



# CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE

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No. TENC 11020

Date: 17.06.2011

**Sealed tenders** under **Single bid System** are invited for the following items as per the Terms and Conditions **on or before 01.07.2011 – 5.00 p.m. (IST)**. The tenders received will be opened **on 04.07.2011 at 10.30 a.m. (IST)**.

Sl No.	Description	Qty
1	IP based Multimedia Communication System with ISDN, IP and SIP based architecture	1 No
2	Online UPS 2KVA with 6 hours backup from reputed manufacturers	1 No
3	Analog phone with memory dialing facility	50 Nos
4	Analog phone with caller ID and memory dialing facility	100 Nos
5	IP phone with alphanumeric display	100 Nos
6	IP phone with LCD display	50 Nos

For detailed Terms & Conditions and Specifications, please scroll down.

Yours faithfully,

**STORES & PURCHASE OFFICER**

**Instructions and Terms**  
**(For Tenders as well as Orders)**

**While submitting your offer please note: (For Indigenous and Imports as the case may be)**

1. In all correspondence, our reference number should be superscribed with closing date of the enquiry. The offers should be sent in sealed covers addressed to the Stores & Purchase Officer.
2. CSIR-CECRI is interested in materials either Indigenous manufacture or foreign make, available from ready stock. Any offer to supply on forward delivery basis under supplier's own quota license will also be considered.
3. **In case of Indigenous offers, the price quoted should clearly mention whether**
  - a) FOR destination / dispatching station by registered road transport.
  - b) FOR destination / dispatching station by passenger train.
  - c) FOR free delivery at this office stores
  - d) Where there is no mention of the above, it will be deemed that FOR at this Officer's Stores.

**In the case of Imports, the price quoted should clearly mention whether**

- a) FOB/Ex-works, the location of which should be indicated in the quotation in case of Imports.
  - b) Where there is no mention of the above, it will be deemed that the price quoted is FOB basis.
4. The offer should indicate clearly and separately the basic price, sales tax, packing and forwarding, insurance charges, other charges and discount, if any. Where there is no mention of the above, it will be deemed that price is inclusive of all charges with no discounts. **Sales tax number (TAN/PAN), Bank A/c. details of your bankers with IFS Code of the bank should be indicated in your offer as well as in your invoices.** The validity of offer should be a minimum of 60 days for indigenous and a minimum of 120 days for imports. If the validity period is not mentioned in your offer, the validity period of offer will be deemed as aforesaid. In case of Import, the supplier is requested to send the Pro forma Invoice on FOB value with clear indication of the Indian Agent's address, their kind of services, and percentage of agency commission (which will be reduced from your invoice and paid in Indian rupees only). Also pro forma invoice should indicate whether Agency commission included / excluded in the FOB price. The pro forma invoice should be accompanied by detailed literature. Agency commission is payable only after installation. It is mandatory for all the **Indigenous supplies, the original invoices valuing more than ₹ 5000.00 should be affixed with ₹ 1.00 revenue stamp.**
  5. The offers should accompany the EMD amount **wherever applicable.** The tenders will be normally opened on the next working day of due date at 3.00 p.m. in Purchase Section in presence of Tender Opening Committee unless otherwise mentioned specifically.
  6. Suppliers will have to make good the shortages, if any, which are revealed after opening the packages. The stores, which are spoiled / damaged during transit due to faulty packing, will have to be replaced by the suppliers. The product should have warranty for workmanship and performance, service and replacement for a minimum period of 12 months from the date of acceptance. Replacement of spares/ parts during warranty period should be done free of all including to and fro Air freights, Packing, Forwarding and Insurance charges etc.
  7. Specific mention should be made whether the delivery will be from ex-stock or will have to be imported and how much time will be required for delivery after placing the order.
  8. The Director, Central Electrochemical Research Institute, Karaikudi is the Direct Demanding Officer for the Directorate General of Supplies and Disposals. In case, if any of the items mentioned is on the current rate and running contract list, please quote the DGS&D rate with contract number and date.
  9. Representative(s) of the suppliers having authorization certificate are free to be present at the time of opening of tenders, only at the specified time and venue.
  10. The Director, CSIR-CECRI reserves the right to accept or reject in part or in full any offer without assigning any reason.
  11. Printed terms and conditions of the firms sent along with offer, if any, shall not be binding on us, if they are in full or in part not consistent with the terms and conditions specified in this tender.
  12. The date of delivery is the essence of the purchase order. It should be adhered to. Otherwise the purchase order is liable to be cancelled and the supplier is liable to pay liquidated damage @1% per week subject to the maximum of 10% of the total value of the purchase order. In case of default in supply, also right of "Risk Purchase" reserved.
  13. The Director reserves the right to accept the delivery in part or in full.

