

REQUEST FOR PROPOSAL

for

Establishing and Managing

Wide Area Network,

Outsource Data Center & Disaster Recovery Site

for

Haryana Urban Development Authority (HUDA)

TENDER no. RFP. HARTRON: PROJ:HUDA:2006-07_____Dated_____

The RFP document available on this website can only be used for information purpose and the RFP sold shall only be accepted for bidding purposes.

Haryana State Electronics Development Corporation Limited

ISO 9001 Organization

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IMPORTANT NOTICE

This tender document is not transferable.

Bidders are advised to study the tender document carefully. Submission of bid shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.

The response to this tender should be full and complete in all respects. Incomplete or partial bids shall be rejected. The bidder must quote for all the items asked for in this tender.

The bidder shall bear all costs associated with the preparation and submission of the bid, including cost of presentation for the purposes of clarification of the bid, if so desired by tenderer. Tenderer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

Key Information Events & Dates

Information/Event	Target Date
Advertisement & Sale of Tender	From 14.12.2006 onwards till 2.1.2007
Non-refundable RFP cost	Rs.5000/- through demand draft/bankers pay order from a scheduled bank, drawn in favour of "M.D., HARTRON", payable at Chandigarh.
EMD	Rs.10,00,000/- in the form of Demand Draft in favour of HARTRON payable at Chandigarh from a scheduled bank.
Pre-Bid Conference	22.12.2006 at 2.30 P.M Hartron
Last date for submission of bids	4.1.2007 up to 2.30 PM
Opening of pre-qualification bid	4.1.2007 at 3.30 PM
Opening of technical bids	To be intimated on 4.1.2007
Presentation on technical bid by short-listed service providers	To be intimated subsequent to the opening of technical bid
Opening of commercial bids	To be intimated
Down load sites	www.huda.nic.in www.hartron.org www.hry.gov.in
Language of the bid	This bid should be filed in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the bidder.

Tenderer reserves the right to reject the bidder's assertion of compliance to a requirement, if the detailed response is found unsatisfactory or contradictory.

Notwithstanding any thing to the contrary in the bidder's detailed response, an assertion of 'Fully complied' (Y) shall be considered as the bidder's agreement to comply with the requirements of Tenderer as interpreted by Tenderer.

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Section-1

INTRODUCTION

1. Introduction

Haryana Urban Development Authority (HUDA) is a prime agency of the State Government engaged in the planned development of urban areas in the state. It undertakes development of land after the same is acquired by the Government of Haryana through its Urban Estates department for specific land uses, such as residential, commercial and industrial, in accordance with the provisions of the development plans of a particular area.

HUDA, a statutory body of Haryana Government was constituted under the Haryana Urban Development Authority Act, 1977. HUDA has various wings, such as Urban Branch, Engineering, Town Planning and Architecture, Financial, Legal and Monitoring. The main functions of HUDA are:

- To promote and secure development of urban areas with the power to acquire, sell and dispose off property, both movable and immovable;
- To acquire, develop and dispose land for residential, industrial and commercial purpose;
- To make available developed land to Haryana Housing Board and other bodies for providing houses to economically weaker sections of the society ; and
- To undertake building works.

The Chief Minister, Haryana is HUDA's Chairman, with the Chief Secretary to the Government of Haryana being the Vice Chairman. The Chief Administrator at the head quarters is responsible for discharging functions of the Authority. The Chief Administrator is assisted by five Zonal administrators (posted at Panchkula, Faridabad, Gurgaon and Hisar) and one administrator at the headquarters. These administrators act as coordinators among various wings engaged in the planned urban development of the respective areas, and are responsible for the implementation of various schemes/projects being executed in these areas.

1.1 Administrative Setup of HUDA

- (i) HUDA has set up urban estates throughout the state, and their work is looked after by five Zonal Administrators, assisted by 17 Estate Offices and 25 Divisions undertaking engineering works. The main duties of the estate offices include selling plots of all

categories of land (developed and undeveloped) and realising the amount of installments. All financial transactions are looked after by the estate officers and are channelised through the Accounts branch of the Head Office for expenditure on development activities.

- (ii) With over 25 years of successful operations, HUDA's activities and finances have grown tremendously. However, the use of Information Technology (IT) is still very limited. In order to reap the benefits of IT in strengthening managerial capabilities, HUDA has undertaken an initiative for computerisation. Property Management and Financial Accounting systems form the core processes that affect HUDA's operations, performance and customer relationships.
- (iii) As a part of its initiative for automation, HUDA intends to implement a web-based software application as it is envisaged that the same would go a long way in addressing customer grievances and bringing about transparency in the processes. The system will enhance management capabilities of HUDA personnel by providing accurate and timely information, tools for effective monitoring and streamlining the operational procedures in all zones. The zonal Administrators are located at following places:-
 - Administrator, HUDA, Panchkula, C-3, Sector-6, Panchkula,
 - Administrator, HUDA, Faridabad, HUDA Complex, Sector-12, Faridabad,
 - Administrator, HUDA, Gurgaon, HUDA Complex, Sector-14, Gurgaon.
 - Administrator, HUDA, Hisar, HUDA Complex, U.E.II, Hisar.
 - Administrator, HUDA, Rohtak

1.2 Vision

The vision is to focus on effective and efficient delivery of Plot & Property Management & Financial Accounting Information to various HUDA Official and to the public. The HUDA has set a vision to provide all the information on web based/online model. Achieving its goal involves

using modern technology tools to modernize HUDA Functions and thereby creating the necessary infrastructure.

1.3 Project Overview

- (i) The HUDA offices are spread all over Haryana, with centrally located head office in Chandigarh supported by five Zonal administrator offices at (Panchkula, Hisar, Gurgaon, Faridabad, Rohtak), 17 Estate offices and 22 Divisional offices. This document lays down the Software/Hardware and Networking specifications with respect to the proposed applications for HUDA with an aim to modernize the communication infrastructure and to improve the administrative efficiency and effectiveness.
- (ii) The applications will be located centrally at Data Center of the bidder and connect to the HO at Panchkula & Gurgaon and other offices located at these locations on MPLS/MLLN based network.
 - a) **Centralized Architecture- Primary Data Centre:** The centralized architecture will have Web, Application Servers, Database servers, LAN switches, SAN Storage, MPLS/MLLN connectivity to HO Panchkula & Gurgaon and their respective offices located at these locations. All the data is to be backed up on daily basis to Backup Media. Entire Set Up will be behind appropriate secured firewalls with defined policies.
 - b) **Disaster Recovery:** As the data of the entire Application Set up is available with the centralized site at Primary Data Centre, But to achieve higher uptime application Set up will have Disaster Recovery Site of around 70% of the capacity of Primary Site. Consolidated Database will be replicated to DR Site on daily basis using dedicated connectivity of 1Mbps between primary & DR Site. In case of Primary site failure DR Site will become up.
 - c) **Remote Management:** Network management will be ensured remotely on Panchkula & Gurgaon site and being monitored continuously to ensure that network is up and running fine.
 - d) **Web Based Application Site:** The Data Center will host a website for online/Remote Web Based Application site. This

enables HUDA's other offices to get connected over the internet also and use all relevant information and can update the information using secure login.

1.4 Invitation to Bidders

This invitation to RFP is for outsourcing of data centre facilities, related technical services for centralization of IT operations and out right purchase of networking equipment for end to end connectivity as per the specifications detailed in this document.

Section-2

Scope of Work

2. Scope of Work

The minimum specified work is mentioned below and is to be performed as per the specifications and conditions mentioned in the different parts of this document. The broad items of minimum specified work are as under:-

1. To connect all the desired locations on a secure and resilient, total IP-MPLS/MLLN VPN network. In the first phase three offices located in Gurgaon and four offices located in Panchkula & Chandigarh are to be connected to central Web/database servers through MPLS/MLLN.
2. To provide Managed Services and Proactive monitoring of entire network and collocated Servers
3. Efficient and 24x7 management of Applications, Database. It is proposed to have the Servers (Web, Database and application) at Bidder's Datacenter premises, which shall be hired for two years with an option to extend the same on annual basis after the expiry of two years. The bidder is to provide lease model solution for 2 years for all the Hardware devices which will be required to be collocated in Bidders Data Center for commissioning of managed hosting services. The datacenter is required to have appropriate firewall for enhanced security of the applications.
4. All networking equipment required for connectivity purpose such as Router etc. shall be purchased by the tenderer as out right purchase and bidder shall install, commission and maintain the same for the period of two years.
5. To provide the connectivity to end-user based on standard MPLS (Multi Protocol Label switching)/MLLN (managed lease line network).The network may further have a single point gateway of adequate capacity to Internet and other existing Networks.
6. Proactive Monitoring of the entire network.
7. Solution should comply with all statutory and other legal requirements for the installation, integration, running, operation and maintenance of the System as specified in the RFP.
8. The above network shall be so conceptualized so as to have end to

end secured communication through VPN and should support seamless transformation and integration of protocols based on open standards as well as open NMS support for monitoring configuring and measurement of the network resources.

9. The network shall support both in terms of infrastructure/ software new protocols adopted by Internet community from time to time.
10. The proposed network of HUDA WAN shall be subsequently integrated by successful bidder with the Haryana State Wide Area Network after the expiry of two years without affecting the ongoing operations. The successful bidder shall further provide all the support for interface of the equipment with respect to networking and ensure smooth transition of the system.
11. The network so designed shall meet the security guidelines of CERT-In.
12. The bidder should design and engineer the system after understanding the requirements of HUDA WAN, details mentioned in this RFP and should provide turn-key solution for the entire network and include any missing item(s) notwithstanding the detailed Bill of Material (BOM) given in RFP for the successful end to end implementation of the HUDA WAN.

2.1 Phases of the project

The HUDA WAN project will be implemented in two Phases as mentioned below:-

1. **Phase-I:** It includes supply, installation, integration, commissioning the necessary networking equipment such as routers, modems, converters etc. providing of MPLS/MLLN Bandwidth to Panchkula and Gurgaon, Hosting Services and Managed Services including hosting of servers (Data, Application & Web) etc. in the bidder's Data Center which are required to be interconnected to provide application access.
2. **Phase-II:** It includes Supply, installation, integration, commissioning the necessary networking equipment such as routers, modems, converters etc, MPLS Bandwidth, Managed Services, Dedicated Collocation of Hardware in bidder's Data Center and its management

for the remaining HUDA offices across Haryana state which are required to be interconnected to provide application access.

Detail List of offices covered under each Phase is attached in Appendix A.

The present scope of the work of this RFP is limited to Phase-I only.

2.2 Scope of Work for providing end to end connectivity

a. Scope of Supply

- (i) Supply of Products/equipment including active components and their related accessories at the offices of HUDA mentioned above.
- (ii) The Successful Bidder shall not bid /supply any equipment that is likely to be declared end of sale within next six months. If, any equipment is declared end of sale within next six months, the Successful Bidder would be required to replace all such equipment with latest one and equivalent configuration. The Successful Bidder shall submit an OEM undertaking with this regard to tenderer.
- (iii) The Successful Bidder shall be responsible for end-to-end implementation and shall identify as mandatory and optional items and shall quote and provide / supply quantities that are considered necessary for the successful commissioning of the network
- (iv) The Successful Bidder shall provide software updates for a period of two years from date of acceptance for all software components like operating systems, database software, messaging software etc. which are part of the supplies.
- (v) The Successful Bidder shall submit the following documentation within 7 days from the date of the issue of the formal work order for the approval of the tenderer. Further the tenderer if required can alter any of the documents mentioned below and the bidder has to adhere to those alterations.
 - a. Site survey report and horizontal connectivity diagrams for HUDA's Panchkula and Gurgaon offices.

- b. Design the connectivity as described in the tender document on MPLS/MLLN VPN with last mile. However Fiber/Copper will be the preferred last mile option.
- c. Project Management and SLA compliance tools.
- d. Detailed implementation plan/schedule for carrying out the activities as per the project timeliness defined in RFP
- e. A detailed IP addressing scheme.
- f. Security architecture, deployment and policies document for securing the IT infrastructure

b. Scope of Installation

- (i) The Successful Bidder shall install and commission the active network equipment as per approved deployment design. The successful bidder is further required to install and configure all the active devices in accordance with OEM guidelines.
- (ii) The Successful Bidder shall install and commission transmission/connecting medium.
- (iii) Civil works, if any, required for installation of Mast for antennas for wireless connectivity and passive-cabling systems will be the responsibility of the Successful Bidder.
- (iv) The Successful Bidder shall plug conduits and entrance holes where the cabling has been installed and shall follow Local regulation/ codes, all Safety Regulations and practices at all times.

c. Scope of Acceptance Testing

- (i) The acceptance tests for the WAN shall be carried out in accordance to the methodology mentioned at clause no.6.16.
- (ii) The above said acceptance test shall be conducted at each office as mentioned at clause no 6.16 of section 6 by a committee comprising of officers from HUDA, HARTRON, third party agency or any officer or person and duly authorized by the tenderer.
- (iii) The successful bidder shall prepare detailed Acceptance Testing Plan (ATP) including test parameters, commitments etc. which shall be acceptable to the tenderer for each of the WAN components i.e. Network, service level management, NMS,

IDS/IPS, DATA Centre, Security and cabling systems, etc. and submit the same to the tenderer alongwith the technical bid. The test parameters, commitments etc. as decided & approved by the tenderer shall be final and binding on the successful bidder.

- (iv) The successful bidder shall ensure that the cabling and crimping/termination is done in accordance with the industry standards and supported by the Original Equipment Manufacturer (OEM) fully tested and certified for operations for a minimum period of 20 years.
- (v) All the functionality, features and configuration relevant to the WAN shall be documented by the successful bidder for the Network, DATA Centre, etc. and shall be demonstrated to the tenderer.
- (vi) All the features and functionality of the Network Management System, service level agreement management, Firewalls, IDS/IPS, etc. to monitor/manage/control the WAN infrastructure as well as for managing the QoS on the LAN/WAN links shall also be documented as well as demonstrated by the successful bidder.

d. Scope of System Integration

- (i) The Successful Bidder shall be responsible for installation, configuration & integration of all networking, hardware, software, data center and IT Management Services (minus the PPM/FAS application) supplied for the Project.
- (ii) The Successful Bidder shall configure quality of service parameters on network switching and routing devices for end-to-end QoS for the traffic over the network.
- (iii) The Successful Bidder shall be responsible for integration of security components in the network to ensure a secured network access for users.
- (iv) The Successful Bidder shall also be responsible for integration of existing IT infrastructure or equipments procured later for State Data Center.

e. Training

- (i) The Successful Bidder at his own cost will impart training for a

period of 7 working days to Five officers nominated by HUDA at Panchkula on the operations and management of HUDA which may be increased to another 7 days depending upon HUDA's requirement.

In the eventuality of termination of contract it will cover the followings:

- a. Installation procedure
- b. Configuring & fine tuning
- c. Administration and Management
- d. Security & Policies
- e. Operations & Monitoring

- (ii) The detailed content shall be finalized by the tenderer in consultation with the successful bidder.

f. Project Management & Implementation Methodology

- (i) The Successful Bidder shall provide a detail project implementation plan.
- (ii) Based on approvals from tenderer, the Successful Bidder shall complete the following minimum:-
 - a. Placement of Project Manager (Nodal Officer) and provide updated status to HUDA Project Manager on a routine basis. The project manager deputed by successful bidder shall act as a single point of contact. The said nodal officer shall remain deputed till the acceptance of the HUDA WAN. This Nodal officer so deputed shall be minimum B.E. with MBA and having minimum seven years experience in system integration, Networking, FMS, etc. and should have appropriate authority to take decisions for smooth and early completion of work.
 - b. Further the successful bidder is required to provide the following services under the Project Management:
 - Round the clock Network Monitoring
 - Network Performance Management
 - Router Configuration Management

- Network Fault Management
- Carrier/ Link Management
- MIS and Report generation

g. Preventive Maintenance Services

This activity shall be carried out as required but at least once in every quarter in addition to the normal maintenance required and sub activities are detailed as below:

- (i) Check for any loose contacts in the cables & connections.
- (ii) Conduct preventive maintenance (including inspection, testing, satisfactory execution of diagnostics and necessary repairing of the equipment).
- (iii) Cleaning and removal of dust and dirt from the interior and exterior of the equipment.

h. Corrective Maintenance Services

- (i) Troubleshooting of hardware problem of all supplied network equipments, Security and passive components etc and rectification of the same.
- (ii) Troubleshooting of software problems of all network, security, NMS platforms and provide solutions for the same.
- (iii) Documentation of problems, isolation, causes and rectification procedures for building knowledge base for the known problems.

i. Configuration Management Services

- (i) The Successful Bidder shall maintain a record of hardware as well as software configurations of all Wide Area network devices including the details of policies implemented on the devices such as Routing configurations, access control lists, routing filters, etc.
- (ii) The Successful Bidder shall keep soft copies of the configurations of each of the devices mentioned above.
- (iii) The Successful Bidder shall ensure define change management procedures to ensure that no unwarranted changes are carried out on the network and its constituents. All the changes must be formally approved by the Successful Bidder designed team leaders and recorded.

