouts, diagrams, etc. after conducting the detailed survey of the along with Technical Proposal.
- 4.14. The bidder must have office in Karachi and Lahore and fully capable to provide maintenance support from these locations.
- 4.15. Bids submitted via email or fax will not be entertained.
- 4.16. The selected bidder will be required to submit project implementation plan.
- 4.17. Total Bid Value shall cover cost of equipment including optional equipment, installation, configuration and services required as per specification.

5. PROJECT COMPLETION TIMELINES

- 5.1 The delivery & implementation for project work as per Form 1 by the selected bidder for Contact Center will be completed within 4 to 6 weeks after receipt of purchase order. In case the voice gateway equipment requires a longer time period for delivery, the selected bidder will be required to arrange on temporary basis the equipment for unhindered implementation, which can be replaced at later stage.
- 5.2 The delivery and implementation for Router/ Voice Gateway, Branch Router and Switch will be completed within 6 to 8 weeks after receipt of purchase order.
- 5.3 The delivery and implementation for Server and Desktops will be completed within 4 to 6 weeks after receipt of purchase order.
- 5.4 The delivery and implementation for Software Packages will be completed within 2 to 4 weeks after receipt of purchase order.
- 5.5 The delivery and installation for Communication Rack will be completed within 2 to 4 weeks after receipt of purchase order

6 PROCEDURE FOR BID SUBMISSION

- 6.1 For this tender ‘Single stage- Two envelope procedure’ for open competitive bidding shall be adopted.

- 6.2 Bid envelope submitted will comprise of a single envelope containing two separate closed / sealed envelopes containing Technical and Financial proposal.
- 6.3 Technical proposal envelope should be marked as ‘Technical proposal for(name of item/items as per the bid submitted)’ and should include following documents:
- 6.4 Technical Document as required for elaboration of recommended solution.
- 6.4.1 Brochures of all components that will be the part of Solution.
 - 6.4.2 Company profile.
 - 6.4.3 List of customers(corporate sector) along with their contact details
 - 6.4.4 Technical specification Form I to VIII completely filled, signed and stamped for identifying offered Solution.
 - 6.4.5 Authorization letter from principal to bidder confirming the Elite level of partnership (relating to category of equipment for which the bid is submitted).
 - 6.4.6 Income Tax/GST certificate of the bidder.
 - 6.4.7 Any other document required as per this tender document.
- 6.5 Financial proposal should be marked ‘Financial proposal for (name of item/items as per the bid submitted)’ and contain bid price filled as per BOQ (Annexure I) as per specification given in Form I to VIII.
- 6.6 In first stage only the ‘Technical proposals’ will be opened in the presence of bidder’s representatives that choose to attend.
- 6.7 Technical proposals of the bidders will be evaluated, generally for compliance of ALL the requirements given in the tender document and specifically for Qualification Criteria given in Annexure II.
- 6.8 Vendors who will not submit all required documents / information as per Qualification Criteria and do not meet the qualification requirement will be declared as ‘Non-Qualified’.
- 6.9 As a part of technical evaluation, bidders may be asked to arrange visit to their completed projects.
- 6.10 On the basis of Qualification Criteria, the financial proposal of only technically qualified bidder will be opened in the presence of their representatives that choose to attend.
- 6.11 Financial proposals of bids found technically non-responsive will be returned un-opened.

7 EVALUATION CRITERIA

The lowest financial bid will be accepted against each category as mentioned in BOQ

8. PAYMENT TERMS

- 8.1 No payment shall be made in advance to the Contractor as mobilization advance.
- 8.2 The selected bidder will be eligible for payment of 50% of bid amount after successful delivery as per the specification given in Form I to Form VIII
- 8.3 The selected bidder will be eligible for payment of 35% of the bid amount upon successful installation, integration, testing and commissioning of work scope identified under Form I and 50% of Form II to Form VIII
- 8.4 The remaining 15% of the bid amount will be released for items under scope of Form I after successful completion of training and 04 weeks of satisfactory equipment operation.
- 8.5 All payments shall be made after deduction of taxes.
- 8.6 All payments shall be made through cross cheque in the Pak Rupees.
- 8.7 Taxes will be deducted at source as per government rules at the time of payment.
- 8.8 Bidder should mention any other charges/optional charges in financial bid deemed necessary to complete and compare final bid amount. (all inclusive including taxes)

