

**Request for Proposal (RFP)  
for Implementation of  
Secretariat Local Area Network  
On  
Build, Own, Operate and Transfer Model**

**Tender No: BSEDC 2007 / SecLAN/004**

**Date 9<sup>th</sup> June 2007**

**Bihar State Electronics Development Corporation Limited**

**(A Government of Bihar Undertaking)**

**BELTRON BHAWAN, SHASHTRI NAGAR,**

**PATNA, BIHAR PIN Code - 800023**

**Tel No:- 0612-2281856, 0612-2281857**

**Fax No: - 0612-2281857**

**E-mail: - bsedc@beltron.in, best@ilfsets.com**

**Web Site: - www.beltron.in**



## IMPORTANT INFORMATION

**Table 1: Important Information about the RFP**

<b>Non-Refundable Tender Cost</b>	Rs. 5,000/- in cash or through demand draft from a scheduled bank, drawn in favour of "Bihar State Electronics Development Corporation Limited", payable at Patna.
<b>Sale of RFP document</b>	9.00 am to 5.00 pm on all working days starting from 9 <sup>th</sup> June 2007 till 5 <sup>th</sup> July 2007
<b>EMD</b>	Rs. 20,00,000/- through Demand Draft /Bank Guarantee in favour of Bihar State Electronics Development Corporation Limited payable at Patna from a scheduled bank only
<b>Last Date of Submission of written queries on Bid document</b>	<i>Any clarification and queries relating to tender document. Bidders have to submit their written clarifications &amp; queries on before 15<sup>th</sup> June 2007 in enclosed format only {Ref: Annexure: 16}. Any clarification or query received after the due time and date will not be entertained.</i>
<b>Pre bid conference</b>	At 19 <sup>th</sup> June 2007 on 3.00 PM <b>Venue:</b> Chamber of Managing Director, Bihar State Electronics Development Corporation Limited, Beltron Bhawan, Patna
<b>Last date for submission of Bids</b>	Up to 5 <sup>th</sup> July 2007 on 3.00 PM <b>Venue:</b> Bihar State Electronics Development Corporation Limited, Beltron Bhawan, Patna
<b>Opening of Pre-Qualification Bids</b>	4.00 P.M. on 5 <sup>th</sup> July 2007 <b>Venue:</b> Chamber of Managing Director, Bihar State Electronics Development Corporation Limited, Beltron Bhawan, Patna
<b>Opening of Technical &amp; Financial Bids</b>	Only those Pre-qualified and Technical qualified bidders will be informed about the opening of Technical and Financial bids opening dates. Date and time of opening of Technical and Financial bids will be published on the Beltron website <a href="http://www.beltron.in">www.beltron.in</a>
<b>Address for Correspondence</b>	<b>Managing Director</b> <b>Bihar State Electronics Development Corporation Limited</b>



<b>and Clarifications</b>	BELTRON BHAWAN, SHASHTRI NAGAR, PATNA, BIHAR - 800023 Tel No:- 0612-2281856, 0612-2281857 Fax No: - 0612-2281857 E-mail: -bsedc@beltron.in, best@ifsets.com Web Site: - <a href="http://www.beltron.in">www.beltron.in</a>
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## Preface

The Electronic Governance (or e-governance) has become an accepted methodology involving the use of IT to providing information speedily to all citizens, Improving Public services, improving administrative efficiency. In this direction Government of Bihar has adopted to rollout to major Information Technology Infrastructure project namely State Wide Area Network, State Data Center and Secretariat Local Area Network for use of ICT in general administration.

With the fast pace of technological change it is becoming important for government to review existing structure of secretariat, hierarchies, policies and procedures. The entire paradigm of the secretariat and in the 'Information Age' will necessarily be different from what it is at present. Consequently, a large scale retooling and restructuring in the secretariat will be called for. Secretariat and governance will inevitably be very different from what is today. Digital government will entail flatter organizational hierarchies and more personalized delivery of citizens' services.

The 'Electronic Governance' in the Secretariat aims at IT driven system of Governance that works better, costs less and is capable of servicing the decision making machinery and citizens' needs as never before. An urgent need was felt to have a central mechanism (iWDMS Integrated Workflow Document Management System, CM's grievances redressal system, Secretariat Knowledge Management System, Bihar Online, Integrated Treasury, Value Added Tax Net etc.), so that electronic feedback system is operationalized. The use of IT by government would be made imperative to the extent possible in a phased but time bound manner. For this, the central mechanism would endeavor:

- to use Information Technology in the process of governance and improve its response to its citizens
- To have connectivity between all its offices so that communication can flow through E-mail to enhance productivity.



- to computerize the process of governance, so that the citizens could file the documents required by the Government, electronically
- To put in place a training program to enable government employees to use Information Technology to enhance productivity.

To extend the success of computerization, Government of Bihar (GoB) proposes to set up Local Area Network for all its Government office in and around Secretariat (SecLAN) and connectivity to State Data Centre (SDC) at Technology Bhawan, Bailey Road, Patna. The proposed SecLAN be used for accessing all intranet applications that are being developed for computerizing the operations of various departments of GoB in order to render a wider range of services to the Citizens of Bihar.

To build a robust scalable, secured and state of art LAN for Bihar Secretariat and manage the same.

To catalyse the change from manual processes to fully automate and computer driven process, it is essential to have a robust infrastructure to support future endeavors of the state. The first step would be to have a Secretariat Local Area Network.

The Secretariat Local Area Network (SecLAN) would aim at:

- Providing a reliable, integrated and robust telecommunications infrastructure catering to high speed, high capacity and secured delivery of voice, and data transmissions.
- Improving the service delivery and response time to the employees of Bihar State Secretariat enabling quick access to information and data.
- Streamlining the information flow within the Secretariat Campus.
- Leveraging IT for greater transparency, accountability and easier access to information among various departments and agencies.

The SeCLAN would be implemented in 7 Locations, which are Old Secretariat, Vikas Bhavan, Sinchai Bhavan, Vishveswarayya Bhavan, Technology Bhavan, Soochana Bhavan, Chief Minister's Secretariat and Chief Minister Residence. The SeCLAN would cover 2000 users in all the departments. Each department in the above building would be provided with Data Port, IP Telephony Port, EPABX Port, and UPS power points.



In order to connect to data center and utilizing the latest technologies in Data, Voice, and Video for various user departments, there are three basic areas of SecLAN:

- OFC, UTP, EPBAX, VoIP and UPS Cabling
- UPS and Diesel Generator facility
- Technology Facility Management Services (FMS)

For the above project BSEDC is considering the appointment of a Bidder (here in after referred to as “bidder”) to design, establishing, implementing, operating and maintaining Secretariat Local Area Network (SecLAN) in an efficient and effective manner. Bidder has to quote for the installation and maintenance of SecLAN on BOOT basis for duration of five years, in accordance with the various provisions of this RFP document.

BSEDC now invites sealed technical and financial proposals from short-listed eligible Bidders for selection as bidder, to implement and operate Secretariat Local Area Network (SecLAN) in the Bihar. The bidder shall be selected as per the procedures described in this Request For Proposal (RFP).

Bidder shall submit three sealed envelopes containing:

- **Part I: Three hard copies of Pre-qualification Bid and one soft copy of the Pre-qualification Bid.**
- **Part II: Three hard copies and one soft copy of the Technical Bid and one soft copy of the Technical Bid.**
- **Part III: Three hard copies and one soft copy of the Commercial Bid.**

You are hereby invited to submit technical and financial Proposals as per the provisions detailed in this RFP. The last date for submitting the technical and financial Proposal is 5<sup>th</sup> July 2007 latest by 3.00 Pm to the following address which is to be used for all communication in regards to this bid process

**Shri. Alok Vardhan Chaturvedi**  
**Managing Director**  
**Bihar State Electronics Development Corporation Limited**  
**BELTRON Bhawan, Shastri Nagar**  
**PATNA BIHAR - PIN CODE-800023**



**Tel No: - 0612-2281856, 0612-2281857**

**Fax No: - 0612-2281857**

**e-mail:-bsedc@beltron.in, [best@ifsets.com](mailto:best@ifsets.com)**

**Web Site: - [www.beltron.in](http://www.beltron.in)**

Please note that a pre-bid conference would be held on 19th June 2007 at 3.00 Pm in the office of Managing Director, Bihar State Electronics Development Corporation Limited, Patna.

Bidders are requested to provide their queries or clarifications regarding the RFP conditions in the Annexure format only before the 15<sup>th</sup> June 2007 of pre-bid conference. Only those questions, which are submitted in writing, will be taken up for discussion in the conference. Only those bidders will be allowed to attend the pre-bid conference that has purchased the tender document.

The authorized representative of the bidder should sign all the communication including this RFP and the bid documents on each page. Only One Signed Copy is to attach with the Pre-qualification bid.



## Letter for Invitation

Date of Issuance: \_\_\_\_\_

Ref. No: \_\_\_\_\_

To,

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

BSEDC invites proposals to provide developing, designing, construction, establishing, implementation and operations of Secretariat Local Area Network (SecLAN) for a period of Five Years on BOOT Model. More details on the services are provided in the Schedule of requirements.

You are requested to go through the document carefully and submit your proposals as per the instructions and guidelines given in the document.

**YOURS SINCERELY,**

***Alok Vardhan Chaturvedi***

***Managing Director***

*Bihar State Electronics Development Corporation Limited*

*BELTRON Bhawan, Sastri Nagar, Patna, 800023*



## **Section I**

# **Project Profile**



## **1.1 Project Profile**

Bihar Government is contemplating to provide to the authorized users with uninterrupted access to information resources and department application software, by establishing Secretariat Local Area Network (SecLAN). SecLAN is intended to help position information and communication technology to drive improved efficiency and responsiveness in day to day administration of the Government.

The SecLAN would be an edge to accommodate increased collaborative applications. The SecLAN will connect from Technology Bhavan where the State Data Center and State WAN is located, to all the six buildings (Soochana Bhavan, Old Secretariat, Sinchai Bhavan, Vikas Bhavan, Vishveswarayya Bhavan and CM's Secretariat).

Creating a single, converged network that provides voice, data and communications is a critical enabler for employees, citizens and businesses to become engaged with their Government, spread all over the State of Bihar through BSWAN and BRAIN DC Projects.

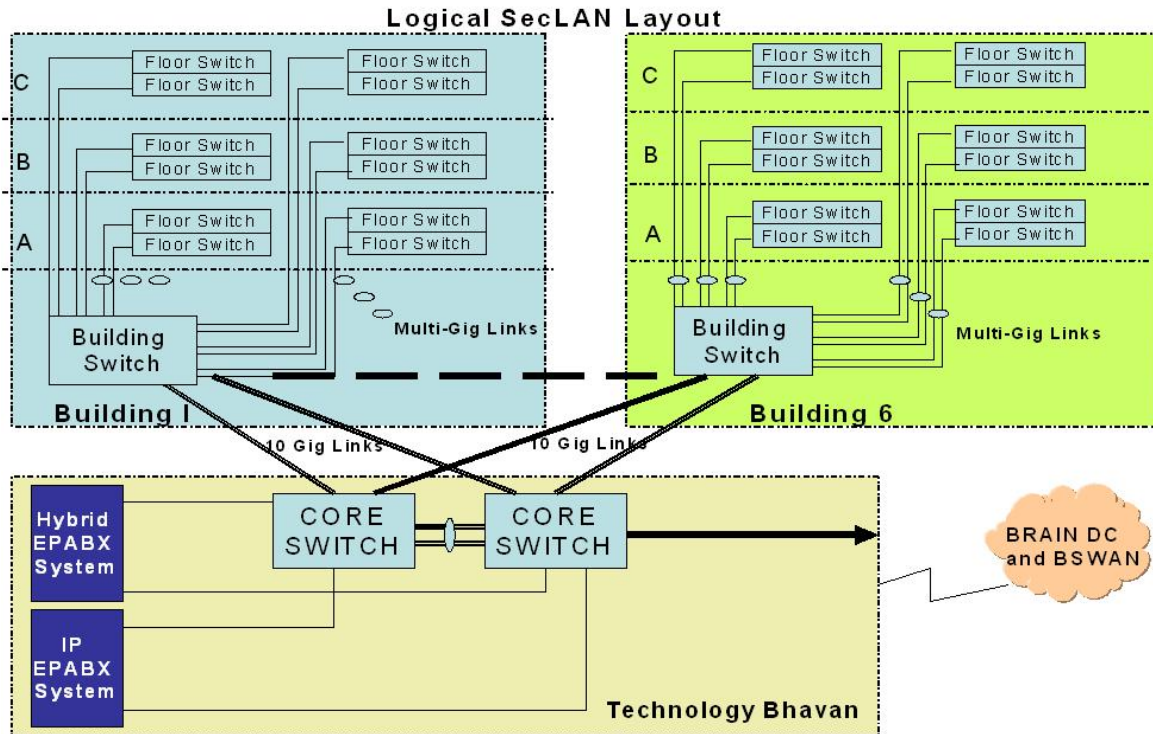
The proposed SecLAN will use latest technology and latest architecture to the next level, providing the means for end-users to share collaborative applications in a decentralized manner over a more robust infrastructure. This approach will enable users to share applications instantly as the network should dynamically adapts to application requirements in a flexible architecture to provide network services and applications that enable the network to support distributed applications as needed. The proposed network should be responsive, manageable, and cost efficient.

