

**ARYABHATTA RESEARCH INSTITUTE OF OBSERVATIONAL SCIENCES (ARIES),
MANORA PEAK, NAINITAL-263 129 (INDIA)**

Phone (91-05942)233727,233734,233735,232655, Fax No. (91-05942)233439, Gram : ASTRONOMY

To

As Per Attached Sheet

No. : AO/ /3-1/10-11

Dated : 25 May, 2010

Sir,

This office is in need of the following items. You are requested to send technical and commercial bid in a separate envelope. Both envelope should be put up in a another envelope and clearly marked on the cover of envelope Technical bid, Commercial bid, enquiry No., date of opening. Sealed envelop should reach latest by dated 21 Dec 2010 up to 2:00 P.M. Technical bid will be opened on same day and Commercial bid will be opened on 28 Dec 2010 at 3:30 P.M.

SI.No.	Description of Item	Specification	Qty
	As per attached list		01

Other terms and conditions of the tender :

1. Specifications and make for each item should necessarily be mentioned as per specification.
2. **Place of Delivery** : ARIES, Manora Peak Nainital-263129
3. **Delivery Period** : **20 days from the date of PO**
4. **Validity period** : Based on delivery period.
5. All bidders can be present at the time of opening the tender. No. separate intimation shall be given in this regard.
6. The opening of the tenders shall only be attended by an authorized representative of the firm whose name, designation and address should be indicated in the offer of the firm. Tendering firm shall issue a letter of authority to such representative indicating the tender no. date due on for the item. In no case un-authorized person shall be allowed to enter tender opening room.
7. **Payment** : 100% payment will be released after inspection and acceptance of Item and submission of Performance Bank Guarantee of 10% of the total amount (including taxes) valid for two months beyond warranty period or else 10% of the amount will be released after two months beyond warranty period.
8. **Warranty period** : Minimum 3 years on site warranty.
9. **Insurance** : Transit insurance covering all risk for all the items is to be arranged by the supplier.

ANNEXURE - I

REQUIREMENTS

Upgradation of the existing Siemens EPABX (Electronic Private Automatic Branch Exchange) HiPath 3750 to **Digital Hi-Path 3800** and supply, fabrication, testing and commissioning of the system.

PRESENT SYSTEM CONFIGURATION:

CONFIGURATION	HiPath 3750 (existing)
Analog Extensions	256
Digital Lines	8
IP users	Nil
Cordless HiPath subscribers	Nil
Trunk Lines	8
Max BSNL/PSTN Lines that can be taken	4
Connectivity between Manora Peak-Devasthal PBX's (i.e with 2 No's of HiPath 3550 installed at remote site)	via 3 rd Party VoIP Boxes (FXO & FXS)
Caller Line Identification (CLI)	N.A
Unified Messaging Facility	N.A
HiPath HG 1500 boards (IP cards)	N.A
PRI (Primary Rate Interface) connectivity	Not possible
Simultaneous connectivity between Devasthal - Manora Peak	4
IP hard /soft phone connectivity	N.A
Remote Access	N.A
ACD (Automatic Call Distribution) identification	N.A
Integrated Modem for Remote Maintenance	N.A
SNMP (Simple Network Management Protocol) Support	Not supported
Soft phones support on Laptops & Desktop PC's without any server compliant and IP/SIP phones for VOIP (Voice Over IP) Applications	Not supported
6 simultaneous 5 party conferences	Not supported
Software Version	Version 4/5

UPGRADATION REQUIREMENTS:

The upgraded solution should be IP based comprehensive and modular including racks, cards, cabinets, servers, etc. The vendor can directly replace the existing Siemens HiPath 3750 with HiPath 3800, or may upgrade the existing cards/ cabinets to HiPath 3800. However, the total solution will have to be under comprehensive warranty for a period of 3 years.