FORM 1: TECHNICAL SPECIFICATION FOR CONTACT CENTER

| Item | Description | Compliance (Y/N) | Comments | Reference Brochure |
|---|--|-------------------------|-----------------|---------------------------|
| 1.1. General / Licensing | 1.1.1 06 agents, supporting both Inbound and Outbound functions (blended) | | | |
| | 1.1.2 01 agent having an upgraded provision of 'Supervisor'. | | | |
| | 1.1.3 Provide Thirty number of sessions | | | |
| | 1.1.4 Support Trunk types: E1, Analogue, SIP, H323 | | | |
| | 1.1.5 IP based | | | |
| | 1.1.6 Scalable to at least 12 agents within the existing solution/design | | | |
| | 1.1.7 Support for remotely located agents (over 128 Kbs WAN) | | | |
| | 1.1.8 Centralized Call Center Infrastructure | | | |
| | 1.1.9 Server based hosting of call center applications | | | |
| | 1.1.10 Interactive Voice Recording (IVR) capability | | | |
| | 1.1.11 The proposed solution should be of latest version | | | |
| | 1.1.12 All licenses should be permanent and have no license renewal cost | | | |
| | 1.1.13 Proposed solution capable of supporting email, web chat, SMS, fax integration which may be required in future. | | | |
| | 1.1.14 Auto call distribution (ACD) capability | | | |
| | 1.1.15 Support of all feature/specifications as mentioned in product brochures, website and other official communication in this regard. | | | |
| | 1.1.16 Provide professional Vocalize services for IVR | | | |
| 1.2 Hosting Environment, Data Center, NIT | 1.2.1 NIT, Data Center can only provide virtualized servers on VMWare ESX 4.1. Any requirement for a dedicated server will be included by the bidder as part of his proposed solution. | | | |

| | | | | |
|-----------------------|---|--|--|--|
| 1.3 Call Treatment | 1.3.1 Support for call routing based on: i. IVR menu selection ii. real-time queue statistics iii. ANI (Automatic Number Identification) iv. dialed number v. Data from XML/HTML/Text /JDBC. vi. Call statistics vii. Agent based algorithms viii. Agent Competency | | | |
| | 1.3.1 Customizable queuing announcements based on: i. skill group of queue ii. position in queue and delay iii. Multiple language option | | | |
| | 1.3.2 Re-route on Ring No Answer | | | |
| | 1.3.3 Call prioritization capability | | | |
| | 1.3.4 Smart queue with multi – language announcements | | | |
| | 1.3.5 Voice mail supported | | | |
| 1.4.Wallboards | 1.4.1 Display of real time call center KPIs for monitoring | | | |
| | 1.4.2 Aid for supervision of call agents | | | |
| | 1.4.3 Queue wise Service Level display and real time agent performance | | | |
| | 1.4.4 Business intelligence / high level view of contact center | | | |
| 1.5 Call Recording | 1.5.1 Centralized recording of all incoming / outgoing calls for on site and remotely located call center (connected via WAN) | | | |
| | 1.5.2 Support for multiple audio file formats | | | |
| | 1.5.3 Save tagging information with recording | | | |
| | 1.5.4 Secured Access with control rights | | | |
| | 1.5.5 Browser based playback application, with Searchable capabilities of: i. Time & date ii. Agent based iii. Call based | | | |
| | 1.5.6 Recoding data storage capability on SAN and Network drives (IP based) | | | |

| | | | | |
|-------------------------|---|--|--|--|
| 1.6 Agent Desktops | 1.6.1 06 Head sets of Plantronics | | | |
| | 1.6.2 Soft phone application for each agent, supporting inbound and outbound calls. | | | |
| | 1.6.3 User friendly screen/ interface for receiving call processing & customer interactions. | | | |
| | 1.6.4 Having capability of displaying on agent desktop: i. contact channel ii. CRM/IVR based details of caller identification. iii. CLI iv. CTI v. Destination | | | |
| | 1.6.5 Agent desktop screen to include information for call: wait, answering, handling duration | | | |
| | 1.6.6 Pop up windows of IP soft phone for CRM / CTI/ IVR based info on call ring, etc. | | | |
| | 1.6.7 Agent state control from the agent desktop for: i. agents log in / log out ii. ready / not ready, etc | | | |
| | 1.6.8 Agent call handling from the agent desktop for : i. Answer/release/hold/retrieve ii. Conferencing iii. transfer | | | |
| | 1.6.9 Access to real-time agent related statistics | | | |
| | 1.6.10 Text messaging and chat based collaboration between agents / Supervisor. | | | |
| 1.7 Supervision Desktop | 1.7.1 View the current state of all agents | | | |
| | 1.7.2 View statistics for all agents and queues | | | |
| | 1.7.3 Send text/chat messages to one or more agents. | | | |
| | 1.7.4 Silently monitor agent calls. | | | |
| | 1.7.5 Barge in on an agent call for three-way conference. | | | |
| | 1.7.6 Intercept agent call, for its transfer to supervisor desktop | | | |