The SecLAN would use technologies such as Mailing, Messaging, IP telephony, Video Conferencing, workspace document sharing, Web based applications and Extensible Markup Language (XML)-based applications.

The proposed Secretariat LAN is about raising the bar with a new level of Connectivity and Communication where and how the network is accessed while offering enterprises the power of choice in deployment options through leading solutions in IP Telephony, applications, data and optical networking.



Following is the schematic Diagram of the proposed SecLAN.



Approximate distances from Technology Bhavan to other buildings:

Vishveswarayya Bhavan	: 200 mtrs
Vikas Bhavan	: 400 mtrs
Soochana Bhavan	: 400 mtrs
Old Secretariat	: 1000 mtrs
Sinchai Bhavan	: 1200 mtrs
CM Secretariat	: 1500 mtrs
CM Residence	: 1500 mtrs

Note: The present connectivity is limited to the eight buildings and Bihar Government may increase the number of locations in future, the selected bidder will have to extend the SecLAN for the new offices as part of this RFP. The department will be opening 4 new offices in coming financial year as part of expansion plan and similarly during the contract period of five years.



## 1.2 Current RFP requirements:

- Establishing, management and maintenance of Secretariat Local Area Network covering 7 buildings of the State Secretariat on OFC campus LAN. Major Infrastructure components are detailed below:

**Table 2: Components of Secretariat Local Area Network**

S.No.	Item Description	Sub Items Description
1	Switches	Building Switches / Floor Switches
2	IP Phones	High End and Low End Phones
3	Fibre Optic Cabling and other allied components	OFC between Technology Bhawan and other Secretariat Buildings and in each floor with in the buildings.
4	UTP Cabling and other allied components	From floor switch to the individual officers desk. UTP cabling for Data, Voice and analog or digital phones.
5	UPS Power Cabling and other allied components	UPS cabling from panel to the individual officer's desk.
6	UPS for all buildings	Individual UPS for each of the building with power panel and other allied components
7	Diesel Generator and other allied components	For each building Diesel Generator Set with all accessories and allied components.
8	NMS for SecLAN	
9	Preparation of Network Operations room and Help desk room	Help Desk Facility at Technology Bhawan for coordinating individual building FM Engineers
10	Passive Cat 6 and fiber optic Cabling with Data Outlets	



**Table 3: Approximate Number of Current User per Location in Secretariat Local Area Network. There is a requirement of providing 100% scalability of the following requirement.**

Sr. No.	Building	Department	Approx. No. of Data Ports / Dept wise	No. of IP Phone Points	No. of Users EPABX
1	Old Secretariat	Finance	60	6	60
		Home	150	6	150
		C S Office	10	6	11
		Personnel & Admin Reforms	20	6	20
		Relief & Rehabilitation	20	6	20
		Land Reforms	20	6	20
		Rural Development	30	6	30
		Revenue Board	10	6	10
		Revenue	20	6	20
		Cabinet Co-ordination Dept	20	6	20
		Planning & Development	30	6	30
		Law Department	10	6	10
		Parliamentary Affairs	20	6	20
		Tourism	10	6	10
		DG Office	30	6	30
		Conference Room	45	2	2
		VC Room	6	2	2
		CM Office	2	4	10
2	Vikas Bhavan	Sugar Cane	10	6	10



Sr. No.	Building	Department	Approx. No. of Data Ports / Dept wise	No. of IP Phone Points	No. of Users EPABX
		Industry	30	6	30
		Agriculture	25	6	25
		Mines & Geology	20	6	20
		Urban Development	15	6	15
		Registration & IG Stamps	20	6	20
		Commercial Taxes	30	6	30
		Animal Husbandry & Fisheries	20	6	20
		Health	30	6	30
		Department of Co-operatives	20	6	20
		Human Resources	50	6	50
		Excise & Prohibition	20	6	20
		Treasury	10	2	10
		Labour & Employment	15	6	15
3	Sinchai Bhavan	Irrigation	30	6	10
		Minor Irrigation	20	3	15
		Forest / Social Poverty	10	3	10
		Treasury	15	2	15
		Energy	10	3	10
		Welfare	15	3	15
4	Vishveswaraya Bhavan	Road Construction	20	6	15
		Building	20	6	20



Sr. No.	Building	Department	Approx. No. of Data Ports / Dept wise	No. of IP Phone Points	No. of Users EPABX
		Construction			
		Central Design Unit	15	3	10
		PHED	20	3	15
		Static Planning Council	10	3	20
		Panchayatraj /Rural Engg	15	6	15
5	Technology Bhavan	Science & Technology	20	6	20
		Forest Directorate	5	2	5
		NIC	4	4	5
6	Soochana Bhavan		50	20	50
7	CM's Secretariat		10	6	10
8	CM Residence		3	2	2
		<b>Grand Total</b>	<b>1120</b>	<b>265</b>	<b>1052</b>

**Note:**

- 1: Other requirements are detailed in Scope of Work
2. Wiring for Data and EPABX ports should be 100% redundant, while Active components (LAN Switches) are required for additional redundant Data ports.
3. Bidders have to take into consideration the future expansion of LAN and accordingly have to make provision for appropriate additional capacities..



## Section II

# Instructions to Bidders



## 2 Instructions to Bidders

### 2.1 Definitions

In this document, the following terms shall have following respective meanings:

1. **“Acceptance Test Document”** means a mutually agreed document, which defines procedures for testing the SecLAN against requirements laid down in the Agreement.
2. **“Affiliate”** shall mean any holding company or subsidiary company of a part to the Agreement or any company, which is subsidiary of such a holding company. The expressions "holding company" and “subsidiary company” shall have the meaning specified in section 4 of the Companies Act 1956 (as amended from time to time).
3. **“Agreement”** means the Agreement to be signed between the successful bidder and BSEDC including all attachments, appendices, all documents incorporated by reference thereto together with any subsequent modifications, the RFP, the bid offer, the acceptance and all related correspondences, clarifications, presentations.
4. **“Authorized Representative”** shall mean any person authorized by either of the parties.
5. **“Bidder”** means any firm or group of firms (called consortium) offering the solution(s), service(s) and /or materials required in the RFP. The word Bidder when used in the pre award period shall be synonymous with Bidder, and when used after award of the Contract shall mean the successful Bidder with whom BSEDC signs the agreement for rendering of services for SecLAN.
6. **“Contract”** is used synonymously with Agreement.
7. **“Corrupt Practice”** means the offering, giving, receiving or soliciting of any thing of value or influence the action of an official in the process of Contract execution.
8. **“Default Notice”** shall mean the written notice of Default of the Agreement issued by one Party to the other in terms hereof.
9. **“Fraudulent Practice”** means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid



prices at artificial non-competitive levels and to deprive the BSEDC of the benefits of free and open competition.

10. **“Good Industry Practice”** shall mean the exercise of that degree of skill, diligence and prudence which would reasonably and ordinarily be expected from a reasonably skilled and experienced Bidder engaged in the same type of undertaking under the same or similar circumstances.
11. **“Gol”** shall stand for the Government of India.
12. **“Implementation Period”** shall mean the period from the date of signing of the Agreement and up to the issuance of Final Acceptance Certificate of SecLAN.
13. **"Law"** shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the Central Government and/ or the BSEDC or any other Government or regulatory authority or political subdivision of government agency.
14. **“LOI”** means issuing of Letter of Intent, which shall constitute the intention of the Tenderer to place the Purchase Order with the successful bidder.
15. **"Bidder"** means the company providing the services under Agreement.
16. **"Party"** means BSEDC or Bidder, individually and **“Parties”** mean BSEDC and Bidder, collectively.
17. **“Period of Agreement”** means 5 years from the date of final acceptance of the SecLAN.
18. **“Proposal”** means the Technical Proposal and the Financial Proposal.
19. **“Request for Proposal (RFP)”**, means the detailed notification seeking a set of solution(s), services(s), materials and/or any combination of them.
20. **“Requirements”** shall mean and include schedules, details, description, statement of technical data, performance characteristics, standards (Indian as well as International) as applicable and specified in the RFP.
21. **“Site”** shall mean the location(s) for which the Contract has been issued and where the service shall be provided as per agreement.
22. **"Service"** means provision of Contracted service viz., operation, maintenance and associated services for SecLAN as per this RFP.
23. **“SecLAN”** means Secretariat Local Area Network covering 7 building in Secretariat Campus in Patna. (Old Secretariat, Vikas Bhavan, Vishwesvaryya Bhavan, Sinchai Bhavan, Technology Bhavan, Soochana Bhavan and Chief Minister's Secretariat)



24. **"Third Party Agency"** means any agency other than the successful bidder, appointed by BSEDC for monitoring the SecLAN during commissioning and operation.
25. **"Termination Notice"** means the written notice of termination of the Agreement issued by one Party to the other in terms hereof.
26. **"Uptime"** means the time period when specified services/network segments with specified technical and service standards as mentioned in this RFP are available to BSEDC. The uptime will be calculated as follows: Total time in a quarter (in minutes) less total Service Down time (in minutes) in the quarter.
27. **"%Uptime"** means ratio of 'up time' (in minutes) in a quarter to Total time in the quarter (in minutes) multiplied by 100.
28. **"Service Down Time"** (SDT) means the time period when specified services/network segments with specified technical and operational requirements as mentioned in this document are not available to Bihar. The network shall be operational on all days of a year and 24-hours/ day with in the uptime specified in the Service Level Agreement (SLA). The network is considered as operational when all centers at all buildings/ levels are working, providing all/ specified services as mentioned in full capacity at all locations in the network.
29. **"BELTRON"** means Bihar State Electronics Development Corporation Limited, State level agency nominated by BSEDC as implementation agency for SECLAN.
30. **"GOB"** means Government of Bihar.
31. **"DIT"** means Department of Information Technology, Government of Bihar, line department for implementation of SECLAN.
32. **BSWAN means Bihar State Wide Area Network.**
33. **BSDC Bihar State Data Centre.**
34. **BRAIN DC Bihar Revenue and Intranet Data Centre.**

## 2.2 Bid Documents

Bidder is expected to examine all instructions, forms, terms, and requirements in the bid document. Failure to furnish all information required by the bid document or submit a Bid not substantially responsive to the bid document in every respect may result in the rejection of the Bid. The bids should be submitted in three parts as mentioned hereunder on or before 5<sup>th</sup> July 2007:

### A. Pre-qualification bid as per eligibility criteria specified



1. A letter on the bidder's letter-head (Appendix – 1)
  - i. Describing the pre-qualifying technical competence and experience of the bidder,
  - ii. Certifying that the period of validity of bid is 180 days from the last date of submission of bid, and
  - iii. Asserting that the bidder is quoting for all the items (including services) mentioned in the tender.
2. The profile of the bidder (template given in Appendix -2)
3. Audited annual financial results (balance sheet and profit & loss statement) of the bidder for the last three financial years. (Template provided in Appendix 3)
4. The bid security in the form of a Bank Guarantee / Demand draft issued by a Nationalized / Scheduled Bank, in favour of Bihar State Electronics Development Corporation Limited, payable at Patna. (Template provided in Appendix 14)
5. Quality certification in delivery of services sought under this RFP, from an internationally recognized/reputed agency, e.g. ISO 9000
6. Manufacturer's authorization form(s) (template provided in Appendix -4)
7. Reference list of major clients (using equipment/services similar to Bihar's requirement). (Template provided in Appendix 5)
8. Solvency Certificate
9. Power-of-attorney granting the person signing the bid the right to bind the bidder as the 'Constituted attorney of the Directorate'.
10. Permanent Account Number (PAN) from INCOME TAX authorities of area of operation of the bidder.
11. A copy of the RFP, all pages duly signed by the authorized signatory towards acceptance of the terms and conditions of the RFP. **Only one signed copy of RFP should be enclosed with the original Pre-qualification bid.**

## **B. Technical bid**

- a. Bid particulars



- b. Bid letter
- c. Proposed Design, Deployment model and Architecture, Network Architecture, Technical Solution, details of equipment and services offered
- d. Unpriced Bill of Material (BOM)
- e. Qualification and Deployment Schedule of the staff proposed for the project (Appendix 6 and 7)
- f. Proposed Project Plan and Implementation Schedule
- g. Statement of deviation from requirement specifications (Appendix 8)
- h. Statement of deviation from tender terms and conditions (Appendix 9)
- i. Schedule of delivery
- j. Warranty
- k. Manufacturer's authorization form(s).

### **C. Commercial bid**

- a. Bid letter
- b. Bid particulars including priced Bill of Material (BOM)
- c. Statement of commercial deviation (template provided in Appendix 11)
- d. Commercial Quotation (template Provided in Appendix 12)

Bidders should enclose with their offers full details of all the equipment and services offered as well as their latest equipment and services available with full documentation and descriptive literature supplementing the description and point out any special feature of the equipment and services. All documentation is required to be in English.