- (iv) The Successful Bidder shall do proper version management of these configurations as the configurations may be changed from time to time. This is required to ascertain changes made to these configurations at different stages as well as have functional configurations.
- (v) These configurations shall not be accessible in general and must be kept confidential under the authority of project manager or a lead administrator/manager.

j. Network Management Services

- (i) Over all maintenance of WAN equipment, Hardware and Security devices, etc.
- (ii) Performance tuning and ensuring resilient performance on the network.
- (iii) Checking network status and taking remedial action in case of problems.
- (iv) Daily monitoring of WAN or manual testing, troubleshooting and reporting as defined under network monitoring services.
- (v) Configuration/ Reconfiguration of routers, modem, etc. for network connectivity, as and when required.
- (vi) The Successful Bidder shall maintain an updated inventory/asset list of complete IT network infrastructure provided by Successful Bidder and an updated set of documents for WAN network diagrams with relevant details.
- (vii) The Successful Bidder shall provide services for link/ devices augmentation/deletion, relocation/connection/ disconnection etc., as and when required.
- (viii) The Successful Bidder shall be responsible to provide network monitoring services including the following:
 - a) Making sure the high availability & reliability of network at all times and performance tuning.
 - b) Monitor the availability of Links to various departments and buildings. Monitoring the link status like peak utilization, normal utilization.
 - c) Monitor the critical errors in routers and do necessary fault

isolation.

- d) Monitor the critical errors in last mile media and any other transmission media and do necessary fault isolation.
- e) Configure/reconfigure the routers remotely, if required.
- f) Collect the data flow on basis of time, interface, IP address, application wise for traffic analysis.
- g) Sending alerts to concerned people regarding critical errors.

k. Spares

The Successful Bidder shall ensure that adequate spares are retained at all times to meet SLA requirements defined in the SLA. The Successful Bidder shall also undertake to provide spare support for entire duration of the contract after the commissioning of the equipment.

l. Bandwidth Sizing

- (i) The bandwidth requirement shall be minimum of 2 Mbps at Panchkula Head Office and 2 Mbps Gurgaon Administrator Office and for the rest of the offices it shall vary between 64 to 512 Kbps. This may be treated as port bandwidth in the case of MPLS at the data center and 1 mbps at disaster recovery site. The connectivity from primary site to disaster recovery site for the purpose of data replication shall be 2 mbps.
- (ii) The connectivity uptime shall be 99.9%. The system integrator shall have to either supply or arrange to supply the said bandwidth from the bandwidth service provider and ensures signing of Service Level Agreement with the bandwidth service provider. The copy of such agreement shall be provided by the system integrator to the tenderer.
- (iii) The tenderer or user or any of its agencies shall not liaison with the bandwidth provider and it shall be sole responsibility of the bidder to liaison for the bandwidth uptime.

2.3 Managed Services and Data Center Facility Services

- (i) The successful bidder shall provide Managed Services and Datacenter Facility Services including day to day operations of the infrastructure installed in the bidder's premises for HUDA for a

period of two years. The successful bidder shall ensure 99.9 % uptime under this project.

(ii) The Successful bidder shall provide following Data Center Facilities/Services :

- Collocation Space for rack for all the Hardware as mentioned in RFP
- Network Connectivity for HUDA WAN and Hosted WAN components including Routers as part of the facilities at Data Center.
- Server and OS Monitoring and Management
- Database Management
- Managed Firewall and its Services
- Backup Services
- Messaging Services
- Anti-Virus and its Services for All Servers in the Data center.
- DNS and NMS Services
- UPS and its services as part of hosted data center facilities
- Maintaining and managing Disaster Recovery Site and providing the services required for DR operations

(iii) Applications architecture shall be a centrally managed application with a single application server at the centre. The basic hardware platform will comprise of a web server and a database server.

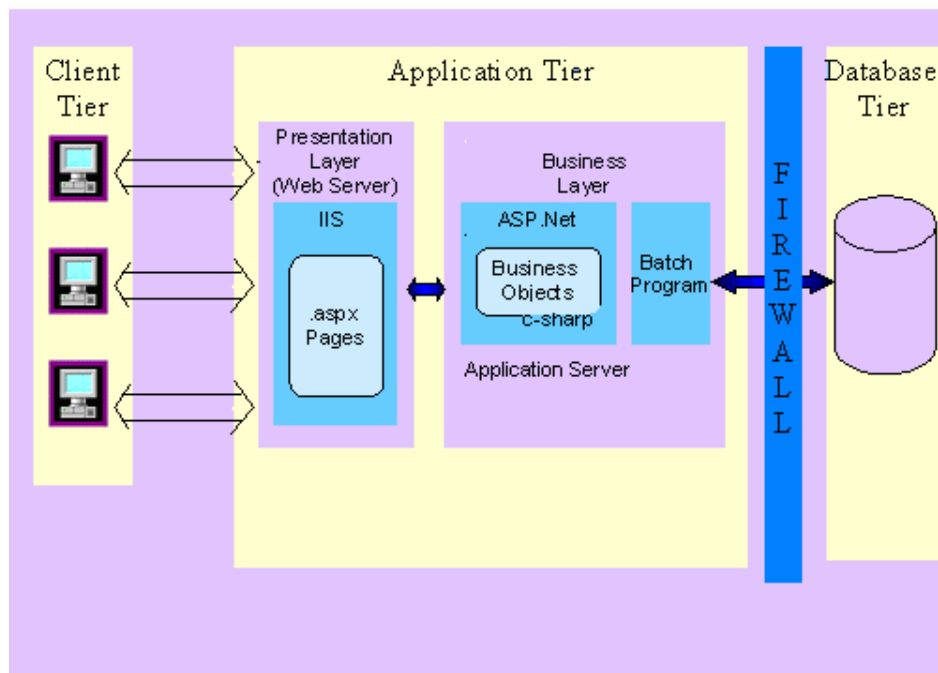
(iv) The web server and database shall be on separate servers. The Local Area Network (LAN) will connect these constituents of the production environment.

(v) Some of the features of the applications relevant for hardware sizing are:

- Concurrent data entry – Various District, Zones, Estate and Head office users will carry out data entry simultaneously.
- Uploading files received from Banks – Head office shall upload data files received from various banks. These data files shall contain the applications received towards the new scheme

floated by HUDA and the bank scrolls of HUDA.

- Data Queries – Data queries can be made using applications on select of parameters on Head office, office of Zonal administrator, Estate office and Divisional office level.
- Viewing and Printing of Reports – Users at various levels will be able to view and print reports. on the shared printer available in the same office premises.



Applications system architecture

2.3.1 System Software Components

This section lists the system software components that are required for the applications. Recommendations for system software are given in Section 3.

The software component comprises the following:

- Operating System
- Web server software
- RDBMS
- Development platform

2.3.2 Hardware Components

This section lists the hardware components that are required for the applications. The hardware requirements at various offices are listed below:

2.3.3 Data Centre

The system requirements are given below:

- Database server
- Web and application server
- Mail Servers
- SAN Storage Services for database servers
- UPS (Backup power supply in case of power failure)
- Network components
 - o LAN components
 - o Security components
 - o WAN components

2.3.4 Head Office - Panchkula & Gurgaon Office

- (i) WAN Components – Router with Managed Network Services.

2.3.5 Disaster Recovery Site/ Pre Production Environment

- (i) Each major and service release before deploying in Production environment shall be installed on the Pre Production Environment, for users verification. After signoff from the users, release shall be installed/ deployed on the production environment. Existing servers/machines procured for development of the application can be used to set up the PPE environment.
- (ii) In case primary site is down, bidder shall provide a Disaster Recovery DR and contingency plan. It will provide an alternative site where the DR server would be hosted, and which is to be activated in case of any disaster. The DR server to be loaded with the OS and application server. Application will be configured on the DR server. At the time of disaster, the database to be restored on the DR server using the backup and the DR site to be activated.

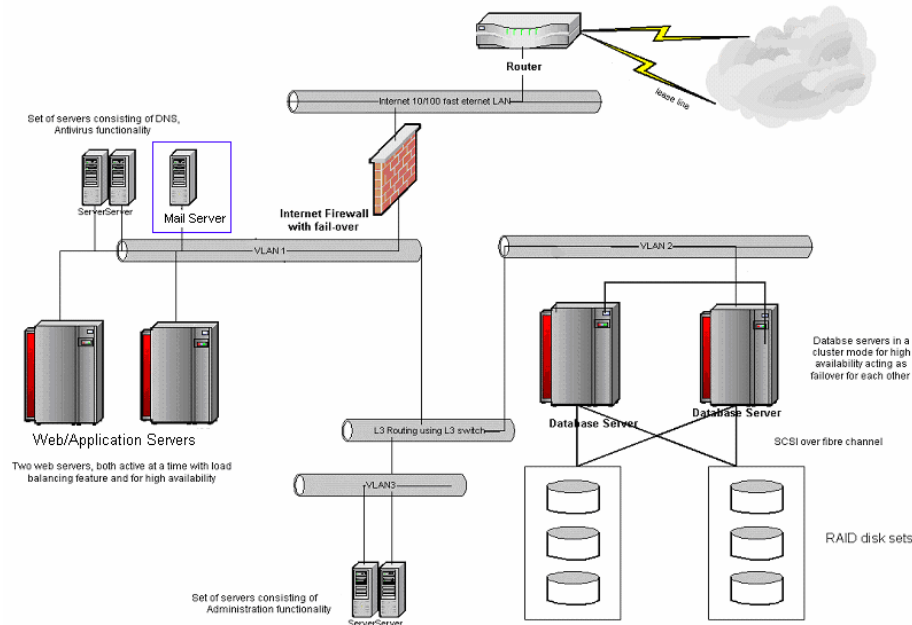
- (iii) As the requirement of tenderer is the zero downtime, i.e. in case of failure of primary site, alternate or Disaster Recovery site should be up in next couple of hours. For this scenario, having same kind of set-up for the DR site as of primary site. This site shall to be updated periodically to keep updated with the primary site, in terms of data and other server objects.
- (iv) The server components required for DRS are listed below:
 - Web and Application server
 - Database server
 - UPS (Backup power supply in case of power failure)
 - LAN components
 - WAN component

2.3.6 Backup Strategy

- (i) Backup refers to the copying of data for the purpose of having an additional copy of an original source. If the original data is damaged or lost or crashed, the data may be copied back from that source, this process is known as Data recovery or Restore. Since data is crucial for applications, hence daily incremental back up from the original database and weekly full back should be taken on DLT/LTO.
- (ii) In case of failure or crash, data can be restored from the backup. There may be loss of data because data can only be restored from the previous available backup. In recommended solution, data loss may not be beyond a day of work.
- (iii) The bidder shall send Monthly Full Backup Copy to HUDA Head Office for retention purposes.

2.3.7 Centralised Server Architecture

- (i) This will include the following server components
 - Web server – This will serve as a front end of the applications for the user. The user will login to the web server to enter data and view reports.
 - Database server – This is the backend for the applications. All the data is stored in the database, which can be used



for generating reports. The other servers that are required for the functionality of web application are the administration server and Mailing Server.

2.3.8 High Availability:

It is recommended to use a cluster environment for high availability. The web server and the database servers are the main components of the applications. The database server will work in cluster mode for high availability.

- (i) Web server – Both the web servers as shown in the diagram will have similar configurations. Both the servers will be active and share the load using the network load-balancing feature. The two web servers will share the total incoming traffic. In case one server fails; the other server will take the complete load with some performance degradation. Also in case web server failure occurs during any transaction, transaction shall rollback and user shall have to login again to get back to the application.
- (ii) Database server - Both the database servers as shown in the diagram will be in cluster mode sharing a common storage

device. The storage device will store the database. The servers will connect to the storage device using over the fibre channel. Both the servers will have similar hardware configuration. At any given time, both the servers will be active. Each server will act as a fail over of each other. In a cluster environment, the database server will assume a virtual IP address, which is published. The user will establish the session with the server using the virtual IP address. The server, which is active in the cluster mode, will assume the virtual IP address of the cluster. Also both the Database server shall be behind the appropriate secured firewall.

- (iii) When any database server failure occurs, the cluster client will detect a failure in its session with the application and attempt to reconnect in exactly the same manner as the original connection. The client session can re-establish the connection to the application without needing to know whether the application is now physically hosted on a different node in the cluster.

2.3.9 Production Site Connectivity

- (i) The production site will consist of Ethernet 10/100 Mbps Local Area Network (LAN) with different Virtual Local Area Network (VLAN) formations.
- (ii) Each server will have dual network card, both the network ports connected to redundant switch for redundancy. At a given time one network port will be functional, the other port will act as a hot standby.
- (iii) The VLAN structure is given as follows:
 - VLAN1 – Web servers will be connected to this VLAN.
 - VLAN2 – Database servers will be connected to this VLAN.
 - VLAN3 – The administration PC will be connected to this network.
 - Layer 3 switch is used for routing between different

VLANs. Access list can be applied to restrict the access between VLANs.

- The entire network is connected using a router.

2.3.10 Security Measures

Security is an important aspect for any network environment. The production site should have good security measures to protect the data and the physical assets. Physical and data security aspects are discussed below:

(i) Physical Security

The physical security is to include the following:

- Protect assets and information
- Prevent vandalism of assets by anti-social elements
- Safeguard the personnel

The following measures are proposed to be provided from the physical security point of view:

- The server should be kept in a locked server rack in secure premises.
- Access Control and Alarm Monitoring System: Access control (swipe card/ biometric recognition system) should be in place.
- CCTV surveillance cameras should be in place. The views should be recorded and the tape should be kept in a secured place. The time to keep this record tape should be decided by the authority.

(ii) Data Security

The solution should provide for the following:

- To prevent any unauthorised data from being removed/ transported
- To contain malicious activities over the network.
- This can be achieved by the implementation of various levels as listed below:
- Data protection at Production site

The security measures need to be taken at production site for data protection on server are as under:-

- Basic perimeter protection: Based on the requirement, the ports, except those required to be kept open, should be closed at the router level and server level.
- Intrusion Detection System (IDS): A network-based intrusion detection system can be deployed to monitor the whole network for all known and suspected activities. Based on the policies set, the system automatically alerts and terminates serious malicious activities.
- Managed Firewall Services: Managed Firewall services can be deployed from the inner perimeter level for additional security. The rule base can be determined based on the requirements. We recommend using an appropriate secured firewall.
- Vulnerability Assessment: Operating System (OS) hardening should be done. Vulnerability assessment tools should be run to check the breach in the system.
- Anti-virus Policy: It is mandatory that all servers have an anti-virus application running.
- Password Policy: The password should be changed periodically.

2.3.11 Mailing Server

To ensure digital communication of mails/documents, 300 mail boxes should be configured on dedicated/shared HUDA mail servers. These mail boxes should be accessible using public internet from any HUDA office using appropriate pop/outlook client or through HTTP/Web browser (in which case there should be a customized web page developed for HUDA mail boxes). The bidder should provide robust anti-virus, anti-spam and anti-malware services for both mailbox server as well as gateway server.

Section-3

Technical Requirement

3. Technical Requirement

3.1 General

- i) The RFP specifies the indicative requirements of robust network architecture, fail safe system configuration, detailed functional specifications of the solution desired for project. The technical specifications specified are the minimum suggestive specifications and these should be taken as guidelines for design and implementation of project. The bidder can offer suggestions in the network design as well as indicate missing components if any, that may be considered necessary in his bid to implement and operate the facility to meet the required objectives of the project as has been laid down in this document.
- ii) The bidder will offer equipment that will best accommodate and meet the present and future requirements for expansion of WAN.
- iii) Bids not meeting these minimum suggestive technical specifications are liable to be rejected. In case the equipment quoted exceeds/differ with the RFP technical specifications, the same should be clearly mentioned alongwith justification.
- iv) One set of service and operation/instruction manual is required to be supplied with each equipment.
- v) Successful Bidder (SB) shall maintain necessary inventory of spares for smooth uninterrupted operations of applications.
- vi) The Successful Bidder shall provide patches, updates and upgrades of all the supplied software free of cost for two years.
- vii) All the equipments should be new and of the prevailing/current standard production of the manufacturer at the time of the proposal.
- viii) The successful bidder is required to supply the latest version of software, providing all the features enumerated in this specification, at the time of award of contract. Equipment must be compatible with other Network vendor equipment.

3.2 Data Centre Facility Specifications

CRITERIA	SPECIFICATIONS
Site Safety from natural Disasters	Site should be free from Natural Disasters like flood plains, tornado or hurricane hot spots or seismically active areas.
Site Safety from EMI/RF Interference	Site should not be near source of Electromagnetic Interference or Radio Frequency Interference like telecommunication signal facilities, airports, electrical railways etc.
Site Safety from Industrial Pollution	Site should not be near sources of Industrial Pollution
Site Safety from Vibrations	Site should be free from Vibration sources like airports, rail lines, busy highways, traffic tunnels, mines etc.
Site Safety from vandalism	Preferably facility building should be within an existing complex to take advantage of established security measures and to protect data center from vandalism, industrial espionage, or terrorism
Site safety from external objects	There should not be exterior windows in the data center to avoid crime targets like vandalism shooting.
Site Safety (locational) from Fire Hazards	Proximity to neighboring structures to avoid fire hazards from industrial buildings.
Easy Emergency Services Support	Adequate access should be there for support and emergency services
Easy access to Public utilities & Infrastructure	Redundant utilities feed and good infrastructure support is required
Raised Flooring & False Ceiling	A raised floor system utilizing bolted stringers is recommended to provide the maximum rigidity for dynamic load as well as to enhance the signal reference grid.