| | | | | |
|-------------------------|---|--|--|--|
| | 1.7.7 Interface for Call Recording / Playback of agents | | | |
| 1.8 IVR Self Service | 1.8.1 Language Selection | | | |
| | 1.8.2 5 Main menu selection | | | |
| | 1.8.3 Sub menu to include recording of Marketing Promos up to 20 | | | |
| | 1.8.4 Lower level submenu up to (7) include database integration and voice simulation of selected data | | | |
| | 1.8.5 Lower level submenu indicated at s.no 1.8.4 may include (Balance Units, Amount, mini statement last 5 transactions, Dividend payment, Zakat, Tax, Plan) | | | |
| | 1.8.6 Selection tree to be designed as per user requirement (not exceeding 20) | | | |
| | 1.8.7 Provide pin generation service | | | |
| | 1.8.8 Authentication using account and pin number | | | |
| | 1.8.9 Both way transfer of call between IVR and agent along with relevant call information | | | |
| | 1.8.10 Provide integration with customer database (Oracle, MYSQL, MS SQL) | | | |
| | 1.8.11 IVR must support accepting DTMF Input | | | |
| | 1.8.12 Automated call reception and greetings. | | | |
| | 1.8.13 Integrate (read / write) with various back ends databases through industry standard interfaces (JDBC, Web Service, etc). | | | |
| | 1.8.14 Conditional routing/queuing capabilities based on outcome of data retrieval as per para 1.7.3. | | | |
| | 1.8.15 Provide self-service/automated capability for providing service in the absence of call agents. | | | |
| | 1.8.16 Support for Voice XML (VXML) standard. | | | |
| | 1.8.17 Able to play a queue music and message to the customers in queue | | | |

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|--|---|--|--|--|
| | 1.8.18 Automated-Attendant support | | | |
| | 1.8.19 Integrated self-service application support | | | |
| | 1.8.20 Detail IVR Specification provided with job order to selected bidder | | | |
| 1.9 Integration of CTI & IVR with CRM | 1.9.1 Provides programming interface for presentation/use of, data captured through CTI/IVR, for customized in-house CRM application. | | | |
| | 1.9.2 Provides accessibility programming interfaces of CTI & IVR for any in house development. | | | |
| | 1.9.3 Provision of any proprietary interface for display of call related customized information to the agent. | | | |
| | 1.9.4 Integrate (read / write) with various back ends databases through industry standard interfaces (JDBC, Web Service, etc). | | | |
| 1.10 Reports | 1.10.1 Should provide both 'real time' and 'Historical' reporting. | | | |
| | 1.10.2 Availability of Dash Board for selected KPIs | | | |
| | 1.10.3 Historical Reports for agent status including; idle, talk, wrap, not ready/not available, hold, etc information. | | | |
| | 1.10.4 Call-by-Call / Call-specific reports for Inbound and Outbound calls. | | | |
| | 1.10.5 Interval level report on calls offered, answered & abandoned | | | |
| | 1.10.6 Service Level & Abandon Rate for any date range | | | |
| | 1.10.7 Interval level on Avg Handling Time, Avg Talk time, Hold Time,Avg Wait Time | | | |
| | 1.10.8 Individual level call tracking in terms of arrival, abandon & answered | | | |
| | 1.10.9 Report on schedule adherence | | | |

| | | | | |
|---|--|--|--|--|
| | 1.10.10 Agent wise specific report of login time, avail time, break time, hold time etc. | | | |
| | 1.10.11 Productivity & utilization report - ACD to display real time information on agent status for better supervisory controls | | | |
| | 1.10.12 Functionality of call wait message to be time bound i.e. message to state clearly the length of queue time | | | |
| | 1.10.13 Toll Free / UAN No Details (PTCL) for billing purpose | | | |
| | 1.10.14 Transferred calls - Average Wrap Up time | | | |
| | 1.10.15 Interval level report of 'short calls' | | | |
| | 1.10.16 Occupancy rate agent wise | | | |
| | 1.10.17 Report on follow up calls | | | |
| | 1.10.18 Provide seven (7) new reports (fresh development) as per requirements of NIT, within one year of time after deployment | | | |
| 1.11 Administration & Maintenance | 1.11.1 Centralized screen interface for management, configuration and administration of all call center related functions. | | | |
| | 1.11.2 Provision for remote/web based administration. | | | |
| | 1.11.3 Should provide user / role management function, for providing different levels for administrator, agents, QA, etc | | | |
| | 1.11.4 Event log for monitoring & trouble shooting of the call center services. | | | |
| | 1.11.5 Support for Oracle 10g /11g 32 /64 bit, Microsoft SQL Server, My SQL Databases, etc | | | |
| 1.12 Backup and restoration | 1.12.1 Ability for scheduling unattended backups (of calling list, configuration and complete systems) and its restoration to minimize the down time | | | |