### **2.3 Pre-bid Conference (PBC)**

- (i) Tenderer shall hold a pre-bid conference (PBC) after the sale of the RFP document as per schedule mentioned in this RFP. 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 Managing Director, Bihar State Electronics Development Corporation Limited in writing to be received at least 2 (two) days prior to the date of PBC. Queries not submitted within this deadline may not be taken up



at the PBC. Queries should be submitted in the enclosed format ( template provided in Appendix-16)

- (ii) Tenderer will entertain queries of and clarifications sought by only those bidders who have purchased this RFP document. Bidders that have purchased the RFP document are welcome to attend the PBC, even if they do not have any specific queries.
- (iii) 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 and also host the same on the State website *www.beltron.in*.

## 2.4 Amendment of Bid Documents

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 or publish through website to all prospective bidders who have purchased the tender documents and will be binding on them.

## 2.5 Cost of Bidding

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

## 2.6 Bid Security i.e. Earnest Money Deposit (EMD)

- a) The Bid security shall be in Indian rupees (INR) and shall be a Bank Guarantee / Demand Draft, issued by a nationalised / Schedule bank in India and shall be valid for at least six months. No interest shall be payable on Bid Security under any circumstance.
- b) The bidder shall furnish, as part of his bid, a bid security in the form of Bank Guarantee / Demand Draft of Rs. 20,00,000/- (Twenty Lakhs only). The template of bank guarantee is provided in Appendix – 14



- c) Unsuccessful Bidder's Bid security shall be discharged or returned within sixty (60) days after the expiration of the period of Bid validity prescribed by BSEDC.
- d) The successful Bidder's Bid security shall be discharged upon the Bidder signing the Agreement.
- e) The Bid security will be forfeited at the discretion of Government of Bihar on account of one or more of the following reasons:
  - o The Bidder withdraws their Bid during the period of Bid validity
  - o Bidder does not respond to requests for clarification of their Bid
  - o Bidder fails to co-operate in the Bid evaluation process, and
- f) In case of a successful Bidder, the said Bidder fails :
  - o to furnish Implementation Guarantee; or
  - o to sign the Agreement in time

## 2.7 Bid Prices

- a) The Price Bid as prescribed should be filled up and sealed along with enclosures in a separate cover super scribed as “**Price Bid – Envelop B, Tender No : \_\_\_\_\_**”.
- b) The prices quoted by the bidder shall be in sufficient detail to enable the Tenderer to arrive at the price of equipment/system offered.
- c) The covers received without superscription are liable for rejection. The tenders not submitted as specified above will be summarily rejected.
- d) If any or all of the information asked in the RFP are not available in the Commercial Proposal the bid is liable for rejection.

## 2.8 Discounts

The Bidders are informed that discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, will not be taken into account for evaluation purposes.

## 2.9 Bid validity

The bids shall remain valid for a period of 180 days from the last date of submission of tender.



## 2.10 Submission of Proposals

- a) All the proposals will have to be submitted in **bound** form with **all pages numbered**. It should also have an **index giving page wise information of above documents**. Incomplete proposal will summarily be rejected.
- b) Number of Copies of Bid
  - o The Bidder shall prepare one original and two hard copies of the following bids along with a soft copy in CD:
    - **Pre Qualification Bid** clearly marking “**Pre Qualification Bid- Original Copy and Pre Qualification Bid- Copy of Bid**”.
    - **Technical Bid** separately, clearly marking “**Technical Bid – Original Copy**” and “**Technical Bid –Copy of Bid**”.
    - **Financial Bids**, clearly marking “**Financial Bid I– Do not open with Technical Bid**”.
- c) No bid will be considered unless and until each page of the bid document is duly signed by the authorized signatory. The bidder shall also submit the soft copy of Pre-qualification, technical and commercial bids on separate CDs duly packed in the respective envelopes.
- d) Prices should not be indicated in the Technical Bid.
- e) All the columns of the quotation form shall be duly, properly and exhaustively filled in. The rates and units shall not be overwritten. Rates shall always be both in the figures and words.
- f) The proposals shall be submitted in three parts, viz.,
  - o **Envelope - 1:** Pre- qualification documents super scribed as “**Envelope 1- Pre- qualification Documents**” containing EMD, Pre- qualification documents complete with all details.
  - o **Envelope 2:** - Technical Proposal super scribed as “**Envelope 2 – Technical Proposal**”, complete with all technical details”. In the technical proposal, there should not be any indication about the prices of any of the products offered.
  - o **Envelope-3:** Commercial Proposal containing Price Schedule super scribed as “**Envelope 3 – Commercial Proposal**”.

All the three sealed envelopes should again be placed in a single sealed envelop super scribed as “**SecLAN Tender No \_\_\_\_\_, Bid from: \_\_\_\_\_)**” “**NOT TO BE OPENED BEFORE 05-July-2007 : 15:00Hrs**, which will be received in the office of



## **Shri. Alok Vardhan Chaturvedi**

**Managing Director**

**Bihar State Electronics Development Corporation Limited**

**BELTRON Bhawan, Sastri Nagar**

**PATNA, BIHAR - PIN CODE-800023**

**Tel No:- 0612-2281856, 0612-2281857**

**Fax No: 0612-2281857**

**e-mail:-[bsedc@beltron.in](mailto:bsedc@beltron.in), [best@ifsets.com](mailto:best@ifsets.com)**

**Web Site: - [www.beltron.in](http://www.beltron.in)**

Up to the due date and time mentioned in the Schedule of Events of this document.

### 2.11 Language

The Bids and all correspondence and documents relating to the bids, shall be written in the English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English language. ***There should be proper page numbering on every page of Pre-qualification, Technical and Financial Bids, so that proper referencing can be done.***

### 2.12 Late Bids

Any bid received by the Tenderer after the time and date for receipt of bids prescribed in the RFP document will be rejected and returned unopened to the Bidder.

### 2.13 Modification and withdrawal of Bids

- a) The Bidder is allowed to modify or withdraw its submitted bid any time prior to the last date prescribed for receipt of bids, by giving a written notice to the Tenderer.
- b) Subsequent to the last date for receipt of bids, no modification of bids shall be allowed.
- c) The Bidders cannot withdraw the bid in the interval between the last date for receipt of bids and the expiry of the bid validity period specified in the Bid. Such withdrawal may result in the forfeiture of its EMD from the Bidder.



## 2.14 Bid Forms

- a. Wherever a specific form is prescribed in the Bid document, the Bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the said information.
- b. For all other cases, the Bidder shall design a form to hold the required information.
- c. BSEDC shall not be bound by any printed conditions or provisions in the Bidder's Bid Forms

## 2.15 Local Conditions

- a. Each Bidder is expected to fully get acquainted with the local conditions and factors, which would have any effect on the performance of the contract and /or the cost.
- b. The Bidder is expected to know all conditions and factors, which may have any effect on the execution of the contract after issue of Letter of Award as described in the bidding documents. The tenderer shall not entertain any request for clarification from the Bidder regarding such local conditions.
- c. It is the Bidder's responsibility that such factors have properly been investigated and considered while submitting the bid proposals and no claim whatsoever including those for financial adjustment to the contract awarded under the bidding documents will be entertained by the Tenderer. Neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the Tenderer on account of failure of the Bidder to know the local laws / conditions.
- d. The Bidder is expected to visit and examine the location of State offices and its surroundings and obtain all information that may be necessary for preparing the bid at their own interest and cost.

## 2.16 Contacting the Tenderer

- a) Any effort by a Bidder influencing the Tenderer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the bid.
- b) Bidder shall not approach Bihar officers after office hours and/ or out side Bihar office premises, from the time of the bid opening till the time the Contract is awarded.



## 2.17 Eligibility Criteria

For each category of pre qualification criteria, the documentary evidence is to be produced duly certified-signed in ink with seal by authorized signatory of the Bidder(s), serially numbered and enclosed with pre-qualification / technical bids. If the documentary proof is not enclosed for any/all criteria the Tender is liable for rejection.

The bidder shall meet the following criteria for eligibility:

- a. The bid shall be submitted by an individual organization or a consortium.
- b. The bidder (lead member of the consortium) shall be an Information Technology & Communication company.
- c. The bidder (lead member of the Consortium) should have average annual sales turnover of INR 50 Crores and above in the last three financial years.
- d. The bidder (all members of the Consortium together) must have successfully completed at least any one of the following for Local Area Network Project in a campus environment.
  - 1 Campus LAN Project minimum Rs. 5 Crores
  - 2 Campus LAN Project minimum Rs. 2 Crores
  - 3 Campus LAN Project minimum Rs. 1 Crores
- e. References (contact details, customer completion certificate, customer satisfaction certificate etc) for these projects shall be provided. Projects executed for bidder's own, bidder's group of companies or bidder's JV companies shall not be considered.
- f. The bidder (All members of the consortium together) should have direct authorization from the Original Equipment Manufacturer (OEM) for selling and supporting the components offered.
- g. The bidder (lead member of the Consortium) shall have Quality certification from an accredited and internationally reputed / renowned firm (viz. ISO 9000)
- h. The bidder (any member of the Consortium) should have office in Bihar. In case bidder has no presence in Bihar, bidder shall furnish an undertaking that an office shall be opened in Bihar, with sufficient personnel and inventory of spares within a month of selection as Successful Bidder.
- i. The bidder (each member of the consortium) shall have bank's certificate of solvency.



- j. The bidder (each member of the consortium) must have company registration certificate, registration under Labour Laws Contract Act, valid sales tax registration certificate and valid service tax registration certificate.
- k. In case of a consortium, applicant consortia shall have a valid Memorandum of Understanding (MoU)/ agreement among all the members signed by the Chief Executives/ Authorised Signatories of the companies dated prior to the submission of the bid. The MoU/ agreement shall clearly specify the stake of each member and outline the roles and responsibilities of each member. The MoU/ agreement shall be exclusively for this project and shall be responsible in case of failure by any member.
- l. The consortium shall be evaluated based on the lead bidder's strength as defined in this bid document. The lead bidder should satisfy at-least 75% of above conditions. Once short listed in pre qualification, change of consortium shall not be allowed.

#### 2.18 Table 4: Schedule of Events

Sr. NO	Events	Date
1	Last date for submission of queries on bid document.	15 <sup>th</sup> June 2007
2	Pre-bid Conference at the Beltron Bhavan.	19 <sup>th</sup> June 2007
3	Last date and time of bid Submission	5 <sup>th</sup> July 2007 , 3.00 Pm
4	Date and time of opening of the Prequalification Documents at Beltron Bhavan.	5 <sup>th</sup> July 2007, 4.00 Pm
5	Date of opening of the Technical Proposals and Commercial Proposal at Government of Bihar premises	Date and time will be intimated to bidders through email/fax/website upload
6	Contract Signing	Date and time will be intimated to the successful bidder



## 2.19 Opening of Proposal

First, the envelope containing pre-qualification will be opened and if found that the bidder meets the eligibility criteria and has furnished all the documents in the prescribed manner, then the second envelope containing Technical Proposal shall be opened. The timing for opening the technical bid will be at the sole discretion of evaluation committee. The commercial bid would be opened in presence of technically short listed bidders. The Evaluation Committee or its authorized representative will open the tenders. Sequence of opening shall be as follows:

- o Pre-qualification
- o Technical Proposals
- o Commercial Proposals

## 2.20 Evaluation

An evaluation committee so constituted by Bihar will evaluate the bids i.e. technical and commercial as per the following pattern.

- a) Conditional bids shall be summarily rejected.
- b) Evaluation committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
- c) Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the errors, his bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- d) The tenderer may conduct clarification meetings with each or any bidder to discuss any matters, technical or otherwise.
- e) Further, the scope of the evaluation committee also covers taking of any decision with regard to the RFP, execution/ implementation of the project including management period.
- f) Bid shall be opened on the day of opening of the bids at 4.00 Pm on 5<sup>th</sup> July 2007 in the presence of bidders representatives who intend to attend at their cost. The bidders' representatives who are present shall sign a register evidencing their attendance.
- g) Bid document shall be evaluated as per the following steps.



- (a) **Preliminary Examination of Pre-qualification documents:** The Pre-qualification document will be examined to determine whether the bidder meets the eligibility criteria, completeness of the bid, 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 eligibility criteria specified in the various sections of this RFP will be rejected and not included for further consideration.
- (b) **Evaluation of document:** A detailed evaluation of the bids shall be carried out in order to determine whether the bidders are competent enough and whether the technical aspects are substantially responsive to the requirements set forth in the RFP. Bids received would be assigned scores based on the parameters defined in table below.