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ANNEXURE

DETAILED SPECIFICATIONS

**Specifications of IP based Multimedia Communication system with ISDN, IP and SIP based architecture**

- 1) The Telecommunication system with ISDN, IP and SIP based architecture.
- 2) 4 PRI/E1 or more with copper and fiber connectivity to connect with PSTN network.
- 3) 288 IP extension ports with an expansion capability of up to 480 lines.
- 4) 384 analog extension ports with CLIP facility with an expansion provision up to 720 ports.
- 5) Unified communication facility for a minimum of 20 ports.
- 6) PC with latest configuration for server application – 1 No.
- 7) PC with latest configuration for console operation – 1 No.
- 8) System should have provision to add digital phone facility also.
- 9) System should work with the existing LAN network cabling system.
- 10) The system should be fully digital and should employ Stored Program Control (SPC) using Pulse Code Modulation (PCM) and Time Division Multiplexing (TDM), conforming to latest ITU-T (earlier CCITT) standards.
- 11) The system shall be 100% non-blocking.
- 12) The Central Processing Unit (CPU) of system should use 32 bit microprocessor with system memory on a MMC card and not on EPROM or a floppy disc drive.
- 13) The System should be SIP based for internet telephony to fulfill the requirement for interoperability between systems and devices from different manufacturers.
- 14) There should be an LED indication on each card, which can help determine the status of the card.
- 15) The offered system should have integrated Universal Call Distribution system (UCD) in-built to support max. 150 agents. System should be able to forward the call center information to the reporting software. Agent Login, logoff, wrap-up features should be available.
- 16) System should also have a standards based CSTA interface available, for integration of 3rd party Call Center applications
- 17) The exchange shall accept different types of trunk signaling such as :  
EDSS1/1TR6 for ISDN BRI and PRI, Ringdown, 2W/4W E&M signalling, Type 1 to Type 5, Analog C.O.Lines, DTMF Signaling
- 18) The exchange should be suited to work on duplex ac mains supply of 230V (i.e. a spare power supply should be provided with the system)
- 19) The system should support simultaneous voice and data capability over the same single pair telephone cable in (2B+D) ISDN BRI format. The following voice & data terminals should be supported.  
ISDN terminals such as ISDN-PC card  
ISDN FAX(G4).  
Video Conferencing Equipment.  
The system shall also support PRI ISDN. in (30B+D) Format
- 20) It should be possible to integrate an announcement/ industrial paging system with the proposed system without any external additional hardware
- 21) The system should have integrated Modem for remote maintenance. The system should also support LAN based remote maintenance.
- 22) system should support centralized system administration via SNMP (Simple Network Management Protocol)