| | | | | |
|--|---|--|--|--|
| <p>1.13 Training</p> | <p>1.13 .1 Provide the training content along with RFP response</p> | | | |
| | <p>1.13 .2 Training to be conducted at NIT premises</p> | | | |
| | <p>1.13.3 Technical Training of system installation, configuration and administration for IT support staff (min 20 hrs)</p> | | | |
| | <p>In case solution offered is through local partners of principal like Cisco, Avaya, etc, the bidder will provide additional training on voice communication framework (min 20 hrs)</p> | | | |
| | <p>1.13.4 Complete User training for call agent, supervisor and QA functions.</p> | | | |
| | <p>1.13.5 Technical training to programmers for available interfaces for CTI, IVR for in house development of customized CRM</p> | | | |
| | <p>1.13.6 Provide necessary complete solution design document document/manual/reference material for above mentioned Training requirements.</p> | | | |
| <p>1.14 Warranty and post warranty SLA support</p> | <p>1.14.1 Provide draft SLA document for the deployed system. Document to include support timing, support methodology, response to different criticality levels, parts replacement, patch updates, etc.</p> | | | |
| | <p>1.14.2 Provide all patches and upgrades without additional cost for minimum period of one year.</p> | | | |
| | <p>1.14.3 One year onsite warranty and support of the proposed solution</p> | | | |
| | <p>1.14.4 Proposed platform should be unified and capable to support email, web chat, SMS & fax integration which may be required in future.</p> | | | |

FORM II: TECHNICAL SPECIFICATION FOR SERVER

| Product Features | Description | Compliance (Y/N) | Comments | Model | Reference Brochure |
|----------------------------------|--|------------------|----------|-------|--------------------|
| 1.1 Make | 1.1.1 Branded (IBM, HP or equivalent) | | | | |
| 1.2 Form Factor / height | 1.2.1 Rack / 2U | | | | |
| 1.3 No of Processors | 1.3.1 1-2 | | | | |
| 1.4 Processor Installed | 1.4.1 01 | | | | |
| 1.5 Processor | 1.5.1 Intel Octet Core | | | | |
| | 1.5.2 Xeon E5-2690 | | | | |
| | 1.5.3 1600 MHZ Memory Type | | | | |
| | 1.5.4 Instruction Set 64 bit | | | | |
| | 1.5.5 No of core 8 | | | | |
| | 1.5.6 No of Threads 16 | | | | |
| 1.6 Processor Speed | 1.6.1 2.90 GHz | | | | |
| 1.7 Intel® Smart Cache | 1.7.1 20 MB /8GT-s | | | | |
| 1.8 Memory Installed | 1.8.1 32 GB * 8R X 4 | | | | |
| | 1.8.2 PC3L-10600R | | | | |
| 1.9 Memory Expandability | 1.9.1 768 GB | | | | |
| 1.10 Hard Disk Drives | 1.10.1 2 x 300 GB | | | | |
| | 1.10.2 SAS | | | | |
| | 1.10.3 15 K rpm | | | | |
| | 1.10.4 Hot Pluggable HDD bays | | | | |
| 1.11 Disk Controller | 1.11.1 Raid Controller | | | | |
| | 1.11.2 Equal / Greater 128 Write Back Cache | | | | |
| 1.12 RAID Support | 1.12.1 Integrated RAID 0 + 1 | | | | |
| 1.13 Hot Swap Components support | 1.13.1 Power Supply | | | | |
| | 1.13.2 Fans | | | | |
| | 1.13.3 Hard Disk | | | | |
| 1.14 Redundant components | 1.14.1 Power supply | | | | |
| | 1.14.2 Fan | | | | |
| 1.15 I/O slots | 1.15.1 PCI Express | | | | |
| 1.16 Networking Support | 1.16.1 Embedded | | | | |
| | 1.16.2 (4) Giga bit NIC | | | | |
| | 1.16.3 Multifunction | | | | |
| 1.18 KVM Cable | 1.18.1 One KVM Cable to connect with Existing IBM KVM Switch 1735-4LX | | | | |
| 1.19 System Management. | 1.19.1 Remote Server Management | | | | |
| | 1.19.2 Server Diagnostics | | | | |
| | 1.19.3 Predictive failure analysis | | | | |
| 1.20 OS Support | 1.20.1 Windows 2008 /12 | | | | |
| | 1.20.2 Linux | | | | |
| | 1.20.3 Virtualization Tech Support | | | | |
| 1.21 Technical Support | 1.21.1 Installation | | | | |
| | 1.21.2 Training | | | | |
| 1.22 Support Existing FC Card | 1.22.1 Existing QLogic 4GB HBA part no QLE2460 Physically fit on the PCIe slot of offered server | | | | |
| 1.23 Warranty | 1.23.1 3 years onsite on parts and labor. | | | | |
| | 1.23.2 Onsite Pre-Failure on Processors, Memory and hard disk drives | | | | |