(c) **Table 5:** Bid Evaluation Criteria

Criteria Points	(if the criteria Mentioned are met)	Total Group Points
<b>A. Organization Capability</b>		
<b>A1. Organizational Profile</b>		<b>10</b>
Existing Organizational strength (Manpower, Quality Certification etc.)	5	
Existing infrastructure in Bihar (own/franchisee) (Supporting documents with location details/address/phone no to be submitted – at least one office in Patna). Presence of personnel in a customer site would not be considered as Infrastructure presence.	5	
<b>A2. Financial Profile</b>		<b>10</b>
i. The bidder or the consortium leader should have a turnover of Rs 50 Crores from IT business.	10	
<b>B. Technical Capability</b>		
<b>B1. Project Management</b>		
<b>Technical Capability in executing &amp; managing large Campus LAN Projects and FMS, integrating various</b>		<b>15</b>



<b>technologies. (Total number of projects implemented by the bidder, along with maintenance track record, SLA audit etc. would be taken into account)</b>		
i) Aggregated total number of projects executed	7	
ii) SLA audit records of projects undertaken	5	
iii) Manpower deployment & strength	3	
<b>Experience of implementing Campus LAN (Total number of projects implemented by the bidder, along with maintenance track record, SLA audit etc. would be taken into account)</b>		<b>10</b>
i) Aggregated total number of projects implemented in the country	6	
ii) SLA audit records	2	
iii) Manpower deployed	2	
<b>B2. Technical Solution Offered</b>		
<b>Solution Offered conforming to RFP (or higher) for Campus LAN (Technology with scalability, interoperability, SLA implementation scheme ,time schedule of implementation etc would be taken into account)</b>		<b>50</b>
i) Compliance of specification of RFP	16	
ii) Additional features offered	9	
iii) Network architecture proposed and FMS	9	
iv) Scalability in terms of Hardware equipments in case of nodes for future upgradeability	3	
v) SLA implementation scheme offered	3	
vi) Time schedule implementation projected	10	
<b>Manpower support offered (Details of manpower deployment plan,</b>		<b>5</b>
ii) Manpower deployment plan at Campus LAN	3	
i) Manpower deployment plan for FMS	2	
<b>TOTAL TECHNICAL SCORE (T) = 100</b>		<b>100</b>

**Lowest One Basis**

The technical scores of the bidder against each criteria would be then totaled up, and thereafter the technical scores of all the bidders would be listed in decreasing order.

Any proposal achieving a Total Technical Score (T) less than 70 will be treated as Not Substantially Responsive and will not be considered further. Only the technically qualified bidders will be informed for opening of the price bid.

**Evaluation of Commercial Bids : Lowest Commercial cost**

The commercial bids will be opened only for the bidders with score of 70 points and above on the parameter defined above.

The bid with the lowest commercial (L1) will be considered as the successful bidder.

**2.21 Deciding Award of Contract**

- a) The Tenderer reserves the right to ask for a technical elaboration/clarification in the form of a technical presentation from the Bidder on the already submitted Technical Proposal at any point of time before opening of the Commercial Proposal. The Bidder shall furnish the required information to BSEDC and its appointed representative on the date asked for, at no cost to the Tenderer. The Tenderer may at its discretion, visit the office / Network Operation Centre (NOC) of the Bidder for Services, any time before the issue of Letter of Award.
- b) *BSEDC* shall inform those Bidders whose proposals did not meet the eligibility criteria or were considered non-responsive, informing that their Commercial Proposals will be returned unopened after completing the selection process. *BSEDC* shall simultaneously notify those Bidders who had qualified the Evaluation process as described in this RFP, informing the date and time set for opening of Commercial Proposals. The notification may be sent by mail or fax.
- c) 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.



## 2.22 Confidentiality

- a) As used herein, the term “Confidential Information” means any information, including information created by or for the other party, whether written or oral, which relates to internal controls, computer or data processing programs, algorithms, electronic data processing applications, routines, subroutines, techniques or systems, or information concerning the business or financial affairs and methods of operation or proposed methods of operation, accounts, transactions, proposed transactions or security procedures of either party or any of its affiliates, or any client of either party, except such information which is in the public domain at the time of its disclosure or thereafter enters the public domain other than as a result of a breach of duty on the part of the party receiving such information. It is the express intent of the parties that all the business process and methods used by the Bidder in rendering the services hereunder are the Confidential Information of the Bidder.
- b) The Bidder shall keep confidential any information related to this tender with the same degree of care as it would treat its own confidential information. The Bidders shall note that the confidential information will be used only for the purposes of this tender and shall not be disclosed to any third party for any reason whatsoever.
- c) At all times during the performance of the Services, the Bidder shall abide by all applicable security rules, policies, standards, guidelines and procedures. The Bidder should note that before any of its employees or assignees is given access to the Confidential Information, each such employee and assignees shall agree to be bound by the term of this tender and such rules, policies, standards, guidelines and procedures by its employees or agents.
- d) The Bidder should not disclose to any other party and keep confidential the terms and conditions of this Contract agreement, any amendment hereof, and any Attachment or Annexure hereof.
- e) The obligations of confidentiality under this section shall survive rejection of the contract.

***Note: The Bidder should conduct background checking for all the personnel deployed on the State Data Center Site and Secretariat Local Area Network Site.***



## 2.23 Publicity

Any publicity by the bidder in which the name of SecLAN is to be used, should be done only with the explicit written permission from BSEDC.

## 2.24 Insurance

The equipment and services supplied under the contract shall be fully insured by the bidder against loss or damage incidental to manufacture or acquisition, transportation, storage, delivery and installation. The period of insurance shall be up to the date the supplies are accepted and the rights of the property are transferred to BSEDC.

## 2.25 Arbitration

BSEDC and the selected bidder shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days from the commencement of such informal negotiations, State and the selected Bidder have been unable to amicably resolve dispute, either party may require that the dispute be referred for resolution to the formal mechanisms, which may include, but are not restricted to, conciliation mediated by a third party acceptable to both, or in accordance with the Arbitration and Conciliation Act, 1996.

All Arbitration proceedings shall be held at Patna, Bihar State, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.



## Section III

### Scope of Work

Bihar Government is contemplating to provide to the authorized users with uninterrupted access to information resources and department application software, by establishing Secretariat Local Area Network (SecLAN). SecLAN is intended to help position information and communication technology to drive improved efficiency and responsiveness in day to day administration of the Government.

The SecLAN would be an edge to accommodate increased collaborative applications. The SecLAN will connect from Technology Bhavan (where the State Data Center and State WAN is located) to all the proposed Eight buildings (Soochana Bhavan, Old Secretariat, Sinchai Bhavan, Vikas Bhavan, Vishveswarayya Bhavan CMs Secretariat and CM's Residence).

To create a single, converged network that provides voice, data and communications for its employees in different government buildings with in Patna for accessing the Data Center resources, for taking fast decisions and to reach the remote part of the state through SWAN and CSC projects.

The SecLAN would use technologies such as Mailing, Messaging, IP telephony, Video Conferencing, workspace document sharing, Web based applications and Extensible Markup Language (XML)-based applications.

The proposed Secretariat LAN should raise the level of Connectivity and Communication where and how the network is accessed while offering GoB the power of choice in deployment options through leading solutions in IP Telephony, applications, data and optical networking.

The Scope of work involves planning, design & deployment of network components, IP Telephony, Installation of necessary UPS systems at all the proposed buildings, Installation of Generators to support UPS with proper rating and fuel @ 400 hours per annum, Fiber optic cable laying from Technology Bhavan to all the 6 buildings and



Passive Cabling at all the 7 locations. Electrical wiring is also part of the scope of work for all the 2000 + Data Points with 3 sockets of 5/15A from UPS with standard ISI mark 3/20 wire. The wire from UPS to MCBs should be of 7/20 gauge and from mains transformer to Electrical panel/UPS should be of minimum 6 sq. mm gauge. Bidder is responsible to take all necessary earthing (including multiple earthing based on Generator requirements) and proper gauge of wire as per industry standard. BSEDC reserves the right to increase or decrease the quantity before allotment of Contract.

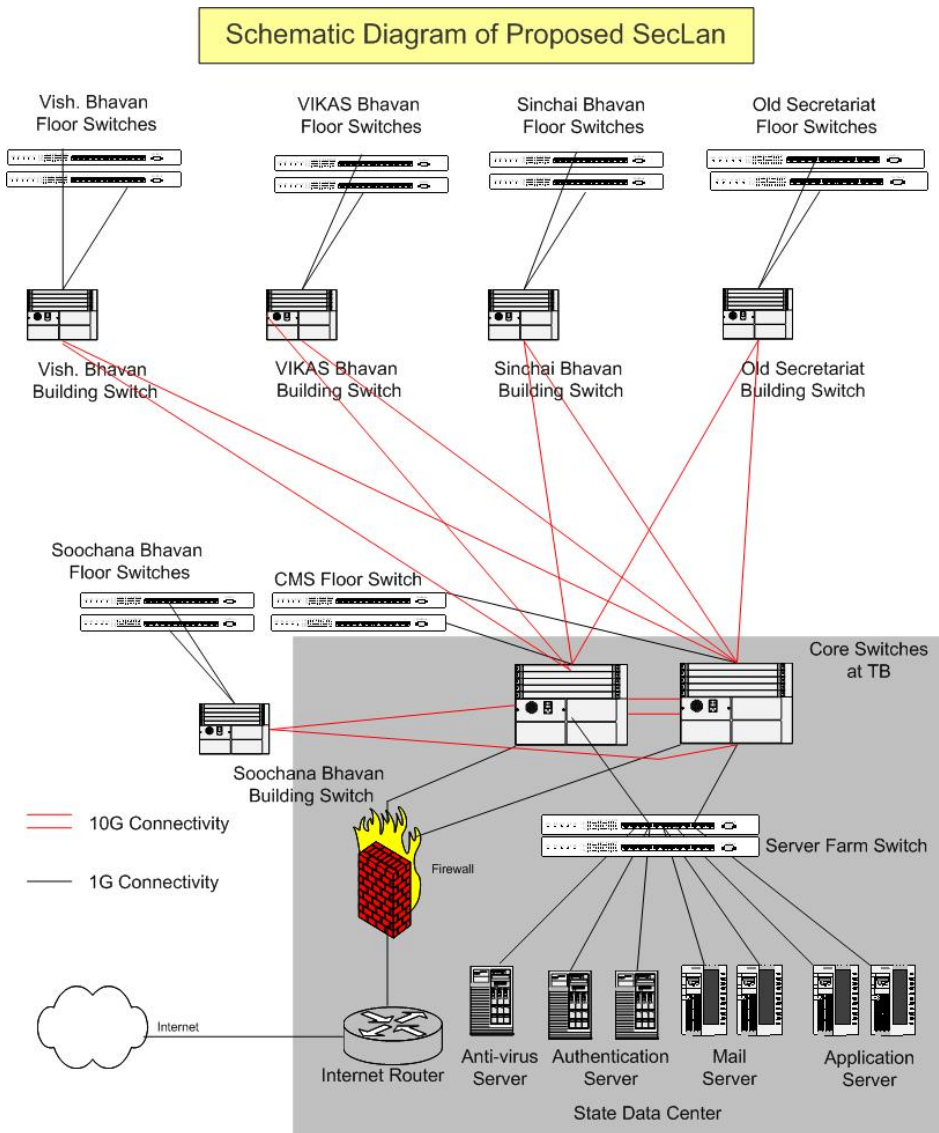
IP Telephones will use the IP telephony system of Bihar State Wide Area Network where provision is made to add more licenses.

Necessary Manpower for monitoring the entire project is the responsibility of the bidder. Bidder can deploy one Project Manager, Help Desk operators, Network Engineers and Electricians as per the schedule of requirements of this document.