	Ideally there should be 24 inches (61 cm) between the raised floor system and structural deck, but a minimum of 18" should be provided.
	Raised flooring clearance between bottom of tile and top of treated real floor should be minimum 1 ft. (300 mm)
	False Ceiling board should have insulation
	The false ceiling board panel size should be 2 ft. * 2 Ft. panel
	The floor tiles in the raised floor should be 24 inch x 24 inch (61 cm x 61 cm)
	Space between false Ceiling board and Actual Top Roof should be minimum 3 ft.
	The tiles should be constructed of, or encased in, galvanized or painted steel or cast aluminum tiles.
	Carpeted tiles should not be used as these tiles harbor contaminants that are agitated every time the tile is walked on.
	For supply air in server Hall perforated grill of 16 gauge SS 304 sheet are being used. The perforated hole size is 8.73 mm and perforation density is 256 holes per square feet. The free area is less than 16.5% of the total area of the supply grill. The pressure drop thru supply air perforated grill is less than 21 Pa.
	No waxes or insulated coating should be used on tile surface , as these can form barrier that interfaces with the static dissipative properties of the floor
	The exposed cut edges of all cut outs for

	cable or air passage should be capped with protective trim
	Load capacity of the structural floor must be taken into account The raised floor system should be in compliance with the specifications laid out in the National Fire Protection Associations Document, NFPA 75.
Easy Access Mechanism for Customer Hardware	Adequate access for hardware from loading dock, freight elevator or appropriate entrance.
Enough Spacing for easy movement, operation of rack and avoidance of interference	Provide adequate space to allow for unobstructed passage, and to allow replacement of cabinets within a string without interference to neighboring units
	Design the operator traffic patterns to minimize the possibility of accidental contact with sensitive components.
Fire Detection & Suppression	Combustible materials should be avoided in the data center, only the minimum supplies absolutely necessary to the functioning of the Hall should be kept within its perimeter.
	Penetrations in parameter can expose the data center to influences from more loosely controlled areas.
	To help minimize the damaged caused by fire, detailed disaster response plans should be created. An automatic detection and extinguishing system shall be installed in space below the raised floor.
	Fire detection system must be interfaced with Security access systems to take preventive actions immediately.

	The server Hall should be separated from other occupancies within the building by fire-resistant rated walls, floor, and ceiling constructed of noncombustible materials.
Humidity , Ventilation, Air Conditioning (HVAC)	If air conditioning used is chiller type then chillers should be located in the basement or in a separate wing of main building. If direct expansion air conditioning is used then condensers should be located outside the building.
	Criteria in determination of the air conditioner placement should be its effectiveness in addressing the current planned load, and their adaptability to change in configuration.
	Consider the air flow patterns of the hardware being installed. Take care units are not laid out in a fashion that exhausts air from one unit into the intake of the next.
	Optimal temperature range for system reliability and operator comfort levels should be between 21 deg C to 23 deg C
	For safe data processing operations ambient relative humidity should be between 45% and 50% RH.
	Server Hall require precision air conditioning with a sensitivity of +/- 1.60 C and +/- 3% RH or closer.
	Ideally a Server Hall cooling system should have sensible ratio 1: 1, most precision systems have between 85% to 100% sensible cooling.

No Contamination	To deliver the air to the areas in need of air conditioning, the sub floor pressure differential should be maintained at an optimal level of 1.25 mm wc. Server Hall should be isolated from contaminants. Inside server Hall airborne dusts, gases and vapors should be maintained in the defined limits to minimize their potential impact on the hardware
Water Proofing	Server Hall should be free from water ingress
	Avoid locating the hardware areas beneath kitchens workshops or other area that have a high potential for leaks
Power Specifications	There must be enough power redundancy to avoid any power failure at any point of time
	Availability of 3 phase , 4 wire power system
	Availability of Diesel Generator with AMF Panel and AMF panel controller between main power and DG set
	UPS should be installed to carry 100% of computer hardware load for a period at least long enough to transfer the equipment to an alternate utility feed.
	UPS should carry 150% of the load to accommodate fault overload conditions
	UPS system should be remotely monitorable and software configurable on SNMP standards
	UPS system must operate under environmental conditions
	The noise generated by UPS system shall not exceed 65 DBA measured at 1 meter away from the UPS cabinet.

	UPS system manufacture should be ISO 9001 certified and UPS shall be manufactured to standards of IEC, EN, TU/GS (European), VDE (German)
	All metallic objects that on the premises that enclosed conductors or that are likely to be energized by electric currents should be effectively grounded.
	The connections to earth or the electrode system need to have resistance in the range of 1 to 25 ohm range for computer center installation.
	Recommended levels for equipment grounding conductors should have very low impedance level less than 0.25 ohm.
	Provisioning should be there to earth UPS systems, Power distribution units, AC units etc.
	There should be enough space between data and power cabling and there should not be any cross wiring of the two, in order to avoid any interference, or corruption of data.
Proximity of Support Equipment	Design the raised floor computer spaces in the convenient proximity to the support equipment (UPS, chiller, etc.)
Physical Security of Server Hall	Secure points should be provided at to the entry to the computer Hall by means of biometric readers, proximity card system etc.
	The access card system should be working on windows based software and should be configurable to access any particular room, particular day and for particular time zone.

	Access to the server Hall should be strictly regulated, and limited to only those personnel necessary for its operation.
	There should not be other tenants near server Hall.
Potential for Future Expansion	To take care of ever increasing customer requirements for server rack space, the IDC Hall should be in an area and should be designed in such a way that offers the potential for future expansion.
Data Cabling & Internet Connectivity	There should be availability of Gigabit LAN and cabling should be CAT6 to take care of Gigabit speeds
	There should be 100% redundancy in data Cabling
	Racks for collocation of servers as well as telco equipment should be there
	IDC should have redundant Optical Fiber connectivity directly with the Telco exchange
	IDC should have redundant connections to Internet to avoid any single point of failure and to offer 100% uptime commitments. IDC should have single Hop access to A Tier 1 ISP
	IDC should be accessible throughout the country and the world through multiple high speed low latency means
Tape Backup	Successful bidder Should provide backup services alongwith Backup Media as required as part of the backup strategy.

3.3 Hardware Specifications

The hardware required for the setting up of the PPM-FAS Projects at Primary/Disaster Recovery Data Center is listed below. Successful bidder is required to provide all the Dedicated Hardware's/ Servers on Operating Lease Model where HUDA need not to invest any capital expenditure on the same. The bidder should procure all the HUDA dedicated hardware servers as well as the all the softwares mentioned in the RFP in the name of HUDA only. Bidder shall provide such software licenses copy to HUDA along with the proof of purchase of hardware in HUDA's name.

3.3.1 Web/Application Server; QTY: 2 (primary) & Mailing Servers; Qty 1(primary)

Config:1 CPU/ Dual Core 3.0 GHz / 8 GB RAM / 73 GB X 2 / 2 X Gigabit Ethernet ports/ RPS & Fans	
CPU	XEON Dual core server Capable of Supporting minimum TWO CPUs – Clock speed – 3.0 Ghz or above
	One CPU populated
FSB	1066 MHz or higher FSB
Cache	Cache – 4 MB Per CPU
Chipset	Intel 5000P chipset
MEMORY	Memory – 8 GB FB ECC 667 Mhz RAM interleaved memory expandable to 16GB
PCI slots	Minimum 1 PCI-X 64/133 Mhz slots and 1 x PCI Express;
RAID controller	Dual channel SAS RAID controller supporting RAID 1
Disks	Two 73 GB HOT PLUG SAS , 10K disks
Power supply/ FANS	Hot plug redundant power supply and redundant fans.
Pre failure warranty / Alert	Pre failure alerts on CPU / Hard drive and memory
NIC	Dual Integrated 10/100/1000 Ethernet ports
SAN HBA Card	1 No. for all Servers
Other Ports	ONE serial, 2 USB port , keyboard, mouse, and one graphics port

DVD ROM drive	Slim line 24X DVD ROM drive
SERVER FORM FACTOR	Maximum 1U rack optimized
Manageability	Proactive notification of actual or impending fault
	Server health monitoring
	Should have own dedicated network port for remote management. .
	Remote management console enabling firmware updates, and remote server diagnostics
Certifications	ACPI 1.0B Compliant PCI 2.2 Compliant
	Microsoft Windows 2003 Enterprise Edition

3.3.2 Database Server; QTY: 2 (primary)

Config: 2 CPU/ Xeon Dual Core 3 Ghz or Above/ 16 GB RAM / 73 GB X 2 / 2 X Gigabit Ethernet ports/ RPS & Fans / Dual port HBA (Primary site only)	
CPU	XEON MP Dual Core 7020 server supporting four Intel CPU
	Two CPU populated
	Clock speed– 3 GHz or above with 667 MHz FSB (should support Hyper Threading)
Cache MEMORY	Cache – 2 x 1 MB L2 Cache Per CPU Memory - 16 GB ECC DDR2 RAM
	Memory scalability – 32 GB DDR RAM, 400 MHz speed , the memory support redundant bit steering and support memory mirroring.
PCI slots	PCI slots - Six PCI-X slots running at 266 MHz (At least four should be hot Swap)
RAID controller	Integrated Serial Attach SCSI Dual channel RAID controller supporting RAID 1
Disks	Two 73 GB HOT PLUG , 10K disks for Operating system internal to each server

Power supply/ FANS	Hot plug redundant power supply and redundant fans
Pre failure warranty	Pre failure warranty on CPU / Hard drive and memory
Ports	ONE serial, 2 USB port ,one remote management port, keyboard, mouse, and one graphics port
Manageability	Proactive notification of actual or impending fault
	Server health monitoring
	Should have own dedicated port for remote management.
	Remote management console enabling firmware updates, and remote server diagnostics
Disk	Four internal hot plug disk support
NIC	10/100/1000 Ethernet ports – 2 Nos, 10/100 Ethernet port - 1 No (Heart Beat)
CD	Slim line 24X DVD drive
FORM FACTOR	Should be rack mountable, less than or equal to 4 U in height
VRAM	8MB Video memory
Certifications	ACPI 2.0 Compliant
	PCI 2.2 Compliant
	Microsoft Windows Windows 2003 Enterprise & SQL 2005 Enterprise with clustering suite
SAN HBA Cards	Dual Host Bus Adaptors (HBAs- OEM/ Qlogic)

3.3.3 Staging Server; QTY: 1 (primary)

Config:1 CPU/ Dual Core 2.0 GHz / 4GB RAM / 73 GB X 3 / 2 X Gigabit Ethernet ports/ RPS & Fans	
CPU	XEON Dual core server Capable of Supporting minimum TWO CPUs – Clock speed – 2.0 Ghz or above
	One CPU populated
FSB	1066 MHz or higher FSB
Cache	Cache – 4 MB Per CPU
Chipset	Intel 5000P chipset
MEMORY	Memory – 4 GB FB ECC 667 Mhz RAM interleaved memory

	expandable to 16GB
PCI slots	Minimum 1 PCI-X 64/133 Mhz slots and 1 x PCI Express;
RAID controller	Dual channel SAS RAID controller supporting RAID 1
Disks	Three 73 GB HOT PLUG SAS , 10K disks
Power supply/ FANS	Hot plug redundant power supply and redundant fans.
Pre failure warranty / Alert	Pre failure alerts on CPU / Hard drive and memory
NIC	Dual Integrated 10/100/1000 Ethernet ports
Other Ports	ONE serial, 2 USB port , keyboard, mouse, and one graphics port
DVD ROM drive	Slim line 24X DVD ROM drive
SERVER FORM FACTOR	Maximum 1U rack optimized
Manageability	Proactive notification of actual or impending fault
	Server health monitoring
	Should have own dedicated network port for remote management. .
	Remote management console enabling firmware updates, and remote server diagnostics
Certifications	ACPI 1.0B Compliant
	PCI 2.2 Compliant
	Microsoft Windows 2003 Enterprise Edition

3.3.4 Backup Server 1(Primary) -Backup server with SAN HBA

Config:1 CPU/ Dual Core 2.0 GHz / 4GB RAM / 73 GB X 2 / 2 X Gigabit Ethernet ports/ RPS & Fans	
CPU	XEON Dual core server Capable of Supporting minimum TWO CPUs – Clock speed – 2.0 Ghz or above
	One CPU populated
FSB	1066 MHz or higher FSB
Cache	Cache – 4 MB Per CPU

Chipset	Intel 5000P chipset
MEMORY	Memory – 4 GB FB ECC 667 Mhz RAM interleaved memory expandable to 16GB
PCI slots	Minimum 1 PCI-X 64/133 Mhz slots and 1 x PCI Express;
RAID controller	Dual channel SAS RAID controller supporting RAID 1
Disks	Two 73 GB HOT PLUG SAS , 10K disks
Power supply/ FANS	Hot plug redundant power supply and redundant fans.
Pre failure warranty / Alert	Pre failure alerts on CPU / Hard drive and memory
NIC	Dual Integrated 10/100/1000 Ethernet ports
Other Ports	ONE serial, 2 USB port , keyboard, mouse, and one graphics port
DVD ROM drive	Slim line 24X DVD ROM drive
SERVER FORM FACTOR	Maximum 1U rack optimized
Manageability	Proactive notification of actual or impending fault
	Server health monitoring
	Should have own dedicated network port for remote management. .
	Remote management console enabling firmware updates, and remote server diagnostics
Certifications	ACPI 1.0B Compliant
	PCI 2.2 Compliant
	Microsoft Windows 2003 Enterprise Edition

3.4 Storage Area Network - Specifications

- (i) Current Requirement: 1TB of USABLE SAN Space connected with Servers and using Dual Host Bus Adaptors and connected with fibre switch.

Type of storage system	Fibre channel based storage system that can be deployed in a fibre channel storage area network.
Capacity required	1 TB usable (For Log files : 140 GB usable space

	implemented with RAID 1, For Data: 860 GB usable space implemented with RAID 10) using 4Gbps 73 GB HDD
Architecture	End-to-end 4 Gbps fibre channel architecture with no single points failure with redundant hot pluggable components
Scalability	Support for Data in-place upgrade to 50 HDDs in future.
RAID levels supported	0, 1, 3, 5, 1/0 and support for mixing RAID levels
Supported operating systems	Windows Server 2003
Other features	Ability to create logical point-in-time copies (snapshots) and full volume copies of production volumes.

3.5 Tape Drive Library Specifications –

- Rack Mountable Tape Drive Library, Native switched fabric 4 Gbps Fibre channel drive
- Ultrium 3 library with native physical data capacities up to 8 TB with atleast 20 cartridge slots
- Native drive data rate of up to 80 MB/sec
- Remote management unit,
- **SAN Switch**
- 16 port SAN switch with 16 ports activated

3.6 System Software Specifications

- (i) The software required for the setting up of the PPM-FAS Projects Data Center is listed below.

SP is required to provide all the system softwares on Operating lease Model where HUDA need not to invest any capital expenditure on the same. The bidder should procure all the HUDA dedicated hardware servers as well as all the softwares mentioned below in the name of HUDA only. Bidder shall provide such software licenses copy to HUDA.

Sl.No	Product Name	Quantity
1	Microsoft Windows Server 2003 R2 Enterprise	6
2	Microsoft SQL Server 2005 Enterprise Edition (Processor Based License)	4
3	Windows Server CAL's	130
4	Windows Server External Connector	2
5	Microsoft Exchange Server Latest Enterprise Edition with 130CAL's	1

3.7 Data Backup services- Specifications

- (i) All Servers should be back up on Daily Incremental & Weekly Full Basis in Offline Shared Back Infrastructure in automated fashion. Back Up should be taken on DLT or LTO's.
- (ii) Current Sizing of Back UP Transfer per month consolidated for all servers: 5TB per month.

A. General

- Backup software should support various platforms like Windows NT 4.0, Windows 2000/2003/2003R2, Sun Solaris, AIX, Tru64 and HP-Unix.
- Backup client software should support various platforms like Solaris Sparc, AIX, HP Unix, SCO Unixware, SCO Openserver, SGI, TRU64, Windows NT 4.0, Windows 2000/2003/2003R2, Windows 95/98, Turbo Linux, Red Hat, SUSE, Caldera, , Netware, etc.
- Backup software should allow the entire back up process in automated fashion where in normal circumstances no human intervention required.

3.8 IT Management Services - Specifications

- (i) Service Provider will provide all the necessary OS Management, Database Administration, Security Administration, Storage Administration, High Availability Administration, Data Replication Administration and Network Administration support on unlimited basis.