FORM III: TECHNICAL SPECIFICATION FOR DESKTOP PC

| Product Features | Description | Compliance (Y/N) | Comments | Model | Reference Brochure |
|--------------------------|---|-------------------------|-----------------|--------------|---------------------------|
| 1.1 Make | 1.1.1 Branded (IBM, HP, Dell or equivalent) | | | | |
| 1.2 Form Factor / height | 1.2.1 Mini or Micro tower | | | | |
| 1.3 Processor | 1.3.1 Intel® Core™ i5-3570 | | | | |
| | 1.3.2 64 bit | | | | |
| 1.4 Processor Speed | 1.4.1 3.8 GHz | | | | |
| 1.5 Intel® Smart Cache | 1.5.1 6MB | | | | |
| 1.6 Memory Installed | 1.6.1 4 GB (2 x 2GB) | | | | |
| | 1.6.2 1600 MT/s data rate DDR3 | | | | |
| 1.7 Hard Disk Drives | 1.7.1 500 GB 7200 rpm SATA 3.0 Gb/s | | | | |
| 1.8 Optical Media | 1.8.1 DVD Drive | | | | |
| 1.9 Network Interface: | 1.9.1 Internal Gigabit Ethernet | | | | |
| 1.10 Slots | 1.10.1 1 full-height PCI | | | | |
| | 1.10.2 1 full-height PCI x16 | | | | |
| | 1.10.3 2 full-height PCIe x1 | | | | |
| 1.11 Power Supply | 1.11.1 320 W Standard power supply | | | | |
| 1.12 OS Support: | 1.12.1 Windows 7 Professional | | | | |
| 1.13 Operating System | 1.13.1 DOS | | | | |
| 1.14 Peripherals | 1.14.1 Keyboard, Mouse | | | | |
| 1.15 Intel Chipset | 1.15.1 Q75 Express chipset | | | | |
| 1.16 Warranty | 1.16.1 3 year comprehensive onsite warranty | | | | |

FORM 1V: TECHNICAL INFORMATION FOR 'SOFTWARE PACKAGES'

| Software Type | Description | Compliance (Y/N) | Comments |
|---|--|-------------------------|-----------------|
| 1.1 Microsoft Windows Server 2012 | 1.1.1 Standard Version | | |
| | 1.1.2 64 bit (Support up to 32GB RAM) | | |
| | 1.1.3 Open Licensing | | |
| | 1.1.4 Client Access license | | |
| | 1.1.5 Down gradable to Windows 2008 Server | | |
| | 1.1.6 Media Kit 64 bit | | |
| 1.2 Microsoft Windows 7 Professional Edition | 1.2.1 Professional Version | | |
| | 1.2.2 Open Licensing Support | | |
| | 1.2.3 Media Kit 32 bit | | |

FORM V: TECHNICAL INFORMATION FOR ROUTER / VOICE GATEWAY

| Equipment Type | Attributes Required | Description | Compliance (Y/N) | Comments | Model Number | Reference Brochure | |
|------------------------|--------------------------------------|--|------------------|----------|--------------|--------------------|--|
| Router / Voice Gateway | 1.1. Capacity/ Specification | 1.1.1 CISCO 2951-EC/K9 or Equal | | | | | |
| | | 1.1.2 Rack-mountable | | | | | |
| | | 1.1.3 USB Console port | | | | | |
| | | 1.1.4 Memory DRAM 512 MB Min | | | | | |
| | | 1.1.5 Flash Memory 256 MB | | | | | |
| | | 1.1.6 Full Duplex Throughput | | | | | |
| | | 1.1.7 Multi Gigabit Fabric Support | | | | | |
| | 1.2. Slot Capacity, Ports/Interfaces | 1.2.1 Highly modular router with at least 6 Slots required | | | | | |
| | | 1.2.2 Must have Three gigabit 10/100/1000 built-in routed interfaces | | | | | |
| | | 1.2.3 Six 10/100 routed interfaces with full routing and VPN capabilities | | | | | |
| | | 1.2.4 Serial/RJ-45 Auxiliary and Console | | | | | |
| | | 1.2.5 Must have one SFP-based port | | | | | |
| | | 1.2.6 All types of interfaces support like V.35, High Speed WAN, Synchronous/Asynchronous, 3G and CDMA | | | | | |
| | 1.3. Management Features/ Protocols | 1.3.1 LAN Management | | | | | |
| | | 1.3.2 Web Services Management | | | | | |
| | | 1.3.3 SNMP, RMON, Net Flow and Syslog Support | | | | | |
| | | 1.3.4 PPTP Support | | | | | |
| | | 1.3.5 DOS Attack Protection | | | | | |
| | | 1.3.6 Voice and Video support | | | | | |
| | | 1.3.7 Multicore Processor Support | | | | | |