### 3 Technical requirements

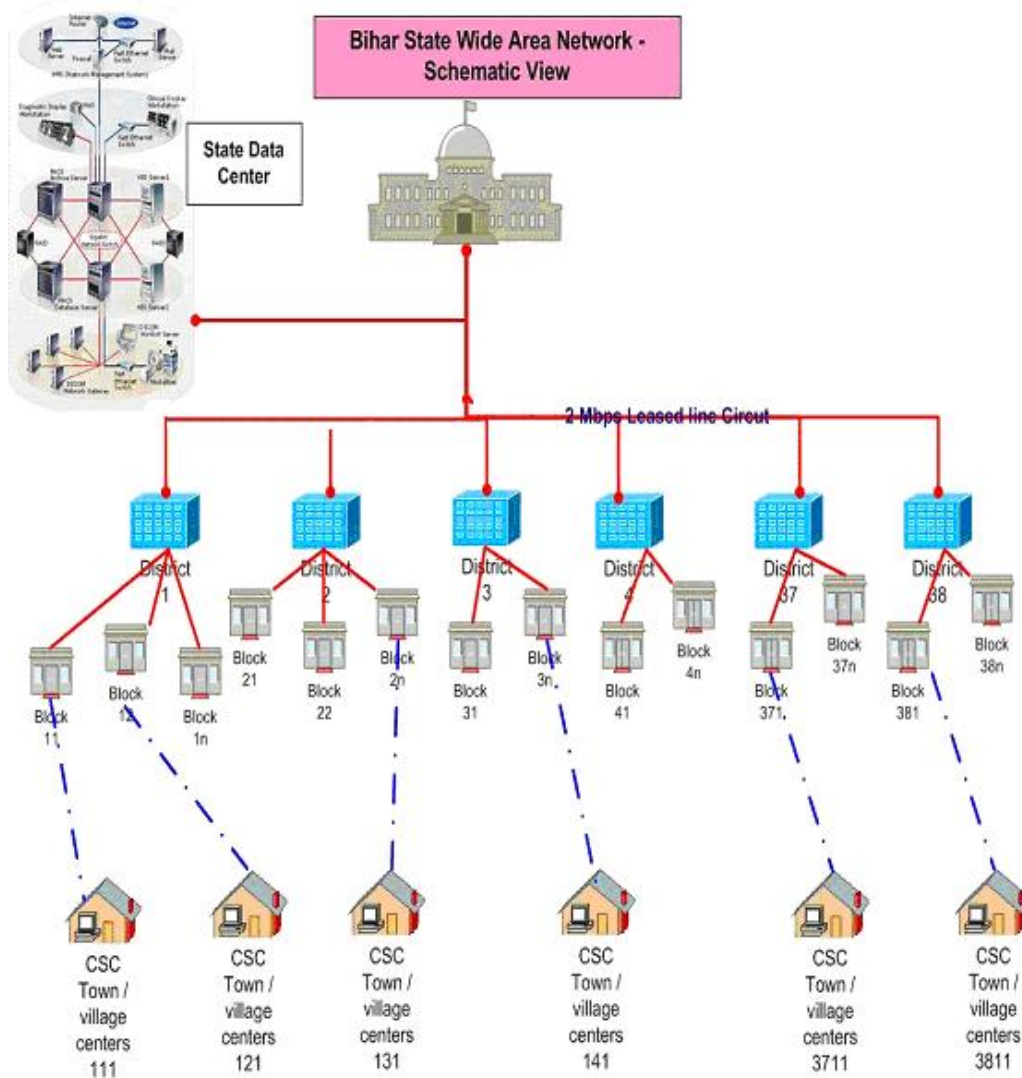
The Secretariat LAN would be installed with Industry standard Architecture which includes Building Switch and Floor Switch. The following Schematic representation illustrates the overall view:



Present State Data Center and Bihar State Wide Area Network are put in place and the following is the schematic diagram of the same The Citizen Service Center Project also utilized the services of State Government on B2C segment. The proposed SecLAN will be connecting the existing network as shown below: Bidders has to integrate the SecLAN



with the State Data Center and SWAN at the Technology Bhavan. Bidders have to furnish their understanding of the total Network in their proposal.





## SECTION IV

### 4 Schedule of Supply and Requirements.

#### 4.1 Schedule of Supply

<u>S.No</u>	<u>Name of the Item and related Services</u>	<u>Unit of Measurement</u>	<u>Quantity</u>	<u>Unit price</u>	<u>Taxes &amp; Duties</u>	<u>Total Price</u>
<b>1</b>	<b>SWITCH</b>					
1.1	Building Switch	Nos	6			
1.2	Floor Switches	Nos	117			
<b>2</b>	<b>IP PHONE</b>					
2.1	IP Phones Type 1 & 2 @ 20:80 ratio	Nos	270			
2.2	NMS for monitoring of Switches and IP Phones with necessary hardware	No	1			
<b>3</b>	<b>UPS</b>					
3.1	UPS 5KVA	Nos	1			
3.2	UPS 20 KVA	Nos	1			
3.3	UPS 40 KVA	Nos	2			
3.4	UPS 60 KVA	Nos	1			
3.5	UPS 120 KVA	Nos	1			
3.6	UPS 160 KVA	Nos	1			
<b>4</b>	<b>Generator</b>					
4.1	Generator 8 KVA	Nos	1			
4.2	Generator 20 KVA	Nos	1			
4.3	Generator 63 KVA	Nos	3			
4.4	Generator 140 KVA	Nos	1			
4.5	Generator 250 KVA	Nos	1			



<b>5</b>	<b>Electrical Wiring</b>					
5.1	7/20 Wire from UPS to MCBs	Mtrs	11000			
5.2	3/20 Wire from MCBs to Sockets	Mtrs	18000			
5.3	MCBs 32A with Fixing box	Mtrs	550			
5.4	5A Sockets with Switch	Nos	6000			
5.5	Cable laying charges / Mtr	Mtrs	29000			
5.6	MCB Fixing Charges / MCB	Nos	550			
5.7	Socket Fixing Charges / Socket	Nos	6000			
5.8	PVC Conduit Laying	Mtrs	20000			
5.9	PVC Conduit laying charges / Mtr	Mtrs	20000			
5.10	Panel Boards & Fixing Charges	Nos	3000			
<b>6</b>	<b>Passive Cabling and components</b>					
6.1	CAT 6E UPT 4 Pair cable (From nearest switch point to Data Outlet at an average of 60 mtrs per each node)	Box of 305 Mtr	670			
6.2	CAT 6E Patch Cords 3 Mtr crimped both sides with RJ-45 Pins and sleeved	Nos	2000			
6.3	Cat 6E Patch Cords 2 Mtrs crimped bith sides with RJ-45 Pins and sleeved	Nos	2000			
6.4	Surface Mounting Box ISI Make Dual Port RJ-45	Nos	2000			
6.5	Dual Port face Plate British Type – RJ-45	Nos	2000			
6.6	Cat 6E Keystone Ivory (I/O)	Nos	4000			
6.7	CAT 6E Patch Panel 24 Port	Nos	120			
6.8	Surface Mounting Box ISI Make Dual Port RJ-11	Nos	1000			
6.9	Dual Port face Plate British Type RJ-11	Nos	1000			
<b>7</b>	<b>Fiber Components (9Micron</b>					



	<b>Single mode)</b>					
7.1	6 Core Fiber Optic multitube Armoured single mode cable	Mtrs	20000			
7.2	6 Core Fiber Optic Multi Mode Cable	Mtrs	1000			
7.3	Fiber Patch Cord Duplex SM (3 Mtrs)	Nos	24			
7.4	Fiber Patch Cord Duplex MM (3 Mtrs)	Nos	210			
7.5	12-fiber, Single mode, 19-inch Rack mount Patch Panel, 1U, Loaded with adapter Plates	Nos	As reqd**			
7.6	24-fiber, Multimode, 19-inch Rack mount Patch Panel, 1U, Loaded with adapter Plates	Nos	As reqd**			
7.7	SC Port coupling single mode	Nos	As reqd**			
7.8	SC Port coupling Multi mode	Nos	As reqd**			
7.9	Pigtail single mode	Nos	As reqd**			
<b>8</b>	<b>Conduit</b>					
8.1	Conduit Pipe : Double Wall Corrugated HDPE-PLB Pipe ISI mark 38 mm ID/50 mm OD	Mtrs	20000			
8.2	PVC casing Capping 1" ( Int Dia )	Mtrs	12000			
8.3	PVC Casing Capping 2" ( Int Dia)	Mtrs	12000			
<b>9</b>	<b>Network Rack &amp; Accessories</b>					
9.1	32U 19" floor Mount Rack with all accessories	Nos	6			
9.2	15U 19" Wall Mount with all accessories	Nos	16			
9.3	9U 19" Wall Mount Rack with all	Nos	16			



	accessories					
9.4	6U 19" Wall Mount Rack with all accessories	Nos	24			
9.5	AC Mains Distribution Box with hardware	Nos	64			
9.6	Cable Manager, 1U, 19" Mounting	Nos	64			
9.7	Tray Fan , 1U, 2 Fan Position	Nos	As reqd			
9.8	Tray Fan, 1U, 4 Fan Position	Nos	As reqd			
9.9	Fan 230 VAC, 90 CFM	Nos	As reqd			
<b>10</b>	<b>Network testing tools</b>					
10.1	UTP cable Checker	Nos	7			
10.2	UTP Cable crimping tool	Nos	20			
10.3	Standard tool kit for network maintenance	Nos	7			
10.4	Fiber Kit	Nos	1			
<b>11</b>	<b>CIVIL WORK FOR ISNTALLATION OF PASSIVE COMPONENTS</b>	<b>Job Work</b>	<b>Qty</b>			
11.1	Digging and Refilling of trenches for OFC & duct laying in soft soil, hard soil. Payment will be as per actual length.	Km	25			
11.2	Soft soil	Km	1			
11.3	Hard soil	Km	1			
11.4	Laying of 38/50 mm HDPE-PLB pipe	Km	25			
11.5	Laying of PVC Casing Capping 1" (Internal Dia)	Km	12			
11.6	Laying of PVC Casing Capping 2" (Internal Dia)	Km	12			
11.7	Optical fiber laying as specified and directed	Km	25			
11.8	UTP Cable laying	Km	200			
11.9	Cable splicing	Nos	As			



			Reqd			
11.10	Inspection chambers	Nos	As Reqd			
11.11	Installation of Racks	Nos	63			
11.12	Installation of Route markers	Nos	50			
11.13	System Integration, configuration & Testing of Network	Job	1			
11.14	Training on Networking	Job	1			



#### 4.2 Location wise Requirements: -

Requirements								
Item Description	Building wise Quantity							
Description	Sinchai Bhavan	Vikas Bhavan	TB	Vish. Bhavan	Old Sect.	Sooch. Bhavan	CM Sec. & Res. (two sites)	Spares (to meet the RFP)
Data Ports	192	576	52	192	768	192	23	
IP Telephony Ports	20	80	12	27	98	20	8	
EPABX Digital ports	80	320	32	96	480	64	18	
UPS (KVA)	60	120	20	40	160	40	5	
Generator (KV) with Auto Start & Auto Changeover switch	63	140	20	63	250	63	8	
Electrical Wiring and termination for UPS, endpoints with 3x5/15A sockets with on/off switches	192	576	30	192	768	192	20	21
<b>Core Switch</b>								
Bidder has to use the SWAN Core Switch and can request for No. of 10G Ports required.								
<b>Building Switches</b>	1	1	0	1	1	1	0	1
a. 24 ports of 10/100/1000 with PoE	2	2	0	2	2	2	0	1
b. 2 ports of 10Gig on Two dedicated line modules	1	1	0	1	1	1	0	1
c. 24 ports SFP GBIC modules	1	1	0	2	1	1	0	1
d. redundant control processor	1	1	0	1	1	1	0	1
e. redundant power supplies	2 or more	2 or more	0	2 or more	2 or more	2 or more	0	2
f. 1000 Base SX SFP GBICs	16	12	0	48	12	9	0	12
g. 10 Gig LR XFPs	2	2	0	2	2	2	0	2
<b>Floor Switch</b>								



a. 24 ports of 10/100 with PoE and Stacking modules and Staking Cables	8	24	4	24	32	12	3	10
b. 1000 Base SX SFP GBIC	16	12	8	48	12	9	4	12
<b>NMS</b>								
NMS for Data Network including Hardware and IP Telephones			1					
<b>IP Telephony System</b>								
Bidder should integrate with the IP Telephony system of BSWAN								
IP Phones (Bidder can give 2 types of IP phone on 20% High End & 80% Low End Instruments for the given figures)	20	80	12	27	98	20	6	7
<b>UPS Requirement (KVA)</b>	60	120	20	40	160	40	5	
Generator (KV) with Auto Start & Auto Changeover switch	63	140	20	63	250	63	8	
<b>Electrical Wiring (6 Buildings) with Earthing</b>	Bidder has to undertake wiring for all the Data Points from BSEB inlet to all the destinations with necessary civil work for installation of Generator, electrical wiring, installation of circuit breakers, MCBs, Electrical sockets of 2x5A and 1x15A (2in1 Socket)with switch. The approximate estimate of electrical items is given in the spares column. Bidders have to arrive the actual BOM including proper wire gauge etc. UPS to Building Floor MCB 7/20 gauge and MCB to Destination 3/20 gauge. The entire work has to done by concealed conduit and bidder has to restore the walls to original conditions. All the earthing requirements with redundancy and like digging the earth pit, filling with Salt, Sand and coal will be the responsibility of bidder.							
MCB – Socket & Cable 3/20								18000
UPS - MCB & Cable 7/20								11000
MCB 10A/32A/63A								650
5/15A Sockets & fixing								6000
Electrical Cable Laying								29000



PVC Conduit of ISI brand								20000
Panel boards, Isolators								7
Electrical Wire 7/20 and 3/20								As Reqd.
Project Manager			1					
Network Engineers	1	4	1	2	4	1		
Senior Electrician			1					
Electrician	1	1		1	1	1	1	
Help Desk			2					



### **4.3 Technical Specifications: -**

#### **Building Switch Specifications**

- Make: Nortel ERS 8600/Cisco Catalyst 6500 / Alcatel-Lucent 9000 Series Switches

##### Hardware Architecture

- Modular Chassis based Architecture with minimum 9 slots
- Should have Supervisor / Switching / Routing engine.
- It should have non-blocking wire-speed architecture.
- It should support Redundant Power Supply and fans.
- It should have hot swappable modules
- It should be architected to support real time applications like voice, video, data by having distributed architecture.
- Offered 10 Gig Module should be a dedicated line module with Non Blocking connectivity to Core Layer.
- Minimum 2 Modules of 10 Gig are required for High Availability and Redundancy.