- (ii) The vendor should provide monitoring services for the health of the hardware / applications kept at the Vendor's Data Centre. In case hardware kept at the Vendor's Data Centre developing any ailment there should be a method of detecting it immediately and informing to HUDA personnel.
- (iii) SP will have to provide detail scope of work which SP will undertake for providing the above mentioned administration services on an uninterrupted 24x7 basis. The vendor must mention the skill set matrix available at its Data Centre for providing these services.
- (iv) The SP will provide the Secured Firewall facility for the HUDA infrastructure.

3.9 System Integration Services - Specifications

SP to provide System Integration services during the Installation and commissioning phase of HUDA's application at the Primary Data Center & DR. The vendor should be able to provide the requisite expertise in terms of manpower and readiness in terms of resources to make the application operational to the satisfaction of HUDA. SP's Roles in this to install and commission all services but not the PPM-FAS application which shall be undertaken by the application provider.

3.10 Messaging Services

The vendor should implement & maintain 300 Mail Boxes on Dedicated/shared HUDA Messaging Infrastructure with Exchange Server. The bidder shall provide the mail system management services should include (but not limited to following):

- Administering Mail servers/services
- Creation/Deletion/movement of Mail boxes
- Monitoring mail Queues/connectors and System / Application Logs
- Backup and restoration on request of mail server/mailboxes
- Upgrade of mail server as required
- Preventing /Monitoring/Disinfecting Virus
- Anti-virus, anti-spam and anti-malware services for both mail box server as well as gateway server

- Monitoring directory services
- Maintaining groups & distribution lists

3.11 DNS & NMS Services

SP to provide all necessary DNS & NMS Services to enable HUDA's Application Internet enabled. The bidder shall provide a list of reports for Server and Network Management for entire network.

3.12 Technical Specification of Equipment for end to end connectivity

3.12.1 Router for offices at DC, DR, Panchkula and Gurgaon – Quantity 7 nos.

a) General Architecture:

- (i) High speed CPU
- (ii) Rack mountable configuration
- (iii) LED for all modules to indicate status

b) Router Port Requirements:

- | | | |
|-------|-------------------------|-----------------|
| (i) | 10/100 Mbps Ethernet | 2 Nos |
| (ii) | WAN Port upto 2 Mbps | 1 No in each |
| (iii) | Packet Forwarding Speed | Minimum 60 Kpps |
| (iv) | ISDN Port | 1 |

c) Router Features:

- (i) Support for router redundancy protocol
- (ii) Router software must have on line reconfiguration facilities
- (iii) High MTBF
- (iv) Capable of booting from a remote system where router image is present
- (v) Support for standard routing protocols like OSPF, RIP & BGP
- (vi) Flash min 128 MB
- (vii) Minimum of 256 MB RAM
- (viii) Configurational changes should be done without rebooting the router or modules
- (ix) Should have stateful firewall functionality and IDS.

The offered router should have the following software features:

At least the following standard IP routing protocols should be available:

- (i) Static
- (ii) RIP, OSPF
- (iii) OSPF Over Demand Circuits
- (iv) Policy Routing
- (v) IP Version 6 Support
- (vi) Support for IPSec & 3DES through a simple software upgrade as and when required.

The following WAN protocols should be available:

- (i) PPP
- (ii) Multilink PPP
- (iii) Compression-Payload and TCP/IP Header

The following Multicasting and Quality of Service (QoS) should be available:

- (i) Resource Reservation Protocol (RSVP) as per RFP 2205 and Internet Group Management Protocol Version 2 (IGMPv2) as per RFC 2236.
- (ii) Support for IP Precedence, Committed Access Rate (CAR),
- (iii) DiffServ QoS
- (iv) The router shall support Application recognition and it should be possible to frame policies based on the applications.

d) Security Features:

- (i) Should support DES / 3 DES / AES
- (ii) PPP PAP or CHAP support.
- (iii) VPN support
- (iv) Time based Access Lists
- (v) Multiple Privilege Levels.

- (vi) Support for RADIUS or AAA.

e) Power:

230 V AC, 50 Hz

3.13 Technical Specification of RACK

- (i) Rack Size : 25 U
- (ii) Width*Depth : 600mm * 1000mm
- (iii) Perforated Front and Back door
- (iv) Power and network cable management
- (v) Redundant Power supply to Servers
- (vi) Foldable TFT Monitor
- (vii) Proper Ventilated and minimum two fans
- (viii) Digital 8 port KVM switch with USB port cables

Section-4

Eligibility Criteria

4 Eligibility Criteria

The Bidder: Bidder should have the capability to implement projects in terms of Datacenter facilities, industry experience, requisite manpower of required qualification and experience, project management skills and quality/level of work. Bidder should have a proven record in implementing heterogeneous system integration projects, WAN connectivity and Data center/Network center projects. The bidder should have reasonable long-standing relationship with active and passive component manufacturer, which they are proposing and these should have been deployed by the bidder in Networks elsewhere. Bidder should be willing to permit HARTRON and HUDA or its representatives to visit the site of above implementation and should supply end user acceptance certificates.

4.1 Bidders general qualification

- (i) This RFP is open to all firms/companies both from within and outside India, who are eligible to do business in India under relevant Indian laws as in force at the time of bidding.
- (ii) Firm/company declared by GoH to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
- (iii) Breach of general or specific instructions for bidding, general and special conditions of contract with GoH may attract a proceeding to declare a firm/company ineligible for a certain period or certain number of consecutive tender calls.

4.2 Minimum eligibility criteria

The essential prequalification criteria to participate in the Bid are:-

- (i) The bidding firm/company must be a registered company under the Companies Act 1956.
- (ii) The Bidder should have been in operation for a period of at least 3 years as of 30.9.2006, as evidenced by the Certificate of Incorporation and Certificate of Commencement of Business issued by the Registrar of Companies;
- (iii) The Bidder should have had an average annual turnover of Rs.20 Crore during the last two financial years in Network commissioning

and Data Center operations , as evidenced by the audited accounts of the company/division (or companies).

- (iv) The Bidder should have had prior experience in providing Data Centre Services and commissioning network services in e-Governance/ PSU's Banks, & Commercial IT-Telecom & BFSI Segment. Need to present at least 5 Client Referenced where Bidder provided Data Centre Facility & associated services with minimum 50 Lacs of order value.
- (v) Bidder's Data Center facility should be certified with BS7799 / ISO 27001. Companies who are currently in the process of getting the above certification are also eligible to bid provided they shall be able to get the same before implementation of the project.
- (vi) The bidding firm/company should be in sound financial position as judged by the Evaluation Committee for this purpose. The net worth of the firm/company should be Rs.50 crores.
- (vii) The bidding firm/company should have at least 100 nos. of qualified manpower on its roll for IT and networking related services and it should have experience in successfully executing at least 2 projects on Wide Area Networks on MPLS/MLLN VPN.
- (viii) The bidding firm/company must comprise a single company and consortiums are not permitted to bid. However, the bidder may have a consortium with the bandwidth provider for the purpose of having bandwidth only to be provided under this project.
- (ix) The bidding firm/company must be authorized to bid on behalf of the manufacturer and should submit an upto date valid authorization letter till the currency of the contract from original manufacturers for such equipment and its accessories, which are not manufactured by them and supplied under this RFP.
- (x) The bidding firm/company should have support centers in Haryana/Chandigarh/Delhi else should submit an undertaking to set up the same with in one month of after the award of contract.
- (xi) The bidding company/firm must certify that the Technology quoted is State of the art and latest.

Documentary evidence in support of all the above mentioned eligibility criteria should be furnished with pre qualification bid.

Section- 5

Bidding Process

5 Bidding Process

5.1 Advice to the bidders

Bidders are advised to study this RFP document carefully before participating. It shall be deemed that submission of Bid by the bidder have been done after their careful study and examination of the RFP document with full understanding to its implications.

5.2 Sale of bid document

- (i) A complete set of this RFP documents can be purchased from Haryana State Electronics Development Corporation, S.C.O. 111-113, Sector 17-B, Chandigarh – 160017 by the bidders in person against a non-refundable amount of Rs.5000/- through Demand Draft/Bankers Pay Order from a scheduled bank, drawn in favour of “Managing Director, HARTRON”, payable at Chandigarh.
- (ii) Bids not submitted in prescribed form will be rejected.
- (iii) RFP document will be sold from 9.00 am to 5.00 pm on all working days starting from 14.12.2006 to 2.1.2007.

5.3 Validity of the bid

The bid should be valid for 120 days from the opening of the Commercial bid OR 6 Months from the last date of submission of bid, whichever is later.

5.4 Transferability of the RFP document

This RFP document is non-transferable.

5.5 Misplacement of the RFP document

HARTRON shall not be responsible for any postal delay about non-receipt / non-delivery of the documents.

5.6 Pre bid conference , place, time and date:

Haryana State Electronics Development Corporation Limited,
S.C.O. 111-113, Sector 17B,
Chandigarh – 160017.
At 2.30 P.M on 22.12.06

5.7 Address at which the bids are to be submitted:

Haryana State Electronics Development Corporation Limited,
S.C.O. 111-113, Sector 17B,
Chandigarh – 160017

Phone - (0172) – 2704922, 2710743, Fax - 2705529

5.8 Last date and time for receipt of bid :

Upto 2.30 pm on 4.1.2007

5.9 Place, time and date of opening of pre-qualification bid:

Haryana State Electronics Development Corporation Limited,

S.C.O. 111-113, Sector 17B,

Chandigarh – 160017

At 3.30 pm on 4.1.2007

5.10 Earnest money deposit (EMD)

All bids must be accompanied by an earnest money of Rs. 10,00,000/- (Rs. Ten Lacs only) in the form of Demand draft from a scheduled bank in India and shall be valid for at least six months, in favour of 'HARTRON' payable at Chandigarh. No interest shall be paid on the earnest money under any circumstances.

5.11 Pre-bid conference

- (i) A pre-bid conference (PBC) after the sale of the RFP document shall be held as per clause no.5.6. In this PBC, Tenderer would address the clarifications sought by the bidders with regard to the RFP document and the project. The bidders would be required to submit their queries to the tenderer in writing at least 5 (five) days prior to the PBC. Queries not submitted within this deadline may not be taken up at the PBC.
- (ii) Bidders that have purchased the RFP document are welcome to attend the PBC, even if they do not have any specific queries. These bidders would be required to register for the PBC at HARTRON. No clarifications shall be issued after the PBC.
- (iii) Tenderer will entertain queries of and clarifications sought by only those companies who have purchased this RFP document.
- (iv) Tenderer reserves the right not to respond to any/all queries raised or clarifications sought if, in their opinion and at their sole discretion, they consider that it would be inappropriate to do so or do not find any merit in it. The minutes of the PBC shall be circulated by tenderer to all those companies who have purchased this RFP document. Nothing in clause no. 5.11 above shall be

taken or read as compelling or requiring tenderer to respond to any question or to provide any clarification. No extension to any deadline referred to in this document will be granted on the basis or grounds that tenderer should respond to any queries to provide any clarification.

5.12 Procedure for Submission of the Bid

Sealed offers prepared in accordance with the procedures enumerated below should be submitted to HARTRON, Chandigarh on or before the last date and time 4.1.2007 upto 2:30 p.m. The bidder should submit their bids in three parts i.e. Pre-qualification Bid, Technical Bid and Commercial Bid. All bids sealed individually should be kept in a separate sealed cover super scribed with separate titles as specified below:-

- a) "Pre-qualification Bid for HUDA Wide Area Network."
- b) "Technical Bid for HUDA Wide Area Network."
- c) "Commercial Bid for HUDA Wide Area Network."
- d) The bidders should submit two copies each of Pre-qualification, technical and commercial bids, with the title mentioned on each as "Original Copy" and "First Copy". Both the copies should be hardbound form with all pages numbered. The language of the bid and all documents related to the bid must be written in English language. If any document is in language other than English, then the bidder is required to enclose a self attested translated English version of such documents.
- e) The bidder shall also submit the soft copy of Pre-qualification, technical and commercial bids on separate CDs/pen drive in Microsoft Word or pdf format duly packed in the respective envelopes.
- f) All the documents viz. Pre-qualification Bid, Technical Bid and Commercial Bid prepared as above are to be kept in a single sealed cover super scribed with RFP Number, Due Date, Item and the wording "Do not Open Before 1530 hrs on 4.1.2007"
- g) **Late bids:** The cover should also indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "Late" by the evaluation committee.

- h) No bid will be considered unless and until each page of the bid document is duly signed by the authorized signatory.
- i) Prices should not be indicated in the Pre-qualification or Technical Bid.
- j) All the columns of the quotation form (Proforma 8,8A, 9 and 11) shall be duly, properly and exhaustively filled in. The rates and units shall not be overwritten. Rates shall be both in the figures and words.
- k) It is mandatory for all bidders to quote F.O.R. destination prices inclusive of all taxes i.e. excise duty, freight, sales tax, octroi, insurance, customs, service tax, etc. Any change in excise duty, custom duty and service tax or any other levies/taxes announced by the Government of India during the currency of the contract, then the same shall be applicable on presentation of the proof during currency of the contract. No change in other duties including sales tax, custom duty effect due to devaluation of rupees shall be entertained.
- l) Price Bids determined to be substantially responsive will be checked by the evaluation committee for any errors. If there is a discrepancy between the quoted rate in figures and the quoted rate in words, the rate in words will take precedence. Arithmetic errors will be rectified on the following basis. If there is a discrepancy between the unit rate and the total cost that is obtained by multiplying the unit rate and quantity, the unit rate multiplied by quantity shall prevail and the total cost will be corrected unless in the opinion of the evaluation committee there is an obvious misplacement of the decimal point in the unit rate, in which case the total cost as quoted will govern and the unit rate corrected. If there is a discrepancy between the total bid amount and the sum of various costs, the sum of the various costs shall prevail and the total bid amount will be corrected.
- m) The amount stated in the Form of Financial Bid will be adjusted by the evaluation committee in accordance with the above-mentioned point for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the EMD shall be forfeited.
- n) Any omission in filling the columns of “units” and “rate” or pertaining

to the Taxes/levies, service tax as applicable etc., shall deemed to be treated as inclusive in the total project cost.

- o) All corrections must be duly signed by the Bidder.

5.13 Documents comprising the bids

The bids prepared by the bidders according to the procedure mentioned at clause no. 5.12 should comprise of the following:-

5.13.1 Original bid proposal shall consist of the following:

- (i) Sealed envelope containing the draft of Earnest Money as mentioned at clause no. 5.10.
- (ii) The RFP document in original duly signed on each page acknowledging the terms of RFP.
- (iii) Sealed envelope containing the Pre-qualification Bid.
- (iv) Sealed envelope containing the Technical Bid.
- (v) Sealed envelope containing the Commercial Bid.
- (vi) Sealed envelope containing the Commercial Bid for Wireless.

5.13.2 First copy of bid proposal shall consist of the following:

- (i) Sealed envelope containing the Pre-qualification Bid.
- (ii) Sealed envelope containing the Technical Bid.
- (iii) Sealed envelope containing the Commercial Bid.
- (iv) Sealed envelope containing the Commercial Bid for Wireless.

5.13.3 Pre-qualification bid shall consist of following :-

- (i) Bid proposal sheet duly filled in, signed and complete in all respects. (Proforma 1).
- (ii) Particulars of the Bidder as per proforma (Proforma 2).
- (iii) Copy of audited balance sheets for the last three financial years.
- (iv) List of 30 engineers on its roll at the time of bidding.
- (v) Attested photocopies of documents to establish eligibility in terms of each eligibility criteria as mentioned at Section-4 of this document.
- (vi) Attested Photo copies of completion certificate and award of order of all the projects handled, along-with the contact details of the clients, which includes Name of concern,

- address, name of contact person, designation, phone number(s), fax, mobile number, e-mail address(s), etc.
- (vii) Copy of the agreement signed between the bidder and the original manufacturer for providing the technical support during the implementation, commissioning and project management period for such components and their accessories supplied under the project.
 - (viii) Complete details such as address, contact person/phone, fax, e-mail of branch offices as well as support centers in Haryana/Chandigarh/Delhi along with proof of after sale service facilities at these centers, in case such facilities are not available, then an undertaking to this effect as specified in clause no.(xiv) of 4.2 of this document.
 - (ix) Manufacturers warranty as per Proforma 3.
 - (x) Indemnification from proprietary & patent rights as per clause 5.29 & 5.30

5.13.4 Technical bid shall consist of following

- (i) Technical design for the proposed network based as per the technical specifications mentioned at Section-3. The evaluation committee reserves the right to make changes, if any, in the design of project.
- (ii) Bidder support methodology for fallback and retrieval of the network, systems deployed etc.
- (iii) The bidder has to give comprehensive plan detailing project schedule, team structure, implementation methodology, network design, training details, project and facilities management of the project, etc. in technical bid and shall give an undertaking that the proposed network to be installed and commission shall be complete in all respect adhering to the requirements of this RFP. (Proforma 4)
- (iv) The bidders are required to submit with their offers, detailed technical literature of the systems offered to enable a clear understanding of various technical

aspects.