| | | | | |
|---------------------------------|--------|--|--|--|
| | 1.3.8 | IEEE 802.1p QoS | | |
| | 1.3.9 | IEEE 802.1q VLAN | | |
| | 1.3.10 | Radius and Tacacs+ Support | | |
| | 1.3.11 | Multiple DMZ Capabilities required | | |
| | 1.3.12 | Secure Dynamic Routing | | |
| | 1.3.13 | Integrated Encryption required | | |
| | 1.3.14 | Dynamic and per user authentication and authorization required | | |
| | 1.3.15 | Authentication Proxy Support for users | | |
| | 1.3.16 | Optional inline Power POE 802.3af | | |
| | 1.3.17 | Optional Enhanced Inline Power POE+ | | |
| | 1.3.18 | Fully VPN capable required | | |
| | 1.3.19 | Remote management | | |
| | 1.3.20 | Must Support Voice PRI, FXO and FXS cards | | |
| | 1.3.21 | Must have full MPLS feature capabilities required. | | |
| | 1.3.22 | Must have L2VPN and RSVP Capabilities | | |
| 1.4 | 1.4.1 | Must have Zone based Firewall capability | | |
| Firewall | 1.4.2 | StateFul firewall capability required | | |
| | 1.4.3 | Firewall Virtualization or security contexts | | |
| 1.5 | 1.5.1 | 32-channel high-density voice and video DSP module | | |
| Packet Voice | 1.5.2 | 1-Port 3rd Gen Multiflex Trunk Voice/WAN Int. Card - T1/E1 | | |
| Digital Signal Processor Module | 1.5.3 | Unified Communication support | | |
| | 1.5.4 | Interfaces with the IP network and the PSTN | | |

| | | | | | | |
|-----|----------------------|--|--|--|--|--|
| | | 1.5.5 Supports IP and TDM control protocols | | | | |
| | | 1.5.6 Support SIP and H323 based Trunks | | | | |
| 1.6 | Power | 1.6.1 Support Power Redundancy | | | | |
| 1.7 | Service and Warranty | 1.7.1 Three Years 24 x 7 x4 Principal Backed Hardware replacement Support Required | | | | |
| 1.8 | Implementation | 1.8.1 Implement as a voice gateway as per NIT business process | | | | |
| | | 1.8.2 Configured Routing and Switching that include Multiple (05) Links Failover as per NIT Business process | | | | |
| | | 1.8.3 Detail scope should discuss with NIT team before tender submission | | | | |
| | | 1.8.4 Deployment / Design document should be submit with Tender document | | | | |
| 1.9 | Training | 1.9.1 Onsite 16 hrs. Advance Level training on Routing and switching should be provide | | | | |
| | | 1.9.2 Detail training document should be submit with Tender document | | | | |

Note: Specification higher than above mentioned is also acceptable as per the options available in that brand.

FORM VI: TECHNICAL INFORMATION FOR BRANCH ROUTER

| Equipment Type | Attributes Required | Description | Compliance (Y/N) | Comments | Model Number | Reference Brochure | |
|-------------------------------------|-------------------------------------|--|------------------|----------|--------------|--------------------|--|
| Router / Voice Gateway | 1.1. Capacity/ Specification | 1.1.1 CISCO 892FSP-K9 or Equal | | | | | |
| | | 1.1.2 Rack-mountable | | | | | |
| | | 1.1.3 USB Console port | | | | | |
| | | 1.1.4 Memory DRAM 512 MB Min | | | | | |
| | | 1.1.5 Flash Memory 256 MB | | | | | |
| | 1.2. Ports/Interfaces | 1.2.1 2 port GE | | | | | |
| | | 1.2.2 1 port SFP Support | | | | | |
| | | 1.2.3 8 port 10/100 Mbps LAN Interface | | | | | |
| | 1.3. Management Features/ Protocols | 1.3.1 LAN Management | | | | | |
| | | 1.3.2 Web Services Management | | | | | |
| | | 1.3.3 SNMP, Telnet, Net Flow | | | | | |
| | | 1.3.4 RIPv1and 2, BGP, OSPF, EIGRP Support | | | | | |
| | | 1.3.5 IP SLA Support | | | | | |
| | | 1.3.6 VRRP, HSRP support | | | | | |
| | | 1.3.7 RADIUS and TACACS+ | | | | | |
| | | 1.3.8 DOS Attack Protection | | | | | |
| | | 1.3.9 Voice and Video support | | | | | |
| | | 1.3.10 Secure Dynamic Routing | | | | | |
| | | 1.3.11 Integrated Encryption required | | | | | |
| | | 1.3.12 Dynamic and per user authentication and authorization | | | | | |
| 1.3.13 Authentication Proxy Support | | | | | | | |
| 1.3.14 Fully VPN capable required | | | | | | | |
| 1.3.15 MAC Filtering, Storm Control | | | | | | | |
| 1.3.16 Remote management | | | | | | | |