##### Port Densities

- Minimum interfaces type supported on a single chassis:
  - a. Minimum 12 ports of 10 Gig in Non Blocking Mode
  - b. Minimum 120 interfaces of Gig Fiber
  - c. Minimum 192 ports of 10/100/1000 base TX
  - d. Minimum 96 ports of 10/100 base TX on PoE

##### Performance

- High back plane speed 192 Gbps or more
- Forwarding rate should be Minimum 140 Mpps
- 9K Jumbo frames

##### L2 Features

- HW based Source Learning
- IEEE 802.1Q VLAN
- Support for at least 499 VLANs.
- 802.1s and 802.1w
- Sub 500 ms re-convergence for mesh or ring architecture



- IP v4: IGMP v1, v2 and v3
- IPv6 : MLD
- Multicast VLAN Registration
- Link Aggregation based on 802.3ad across line cards

#### Layer 3 Features

- IP v4 : Static Routing, OSPF, RIP, BGPv4, VRRP, ECMP, PIM Spares Mode, SSM
- IP v6: Static Routing, RIPng, OSPFv3, VRRPv3, ECMP,
- IPv6 Tunneling
- Router Discovery Protocol
- Multi-netting
- Policy Based Routing

#### Quality of Service

- 8 hardware queues per port
- Ingress Policing / Egress Shaping
- 802.1p/Tos/Diffserv marking and mapping
- WRR and SP

#### Security and Management

- Standard and extended ACLs on all ports
- Many to one port mirroring based on port, VLAN and flow based
- Radius and TACACS+
- Secure Shell (SSH) Protocol, HTTPS, SSL, LDAP and DoS protection
- IP Anti-Spoofing, IEEE 802.1x, IP Route Filtering and DHCP snooping
- Switch needs to have console port and dedicated Ethernet port for administration & management,
- SNMPv1, snmpv2/v3
- Support management using CLI, GUI using Web interface. Additionally, management can also be done using NMS.
- Support FTP/TFTP for upgrading the operating System

#### Standards

- IEEE 802.1x support
- IEEE 802.3x full duplex on 10BASE-T and 100BASE-TX ports
- IEEE 802.3af Power Over Ethernet
- IEEE 802.1D Spanning-Tree Protocol



- IEEE 802.1p class-of-service (CoS) prioritization
- IEEE 802.1Q VLAN
- IEEE 802.3x be on 10 BaseTx/ 100 Base Tx /1000 Base Tx
- IEEE 802.3u 10 BaseT /100 Base Tx /1000 Base Tx
- RoHS Compliant

### **Floor Switch Specifications:**

Make: Nortel ERS 4500/Cisco Catalyst 3750 / Alcatel-Lucent 6200 Series

Switches

Architecture:

- It should be stackable with support of minimum 8 switches in a single stack.
- 24 ports of 10/100, Minimum 2 x Gigabit Combo Uplinks and 2 Stacking ports.
- Stacking kit along with Cable should be provided with all Switches.
- All 10/100 ports should support standard based 802.3af PoE.

Performance:

- It should have Non-blocking wire speed performance.
- Backplane of each switch should be minimum 12 Gbps.
- Packet forwarding throughput should be 148800 packets per second per 100 Mbps port or 1488000 packets per second per Gigabit port for packet size of 64 Bytes.
- The aggregated throughput of each switch should be minimum 9 Mpps for 64 Bytes packets.
- It should support minimum 255 VLANs and should be possible to configure port and protocol based VLAN
- It should support Q-in-Q VLAN Stacking feature

High availability Features:

- It should have support redundant power supply.
- It should support failsafe stacking.
- It should support 802.1w, 802.1s, 802.1d and 802.3ad.

Quality of service (QoS):

- It should support L2 Switching with advanced L3/L4 Services.
- It should support 802.1p, TOS, DSCP marking
- It should support QoS Mapping - 802.1p to TOS/DSCP, TOS to 802.1p/DSCP, DSCP to 802.1p/TOS



- It should support Four Egress Queues per port with Strict and WRR algorithms.
- Ingress and Egress bandwidth rate limiting per port

Management Features:

- It should support SNMPv1, v2 and v3.
- IGMP v1/v2/v3 snooping to optimize Multicast Traffic.
- Should support dual image and multiple configuration file.
- Web Based and CLI based management
- It should have a console port for configuration and management
- Port Mirroring for troubleshooting.
- BootP/DHCP client
- SNTP
- Syslog support
- RFC 2819 RMON Groups
- Virtual Cable tester for copper Ethernet cabling or equivalent.
- Working temperature of 0 to 50 degree Celsius

Security Features:

- 802.1x port based user authentication with multiple host mode
- 802.1x Multi-client, multi-VLAN support for per-client authentication and VLAN assignment
- Guest VLAN
- MAC address lockdown
- RADIUS and TACACS+ admin authentication
- Secure Shell (SSH), Secure Socket Layer (SSL) and SNMPv3 for encrypted remote management communication
- Access control lists to filter out unwanted traffic including denial of service attacks
- Access control lists (ACLs) - per port, MAC SA/DA, IP SA/DA, ICMP type and code, Ethertype, TCP/ UDP port
- STP root guard.

Note:

1. All LAN switches should be from same OEM.



2. For better management Voice solution should preferable be of same OEM.
3. All floor switches should be of minimum Layer 2 manageable and should be from same make and model.
4. Bidders are requested to visit the site and have their own assessment.

### **Note: Security**

Bidders have to install necessary security either appliance based or built in the equipment as part of the contract. The security is limited to securing the Network of SecLAN.

- IEEE802.1x port based user authentication with multiple host mode (IP Phone and PC connected on same port)
- IEEE 802.1x Multi-client, multi-VLAN support for per-client authentication and VLAN assignment
- MAC address lockdown to have network access preventing unauthorized network device access includes lockdown after a user-configured number of MAC addresses have been learned
- RADIUS and TACACS+ admin authentication prevents unauthorized switch management
- Secure Shell (SSH), Secure Socket Layer (SSL) and SNMPv3 for encrypted remote management communication
- Access Control Lists to filter out unwanted traffic including denial of service attacks
- Access control lists (ACLs) are per port, MAC SA/DA, IP SA/DA, ICMP type and code, Ether type, TCP/ UDP port
- STP root guard prevents an unauthorized device from becoming the root of a spanning tree.

### **IP - Telephony**

This IP terminal should be an open platform allowing the integration of internal, external, hosted, or third party Web applications via XML/SOAP. It should provide a set of tools for customizing their communications to the specific day-to-day demands of work and to fit specific enterprise, group, and individual needs.



## IP Phone Specifications:

Followings are minimum specifications, bidders can quote 2 models in the ratio of 20:80

- Gray scale graphical display
- Minimum 10 physical soft keys
- Adjustable display angle
- Contrast adjustment
- Navigation key with exit and validation keys for use with the graphical interface
- Context-sensitive and programmable keys for direct functions access
- Comfortable handset with enhanced audio quality
- Full Duplex Hands free and group listening modes
- Optional Integrated alphabetic keyboard to access: dial by name, text mail.
- Direct access to text and voice mailboxes with message signaling led
- Mute
- Redial
- Message key with LED
- Keypad lock feature
- XML compatible
- Remote power feed per the 802.3af standard and local 120 / 230 -volt feed
- Auto-sensing 10/100 Ethernet switch interfaces
- QoS (Internal in the terminal and priority to the voice signal)
- Fixed or dynamic assignment of the IP address by DHCP
- 802.1x (MD5) compatibility for authentication
- AES for voice content encryption
- G.711, G.723.1 and G.729a Audio compression

## Network Monitoring

Network Monitoring Software suitable to monitor the SecLAN should be installed with necessary standard hardware of any reputed make.

## UPS System:

All the buildings are to be provided uninterrupted power of required rating. The detailed UPS ratings are given in the schedule of requirements. Following are the specifications of the UPS:



Capacity	Detailed Specifications
5 and 10KVA of APC / Emerson / Numeric make	<ul style="list-style-type: none"> <li>• <b>Quality Certification:</b> ISO 9001-2000 Safety Standards and EMC Standards as per IEC standards</li> <li>• <b>Technology:</b> Inverter device IGBT based , Microprocessor controlled Digital Design, Double Conversion True On-line UPS</li> <li>• <b>Inverter efficiency</b> :&gt;90 %</li> <li>• <b>Capacity:</b> 5/10KVA online UPS</li> <li>• <b>Input Voltage &amp; Range:</b> Range 160V – 270V</li> <li>• <b>Input Frequency Range:</b> 50Hz ± 5%</li> <li>• <b>Input Phase:</b> Single Phase with ground</li> <li>• <b>Input Power Factor:</b> 0.8 to unity</li> <li>• <b>Output :</b> 5 /10KVA</li> <li>• <b>Output Voltage:</b> 230V 50Hz ± 1%</li> <li>• <b>Rated Output Current:</b> 21 A at 0.8 p.f./ 17A at Unity p.f</li> <li>• <b>Battery Backup:</b> At least 1 Hour</li> <li>• <b>Battery Type:</b> Sealed Maintenance Free (SMF)</li> <li>• <b>Battery Make:</b> Panasonic/ Amara Raja/ Exide</li> </ul>
20, 30, 100 and 160 KVA APC / Emerson / Numeric make	<ul style="list-style-type: none"> <li>• <b>Quality Certification:</b> ISO 9001-2000 And ISO 14001</li> <li>• <b>Safety Standards:</b> EMC/EMI as per SAMEER/ ERTL/ Equivalent Certification</li> <li>• <b>Technology:</b> Inverter device IGBT based , Microprocessor controlled, Double Conversion True Online UPS</li> <li>• <b>Voltage Regulation:</b> 220,230,240V +/- 1%.</li> <li>• <b>Rated Output current:</b> 41A</li> <li>• <b>Switching Frequency:</b> 12 – 24 KHZ.</li> <li>• <b>Output Frequency regulation:</b></li> <li>• Free running Mode 50 ± 0.5%,</li> <li>• Sync Mode 50 ± 2 Hz.</li> <li>• <b>Harmonic Distortion(THD):</b> &lt;2% (linear load) , &lt;6% (non-linear load)</li> <li>• <b>Output Waveform:</b> Pure Sine wave.</li> <li>• <b>Output Power Factor:</b> 0.9 to Unity</li> <li>• <b>Battery Backup:</b> Minimum 1 Hour at full resistive load.</li> <li>• <b>Battery Type:</b> SMF VRLA type.</li> <li>• <b>Battery Enclosure:</b> MS Rack Powder Coated.</li> </ul> <p>Operating Temperature: 10 to 45 C°</p> <ul style="list-style-type: none"> <li>• <b>Storage temperature:</b> 0 to 50 C°.</li> <li>• <b>Power:</b> 220V-240V AC, 50Hz, with redundant supply.</li> </ul>



	<ul style="list-style-type: none"> <li>• <b>Noise level:</b> &lt;55 dB @ 1 Meter.</li> <li>• <b>Alarms &amp; Indications:</b> All necessary alarms &amp; indications essential for performance monitoring of UPS to be incorporated.</li> <li>• <b>Bypass:</b> Automatic Bypass.</li> <li>• <b>Overload capacity:</b> 105 to 120% for 10 min. &gt;130% - 1Sec.</li> <li>• <b>Compatibility:</b> UPS to be compatible with DG Set supply and mains supply.</li> </ul> <p><b>Standard:</b> RS 232 port for software interface, SNMP interface support for battery wise status monitoring.</p>
<b>Generator</b>	
Generator 20 KVA; 63 KVA; 140 KVA; 250 KVA and 300 KVA	<ul style="list-style-type: none"> <li>• <b>Engine type:</b> Multi-cylinder, in accordance with IS 10002-1981 with latest amendments.</li> <li>• <b>General Features</b></li> <li>• Electric auto start 12 V DC. Water cooled /Air cooled.</li> <li>• Fuel and Rating: Diesel, Rating Continuous.</li> <li>• <b>Output:</b> Suitable BHP rated to match the alternator Rated Speed 1500 RPM.</li> <li>• <b>Over load capacity:</b> 10% overload – 1 hour , 50% overload – 15 second</li> <li>• <b>Accessories:</b></li> <li>• Residential type silencer with exhaust piping with vibration isolator.</li> <li>• Fuel tank suitable for 8 Hrs of continuous running with necessary piping and fuel gauge, drain valve, inlet and outlet connections.</li> <li>• Anti vibration mounting pads</li> <li>• .Battery 12 V with lead and terminal.</li> <li>• Protection Controls:</li> <li>• Low oil pressure, high water temperature, over speed etc</li> <li>• <b>Alternator:</b></li> <li>• Speed 1500 rpm.</li> <li>• Output Capacity: 20; 33; 63; 133; 230 and 300 KVA .</li> <li>• P.F 0.8 lag .</li> <li>• Output: Voltage 415V, 3Ph 4wire. 50Hz</li> <li>• Rating: Continuous running.</li> <li>• Over load capacity 10% overload – 1 hour 50% overload – 15 second.</li> <li>• Excitation: Self excited, self regulated, automatic voltage regulator with remote voltage control facility.</li> </ul>



	<ul style="list-style-type: none"> <li>• Insulation Class H.</li> <li>• <b>Control Panel</b></li> <li>• The Gen set control panel shall be of 14 SWG CRCA sheet and powder coated finish. The panel shall be provided with standard engine instrumentation, Voltmeter with selector switch, Ammeter with selector switch, Frequency meter, Current transformer, Instrument Fuses etc. MCCB/MCB of suitable rating shall be providing for overload and short circuit protection.</li> <li>• <b>AMF:</b> AMF facility shall be provided for the DG set. AMF relay shall be provided in the control panel/Electrical panel with required control wiring and Contactors for automatic operation shall be done.</li> <li>• Acoustic enclosure: Weather and sound proof Acoustic enclosure shall limit sound level below 70 db at 3 m distance from the set. Minimum 50 cm all round clearance shall be provided inside. The exhaust pipe shall be minimum 1.8 m above ground level. Additional Canopy shall be provided over the Acoustic enclosure with suitable steel structure.</li> </ul>
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### Electrical Wiring and Earthing:

Bidder has to undertake wiring for all the Data Points from BSEB inlet to all the destinations with necessary civil work for installation of Generator, electrical wiring, installation of circuit breakers, MCBs, Electrical sockets of 2x5A and 1x15A with switch. The approximate estimate of electrical items is given in the spares column. Bidders have to arrive the actual BOM including proper wire gauge etc. UPS to Building Floor, MCB 7/20 gauge and MCB to Destination 3/20 gauge. The entire work has to done by concealed conduit and bidder has to restore the walls to original conditions. All the earthing requirements like digging the earth pit, filling with Salt, Sand and coal will be the responsibility of bidder.