- (v) Detailed document on the proposed plan by the Bidder for the security and the network management system (both hardware and software), firewall, email, communications, etc. specifying the protocol design, reports, alarms and management functions available.
- (vi) Bidder shall specify the brand name, make and technical specification of all the equipment and accessories quoted for this project (Proforma 7)
- (vii) An undertaking from the bidder to ensure the compliance with existing Govt. of India policies/regulations applicable to such networks. (Proforma 4).
- (viii) Acceptance test plans
- (ix) An undertaking that after the expiry of the facility management period, the bidder will handover the total system in running condition in accordance to the clause no.6.18, so that the same will become the property of the HUDA (Proforma 4).
- (x) An undertaking from the bidder that he shall accordingly train the manpower of HUDA as per the clause no. 4 of Section-2.
- (xi) Technical Deviation Proforma-10.

5.13.5 Commercial bid shall consist of the following

- (i) Bid prices duly filled, signed and complete as per the price schedule on the prescribed quotation form (Proforma 8 and 9).
- (ii) The bidder can quote, separately, for any other item, which the bidder may think is essential or may be required while executing the project, which is not included in the Section-3.
- (iii) The bidder shall also quote for the software along with its number of licenses along with its prices, which the bidder may think is essential for the execution of the project and which is not included in the Section-3.

- (iv) Bidders shall quote year-wise annual maintenance contract (AMC) charges for two years with spares for taking up maintenance of all such equipments supplied under this project after the expiry of facility/project management period/warranty period (Proforma-4).

5.14 Opening of bids and Procedure of evaluation

- (i) An evaluation committee so constituted by GoH will evaluate the bids i.e. Prequalification, technical and commercial. The Bids upon opening will be initially examined to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
- (ii) The bidder shall designate minimum one person to represent the bidder in its dealing with HARTRON in relation to the proposal submitted by the bidder. HARTRON will assume that the person(s) designated is authorized to perform all tasks, including, but not limited to, providing information and responding to enquiries on behalf of the company.
- (iii) Only Pre-qualification bid shall be opened on the day of opening of the bids at 3.30 p.m. on 04.01.07 (see clause no.5.9) in the presence of bidders' representatives. The bidders' representatives who are present shall sign a register evidencing their attendance.
- (iv) Technical bid will be opened for those bidders whose bids shall meet all the prequalification criteria unconditionally as specified in section 3 and clause no.5.13.3. The Place, date and time of the opening of the technical bid shall be notified separately.
- (v) Technical bid document shall be evaluated as per the following steps:
 - (a) **Preliminary Examination of Technical Bids:** The technical bids will be examined to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting the minimum levels of the performance or other criteria specified in the various sections of this RFP will be rejected and not included for further

consideration.

- (b) **Evaluation of Technical Bids:** A detailed evaluation of the bids shall be carried out in order to determine whether the bidders are qualified and whether the technical aspects are substantially responsive to the requirements set forth in this RFP. Further, the documentation furnished by the bidder will be examined to see whether the qualifications and specific requirements mentioned in this document are fulfilled.
- (c) Tenderer may conduct clarification meetings with each or any Bidder to discuss any matters, technical or otherwise.
- (d) Any effort by the bidder to influence the Tenderer in the process of evaluation of technical Bids, bid comparison or the Tenderer's decisions on acceptance or rejection of bids may result in rejection of the bidder's bid.
- (e) The bidders will also be required to make a detailed presentation covering various aspects on technical parameters defined in this RFP such as network design, upgrade-ability features, services supports, maintainability, implementation schedule, NMS, etc.
- (f) Tenderer may also ask the bidders to arrange visits of officers to the network sites already established and claimed in the bid.
- (vi) Further, the scope of the evaluation committee also covers taking of any decision with regard to this RFP, execution/ implementation of the project including management period.
- (vii) No further discussion/interface will be held with the bidder whose bid has been technically disqualified/rejected.
- (viii) Financial bids of those bidders who satisfy the parameters laid out in the technical bid will only be opened. The place, date and time for the opening of the financial bids shall be announced separately.
- (ix) The bidder's names, the Bid Prices, the total amount of each bid, and such other details as the Tendering Authority may consider appropriate, will be announced and recorded by the Tenderer at the opening.
- (x) Tenderer shall draw up a matrix covering the following before

deciding the successful bidder:

- a) Financial status of the company
 - b) Compliance to RFP requirements
 - c) Experience in implementation of similar projects
 - d) Experience in management of similar projects
 - e) Experience in Datacenter facilities in terms of customer base of its data centre services in India and abroad.
 - f) Availability of help Desk and support operations with 24x7 operations
 - g) Availability of the bidder for provisioning and maintaining the MPLS/MLLN/leased lines.
 - h) Project Implementation plan and schedule
 - i) NMS integration plan
 - j) Security features provided
 - k) Openness of the system for meeting future requirements
 - l) Local support infrastructure
 - m) Management and maintenance plan including spares
- (xi) Bidder shall perform all the obligations specified in accordance with the terms and conditions laid down in this RFP. Though formats for Technical bid and Commercial bids are given separately, bidder shall add his remarks and comments under “any other relevant matter. Notwithstanding the fact that the RFP is descriptive, if the bidder feels that the RFP is deficient in anyway in defining scope of supply, scope of services etc for successful implementation and facility management of the project for two years, bidder should include the same under “any other” with explanation in Technical Bid and price under relevant head in commercial bid, if there is any price implication for the inclusion, found essential for successful project implementation. Thus, Proposals received will be considered as an offer to satisfy the requirements of HUDA as described in this Request for Proposal and bidder shall be obligated to implement the project as per scope of work finalized by Tenderer.
- (xii) All details provided by the Bidder should be specific to the

requirements specified in this RFP. Detailed clarification may be provided by Bidder, if so desired by Tenderer. The Bidder shall specify the responsibilities of Tenderer, if any, other than already mentioned in the RFP, separately for the successful implementation of the project.

5.15 Criteria for rejection of bids

The bid(s) may be rejected if any one or more of the following conditions are not fulfilled:-

- (i) Bids not made in compliance with the procedure mentioned at clause no. 5.12.
- (ii) Failure on part of the bidder to provide appropriate information as required in the bid proposal or any additional information as requested by the Tenderer, including any supporting document.
- (iii) Incomplete or conditional bids - bids that do not fulfill all or any of the conditions as specified in this RFP.
- (iv) Bids without earnest money deposit (refer Clause no.5.10).
- (v) If found to have a record of poor performance such as abandoning works, not properly completing the contract, inordinately delaying completion, being involved in litigation or financial failures, etc.
- (vi) Failed to provide clarifications related thereto, when sought.
- (vii) Applicants who are found to canvass, influence or attempt to influence in any manner the qualification or selection process, including without limitation, by offering bribes or other illegal gratification, shall be disqualified from the process at any stage.
- (viii) Validity of the bid not as per the clause No. 5.3 shall be considered as non-responsive and would be disqualified.
- (ix) The submission of more than one bid under different names by one bidder - If same is found at any stage, all the bids by that bidder will be rejected.
- (x) Material inconsistencies in the information submitted.
- (xi) Misrepresentations in the bid proposal or any supporting documentation.
- (xii) Bid proposal received after the last date and time specified at clause no.5.8.

- (xiii) Bids found in unsealed cover, unsigned bids, bids signed by unauthorized person and unsigned corrections in the bids.
- (xiv) The bid shall contain no erasures or overwriting except as necessary to correct errors made by the bidder, in which case such corrections shall be authenticated by the person or persons signing the bid.
- (xv) All pages of the bid must be signed and sequentially numbered by the bidder.
- (xvi) The decision of evaluation committee in this regard shall be final and binding on the bidders.
- (xvii) Bids not submitted on the prescribed Proformas enclosed with this RFP.

5.16 Acceptance of the bid

- (i) The valid bids received will be evaluated by the Tenderer to ascertain the best, technical superior, commercially optimal bid in the interest of GoH.
- (ii) Tenderer do not bind itself to accept the lowest or any bid and reserves the right to:
 - a) reject any or all bids with/without any reason;
 - b) accept/prefer any bid without assigning any reason.
- (iii) Tenderer reserves the right to appoint any consultant or consultants to help Tenderer for evaluation of the bid.
- (iv) Tenderer reserves the right to remove any of the item(s)/service(s) mentioned in the document.

5.17 Cross checking

Tenderer reserves the right to contact and verify bidder's information, references and data submitted in the bid proposal without further reference to the bidder.

5.18 Absence of specifications

The absence of specifications details regarding any equipment to be supplied under this RFP implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of Tenderer. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.

5.19 Cost involved in tendering

The Bidder shall bear all costs associated with the preparation and submission of its bid, including the cost of presentation for the purposes of clarification of the bid, if so desired by the Tenderer. Tenderer will in no case be responsible or liable for those costs.

5.20 Amendment in the RFP document

The amendments in any of the terms and conditions including technical specifications of this RFP document will be notified in writing either through post or by fax or by email to all prospective bidders who have purchased the RFP document and will be binding on them.

5.21 Withdrawal of bid proposal

No bid proposal will be withdrawn subsequent to the deadline for the submission of bids. However, the bidder is allowed to modify or withdraw its submitted bid any time prior to the last date & time prescribed for submission of the bids, by giving a written intimation to Tenderer .

5.22 Right to negotiate

- (i) The evaluation committee reserves the right to negotiate with the bidders, if required. Final authority to take any decision in this regard lies with Tenderer .
- (ii) The list of successful bidders will be put up to the High Powered Purchase Committee of the Haryana State by Tenderer for final negotiation/decision with regard to the selection of the vendor as per the rules and procedures of GoH.
- (iii) Tenderer also reserves the right to chose part or whole of the technically acceptably bids at individual costs quoted in the commercial bids.

5.23 Contract agreement

A contract agreement will be signed between the successful bidder and HUDA directly.

5.24 Earnest money refund

- (i) The draft of earnest money to the bidder(s), who fail(s) to qualify for the technical bid, will be returned back by HARTRON to the authorized representative of the bidder against a proper receipt or

will be sent by the registered post at the mailing address of the bidder as specified in the bid within four weeks of opening of the pre-qualification bid.

- (ii) The draft of earnest money to the bidder(s), who fail(s) to qualify for the commercial bid, will be returned back by HARTRON to the authorized representative of the bidder against a proper receipt or will be sent by the registered post at the mailing address of the bidder as specified in the bid within eight weeks after completion of technical bid evaluation.
- (iii) The draft of earnest money to the bidder(s), who qualify(s) for the commercial bid, but do not get the order for the project will be returned back by HARTRON to the authorized representative of the bidder against a proper receipt or will be sent by the registered post at the mailing address of the bidder as specified in the bid within one month after signing of contract agreement between HUDA and the successful bidder.

5.25 Letter of intent and Performance Bank Guarantee

- (i) After Acceptance of a Bid Proposal by High Powered Purchase Committee of Haryana Government or by a committee as constituted by the tenderer (as the case may be), a letter of intent will be issued by the HARTRON to the successful Bidder.
- (ii) **Acceptance of the letter of intent:** The successful bidder shall accept the Letter of Intent within 10 (ten) days from the date of issue of the Letter of Intent by returning a duly signed copy to HARTRON.
- (iii) **Signing of contract :** The successful Bidder shall enter into the Contract Agreement with HUDA within 15 days of the acceptance of the Letter of Intent.
- (iv) **Performance bank guarantee:** While signing the Contract Agreement with HUDA, the successful bidder within 15 (fifteen) days of signing the Contract agreement shall furnish unconditional irrevocable Performance Bank Guarantee of 10% of the total value of the project cost from a Nationalized Bank in favour of "Managing Director, HARTRON" on the prescribed Format (as mentioned at

Annexure 1), which will be renewed every year by the bidder till the currency of the contract. The said bank Guarantee shall be renewed by the bidder 30 days before the expiry date. However, the last renewal shall be for the period of one year and six months. The said Performance Bank Guarantee be extendable by the HARTRON as per the requirement and shall be kept in full force and effect for the full term of the Contract Agreement including the facility/project management period. Further, the decision of the HARTRON with regard to the Performance Bank Guarantee shall be binding on the successful bidder. The guarantee amount for each year shall be calculated on the basis of balance amount of the total project cost under the contract agreement. The HARTRON may forfeit the Performance Bank Guarantee for any failure on part of successful bidder to complete its obligations under the Agreement. The Performance Guarantee shall be denominated in Indian Rupees and shall be in the form of a Bank Guarantee issued by a scheduled bank located in India.

- (v) **Award of Contract:** HARTRON shall formally award contract on the successful bidder upon the receipt of the Performance Bank Guarantee as mentioned at (iv) above.

5.26 Right to vary quantities at the time of award

Tenderer reserves the right to include only a part or whole or none (in the event of not getting a viable solution within the budget estimated) of the above as scope of the successful bidder. Tenderer shall also reserves the right to split up the total scope among two or more bidders who agree to meet such a scope, if found beneficial in the long run for HUDA. Hence the bid be prepared carefully considering the scope of each item individually and computing the total.

5.27 Right to accept any bid and to reject any or all bids

Tenderer reserves the right to accept any bid, and to annul the tender process and reject all or any bids at any time without assigning reason prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Tenderer's action.

5.28 Changes in technical specifications and price bid

- (i) Tenderer reserves the right to effect changes in the Technical Specifications after the pre bid discussions with the bidders. Any such change will be notified in writing to all those who have purchased this document.
- (ii) Once quoted, the bidder shall not make any subsequent price changes, whether resulting or arising out of any technical/commercial clarifications sought regarding the bid, even if any deviation or exclusion may be specifically stated in the bid. It is expected that all clarifications are sought for earlier and the bid requirements understood clearly by the bidder before submitting the bid. Such price changes shall render the bid liable for rejection. However, the Tenderer reserves the right to request the bidder/s to give revised commercial offer after technical evaluation, if the situation so warrants.

5.29 Proprietary rights

The bidder/supplier shall indemnify the Tenderer against all third party claims of infringement of patent, copyright, trademark and trade designs arising from use of the goods or any part thereof in India.

5.30 Patent rights

The Bidder shall indemnify the Tenderer against all third-party claims of infringement of patent, trademark or industrial design and intellectual property rights arising from the use of the Goods or any part thereof.

5.31 Additional information/clarification

Tenderer reserves the right to ask for any additional information, as it may deem necessary to evaluate the bid proposal. Bidders that fail to submit additional information or clarification as sought by evaluation committee within 10 days of the receipt of Tenderer's letter requesting for such additional information and/or clarification, their bids will be evaluated based on the information furnished along with the bid proposal.

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Section-6

Terms and Conditions of Contract

6 Terms & Conditions of Contract

6.1 Use of RFP document and other Information

- (i) Successful bidder shall not, without the Tenderer's prior written consent, disclose the contract agreement, or any provision thereof, or any specification, pattern, sample or information furnished by or on behalf of Tenderer in connection to any person other than a person employed by the Tenderer in the performance of the contract agreement and the scope of work. Disclosure of document/information to any such employed person shall be made in confidence and shall extend only so far as may be necessary for such performance.
- (ii) Successful bidder shall not, without the Tenderer's prior written consent make use of any document or any information specified in (i) above, except for the purpose of performing the contract agreement and the scope of work.
- (iii) Any document other than this contract agreement shall remain the property of the Tenderer.

6.2 Change in the minimum specified work

- (i) Tenderer may at any time by written intimation to the successful bidder, make changes in the minimum specified work.
- (ii) The successful bidder shall not perform changes in the minimum specified work, until Tenderer gives permission for such change in writing on the basis of estimate provided by the successful bidder.
- (iii) Mutually agreed change in the minimum specified work shall constitute as a part of the contract agreement and all the provisions and contract agreement shall apply on the said change.
- (iv) Any change in the minimum specified work that may be required for the successful implementation of the project and not involving any significant additional costs shall be carried out by the successful Bidder at no additional cost or expense to the Tenderer.
- (v) In the event of withdrawal or discontinuance of any item or items

and consequent ceasing of or reduction in demand the successful bidder shall not be entitled to any compensation. Tenderer will, however, make all reasonable endeavors to give warning of any impending complete withdrawal or of any reduction seriously affecting quantities likely to be required under contract.

- (vi) If during the currency of the contract, the specifications of any item or items to be supplied become obsolete, the successful bidder shall continue to comply with demands for the supply of the said item or items in accordance with the new specifications at rate not higher than already agreed rates at the time of contract, and the successful bidder will not be entitled for any compensation also.

6.3 Changes in contract agreement

Except the changes as mentioned in clause 6.2 above, no modification of the terms and conditions of the Contract Agreement shall be made except by written amendments signed by the both successful bidder and HUDA.