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|--|-----------------------------------|--|--|--|--|--|
| | 1.4 Service and Warranty | 1.4.1 Three Years 24 x 7 x4 Principal Backed Hardware replacement Support Required | | | | |
| | 1.5 Implementation Training | 1.5.1 Configured Multiple (02) Failover Links as per NIT Business process | | | | |
| | 1.6 Training | 1.6.1 Provide Training and documentation on implemented scope | | | | |

FORM VII: TECHNICAL INFORMATION FOR SWITCH

| Equipment Type | Attributes | Description | Compliance (Y/N) | Comments | Module Number | Reference Brochure |
|---|--------------------------------------|---|------------------|----------|---------------|--------------------|
| 1. Switch | 1.1. Capacity/ Specification | 1.1.1 CISCO WS-C2960S-24TS-S or Equal | | | | |
| | | 1.1.2 At least 35 Mbps throughput/forwarding rate | | | | |
| | | 1.1.3 Minimum 50 Gbps Backplane/forwarding bandwidth | | | | |
| | | 1.1.4 Up to 2 Sessions in SPAN | | | | |
| | 1.2. Slot Capacity, Ports/Interfaces | 1.2.1 24 Ports 10/100/1000 | | | | |
| | | 1.2.2 Serial/RJ-45 Auxiliary and Console | | | | |
| | | 1.2.3 Two SFP 1 G Fiber Uplink | | | | |
| | 1.3. Management Features/ Protocols | 1.3.1 LAN Management | | | | |
| | | 1.3.2 Web Services Management | | | | |
| | | 1.3.3 SNMP, RMON, and Syslog Support | | | | |
| | | 1.3.4 QoS capabilities include sharing, shaping, and strict-priority configurations | | | | |
| | | 1.3.5 Voice and Video QoS support | | | | |
| | | 1.3.6 QoS and Sophisticated Traffic Management | | | | |
| | | 1.3.7 IEEE 802.1p QoS | | | | |
| 1.3.8 IEEE 802.1q VLAN | | | | | | |
| 1.3.9 Radius and Tacacs+ Support | | | | | | |
| 1.3.10 Per-VLAN Spanning Tree Plus (PVST+) and Per-VLAN Rapid Spanning Tree (PVRST) | | | | | | |
| 1.3.11 Classification and marking based on full Layer 3 and Layer 4 headers | | | | | | |

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|--|---------------------------------|--|--|--|--|
| | | 1.3.12 Auto-QoS command-line interface (CLI) for VoIP deployments | | | |
| | | 1.3.13 Standard ACLs on all ports | | | |
| | | 1.3.14 SSHv1 and v2 | | | |
| | 1.4 Service and Warranty | 1.4.1 Three Years Next Business Day Principal Backed Hardware replacement Support Required | | | |
| | 1.5 Training and implementation | 1.5.1 Training on offered equipment | | | |
| | | 1.5.2 Configuration, installation and implementation as per NIT business Process. | | | |