### UTP Cabling System

Cabling System and Component Specifications are as follows:

#### UTP Cable



<b>Type</b>	<b>Unshielded Twisted Pair, Category 6, TIA / EIA 568-B.2</b>
Material:	
Conductors	23 AWG solid bare copper or better
Insulation	Polyethylene
Jacket	Flame Retardant PVC
Pair Separator	Cross-member fluted Spline.
Approvals	UL Listed
	ETL verified to TIA / EIA Cat 6
Operating temperature	-20 Deg. C to +60 Deg. C
Frequency tested up to	Minimum 600 MHz
Packing	Box of 305 meters
Delay Skew	45ns MAX.
Impedance	100 Ohms + / - 15 ohms, 1 to 600 MHz.
Performance characteristics to be provided along with bid	Attenuation, Pair-to-pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR

## UTP Jacks

<b>Type</b>	<b>PCB based, Unshielded Twisted Pair, Category 6, TIA / EIA 568-B.2</b>
Durability	
Modular Jack	750 mating cycles
Wire terminal	200 termination cycles
Accessories	Strain relief and bend-limiting boot for cable
	Integrated hinged dust cover
Materials	
Housing	Polyphenylene oxide, 94V-0 rated
Wiring blocks	Polycarbonate, 94V-0 rated
Jack contacts	Phosphorous bronze, plated with 1.27micro-meter thick gold
Approvals	UL listed



Performance Characteristics to be provided with bid	Attenuation, NEXT, PS NEXT, FEXT and Return Loss
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### UTP Jack Panels

Type	24-port, PCB based, Unshielded Twisted Pair, Category 6, TIA / EIA 568-B.2
Ports	24
Port arrangement	Modules of 6-ports each, arranged 1port x 6.
Category	Category 6
Circuit Identification Scheme	Icons on each of 24-ports
Port Identification	9mm or 12mm Labels on each of 24-ports (to be included in supply)
Height	1 U (1.75 inches)
Durability	
Modular Jack	750 mating cycles
Wire terminal (110 block)	200 termination cycles
Accessories	Strain relief and bend limiting boot for cable
Materials	
Housing	Polyphenylene oxide, 94V-0 rated
Wiring blocks	Polycarbonate, 94V-0 rated
Jack contacts	Phosphorous bronze, plated with 1.27micro-meter thick gold
Panel	Black, powder coated steel
Approvals	UL listed
Up gradable to intelligent System	Panel Should be up gradable to intelligent system without changing the panel using Retrofit Solution
Performance Characteristics to be provided along with bid	Attenuation, NEXT, PS NEXT, FEXT and Return Loss



## Faceplates

<b>Type</b>	<b>2-port each with White surface box for RJ45 and RJ11</b>
Material	ABS / UL 94 V-0
No. of ports	Two

## Workstation / Equipment Cords

<b>Type</b>	<b>Unshielded Twisted Pair, Category 6, TIA / EIA 568-B.2</b>
Conductor	24 AWG 7 / 32, stranded copper
Length	7-feet
Plug Protection	Matching colored snag-less, elastomer polyolefin boot
Warranty	25-year component warranty
Category	Category 5
Plug	
Housing	Clear polycarbonate
Terminals	Phosphor Bronze, 50 micron gold plating over selected area and gold flash over remainder, over 100 micron nickel under plate
Load bar	PBT polyester
Jacket	PVC
Insulation	Flame Retardant Polyethylene

## Specifications for Fiber Optic Cabling Systems

### Fiber optic Cable

<b>Cable Type</b>	<b>6-core, Single Mode, Armored, Loose-tube, Gel filled</b>
Fiber Type	Single Mode, 9 / 125, 250 micron primary coated buffers
No. of cores	6
Armor	Corrugated Steel Tape Armor



Cable Construction Type	BELLCORE GR 20 / IEC 794-1
Attenuation	
@ 1310nm	0.45 db/KM
@1500nm	0.4 dB/KM
Tensile rating	1200N
Maximum Crush resistance	3000N
Operating Temperature	-40 Degree C to +60 Degree C

### Fiber Optic Connectors

<b>Connector Type</b>	<b>SC-Style, Simplex</b>
Operating temperature	-40 Degree C to +85 Degree C
Durability & color	
SM connectors	220 cycles, Blue
Ferrules	Pre-radiused Ceramic Ferrules
Attenuation	Not more than 0.75 dB per mated pair

### Fiber Optic Patch panels

<b>Fiber optic patch panel</b>	<b>19-inch, Rack mounted Fiber optic patch panel</b>
Height	2 U, 3.5 inches
# of fibers	24 and 48
# of OSP Cables for termination	Minimum 2
Grounding	2 Nos. of earthing lugs, pre-loaded
Cable Management rings	Front and rear cable management rings, pre-loaded
# of 6-port / 12-port adapter plates	4 / 4 Max.



### Fiber Optic Adapter plates

<b>Fiber Optic adapter plate</b>	<b>6-port, SC-Style, SM &amp; MM</b>
Attenuation	Max of 0.75 dB per mated pair

### Fiber Optic Patch Cord.

<b>Fiber Optic Patch Cords</b>	<b>50/ 125 Ethernet Patch Cord</b>
Bandwidth	
@850nm	500 MHz-KM
@1300nm	500 MHz-KM
Insertion Loss	Less than 0.5 dB

### Warranty

A 15-year System and Application Performance Warranty supporting applicable international and local industry standards



## Section V

# SPECIAL CONDITIONS OF CONTRACT



## 5 Special Conditions of Contract

The following clauses shall supplement the Instructions to Bidders.

### 5.1 Responsibility Matrix

Sr. No	Activity	BELTRON GoB State implementation agency	Consultants	Bidder	Third Party Monitoring Agency
1	Preparation of RFP for the Selection of SecLAN		√		
2	Tender Process for the Selection of SecLAN,	√	√		
3	Approval for Appointment of SecLAN Consultant,	√			
4	Review and suggestion on the SecLAN Architecture			√	
5	Site Identification	√			
6	Site Handover	√		√	
7	Site Survey and Preparation			√	
8	Installation and Commissioning of SecLAN			√	
9	Monitoring the Installation and Commissioning of SecLAN	√	√		√
10	Acceptance Tests		√	√	√
11	Onsite Inspection and Verification of Acceptance Tests	√	√	√	√
12	Trial Run			√	√



13	Witness of Trial Run	√	√		√
14	Issue of Final Acceptance Test Certificate	√			√
15	Operation, Management and Maintenance of SecLAN			√	
16	Supervision of the Monitoring of SecLAN				√
17	Periodical Generation of NMS report			√	√
18	Verification of NMS Report				√
19	Approval of NMS Report	√			
20	Periodical Auditing of the SecLAN				√
21	Submission of the Audited Report of SecLAN as advised by Consultant			√	√

## 5.2 Third Party Monitoring Agency

BSEDC shall appoint a Third Party Agency, which shall monitor the DC and SecLAN during implementation, commissioning and operation. The Third Party Agency shall also conduct the Final Acceptance Test as per the technical requirement of the Agreement and shall issue the Certificate of Completion for SecLAN. Third Party Agency shall verify the services as mentioned in Section IV provided by the bidder. The bidder shall cooperate with such Third Party Agency. Third Party Agency will be responsible for verification, validation of all invoices under the terms & conditions of the Agreement and will recommend on the eligible payment. Third party agency will be responsible for performance audit and will recommend release of payments to bidder.



### 5.3 Site Preparation and Site Survey

As per implementation plan, BSEDC shall arrange the necessary minimum constructed rooms/ space permanent construction for operation of SecLAN project. The space cannot be used for any purpose other than for delivering the services as mentioned Section IV as contracted under the Agreement. BSEDC shall arrange for necessary clearances, which shall enable the Bidder to undertake civil, electrical, and mechanical works including false ceiling, partitioning, installation of UPS equipment, cable laying etc., at the respective sites. Infrastructure required for installation of equipment shall also be the responsibility of the Bidder.

The entry and exit to the site for the equipment and personnel of the Bidder shall be in accordance with Security Rules and Regulations that may apply to the Government Campus where the site is located.

BSEDC shall provide site readiness roadmap at the time of signing the contract. The Bidder will be responsible for site survey to identify the exact situation of the site and for ensuring site readiness for the implementation of the SecLAN infrastructure. The Bidder would prepare a detailed report detailing status of the site.

The Bidder in his report detailing status of the site has to accord his acceptance for the site handed over by the State Government for SecLAN implementation. If the site is not otherwise acceptable to the bidder, he has to give clearly the deficiencies and possible remedies to the State Government. On receipt of Bidder's Acceptance Report the State Government will initiate appropriate corrections or modifications for stated site deficiencies.

### 5.4 Acceptance Test

**Acceptance Testing:** The acceptance of the sites for Secretariat LAN Buildings in accordance with the requirements in Section III shall be conducted. After successful testing by the Third Party Agency a Final Acceptance Test Certificate shall be issued by BSEDC to the Bidder. The date on which Final Acceptance certificate is issued shall be deemed to be the date of successful commissioning of SecLAN.

The test shall include the following



1. All Civil, electrical, air conditioning, fire proofing etc., are completed as per the specifications.
2. All hardware and software items must be installed at particular site as per the specifications.
3. Availability of all the defined services shall be verified. The successful bidder shall be required to demonstrate all the features/facilities/functionalities as mentioned in the RFP.
4. The third party monitoring agency in consultation with Government of Bihar shall define detailed test plan.
5. Successful bidder will arrange the test equipment required for performance verification. Successful bidder will also provide documented test results.
6. 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.
7. All documentation as defined should be completed before the final acceptance test.
8. The training requirements as mentioned should be completed before the final acceptance test.

Any delay by the Bidder in the Final Acceptance Testing shall render the Bidder liable to the imposition of appropriate Penalties.

SI No	Description	Month 1	Month2	Month 3	Month 4
<b>1</b>	<b>Partial Acceptance Test in accordance with the requirements in Section III shall be conducted</b>				
1.1	Locations	Technology Bhavan, Old Secretariat, Cm's Secretariat and CM's Residence	Vikas Bhavan, Soochana Bhavan	Vishveswarayya Bhavan, Sinchai Bhavan	Any Exceptions will completed in this period
1.2	Total sites	3	2	2	Balance
<b>2</b>	<b>Final Acceptance in accordance with the requirements in Section III shall be</b>				



	<b>conducted</b>				
2.1	Locations		Technology Bhavan, Old Secretariat, Cm's Secretariat	Vikas Bhavan, Soochana Bhavan	Vishveswarayya Bhavan, Sinchai Bhavan

### 5.5 Performance Security for Operations

Within 15 days of the issuance of Letter of intent (LoI) the Bidder shall furnish revolving Performance Guarantee, as provided, to BSEDC for an amount equal to 10% of the arithmetic sum of 5 years of the Guaranteed Revenue according to the Agreement. The Performance Guarantee shall be valid initially for a period of one year. The guarantee shall be renewed year by year, at least 30 days before expiry date, for a minimum period of one year and thus cover the balance period of the agreement. The guarantee amount for each year shall be calculated on the basis of Guaranteed Revenue for the remaining years of operation under the agreement subject to minimum Performance Guarantee based on sum of two years Guaranteed Revenue. The BSEDC may forfeit the Performance Guarantee for any failure on part of 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 with at least one branch office in Patna in the format provided by BSEDC. The Performance Guarantee shall be returned to the Bidder within 30 days of the date of successful discharge of all contractual obligations at the end of the period of the Agreement by BSEDC. In the event of any amendments to Agreement, the Bidder shall within 15 days of receipt of such amendment furnish the amendment to the Performance Guarantee as required.