The upgraded System Configuration should fulfill the following minimum requirements:

CONFIGURATION	HiPath 3800
Analog Extensions	256
Digital Lines	8
IP users	500
Cordless HiPath subscribers	250
Trunk Lines	8
Max BSNL/PSTN Lines that can be taken	8
Connectivity between Manora Peak-Devasthal PBX's (i.e with 2 No's of HiPath 3550 installed at remote site)	Seamless connectivity using the in-built IP cards
Caller Line Identification (CLI)	Present
Unified Messaging Facility	Present
HiPath HG 1500 boards (IP cards)	atleast 10 B Channels
PRI (Primary Rate Interface) connectivity	Possible by using PRI cards
Simultaneous connectivity between Devasthal – Manora Peak (between upgraded version at Manora Peak (i.e. HiPath3800) to 2 No's of HiPath 3550 installed at remote site at Devasthal)	10
IP hard /soft phone connectivity	Present
Remote Access	Present within the network
ACD (Automatic Call Distribution) identification	Present
Integrated Modem for Remote Maintenance	Present
SNMP (Simple Network Management Protocol) Support	Present
Soft phones support on Laptops & Desktop PC's without any server compliant and IP/SIP phones for VOIP (Voice Over IP) Applications	Present
6 simultaneous 5 party conferences	Support
Software Version	Version 7 or latest

Features and Facilities Required-

The system should provide the following features as a part of its telephony functions

1. The upgraded system should be 100% non-blocking and HOT STANDBY ON POWER SUPPLY UNIT.
2. The upgraded system should be able to restart automatically without human intervention when the external ac power supply is resumed after complete power failure i.e. even after the batteries are discharged.
3. The upgraded System should have Integrated Modem on the central motherboard for remote maintenance.
4. The upgraded system software should be protected against loss/alteration of memory due to power failure, unauthorized command or any other faulty condition.

5. **The offered upgraded system should have integrated Universal Call Distribution system (UCD) in-built.**
6. **System should also have a standards based CSTA interface available, for integration of 3rd party Call Center applications.**
7. The upgraded system should work with any type of public exchange or similar network to which it will be connected without requiring any modification in networks. It should be possible to network with exchanges of different makes / technologies using E&M lines , ISDN BRI/PRI lines,T1 Trunks .
8. The upgraded 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 should also support PRI ISDN in (30B+D) Format.
9. The upgraded system should support MOBILITY FEATURE for ONE NUMBER SERVICE.
10. The upgraded system should have the LOGICAL PARTITIONING.
11. The upgraded system should have integrated Modem for remote maintenance, The system should also **support LAN based remote maintenance**
12. **The upgraded system should support centralized system administration using SNMP (Simple Network Management Protocol)**
13. The upgraded system shall support **Integrated Cordless Solution** based on the DECT (Digital Enhanced Cordless Telephony) technology.
14. The upgraded System should support direct LAN TCP-IP Connectivity.
15. **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 multiple systems like extention CLI, one operator for complete network, transfer of call received at one site to another, use of BSNL line connected at one site from another site etc.
16. **Upgraded System should support soft phones on Laptops & Desktop PC's without any server compliant and IP/SIP phones for VOIP (Voice Over IP) Applications.**

17. **Additional Features of the System :**

- External CLI on analog & digital extns should be available on ISDN PRI LINES and Analog trunks
- Different class of service for extensions in the night mode
- Automatic call-back to busy and ringing extension
- System should also support upto 6 simultaneous 5 party conferences.

18. The upgraded system shall be capable of PULSE to TONE conversion and vice-versa to enable correct operation in originating and receiving calls.

19. There must be protection of EPABX from high voltage / current transient occurring in junction lines to the Exchange.

20. Authorization Codes : 5-7 digit authorization code to make outgoing calls from all the 3 PBX's thereby ensuring no misuse of the system. The vendor should ensure that the authorization code assigned to individual users should be valid while making any outgoing calls from any of the 3 PBX's.

21. Flexible numbering plan – Support up-to 10 Digit for an extension number & Allow phone number assigned to a station to be changed through software.

Expandability Options:

With the above upgradation solution, vendors have to quote following optional items which may be necessary for further expandability of the system.