FORM VIII: TECHNICAL INFORMATION FOR COMMUNICATION RACK

| Equipment Type | Attributes | Description | Compliance (Y/N) | Comments | Module Number | Reference Brochure |
|--------------------------|--------------------------------------|---|-------------------------|-----------------|----------------------|---------------------------|
| 1. Communication Rack | 1.1 42 U | 1.1.1 Imported, Branded (Techno steel, Infinity or Equal) | | | | |
| | | 1.1.2 600mm X 800mm | | | | |
| | | 1.1.3 With side panels & Doors | | | | |
| | | 1.1.4 Powder coating | | | | |
| | | 1.1.5 Mesh Door | | | | |
| | | 1.1.6 Welded frame with high intensity | | | | |
| | | 1.1.7 19" standard installation with adjustable dimension | | | | |
| | | 1.1.8 High-density vented front door (patent) | | | | |
| | | 1.1.9 rear door enable equipment protection | | | | |
| | | 1.1.10 Bottom with cable entrance, optional cover to close | | | | |
| | | 1.1.11 Side doors with locks for protection | | | | |
| | | 1.1.12 SPCC cold rolled steel | | | | |
| | | 1.1.13 Thickness of Steel: mounting rail: 2.0mm | | | | |
| | | 1.1.14 mounting angle: 1.5mm; others: 1.2mm | | | | |
| | | 1.1.15 Fan tray | | | | |
| | 1.1.16 20 outlets British socket | | | | | |
| | 1.2 Complete Installation of Rack | 1.2.1 QTY 02 16 amp Clipsal Industrial Socket | | | | |
| | | 1.2.2 4 mm 3core Pakistan Cable Approx. 50 ft. | | | | |
| | | 1.2.3 QTY 02 16 amp SP Hager C\B. completion installation with in existing Power DB | | | | |

ANNEXURE I: BILL OF QUANTITY

| Description | Quantity | Unit Price | Total Price (PKR) |
|--|---------------|------------|-------------------|
| 1.1 Contact Center Solution (As per Form I of the Tender Document) (Please attached the BOQ with cost break-up) | - | - | |
| 1.2 Branded Servers (As per specifications in Form II) | 1 | | |
| 1.3 Branded Desktop PCs (As per specifications in Form III) | 4 | | |
| 1.4 Router/ Voice Gateway (As per specifications in Form V) | 1 | | |
| 1.5 Branch Router (As per specifications in Form VI) | 1 | | |
| 1.6 Switch (As per specifications in Form VII) | 1 | | |
| 1.7 Communication Rack (As per specifications in Form VIII) | 1 | | |
| 1.8 Microsoft Windows Server 2012 Standard (As per specifications in Form 1V) | Open Licenses | 1 | |
| | CAL | 4 | |
| | Media Kit | 1 | |
| 1.9 Microsoft Windows 7 Professional Edition (As per specifications in Form 1V) | Open Licenses | 4 | |

Note: BOQ amount should include all / any tax, etc, that is to be borne by NIT

ANNEXURE II: QUALIFICATION CRITERIA

Vendors who will meet the following conditions and submit the documents / statements / information as mentioned, will be declared Qualified Vendors while others will be classified as Non-Qualified Vendors.

1. Income Tax Certificate / GST Certificate (Copy to be provided).
2. Holding Elite level partnership like Gold / Premier/ Tier1 etc for Pakistan from the principal/ manufacturer of the equipment (Copy to be provided).
3. Submission of all documents as mentioned in Para 6.4
4. Compliance of the offered model / product with the specification mentioned in Technical Information Form I to VIII.
5. Technical proposal documents be duly signed and stamped.
6. The bidder must have office having fully functional tech support department in Karachi and Lahore.
7. High level of customer satisfaction feedback from the client list of the bidder.
8. The Vendor must be a well-established company registered in Pakistan and must have been in business for at least 3 years or more.

ADDITIONAL CRITERIA FOR CALL CENTER

9. Successful implementation of at least Five (5) to Seven (7) similar projects* completed within last Five years Testimonial from the customer or can be confirmed by NIT through the contact detail provided.
10. The Contact Center deploy project completed during last 6 years and in hand should have a combined worth of at least Rs. 25 Million (list to be provided).
11. The proposed solution should be in Contact Center technical solution business for more than Three years in Pakistan.
12. The Vendor must be a technology company having complete knowledge and control over the offered solution and must be authorized to tailor and customize the solution as per customer needs.
13. The vendor should have Minimum 03 to 05 Integrations of Contact center with CRM

Additional Criteria for Network Equipment:

14. Successful implementation of at least Fifteen (10) to twenty (15) similar projects* completed within last two years Testimonial from the customer or can be confirmed by NIT through the contact detail provided.
15. The Network Equipment supply, install and deploy project completed during last 2 years and in hand should have a combined worth of at least Rs. 30 Million (list to be provided).
16. The bidder must have office in Karachi and Lahore and fully capable to provide maintenance support from these locations.

Additional Criteria for Server, Desktop & Software :

17. Successful implementation of at least Five (05) similar projects* completed within last two years. Testimonial from the customer or can be confirmed by NIT through the contact detail provided.
18. The supply of Server, Desktop hardware & Software's orders completed during last 2 years and in hand should have a combined worth of at least Rs. 15 Million (list to be provided).

** Project listed should be of the same or higher specification than this Tender*