6.4 Project Milestones

- (i) The project including supply, installation and commissioning of all the equipment for end to end connectivity and the DATA Centres facility should be completed within two months from the issue of the formal purchase order.
- (ii) If the successful bidder fails to deliver services prescribed at clause 6.4 above the same shall be subject to 0.5% penalty per week of the contract value subject to a maximum of 5% of the total value of the project.
- (iii) The above penalty, if any, shall be recovered from the 1st payment to be made to the successful bidder under this project or recovery will be made from amount of Earnest Money or Bank Guarantee submitted by the successful bidder to Tenderer provided that:
- No recovery of penalty will be made, if Tenderer accepts the delays by extending the milestones upto two week by

recording in writing that the exceptional circumstances were beyond the control of the successful bidder and there was no loss to Tenderer.

- Where the delay on the part of successful bidder is more than 2 weeks subject to maximum of 4 weeks, the matter of extension of Time frame for accomplishing the particular delayed activity will be referred to the Committee appointed by Tenderer with related documents that there are genuine reasons for delay on the part of successful bidder and that no loss will result to HUDA in case extension is allowed. In case the time frame for the activity as mentioned in the milestones above is extended, no penalty during the extended period shall be recovered from the successful bidder.
- (iv) The unexcused delay in performing of any services as mentioned in the milestones by the successful bidder in the prescribed period may render him liable to any or all of the following penalties:-
- The penalty as mentioned at clause no. 6.4 (iii) above.
 - Forfeiture of earnest money and revoking of Security (Performance Bank Guarantee).
 - Termination of the contract as default.

6.5 Responsibilities of Successful bidder

- (i) The successful bidder is responsible to execute all but not limited to the work specified under scope of work as specified in section-2 of this RFP.
- (ii) The successful bidder shall maintain the network infrastructure, hosting of applications under this RFP for the smooth implementation and operation of the project and allied services.
- (iii) The successful bidder shall be responsible for arranging the bandwidth, its integration, Commissioning and maintenance to ensure end to end connectivity as well as adhering to the SLA defined in the RFP.

- (iv) The successful bidder shall handle all the technical and implementation matters including timely commissioning and maintenance of the MPLS/MLLN/leased lines/wireless.
- (v) Responsibility of Electricity earthing and its testing according to the norms at each location while installation of equipments is of successful bidder. If at any location the earthing is not working properly or there is no-earthing, then the successful bidder will arrange/repair the same. Successful bidder shall submit a test report for each site. If any equipment starts malfunctioning due to improper earthing during the currency of the contract, the same equipment will be replaced / repaired by the successful bidder at his own cost and the successful bidder will not be compensated for the same.
- (vi) To lay down the whole data cabling upto each point and the power cabling upto and from the Uninterrupted Power Supply (UPS), near to each equipment supplied by the successful bidder under this RFP is the responsibility of the successful bidder.
- (vii) Inputs/guidelines for the preparation of site as per standard norms shall be submitted by the successful bidder after site.
- (viii) Civil works, if any, required for installation of Mast for antennas for wireless connectivity (if any) and passive-cabling systems will be the responsibility of the successful bidder
- (ix) The installation, configuration, maintenance and up-dation of all required software, mailing, Anti-Virus, Virus Definitions, etc. is the responsibility of successful bidder till the currency of the contract. All the updates of the software should be supplied along with the Compact Disk (CD) media containing the same during currency of contract.

6.6 Responsibilities of HUDA

- (i) To provide appropriate environmental conditions, necessary power facilities for the system, access to the premises, a secure equipment storage area, and suitable conditions for the

successful bidder's officials.

6.7 Price fall

- (i) The prices charged for the Items/services supplied under the contract by the successful bidder shall in no event exceed the lowest price at which the successful bidder sells the goods or offers to sell Items of identical description to any persons/organizations including the HARTRON and HUDA, Department of the Central or State Government or any Statutory undertaking of the central or State Government, as the case may be, till the signing of the contract.
- (ii) If, at any time during the said period the successful bidder reduces the sale price, sells, or offers to sell such goods to any person/organization including HARTRON and HUDA or any Department of State or Central Government or any statutory Undertaking of the Central or State Government as the case may be, at a price lower than the price chargeable under the contract, the successful bidder shall forthwith notify such reduction, or sale or offer to sell to the HARTRON and HUDA and the price payable under the contract for the supply of material after the date of coming into force of such reduction or sale or offer to sell shall stand correspondingly reduced.

6.8 Inspection/tests of the items/equipments

- (i) Inspection committee so constituted shall have the power to inspect the items including routers, modems, switches, servers, etc. before, during or after installation and to reject the same or any part or portion, if he or they be not satisfied that the same is not at par or according to the specifications submitted by the successful bidder. The hardware equipment if required can be put to the operational as well as burning test for a minimum period of 72 hours.
- (ii) The successful bidder shall not be paid for supplies rejected as specified at (i) above.
- (iii) Successful bidder shall neither claim nor be entitled to payment for any damage that rejected supplies may suffer from any harm

whatsoever incidental to a full and proper examination and test of such supplies.

- (iv) HARTRON and HUDA shall be under no liability whatsoever for rejected items and the same will be at the successful bidder's risk.
- (v) Rejected supplies shall be removed by the successful bidder at his own expense within 10 days after notice has been issued to him of such rejection, and failing such removal of rejected goods will be at successful bidder's risk.
- (vi) Super inspection of already inspected may be carried out at the discretion of the HARTRON and HUDA after installation, by such officer or team of officers as may be authorized by HARTRON and HUDA. The provisions of conditions mentioned at (i) to (v) above will also apply to the Super Inspection.

6.9 Site visit

- (i) Bidders desirous of making site visits to such offices and facilities of the HUDA are required to submit requests for the same to HARTRON and HUDA at least 10 (ten) working days prior to the closing date of the tenders. HARTRON and HUDA may give the permission letter for such site visits, which would extend to certain offices and facilities of the HUDA as necessary for the bidder to implement the project. The cost of the visit will be borne by bidder himself; HARTRON and HUDA is not liable to provide any facility to the bidder(s) for such visits.
- (ii) HARTRON and HUDA on its own discretion can cancel such permissions at any moment without any notice to the bidder(s).

6.10 Warranty

- (i) Successful bidder will also be responsible for providing comprehensive on site warranty during the period of contract for all the equipment (or the period mentioned below, whichever is higher) and their related accessories supplied under this RFP. The warranty of the equipment is as under: -

Active networking equipment	5 years
servers etc	3 years
Storage devices	3 years

- (ii) Warranty shall be deemed to commence from the date of the successful completion and acceptance of the final acceptance by the technical committee so constituted.
- (iii) During the warranty period, it will be the responsibility of the successful bidder to rectify any defect and update the System and the software by incorporating necessary patches, upgrades and updates as and when released by the original supplier or found necessary by Tenderer so as to ensure that the Solution is functioning to provide the best performance.
- (iv) Successful bidder shall make available to Tenderer the necessary manpower at all times to incorporate changes either in the reports or statements and changes in the business rules for the supplied modules. It is also his responsibility to install the software changes to all systems.
- (v) Successful bidder shall undertake the preventive maintenance of all supplied equipments including active and passive components supplied under this RFP once in every quarter during the currency of contract so as to ensure the smooth functioning of the system and he will have to strictly adhere to this Schedule.

6.11 Facility, Project Management and Service Level Agreement

- (i) The facility management define in this clause represents to the DATA centre services initially two years with an option to extend the said period yearly for another three years by HUDA and the project management of the end to end equipment supplied and installed under this project for two years.
- (ii) The scope of project management include, but not limited to:
 - Network administration
 - Maintaining and managing the network including the

passives equipment

- Supporting the provision of last mile access.
 - Sufficient spares to be kept for the smooth and uninterrupted operation of HUDA WAN as per the defined SLAs.
 - sustained connectivity for the network.
 - Continuous availability of the facilities.
- (iii) The services of the DATA centre including network and the systems under this RFP are considered as operational when all sites at all levels of HUDA WAN are working, providing all/specified services in full capacity at all locations in the network. The service(s) at a site is considered as available, when that service(s) in full capacity can be used from all the service positions at that particular site.
- (iv) Bidder is required to mention the skill level (i.e. certified Hardware/Software Engineers having minimum qualification of B.E./B.Tech with relevant experience. The bidder shall depute adequate number of manpower at HUDA Head Qaurter Panchkula and the DATA centre facility required to maintain and operate the complete network. Tenderer reserves the right to verify the technical credential of the manpower to be deputed by the bidder.
- (v) During this period, the successful bidder will attend/rectify the defects of the equipment at all sites within 24 hours from the time/date, complaints are reported to the successful bidder or its representatives. In case the reported problem is not resolved within 24 hours at such locations, a fine of Rs.1000/- per day per router/switch/firewall/server shall be charged. If the successful bidder does not attend/rectify the defect/problem, HUDA in consultation with HARTRON at its own discretion will have the right to arrange repairs/replacement at the cost and risk of the successful bidder and in such case at the end of the warranty period, the warranty will be extended for duration equivalent to the total time during which the system remains out

of order.

- (vi) The successful bidder shall also sign a Service Level Agreement with HUDA to ensure uptime of the entire system at least 99.9% (average for the quarter). If the uptime is found less than 99.9% and up to 97%, then the amount equivalent to the $((99 - \text{Uptime\%}) * 2)\%$ for that quarter will be deducted from the total amount to be paid to the successful bidder for that particular quarter as penalty. In case the uptime is found less than 97% and up to 95% then the amount equivalent to the $(99.9 - \text{Uptime\%})^2\%$ for that quarter will be deducted from the total amount to be paid to the successful bidder for that particular quarter as penalty. The location wise reports for the uptime should be generated weekly and be given to the HARTRON and HUDA by the successful bidder. If the average of this weekly uptime for any site is found less than 95% for any four (4) consecutive week's period, then HARTRON and HUDA can take the penal action against successful bidder including but not limited to the revoking of the Performance Bank Guarantee. The report of each week should reach the HUDA by the end of the next week. During the extended period of Facility/project Management to be awarded by the HUDA or the agency so authorized after the successful completion of the initial Facility Management period of 2 years, as specified in clause no.6.11 of this document, the penalty as specified above for not maintaining the required up time as mentioned above will also be applicable. For example: - Incase the uptime for a particular quarter is 97%, then $((99.9 - 97) * 2) = 5.18\%$ of the amount for that quarter will be deducted as penalty from the total amount of the Facility Management for that quarter. Or – Incase the uptime for a particular quarter is 96%, then $(99.9 - 96)^2 = 15.21\%$ of the amount for that quarter will be deducted as penalty from the total amount of the Facility Management for that quarter.

As the continuous failure of a particular location will undermine the fruitfulness of the total network, the penalty in such case

may exceed the payment due for that site to be deducted from the payment of that quarter to be released to the successful bidder.

(vii) Downtime will exclude outages due to the following:

- a) The Bidder, if faced with problems in timely delivery of services, which have dependencies on other source(s), which are beyond their control at any time, shall immediately inform the HARTRON and HUDA in writing, about the causes of the delay and tentative duration of such delay etc. The HARTRON and HUDA, on receipt of such notice, shall analyze the facts at the earliest and may at its sole discretion, relax the penalties accordingly.
- b) Outages caused by reasons beyond the scope of work of the successful bidder
- c) Time taken for scheduled maintenance/troubleshooting either for preventive purposes or improvement in function or other purposes provided however that such periods do not exceed 60 minutes in a quarter.
- d) Time taken for reconfiguration or other planned downtime situations provided however that such outages taken along with those created by item b above do not exceed 60 minutes in a quarter;
- e) Scheduled shutdowns as required by HUDA
- f) Force Majeure events

SLA and penalty clauses as mentioned above have been detailed herein in order to have uniform understanding by the bidders so that commercial offers received shall be uniform comparison. However, the HARTRON and HUDA reserves the right to alter the SLA or the Penalty conditions thereof after the finalisation of the successful bidder after re-assessing the need, real cost of SLA in various Slabs, SLAs achievable/required as per the applications etc. The HARTRON and HUDA also reserves the right to modify the SLA and penalty conditions thereof reasonably, as guided by the foregoing principles, during

the tenure of the project as per application requirements.

6.12 Third Party Agency

Tenderer has an option to appoint a third party agency for a period of two years, which shall be involved for inspection, installation, auditing & monitoring the HUDA WAN during implementation, commissioning and operation (facility management). The said agency may also be involved in conducting the acceptance test as per the technical requirements and shall also be involved in the issuance of acceptance certificate subsequent to the completion of final acceptance test. The successful bidder is required to cooperate with this third party agency and shall allow to use monitoring tools. This third party agency may also be responsible for verification, validation of all the invoices submitted by the successful bidder under this project and will recommend to HARTRON and HUDA for eligible payments.

6.13 Spares

The successful bidder will ensure that supplies of necessary maintenance equipment and spare parts including active and passive components be made available for the life of the machines or at least for contract duration on continuing basis. For active components especially routers, their OEM should have their spares depot in India and should be able to deliver the spares, the next business day. However, it has no bearing on the uptime and related clauses/sections as specified in this RFP.

6.14 Dispatch Documents

- (i) With every dispatch of goods or materials under the contract, the successful bidder will prepare Delivery Challan in triplicate. The original delivery challan is to be sent by the successful bidder to the HARTRON and HUDA.
- (ii) The second copy of Delivery Challan to be returned to the successful bidder by the respective designated officers at each site with the quantities or numbers received duly noted and signed thereon. The said duly signed Delivery Challan received by the successful bidder from the respective intending officers

shall also be forwarded to HARTRON and HUDA for further necessary action.

- (iii) The third copy to be sent by the successful bidder to the user for record in its office.

6.15 Condition of items supplied

- (i) This is subject to the condition that the materials are securely packed by the successful bidder in sound containers and the consignment is accepted by the carriers without any adverse remarks as to the packing or the condition of the containers. In case of any adverse remarks, the responsibility for the losses in transit will rest with the successful bidder.
- (ii) The successful bidder will not be entitled to charge or be paid for supplies broken, lost or damaged in transit. Such supplies shall be removed by the successful bidder at his own expense. The decision in this regard taken by HARTRON and HUDA shall be binding and final.

6.16 Acceptance tests

Acceptance Test shall be conducted in two steps:

- (i) The first acceptance test shall involve successful supply, delivery at site, installation & commissioning of end to end connectivity equipment at HUDA head quarter Panchkula and all other offices of HUDA, located in Panchkula and Chandigarh and Gurgaon.
- (ii) The datacenter facilities should be installed and functioning as per the requirement mentioned in this RFP. All the applications hosted should be functioning properly.
- (iii) On the successful completion of the Acceptance Test and after the committee so constituted including third party agency engaged by the HARTRON and HUDA to conduct the said acceptance tests are satisfied with the working of the system, the acceptance certificate signed by the authorized representative(s) of HARTRON and HUDA, authorised representative(s) of GoH and the third party, will be issued by the HARTRON and HUDA to the successful bidder. The date on

which such certificate is issued shall be deemed date of the successful commissioning of the HUDA WAN. Any delay by the successful bidder in the performance of its contracted obligations shall render the successful bidder liable to the imposition of appropriate penalties, unless agreed otherwise by HARTRON and HUDA.

(iv) Any delay by the successful bidder in the Partial/Final Acceptance Testing shall render the Successful bidder liable to the imposition of appropriate Penalties.

(v) **Methodology:**

a) All hardware and software items must be installed at particular site as per the minimum specifications mentioned in Section III of this document and are integrated as per the design plan as approved by the HARTRON and HUDA.

b) After installation and configuration of each and every subsystem, integrating various systems and providing various services, tests shall be conducted for system performance as a whole. Commissioning shall mean end-to-end commissioning of the network.

c) The functioning of the datacenter and running of the applications.

d) Successful bidder will arrange the test equipment required for performance verification. The bidder shall furnish the list of test diagnostics programs for hardware and software along with the test schedules and will also provide documented test results.

e) The successful bidder shall be required to demonstrate all the features/facilities/functionalities as mentioned in the RFP.

f) The successful bidder shall be responsible for the security audit of the network to be carried out by a certified agency other than the successful bidder.

g) The acceptance involves the operations of the complete system/network for two consecutive weeks (14 working days) as per the prepared acceptance test procedure.

- h) In case of failures, acceptance test will be restarted, provided the maximum number of restarts shall not exceed three in number.
- i) The acceptance test shall include all reasonable exercises which the combination of the equipment and the software can be expected to perform in actual usage. The tests shall include, but not limited to, the demonstration of the proper functioning of all hardware and software.
- j) The acceptance test duration will be 14 working days of 24 hrs per day. The uptime availability of the system during this time will be calculated as per the Uptime requirement defined.
- k) However, if the system does not meet the availability criteria laid down as above within 4 weeks from date of commissioning, HARTRON and HUDA shall have the right to reject the system and ask for its replacement. If so deemed necessary, the bidder shall replace the whole or part of the system as suggested by HARTRON and HUDA within six weeks from the date of rejection notice. If the bidder fails to replace the system as required, the HARTRON and HUDA reserves the right to initiate any contingent measures as deemed necessary in the interest of the project.
- l) All active/passive components shall be submitted for factory acceptance test by the HARTRON and HUDA. Tests shall include, but not limited to, power on test of all equipment, port testing of all active devices, interface testing etc.
- m) Training part of the project should be completed.