1. Different **IP Hard-Phone** models with features and specifications.
2. **IP Soft-Phone** with features, specification and licensing options. Single user licensed price should be included in the upgradation cost.
3. Different **Digital-Phone** models with features and specifications compatible with upgraded System.
4. Termination and Connectivity Solution including *Racks, Patch Panels, Patch Cords, MDF, Jumpers*, etc.

System Administration and Maintenance Facilities:

- The system shall provide an administrative console for all administrative tasks like add/ remove/ modify and features programming.
- It shall be possible to use a PC with terminal emulation software loaded onto it to access the console interface.
- It should be possible to perform initial configuration tasks, maintenance tasks, rudimentary administration tasks etc. via web pages. For this use, there should be a built-in web-server inside the telephony server.
- The system should allow remote access over LAN/ WAN or PSTN for maintenance functions – for both software and hardware of the system.

- The system shall continuously run self-tests and log any kind of alarm immediately. The fault information data may be displayed on the system terminal, and may raise an alarm both on an external alarm or a pre-defined extension or cell-phone.
- The system shall allow multiple administrators to log in simultaneously, both locally and/or remotely.
- The system shall maintain a history of commands executed.
- Centralized call billing software should be installed in the administrator PC from where the monthly or periodically bills can be generated for all the extensions of upgraded system and of 2 PBX's HiPath 3550 at a time. Some optional features may be added in the Call Billing software package. These are:
 - a) The billing software should be web-based as well as GUI based. Users should be able to check his/her bills extension wise immediately after a call is made. There should be protection mechanism so that he/she can not view other's call details except by the system administrator.
 - b) The billing software should have capability to get the Extension to Extension calls.
- System should offer In-Built/External Help-Desk software to support Automatic Call Distribution feature for complaint logging/emergency reporting etc. (optional)

Manuals & Guides

Following Manuals and Guides have to be supplied along with the system:

- Operation and Maintenance Manuals
- Trouble-shooting guide

Training

All training related to System Administration, Configuration, Maintenance and Operation has to be arranged at the site of installation for at least two peoples.

Warranty: The equipment supplied shall carry on-site warranty period of 3 year from the date of installation and commissioning against all manufacturing defects and wear and tear during operation of the equipment. The successful bidder will have to keep the equipment in good operating condition during the period of warranty. Successful bidder should have to supply the Warranty card/letter for the equipment at the time of installation or while submitting the bill.

Service Call Attend : The successful bidder after installation and operationalisation of the equipment, shall attend to any complaints of malfunction, defects etc., of the equipment and rectify the defects within 48 hours of the complaint during the period of warranty. This should be clearly indicated on the official letter pad (signed with seal).

Site Preparation: Site preparation including electrical requirements required from ARIES side at the installation site should be clearly indicated in the bid by the bidders.

10. **Special Cause** : Any tender can be rejected by the order of the Director, ARIES, Nainital without assigning any reason whatsoever.
11. Prices should be quoted on F.O.R Manora Peak, Nainital.
12. Packing & Forwarding charges, Bank Charges, Insurance and Freight Charges should mentioned clearly and separately in the quoted price. Term like "at actual & at the time of delivery" will not be acceptable and the tender will be rejected.
13. If the item is found to have any defect during the warranty Period, Transportation and other charges from ARIES to the Service Station will be borne by the Vendor supplying the item.
14. Tenders Received by only **Post/Speed post/Courier** will only be accepted.
15. Sealed tender should reach "Director, ARIES, Manora Peak, Nainital - 263 129" by stipulated date. Tender received late by whatsoever reason will not be accepted at all.
16. All the tenderer must submit the **EMD of Rs: 15000.00 in favor of Director, ARIES in the form of D.D. Only**. Any other mode of EMD will not be acceptable.
17. Liquidated damage as decided by ARIES will be charged, if the item(S) is/are not delivered within the stipulated time frame.

Note : Please quote the tender no. and opening date on the top of the cover containing tenders.

Yours sincerely,

(Dheerendra Kumar)
Junior Purchase Officer
For, Director