- 23) The system shall support Integrated Cordless Solution based on the DECT (Digital Enhanced Cordless Telephony) technology. The system should support up-to 64 Base stations & 250 handsets. Direct Base station connectivity to the control board.
- 24) System should support High Density Traffic of up to 12 channels per radio cell per base station It should be possible to place the base station up to 1000 mtrs from the system. Each Base station should have range of 50 Mtrs inside Buildings & up to 300 Mtrs in Open Air. System should support Roaming & Handover (i.e. the call should not get cut when the DECT user moves from one base station cell area to another Base station cell area )
- 25) The System should support direct LAN TCP-IP Connectivity. (10/100 Base T on RJ45). This should be available on an Integrated Interface Card Inserted in Universal Slots. Upto 10 - 15 simultaneous Remote Lan Access should be possible through the system. There should be fire wall Concept Check both the Source IP Address & Destination IP Address as well as ISDN numbers at the WAN transition to ensure the security of Data. The above feature should be available without any external additional hardware
- 26) System – System networking over IP should be possible. The system should be able to use the existing IP network to get connected to a similar system at other location with complete feature transparency between the 2 systems. A single voice call between the 2 systems should not take more than 20kbps of bandwidth on the IP network. In case the IP network is down, the system should be able to get connected to the remote system using Dial-up PSTN connectivity offering 'No Single Point of Failure'.  
System should support Digital Phones on Single pair of Cable.  
Digital Phone having In-built USB port to connect data equipment like PC or a keyboard.  
Adapter slots for connecting ISDN So Terminals like Group IV Fax, Video Conferencing Equipment, Digital Phones, Analog Phones, Headset & mic adapter. Etc.  
1<sup>st</sup> party TAPI compatible to support TAPI based Dialer applications like Microsoft outlook dialer.
- 27) System should support soft phones and IP phones for VOIP ( Voice Over IP ) Applications
- 28) The system should be suitable for more than 5 digit extension numbering scheme. This numbering scheme should be flexible. System should also allow mixed numbering scheme.
- 29) The system should support Mobile PIN functionality. Calls can be made from various telephones and still billed to his own account.
- 30) The System should support Software Server based Unified Communication Application to ensure the benefits of accessing services of Phone Call, Email, Fax, Voice Mail & Instant Message in single screen for *"Paper Less governance"*.
- 31) The System should support a cost-effective communication solution called Fixed Mobile Convenience (Mobility) which integrates employee's mobile number and home/office number.
- 32) The offered system should have automatic call route selection, background music, call waiting, 12 party conferences, voice mail, Meet Me conference, external music on hold, unified messaging (Voice mail, Fax and E-mail), instant messaging etc.
- 33) System should have features like automatic call back, call forward, call hold, call pickup, call transfer, boss and secretary function, Do-not-disturb, music on hold, password code, audio conferencing, voice mail with message recording and retrieval facility etc.
- 34) Safety aspects against lightning, surge voltages and spikes are to be provided.

**Optional items:**

- 1) On-line UPS 2KVA with 6 hours backup from reputed manufacturers. – 1 No.
- 2) Analog phone with memory dialing facility.
- 3) Analog phone with caller ID and memory dialing facility
- 4) IP phone with alphanumeric display
- 5) IP phone with LCD display
- 6) Advanced IP phones with different models.

### TENDER SCHEDULE

- 1) Supply & Installation of new system with TEC approval should be enclosed
- 2) TEC approval & Brochure should be enclosed
- 3) Supplier should have experience in installation of similar systems above 500 lines (Please mention details of Installation with contact person)
- 4) Direct company service station should be located near by Karaikudi (Please mention the Detailed Address)
- 5) Cables rates separately mentioned for the supply PVC /Jelly filled cables with necessary MDF material, Laying charges any for Under ground cable work UG cable rates for Trench cutting & closing with laying of cables and cost MDF box with supply and termination of cables

Mention of cables rate per meter cost for both PVC cable, UG cable & MDF's:

100 Pair cable, 50 Pair cable, 20 Pair cable, 10 Pair cable, 5 pair cable and single pair cable

MDF with Krone connectors rates for 1000 pair, 300 pair, 100 pair, 50 pair, 20 pair and 10 Pair

- 6) Supply of New Telephone instruments & termination.
- 7) Maintenance of the complete work after installation in the entire campus should be done by the supplier on yearly basis.
- 8) Supply of spares and service support is to be guaranteed for minimum 10 years by the manufacturer and supplier.
- 9) Other terms and conditions like delivery period, warranty etc. should be provided.

*Sd/-*

**STORES & PURCHASE OFFICER**