6.17 Payment schedule

a) Hardware and software for Gurgaon and Panchkula offices with respect to end to end connectivity

- (i) No payment will be made in advance for any supplies/services under this project.
- (ii) 60% payment for hardware and software shall be made upon delivery and inspection.

- (iii) Balance 30 % payment shall be released upon the installation and commissioning of the hardware and software at all the offices.
- (iv) The remaining 10% shall be released upon the completion of final acceptance test.

b) Payment schedule for Datacenter services

- (i) No advance payment to be given.
- (ii) A quarterly payment shall be released after the completion of that quarter.

The bidder is required to give details of the amount worked out for the release of quarterly payment in the commercial bids.

6.18 Handing Over:

- (i) The ownership of the equipment specifically purchased by the successful bidder for executing this project (and not given on a shared infrastructure model) and installed at datacenter for this project shall be handed over to the HUDA after the 24 months (to be calculated from the date of issue of final acceptance certificate).
- (ii) The successful bidder shall hand over the equipment to in good running condition. The successful bidder shall also provide complete inventory record of all the equipment including necessary tools installed and operational alongwith their maintenance record at the time of transfer of the project. The said inventory record should be generated through asset management control tools.

6.19 Sub-contracting of the project

In the event successful bidder intends to use Sub-contractor for any part of the Project, the following shall be adhered to:

- (i) The sub-contracting of the entire project shall not be allowed. Further, the successful bidder will be solely responsible for the whole project and all of the conditions of the project, even if he sub-contracts any part of the project to any other party. In other words sub-contracting would not absolve the successful bidder from the responsibility for the complete project and its

conditions. However, sub-contracting of data center services, system integration would not be allowed under this RFP and shall be the sole responsibility of the successful bidder.

- (ii) The successful bidder may subcontract a part of project after informing the HARTRON and HUDA for the same. However, the successful bidder will be solely responsible for the implementation of any part of the project sub contracted to the satisfaction of HARTRON and HUDA.
- (iii) Evidence that all obligations imposed by the RFP on the Bidder have been fully understood and accepted where applicable by the Sub-contractors.

6.20 Change in company structure

The Membership/Board structure of the bidder, if changed after the bidder is selected, the successful bidder shall accordingly inform the HARTRON and HUDA of such changes.

6.21 Compliance with laws, permits

The successful bidder shall comply with all local, state rules, regulations, ordinances, codes, and laws relating to the work or the conduct thereof and shall secure and pay for any permits and licenses necessary for the execution of the work and successful bidder shall be responsible for the same.

6.22 Liability insurance

Successful bidder shall agree to maintain General Liability Insurance, Worker's Compensation and HUDA Liability Insurance to cover all its personnel engaged in the performance of the services herein described, as well as damages arising as a result of the performance of such services. Successful bidder further agrees to require his subcontractor(s), if any, to maintain General Liability Insurance, Worker's Compensation, and HUDA Liability Insurance. The successful bidder shall also be responsible for Employees Provident Fund (EPF) and other worker compensation issues, if any, applicable on his or his subcontractors' personnel.

6.23 Forfeiture of earnest money

- (i) If the bidder withdraws his bid before the expiry of validity or

after the acceptance of the bid, the earnest money deposited by the successful bidder will be forfeited.

- (ii) If the successful bidder fails to comply with any of the terms, conditions or requirement of this contract and the technical specifications for the equipment requirement as indicated in various sections of the RFP document, the earnest money deposited by the bidder will be forfeited.
- (iii) In case successful bidder fails to comply with the project milestones as specified at clause no.6.4, the earnest money deposit will be forfeited.
- (iv) In case of issue of the Letter of Intent, (Refer Clause no. 5.25) if the bidder fails to:
 - (a) accept the Letter of Intent by returning a duly signed copy within the time limit specified; and / or
 - (b) execute the contract agreement; and / or
 - (c) furnish the performance bank guarantee as specified in this Document.

The earnest money deposit will be forfeited

6.24 Force Majeure

Neither party shall be responsible to the other for any delay or failure in performance of its obligations due to any occurrence commonly known as Force Majeure which is beyond the control of any of the parties, including, but without limited to, fire, flood, explosion, acts of God or any Governmental body, public disorder, riots, embargoes, or strikes, acts of military authority, epidemics, strikes, lockouts or other labour disputes, insurrections, civil commotion, war, enemy actions. If a Force Majeure arises, the Bidder shall promptly notify HARTRON and HUDA in writing of such condition and the cause thereof. Unless otherwise directed by HARTRON and HUDA, the successful bidder shall continue to perform his obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. The successful bidder shall be excused from performance of his obligations in whole or part as long as such causes, circumstances or

events shall continue to prevent or delay such performance.

6.25 Termination of the contract

- (i) In the event of the bidder failing duly and properly to fulfill the contract or committing breach of any of the terms and conditions of this contract or repeatedly supplying goods liable to rejection hereunder or failing, declining, neglecting or delay to comply with any demand or requisition or otherwise not executing the same in accordance with terms of this contract or not achieving the milestones mentioned at clause no 6.4 or if the bidder or his agent or servants being guilty of fraud in respect of this contract or any of his partners or representatives found directing, giving, promising or offering any bribes, gratuity, gift loan, perquisite, reward or advantage pecuniary or otherwise to any person in the employment of Government in any way relating to such officers or person or persons, officer or employment or if the bidder or any of his partners become insolvent or apply for relief as insolvent debtor or commence any insolvency proceedings or make any composition with his/their creditors or attempts to do so, then without prejudice to HARTRON and HUDA rights and remedies otherwise, HARTRON and HUDA shall be entitled to terminate this contract forth with and may claim back all or part of the money already paid to the bidder.
- (ii) The termination of this contract in whole or part under any conditions shall not be affected by the acceptance, meanwhile or subsequently, of supplies accepted or made at any station whether in ignorance of the termination or otherwise.
- (iii) If during the currency of the contract, the successful bidder becomes bankrupt or otherwise insolvent or is likely to become insolvent or bankrupt, HARTRON and HUDA may, at any time, terminate the contract agreement by giving written notice to the successful bidder. Notwithstanding the above, such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to HARTRON and HUDA.
- (iv) Further the HARTRON and HUDA shall also have the unfettered

right to repudiate and rescind the Contract if there is any breach of the Contract by the Successful Bidder including but not limited to the occurrence of any of the following events or contingencies:

- a) Minimum balance not maintained vide revolving guarantee.
- b) Default achieving milestones affecting the overall time schedule
- c) Quality of the network/servers/infrastructure facility/ software etc. not as per specifications/agreements.

6.26 Consequences of termination

- (i) Upon termination, the successful bidder shall deliver or cause to be delivered all works carried out for and on account of the State Govt. and all data and records required from or on account of the State Govt.
- (ii) Termination of the contract agreement shall not affect any continuing obligations of the successful bidder under the contract agreement, which, either expressly or by necessary implication, are to survive its expiry or termination such as confidentiality obligations of the successful bidder.
- (iii) Upon termination of the contract agreement for any reason whatsoever, the successful bidder shall return to the HARTRON and HUDA, any and all confidential information and any other property of the HARTRON and HUDA.
- (iv) HARTRON and HUDA may procure services similar to those undelivered, upon such terms and in such manner, as it deems appropriate, at the risk and responsibility of the successful bidder and the successful bidder shall be liable for any additional costs for such services.
- (v) The successful bidder shall continue the performance of the contract agreement to the extent not terminated.
- (vi) Upon termination of the contract agreement for whatsoever, HARTRON and HUDA shall have the right to impose the following penalties:-
 - (a) Forfeiture of earnest money

- (b) Revoking of performance bank guarantee by HARTRON and HUDA on advice of State Govt.
- (c) Imposition of appropriate penalties.

6.27 Insurance of items

Successful bidder shall insure all the delivered items till acceptance and during the facility management period of five years from the date of acceptance.

- (i) The successful bidder shall arrange for comprehensive Insurance of equipment and works covering transit, storage, erection, commissioning and maintenance as may be necessary and for all such amounts to protect the interest of the HARTRON and HUDA against all risks. The scope of such Insurance shall cover the entire value of the equipment and Infrastructure being supplied for the entire Contract period.
- (ii) The Transit cover shall be on all risks for inland transit.
- (iii) The successful bidder shall arrange workmen compensation insurance, which shall be at the cost and responsibility of the successful bidder.
- (iv) Any loss or damage to the components during handling, transporting, storage and erection, till such time the complete setup is taken over by the HARTRON and HUDA, shall be to the account of the successful bidder.
- (v) All costs on account of insurance liability and necessary premium will be on successful bidder's account and such Insurance charges shall be indicated as a fixed Lumpsum as in the Commercial Bid. .
- (vi) Any no-claim bonus shall be to the account of the HARTRON and HUDA.

HARTRON and HUDA, shall be the principal holder of the policy. HARTRON and HUDA reserves the exclusive right to assign the Policy

6.28 Arbitration

- (i) In the event of any dispute or difference arising between the Successful Bidder and HARTRON and HUDA out of or in

connection with the Contract or RFP or any of the terms and conditions contained therein or as to the interpretation or any other matter, both the parties shall resolve such dispute or difference first by mutual discussions. If any dispute or difference still persists, it shall be referred to Arbitration to be conducted in accordance with Arbitration and Conciliation Act 1996. The arbitration will be held in Chandigarh and the proceedings shall be conducted in English. The parties to the dispute will instruct the Arbitrator(s) to render a decision within 30 days of the date of their appointment and such a decision shall be binding on both the parties.

- (ii) This RFP and the Contract shall, in all respects, be governed by and construed in all respects in accordance with the laws of the Republic of India.
- (iii) In relation to any legal action or proceedings to enforce the Contract, the parties to the Contract irrevocably submit to the exclusive jurisdiction of the courts in Chandigarh to the exclusion of any other court or courts that may otherwise have had such jurisdiction and waive any objection to such proceedings on grounds of venue or on the grounds that the proceedings have been brought in an inconvenient forum.

6.29 Acquaintance with all conditions

The bidder acknowledges that he has made himself fully acquainted with all the conditions and circumstances under which the supplies required under the contract will have to be made or furnished and with all the terms, clauses, conditions, specifications and other details of the contract and the bidder shall not plead ignorance of any of those as excuse in case of complaint against or on rejection of supplies tendered by him or with a view either to ask for encashment of any rates agreed to in the contract or to evading any of his obligations under the contract.

6.30 Limitations of Liability

Further, bidders commutative liability for its obligations under contract shall not exceed the total contract value.

Annexures

(to be submitted by the successful bidder)

Annexure – 1

Format of Performance Bank Guarantee in favour of HARTRON

In consideration of Haryana State Electronics Development Corporation Ltd. (HARTRON) and having its Headquarter at SCO 111-113, Sector 17B, Chandigarh, which expression unless the context otherwise requires, shall include its successors and permitted assigns (the "HARTRON") having agreed to accept from [] (the name of the Contractor) a company incorporated, organized and subsisting under the Companies Act, 1956 (1 of 1956) and having its registered office at [..] which expression unless the context otherwise requires, shall include its successors and permitted assigns (the "Contractor") under the terms and conditions of an agreement dated the [.....] day of [.....] between the HARTRON and the Contractor for the setting up WAN and Data Centre and disaster recovery site as specified in the RFP Document for the same. Security deposit for the due fulfillment by the Contractor of the terms and conditions contained in the Contract Agreement on production of an interest free bank guarantee ("Performance Bank Guarantee") of 10% of the total work value of Rs. _____ (_____ rupees only) amounting to Rs. _____ (_____ rupees only) in favour of the HARTRON to be renewed annually up to the currency of the contract Agreement. The guarantee amount for such annual renewal shall be calculated on the basis of the balance amount of the total work cost.

1. We, [] (name of the, Bank) do hereby guarantee and undertake to indemnify and pay and keep indemnified the HARTRON in terms of the Contract Agreement to the extent of this Bank Guarantee value of Rs. _____ (_____ rupees only).
2. We, [] (name of the Bank) further agree that if a demand is made by the HARTRON for honoring the Performance Bank Guarantee we, [] (name of the Bank) having no right of decline to cash the same for any reason whatsoever. The fact that there is a dispute between the HARTRON and the Contractor is no ground for us [] (name of the Bank) to decline to honour the Performance

Bank Guarantee.

3. We, [] (name of the Bank) further agree that a mere demand by the HARTRON is sufficient for us [] (name of the Bank) to pay the amount covered by the Performance Bank Guarantee without reference to the Contractor and any protest by the Contractor cannot be valid for us [] (name of the Bank) to decline payment to the HARTRON.
4. We, [] (name of the Bank) further agree that the HARTRON shall have the fullest liberty, without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Contract Agreement or to extend time of performance by the Contractor from time to time or to postpone for any time or from time to time, any of the powers exercisable by the HARTRON against the Contractor and to forbear or enforce any of the terms and conditions relating to the Contract Agreement and we shall not be relieved from our liability by reasons of any such variation or extension being granted to the Contractor or for any forbearance, act or omission on the part of the HARTRON or any indulgence by the HARTRON to the Contractor or any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us [] (name of the Bank).
5. We [] (name of the Bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the HARTRON in writing.

DATED THE [] DAY OF [] Signatures _____
Name _____
Designation _____
For [Name of the Bank]
(Seal of the Bank)

Proformas

Proforma 1
BID PROPOSAL SHEET

(to be enclosed with pre-qualification bid)

Bidder's Proposal Reference No. and Date	:		
Bidder's Name and Address	:		
		Tel. No.	Fax No.
Bidders Correspondence address			
		Tel. No.	Fax No.
Name of contact Person	:		
Designation	:		
Telephone No (s)	:		
Fax No (s)	:		
Mobile No	:		
Email ID	:		

To,

Managing Director
HARTRON
SCO 111-113
Sector 17 B
Chandigarh 160017

**Subject: Proposal for – Establishing and Managing Wide Area Network
and Outsource Data Center, Disaster Recovery Site for HUDA**

Dear Sir,

1. We, M/s _____, having read and examined in detail the specifications, requirements as mentioned in the RFP do hereby propose

site preparation for HUDA Wide Area Network - HUDA WAN as specified in the RFP.

2. PRICE AND VALIDITY

All the prices mentioned in our proposal are in accordance with the terms as specified in bidding documents. All the prices and other terms and conditions of this proposal are valid for a period of 120 days from the opening of the commercial bid or six months from the last date of submission of the RFP, whichever is later.

3. EARNEST MONEY

We have enclosed the earnest money in the form of Bank Draft amounting to **Rs. ---- Lakhs**. It is liable to be forfeited in accordance with the provisions of RFP document.

4. ASSURANCE

We declare that all the services shall be performed strictly in accordance with the technical specifications and other terms and conditions covered in RFP document.

5. BID PRICING

We further declare that the prices stated in our proposal are in accordance with your terms & conditions in the bidding document.

6. QUALIFYING DATA

We confirm having submitted the qualifying data as required by you in your RFP document. In case you require any further information/ documentary proof in this regard before evaluation of our bid, we agree to furnish the same, in time, to your satisfaction.

7. We hereby declare that in case the contract is awarded to us, we shall submit the Bank Guarantee as per terms of RFP document.

8. We hereby declare that our proposal is made in good faith, without collusion or fraud and the information contained in the proposal is true and correct to the best of our knowledge & belief. We further declare that we have read the provisions of this RFP and confirmed that these are acceptable to us.
9. Bid submitted by us is properly prepared and sealed so as to prevent any subsequent alteration and replacement.
10. We understand that you are not bound to accept the lowest or any bid by you.

Thanking you,

Yours faithfully,

(Authorised Signatory)

Date:

Name:

Place:

Designation:

Business Address:

Seal of the company:

Proforma – 2**PARTICULARS OF BIDDERS**

(to be enclosed with pre-qualification bid)

FOR RFP NO. _____

1. Name of the Bidder			
2. Address of the Bidder			
	Tel.	Fax	
3. Year of establishment			
4. Bidder's proposal number and date			
5.Registration Details with PWD/CPWD/MES			
6. Name, Designation and address of the officer to whom all references shall be made regarding this TENDER			
	Tel:	Mobile:	
	Fax:	Email:	
7. Annual turnover of the firm for the last 2 successive years (in Rs.)	Year	Turn over	Profit
	2005-2006		
	2004-2005		
8. Details of Draft for Earnest money deposited	Draft No.		
	Bank Name:		

Signature _____

Name _____

Designation _____

Date _____

Company seal

(To be enclosed with Pre Qualifying Bid)

Proforma - 3

MANUFACTURER WARRANTY

We, M/S ----- warrant that everything to be supplied by us hereunder shall be brand new, free from all encumbrances, defects and faults in material. Workmanship and manufacturing shall be of the highest grade and quality and consistent with the established and generally accepted standards. Materials of the type ordered shall be in full conformity with the specifications, drawings or samples, if any, and shall operate properly.

We, M/S----- also undertake that in case any item supplied by us found to be defected, faulty, or used at any stage, it shall be replaced by us at our cost.

Signature of the Witness

Name

Signature of the Tenderer

Name

Seal

Date

(To be enclosed with Technical Bid on the official letter head of the bidding company)

Proforma-4

**UNDERTAKING FOR NETWORK INSTALLED IN COMPLETE RESPECT,
SECURITY, TRAINING, ETC.**

We, M/S ----- undertake

1. That we undertake that the network proposed to be installed and commissioned is complete in all respects adhering the requirements specified in the RFP.
2. that we will undertake half yearly security audit for network (HUDA WAN) by any Certified Internet Security Auditor (CISA) or any authenticated agency of Govt. of India.
3. that the design(s) offered is in compliance with existing Government of India Policies/regulations applicable to the WAN.
4. that after the expiry of the lease period of Two years, we will handover the total equipment installed at datacenter in running condition with the same or improved specifications as was supplied by us.
5. that we will accordingly train the manpower of HUDA as per the scope of training under section II of RFP document, so that HUDA can handle the system, once the lease period for datacenter is over.

Signature of the Witness

Signature of the Tenderer

Name

Name

Address

Address

Seal

(To be enclosed with Pre Qualifying Bid)

Proforma - 5

Details of the Infrastructure available with the bidder at Data Center Facility

The bidder has to give their response to the questions, in case options are given then the bidder has to choose only from the options given for that question.

The bidder can describe further their response to the given question and any other important related information, which the bidder feels is relevant to mention.

Specifications	REPLY	REMARKS
(i) Physical Infrastructure		
• Please provide the address of Data Centre		
• Is the Data Centre (DC) housed in Bidder's own premises?		
• DC facility is away from LPG storage, chemical Godowns and other storage facilities for other dangerous commodities and EMF area		
• Are all the critical areas (Server Farm, Network Operating Centre, Tele-Communication Room) of the Data Centre separated from Infrastructure and Mechanical Facilities?		
• What is the distance of the Data Centre Facility from the nearest Airport?		
• What is the distance of the Data Centre Facility from the nearest Railway Station?		
• Number of floors in the Data Centre		
• Does the area in which the Data Centre is located have any past record of natural disaster e.g. earthquake, floods, high wind speed, hurricanes etc.?		
• Is the building locating the Data Centre quake resistant? If yes, up to what intensity of Richter scale?		

What is the scalability in terms of square feet of the Data Centre in terms of physical floor area to house servers in the future?		
Availability of racks for hosting servers in an area which can be preferably segregated from that used by other Customers		
Will the building be able to withstand Flood?		
Will the building be able to withstand Fire?		
Ability to accommodate about 5-10 personnel to operate from the Data Center. These persons will include HUDA staff and representatives of vendors providing service to the HUDA. This facility would be needed only in times of actual fallback usage or periodic testing.		
Availability of Proper basic amenities like furnished work-space, telephone connections, etc.		
Details of the fire extinguishing technology. Whether environment friendly?		
(ii) Power Supply and Backup		
Does the electrical system designed to incorporate a minimum of 100% spare capacity?		
Are there three levels of power resilience i.e. primary, secondary 1 and secondary 2?		
Are the alternate electricity utility services equipped with automatic transfer of load?		
Is the power supplied from dual redundant parallel UPS with input and output isolation transformers?		
Is there power redundancy available up to the rack level i.e. from two power sources?		
If the servers don't have the provision of dual power supply, is there a facility of installing a static power transfer switch at the rack?		

Does the power distribution system ensure that addition or removal of any equipment or component will not involve power interruption to the facility?		
Power availability is ensured to what extent (in percentage terms)?		
Is there a centralised monitoring facility for monitoring the health of the Power Supply facilities?		
Power availability is ensure 99.99%		
In case of longer power failure, what is the alternate power source? How many days' provision is made?		
(iii) Humidity, Ventilation and Air-Conditioning System		
Does the Data Centre have a precision Air Conditioning System with computerised temperature and humidity control with graphic display?		
Air supply through false floor		
Precision environment control. Temperature at 20+/- 1 degree centigrade and humidity at 50%RH +/- 5%. Please mention the equipment responsible for precision control in Annexure 3.		
Back up AC System		
Is the Data Centre equipped with chemical and dust filtration equipment?		
(iv) Fire Management System		
All utility areas including doors and walls are fire rated for minimum 2 hrs.		
Fire Detection System has optical, thermal and ionization sensor placed in overlapping zones and preferably in racks.		
Data Center has high sensitivity smoke detection system and fire detection.		
Is the Data Centre divided into various overlapping zones, with each zone having multiple fire detectors of different types?		

- Is there a fire detector placed in every rack? - What is the maximum response time in case of a fire?		
Whether regular mock drill of fire fighting undertaken? When the last drill was done?		
Is the fire fighting mechanism through multi-zone; dry pipe; human friendly gas [FM 200 Gas] based fully automatic suppression system		
(v) Physical Access Security		
Are there three levels of manned security dedicated for Data Centre player at various levels viz. at complex entry, main IDC entrance and at the entrance of critical area (like Server Farm, Network Operating Centre)?		
How many layers of access control established?		
Is the Access Control in the Server Farm and other critical areas through biometric / electronic devices?		
Does the Data Centre have door sensors?		
Does the Data Centre have staff attendance control systems?		
Does the Data Centre have CC TV surveillance & recording facilities?		
If yes then for what period is the recordings kept (in no of days)?		
Is the Vendor ready to provide the recordings to the HUDA's if required?		
Is there a provision for dedicated rack / racks for different Customers and keys of which can be held by the Customer?		
The entire infrastructure such as power system, fire detection & fighting system, access system, etc. should be integrated to the central building management system.		
(vi) Data Center Network Connectivity		

Data Center should have fibre connectivity with exchange level redundancy with the Telecommunication carrier.		
Does the vendor have there own network backbone for providing connectivity from the HUDA's Site to the Vendor's Data Centre?		
Provide a secured environment for server hosting, network security through usage of appropriate software and hardware firewalls and security administration, virus protection, etc.		
(vii) Services Provided		
Does the Vendor provide managed security services e.g. firewall protection, intrusion detection system?		
Does the Vendor provide backup services?		
Does the Vendor provide System and Database Administration Services?		
Does the Vendor provide Managed Reporting Services?		
Does the Vendor provide Project Management Services?		
Does the Vendor have agreement with Hardware / Software Suppliers and are in a position to quote for the required Hardware / Software on a lease / service basis?		
Can the Vendor provide 2 hours parts / spares replacement guarantee for Hardware supplied by the vendor?		
Does the Vendor offers the above Lease / Service model for Hardware to its existing Customers as regular practice? If yes, please attach a separate sheet with the name of some Customers with order value.		

Does the Vendor keep enough inventory of regular equipments/spares to offer Lease/Service for Hardware to its customers.		
(viii) Contingency		
Does the Company have a Disaster Recovery & Business Continuity Policy document?		
Does the Data Centre have its own Disaster Recovery Site?		
If yes then are the services of that Disaster Recovery Site available to the customers?		
Does the Company have adequate insurance cover for its operations? Please indicate the cover amount.		
Can the vendor provide adequate insurance cover for all HUDA's infrastructure hosted at its Data Centre?		
(ix) Experience		
Has the Vendor implemented a similar solution earlier?		
(x) Other Service Standards		
Are all the services offered available on 24 x 7 x 365 basis?		
Are all the infrastructure elements such as Power Supply System, Humidity Ventilation and Air-conditioning System, Fire Detection and Fighting System, Physical Access Mechanism etc. integrated to a Central Building Management System?		
Does the Data Centre operator guarantee a certain level of service uptime and is ready to sign Service Level Agreement with penal clause covering Data Centre Infrastructure, Services and Connectivity?		
If yes then what is the percentage uptime will the Vendor guarantee and sign Service Level Agreement for?		

- Is Data Centre certified with BS7799 or ISO27001 Compliant - Does the Data Centre have adequate sitting space for the Staff of the HUDA and that of other Vendors at the time of commissioning and testing?		
(xi) Other Terms and Conditions		
Is the bidder in position to provide the complete integrated solution including Hardware, Software, Sitting Space, Connectivity, Implementation, Security Elements and Overall Management / Monitoring of the Systems with long term support commitment?		
Is the bidder in a position to provide tape backup of the data and is willing to sign SLA for the Data availability?		
Is the bidder able to provide Roof Top space for installing <<MODEOF CONNECTIVITY-WIRELINE/WIRELESS>> / RF equipment's, if required?		

Signatures of authorized signatory

Seal of the company

Name

Address

Date

(To be enclosed with Pre Qualifying Bid)

Proforma - 6

UNDERTAKING BY THE BIDDER

NAME OF THE BIDDER: M/s _____

The bidder is requested to sign and affix their seal on each page of this document and submit this duly signed original TENDER document with pre-qualification bid in respective cover without fail.

The bidder is also requested to give the following declaration as per the format.

We M/s _____ have gone through the terms and conditions and will abide by them as laid down vide pages from 1 to _____ (Commercial Bid and all relevant Annexures and formats enclosed)

We M/s _____ hereby confirm that our firm has not been blacklisted by any State Government / Central Government.
We M/s _____ further confirm that our firm has no legal case pending in any of the courts for winding up the company.

We M/s _____ hereby declare that the particulars furnished by us in this offer are true to the best of our knowledge and we further understand and accept that, if at any stage the information furnished is found to be incorrect or false, we are liable for disqualification from this tender and also is liable for any penal action that may arise due to the above.

Date:

Place:

Signature :

Name :

Designation :

Seal of Bidder:

(To be enclosed with Technical Bid)

Proforma-7
Technical Detail

S. No.	Equipment Name	Qty.	Make/Code	End of sale date	End of support date	Bundled accessories alongwith equipment	Add on accessories included	Certification wherever required	Compliance of the Specs. Enclose Specs. Sheet
	Data Center								
	Software								
1.	Operating System								
2.	Data Base Software								
3.	Web Server software								
4.	Application Server Software								
5.	Messaging Software								
6.	Backup Software with Agents								
	Hardware								
7.	Web Server								
8.	Application Server								
9.	Database Server								
10.	Mail Server								
11.	Staging Server								
12.	Layer -3 Switch								
13.	SAN/Storage Device / Tape Library/ SAN switches								
14.	Racks with foldable monitors, Digital 8 port KVM switch								
15.	Backup Server								
	End to end connectivity equipment								
16.	Router for Head office at Panchkula and Gurgaon	2							
17.	Router for other offices of HUDA at Panchkula and Gurgaon	9							

OTHER ITEMS		COMPLIANCE					Remarks		
1	Facility Management for 1 st Year								
2	Facility Management for 2 nd Year								
3	Facility Management for 3 rd Year								
4	Warranty								
5	Availability of Spares								
	AMC after the expiry of period of facility management								
1	AMC For 4 th Year (with spares)								
2	AMC For 5 th Year (with spares)								
3	AMC For 6 th Year (with spares)								
	ANY OTHER ITEMS NEEDED FOR THE PROJECT								

Signature :

Name :

Designation :

Seal of Bidder:

Date:

Place:

(To be enclosed with Commercial Bid)

Proforma-8

Commercial Proforma for Data Center Services Facility on lease basis
(Quarterly charges for two years with one year extension)

DESCRIPTION	Charges for 1 st Year/2 nd year/3 rd year			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Software				
Operating System with CAL's and Ext Connector				
Data Base Software				
Web Server software				
Application Server Software				
Messaging Software with 170 CAL's				
Backup Software with Agents				
Hardware				
Web Server				
Application Server				
Database Server				
Staging Server				
Mail Server				
Layer-3 Switch , Digital 16 port KVM switch				
SAN Storage Device / Tape Library/SAN Switch				
Backup Server				
Router for DC and DR				
Hosting Services				
Racks with foldable monitors				

DESCRIPTION	Charges for 1 st Year/2 nd year/3 rd year			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Data Center Facility Services like Rack Space, Managed Routers, UPS etc.				
Server/OS/DB/Network Management				
Other System Admin Services/Mail management				
DNS & Anti-Virus Services				
Security Services Intrusion Detection Services (Host Based) & Firewall Services				
Security Services Intrusion Detection Services (Network Based)				
Backup Services				
DR Management Services				
Connectivity				
Internet Bandwidth at Primary Site (2Mbps)				
Internet Bandwidth at DR Site(1 Mbps)				
Bandwidth between Primary & DR Site (1 Mbps)				
Bandwidth Charges for Head Office at Panchkula (2 Mbps)				
Bandwidth Charges for Head Office at Gurgaon (2 Mbps)				

DESCRIPTION	Charges for 1 st Year/2 nd year/3 rd year			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Bandwidth Charges for One No. office at Panchkula (256 Kbps) and 2 Nos Offices (64 Kbps)				
Bandwidth Charges for other offices at Gurgaon one 2Mbps and 1 no.(512 Kbps and 1 No 64kbps)				
Installation & System Integration Services				
Any Other Items Needed for the Project				
Total in fig				
Total in words				

Date:

Place:

Signature :

Name :

Designation :

Seal of Bidder:

(To be enclosed with Commercial Bid)

Proforma-8 A**Commercial Proforma for Data Center Services Facility on BOOT Model
(Optional) (Quarterly charges for Two years with one year extension)**

DESCRIPTION	Charges for 1 st /2 nd /3rd Year			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Software				
Operating System with CAL's and Ext Connector				
Data Base Software				
Web Server software				
Application Server Software				
Messaging Software with 300 CAL's @ Single CAL				
Backup Software with Agents				
Hardware				
Web Server				
Application Server				
Database Server				
Staging Server				
Mail Server				
Layer-3 Switch , Digital 16 port KVM switch				
SAN/Storage Device / Tape Library/SAN Switch				
Backup Server				
Router for DC and DR				
Hosting Services				
Racks				
Data Center Facility Services like Rack Space, UPS etc.				

DESCRIPTION	Charges for 1 st /2 nd /3rd Year			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Server/OS/DB/Network Management Other System Admin Services/Mail management				
DNS & Anti-Virus Services				
Security Services Intrusion Detection Services (Host Based) & Firewall Services				
Security Services Intrusion Detection Services (Network Based)				
Backup Services				
DR Management Services				
Connectivity				
Internet Bandwidth at Primary Site (2Mbps)				
Internet Bandwidth at DR Site(1 Mbps)				
Bandwidth between Primary & DR Site (1 Mbps)				
Bandwidth Charges for Head Office at Panchkula (2 Mbps)				
Bandwidth Charges for Head Office at Gurgaon (2 Mbps)				
Bandwidth Charges for One No. office at Panchkula (256 Kbps) and 2 Nos Offices (64 Kbps)				
Bandwidth Charges for other office at Gurgaon (256 Kbps, 64kbps)				

DESCRIPTION	Charges for 1 st /2 nd /3rd Year			
	1 st Qtr	2 nd Qtr	3 rd Qtr	4 th Qtr
Installation & System Integration Services				
Any Other Items Needed for the Project				
Total in fig				
Total in words				

Signature :

Name :

Designation :

Seal of Bidder:

Date:

Place:

(To be enclosed with Commercial Bid)

Proforma-9**Commercial Proforma for End to end connectivity equipment**

S.No.	Equipment Name	Qty.	Make/ Code	Unit cost	Total cost
End to end connectivity equipment					
1.	Router for Head office at Panchkula and Gurgaon				
2.	Router for other offices of HUDA at Panchkula and Gurgaon				
	Sub Total-A				
3.	Sales tax/vat				
4.	Octroi/Local Levies				
5.	Excise duty				
6.	Customs duty				
7.	Any other taxes				
	Sub Total-B				
OTHER ITEMS					
1	Facility Management for 1 st Year				
2	Facility Management for 2 nd Year				
3	Facility Management for 3 rd Year				
	Sub Total-B				
	AMC after the expiry of period of facility management				
1	AMC For 4 th Year (with spares)				
2	AMC For 5 th Year (with spares)				
3	AMC For 6 th Year (with spares)				
	Sub Total-C				
	ANY OTHER ITEMS NEEDED FOR THE PROJECT				
	Sub Total-D				
	Grand Total (A+B+C+D) (in Figures)				
	Grand Total (A+B+C+D) (in Words)				

Signature :

Date:

Name :

Place:

Designation :

Seal of Bidder:

(To be enclosed with technical bid)

Proforma-10
Technical Deviations

Sr. No.	Clause No.	Page No.	Statement of deviations and variations
--------------------	-----------------------	---------------------	---

Date

Signature

Name

Place

Seal

(To be enclosed with commercial bid)

PROFORMA 11
Financial Deviations

Sr. No.	Clause No.	Page No.	Statement of deviations and variations
--------------------	-----------------------	---------------------	---

Date

Signature

Name

Place

Seal

Appendix- A**Bandwidth Requirements****For Panchkula**

Office Name	Bandwidth Required
C-3 , Sec-6, HUDA PKL	2Mbps
Sec-8 Huda Complex, PKL	256 Kbps
Executive engineer Phase-I (Division Office) ,PKL	64 Kbps
CA Office, Old Estate Office, Madhya Marg ,Chandigarh	64 Kbps

For Gurgaon

Office Name	Bandwidth Required
HUDA Complex Building Sector-14	2mbps
Sector-15 Part-II Gurgaon	512 Kbps
Huda Nursery Sector 14	64 Kbps