### 5.6 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 Tenderer in writing of such condition and the cause thereof. Unless otherwise directed by Tenderer, 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.

### 5.7 Implementation Schedule

SI No	Description	Month 1	Month 2	Month 3	Month 4
1	Sites to be completed from date of LOA / Agreement Signing (T0)	3	2	2	Balance let out sites or points etc., with the sites
2	Minimum Sites to be completed	Technology Bhavan, Old Secretariat and CM's Residence	Vikas Bhavan, Soochana Bhavan	Vishveswarayya Bhavan, Sinchai Bhavan	
3	Activities to be completed	Site Survey and Preparation, complete OFC laying for all buildings, other Cable laying in above sites, Dispatch of Networking Hardware to the sites, Implementation of the network, Partial Acceptance testing,	Site Preparation, Dispatch of Networking Hardware to the Site, Implementation of the network, Partial Acceptance testing, Acceptance test of Month 1 Deliverables,	Site Preparation, Dispatch of Networking Hardware to the sites, Implementation of the network, Partial Acceptance testing, Acceptance test of Month 2 Deliverables,	Site Preparation, Dispatch of Networking Hardware to the Sites, Implementation of the network, Partial Acceptance testing, Acceptance test of Month 3



					Deliverables,
4	Trial Period and Commencement of Operation.		Month 1 Deliverables	Month 2 Deliverables	Month 3 Deliverables

**Note:**

- **Site Acceptance process by the BOOT operator will be a parallel activity in M1, M2, and M3.**
- **Trial period and commencement of operations of M1 will be completed in M2, and similarly for other quarters.**
- **Entire implementation of all sites has to be completed with in 3 months.**

## 5.8 SLA Requirement

1. Service Level Agreement (SLA) is the contract between the Government of Bihar SecLAN Implementation Agency. SLA defines the terms of the operator's responsibility in ensuring the performance of SecLAN based on the agreed Performance Indicators as detailed in the Agreement. This section defines various Service Level Indicators for SecLAN, which can be considered by the State in the Service Level Agreement with operator.
2. The Table below summarizes the Indicative Performance Indicators for the services to be offered by the SecLAN Operator. The detailed description of the performance indicators, SLA Terms and their definitions are discussed in the following sections.

### Definitions

Service Level Agreements (SLAs) are agreed upon performance metrics subject to reporting and measurement, and subject to the service level penalties.

Service Level Objectives (SLOs) are agreed upon performance metrics subject to reporting and measurement, but not service level penalties.



### Performance Metrics

The following metrics define the baseline requirements that will measure the effectiveness of the response time, performance, and availability governed by the SLAs.

#### 5.8.1 Service Type: Availability of Network Environment

SLA	SLA Definition	SLA Metric	Measurement & Reporting	Comment/Assumption
98.5% Monthly Avg	Hours of Availability	Unless otherwise specified, the listed hours of availability: Availability: Mon – Sat 6:00 AM – 10:00 PM PST Availability: Sunday 8:00 AM – 8:00 PM PST	Monitored daily, reported monthly	All maintenance work to be performed during Maintenance Window Backups will be required both prior to batch processing and after batch processing is completed. “Business hours” to be calculated based on Hours of Availability “Hours” refers to clock hours or contiguous hours

#### 5.8.2 Service Type: Technology Bhavan Network

SLA	SLA Definition	SLA Metric	Measurement & Reporting	Comment/Assumption
98.5% Monthly Avg	Network Availability	24 x 7 x 365	Monitored daily, reported monthly	This refers to the Data Center Network only



### 5.8.3 Service Type: Problem Management

SLA	SLA Definition	SLA Metric	Measurement & Reporting	Comment/Assumption
99.5%	Severity 1 Problem Response (Urgent)	Response time in 15 minutes Time to Fix - within 2 hours with a 4 hour max	Monitored daily, reported monthly	Severity 1: Problems affecting mission critical processes on one or more campuses. (Examples include but are not limited to Data Center Network, Telecommunications, Security breaches, student enrollment, payroll-related processing, etc)
	Severity 2 Problem Response (High)	Response time in 1 hour Time to Fix - within 4 hours with an 8-hour max		Severity 2: Problem affecting production online transaction processing on one or more campuses.
	Severity 3 Problem Response (Medium)	Response time in 3 hours Time to Fix - within 12 business hours with a 16 business hour max		Severity 3: Problem affecting anything other than production online transaction processing for one or more campuses.
	Severity 4 Problem Response (Low)	Response time in 8 hours Time to Fix - within 30 business days		Severity 4: No impact to any campuses.



SLA	SLA Definition	SLA Metric	Measurement & Reporting	Comment/Assumption
	Severity 1 Root Cause Analysis	Root Cause Analysis performed within 10 business days Changes in systems and policies recommended within 15 business days Changes in systems and policies implemented within 30 business days		

#### 5.8.4 Service Type: Availability of Non-Production Environment

SLA	SLA Definition	SLA Metric	Measurement & Reporting	Comment/Assumption
98.5% Monthly Avg	Hours of Availability	Unless otherwise specified, the listed hours of availability: Availability: Mon – Sat 6:00 AM – 10:00 PM PST Availability: Sunday 6:00 AM – 7:00 PM PST	Monitored daily, reported monthly	All maintenance work to be performed during Maintenance Window Backups will be required both prior to batch processing and after batch processing is completed. “Business hours” to be calculated based on Hours of Availability



				“Hours” refers to clock hours or contiguous hours
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**3. Denial of Service**

Denial of Service (DoS) is the most common form of attack on the Network, which leads to network unavailability for the genuine network users. The operator shall respond to Denial of Service attacks reported by departments/SecLAN users or SecLAN maintenance personnel within 15 minutes of intimation to the helpdesk. The Denial of Service attack can be defined as sudden burst of network traffic leading to more than 90-95% utilization of the SecLAN bandwidth in any segment or complete network. In such a scenario operator shall perform an analysis of the issue, verify whether the network utilization is due to genuine user requirements or it is a denial of service attack. In case it is identified as DoS attack, operator shall identify the source of Denial of Service attack, and shall disconnect the source or network from SecLAN backbone and resolve the issue to ensure availability and performance of the backbone.

The SecLAN Operator, at regular intervals, shall monitor and measure the actual bandwidth allocated by the Bandwidth Provider against the agreed Committed Interface Rate (CIR) and issues identified shall be reported to PSEGS and shall be escalated to the Bandwidth Service provider for resolution.

**4. Network Operations Management**

The operator is required to establish Contact Centre (Helpdesk) at the State Data Center level (*with a toll free number*) with an appropriate CRM Solution. The Helpdesk shall act as a SPOC (Single Point of Contact) for all the Network & Security related issues reported by the government departments or any other related stakeholders of the SecLAN. SecLAN Project Management Unit (PMU) established by the State shall monitor each issue need to be recorded in the CRM as a Service Request (with allocation of service request number) and the resolution timelines for such Service Requests.



S.No	Severity	Initial Response Time	Issue Resolution Time
1	Level 1	15 Mins	1 Hr
2	Level 2	30 Mins	2 Hrs
3	Level 3	60 Mins	8 Hrs

### 5. Severity Level Definition

<b>Level 1:</b>	The SecLAN outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services.
<b>Level 2:</b>	The SecLAN outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services in one or more Departments.
<b>Level 3:</b>	The SecLAN outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services to one or more users in the departments.

### 6. Other Information related to SLA management is provided below.

#### a. Capacity and Performance Management

The SecLAN operator shall provide capacity planning services through network base lining and trending, to determine the resources required for SecLAN and to plan and complete network upgrades before a capacity problem causes SecLAN down time or performance problems. In addition to availability, latency, jitter and packet loss, SecLAN operator shall monitor the network and dependent infrastructure (*resource*) utilization during successive time periods (*hour, day, week, month, and year*) and shall provide recommendations to State government on SecLAN infrastructure upgradation. SecLAN operator shall perform the planned network upgrades with prior notification to the departments/users in the network segment (s) affected by the planned outages. SecLAN operator should ensure that all the planned outages are performed only in the Extended SLA Hours and only the emergency upgrades are performed in the Prime Business Hours.

#### b. Measurement of SLA



The Measurement of SLA shall be performed by a third party agency, independent of the SecLAN Operator, to be identified by the State Government.

The Operator shall establish an Enterprise/Network Management System for monitoring and measurement of the SLA parameters identified for the SecLAN's.

**c. SLA Reporting**

For reports of performance of the Secretariat LAN, the operator is required to setup a portal solution available to all stakeholders to be established at the State level for SecLAN Implementation. This portal shall provide online performance and availability reports of SecLAN.

**d. SecLAN Security Auditing**

Upon completion of SecLAN Installation and before the 'go-live' phase, it is mandatory for the SecLAN operator to get the SecLAN Infrastructure audited by a reputed third party agency from a security and business continuity perspective. Such Security audit shall include complete infrastructure established at the State Data Center and the infrastructure at Secretariat Local Area Network locations.

## 5.9 Penalties

The bidder shall be paid as per the services (i.e. availability) provided to the tenderer.

Link	Availability during PBH	Penalty	Availability during ESH	Penalty
TB Network	>= 99.5%	Nil	>= 95%	Nil
	Less by 1%	0.5% of the QGR	Less by 1%	0.25% of the QGR
	Less by >1% but < 2%	Additional 1% of the QGR	Less by >1% but < 2%	Additional 0.5% of the QGR
	Less by >2% but <5%	Additional 2% for every %age	Less by >2% but <5%	Additional 1% for every %age
	Less by >5% but <20%	Additional 2.5% for every %age	Less by >5% but <20%	Additional 1.25% for every



Link	Availability during PBH	Penalty	Availability during ESH	Penalty
				%age
	>20%	No payment	>20%	No payment
OS & CMS	>= 99%	Nil	>= 90%	Nil
	Less by 1%	0.5% of the QGR	Less by 1%	0.25% of the QGR
	Less by >1% but < 2%	Additional 1% of the QGR	Less by >1% but < 2%	Additional 0.5% of the QGR
	Less by >2% but <5%	Additional 2% for every %age	Less by >2% but <5%	Additional 1% for every %age
	Less by >5% but <20%	Additional 2.5% for every %age	Less by >5% but <20%	Additional 1.25% for every %age
	>20%	No payment	>20%	No payment
Other Bldg LAN	>= 99%	Nil	>= 90%	Nil
	Less by 1%	0.5% of the QGR	Less by 1%	0.25% of the QGR
	Less by >1% but < 2%	Additional 1% of the QGR	Less by >1% but < 2%	Additional 0.5% of the QGR
	Less by >2% but <5%	Additional 2% for every %age	Less by >2% but <5%	Additional 1% for every %age
	Less by >5% but <20%	Additional 2.5% for every %age	Less by >5% but <20%	Additional 1.25% for every %age
	>20%	No payment	>20%	No payment

1. **Network availability:** - Network availability is defined as total time in a quarter (in minutes) less total down time (in minutes) in the quarter including planned downtime. The network is considered available when all the services mentioned in the requirement section in full capacity are available. Bandwidth downtime will not be considered as part of network downtime. BOOT Operator will take at least 15 days prior approval from the state for the network maintenance i.e. planned downtime. The BOOT Operator should provide support and maintenance for the SecLAN from the date of Final acceptance



testing. The Operator's request for payment shall be made at the end of each quarter by invoices along with the following supporting documents:

- Performance statistics
- Log of network parameters along with Service Down time calculation and Uptime percentage.
- Any other document necessary in support of the service performance acceptable to BSEDC.

The Third Party Agency shall verify all the supporting documents as prescribed and acceptable to BSEDC. On receipt of such invoice after verification by the Third Party Agency and after deducting Income Tax, other taxes and any Penalties, BSEDC shall pay the amount within a period of 15 days. The BOOT Operator shall furnish all tax payment receipts to BSEDC.

## **2. Penalties for delay in implementation**

If the BOOT Operator fails to complete the Acceptance Test within the time period (s) specified in the implementation plan, BSEDC may, without prejudice to its other remedies under the Agreement, levy as Penalties, a sum equivalent to 0.25 % of the arithmetic sum of the guaranteed revenue for the five years payable under the Agreement, for each week or part thereof of delay, until actual delivery of performance. The maximum penalty for delay shall not exceed 2% of the arithmetic sum of five years Guaranteed Revenue. If the delay continues beyond 18 weeks, BSEDC may terminate the Agreement.

## **3. Operational Penalties**

In the event the BOOT operator is unable to meet any one of the SLA parameters defined in this RFP for 10% or more of the operational parameters during two quarters in a year or five quarters during the five years of the contract, BSEDC reserves the right to terminate the contract.

## **4. Penalties for misuse**

In case of misuse of bandwidth/ Internet at the instance of BOOT Operator, the penalty imposed on the BOOT Operator, without prejudice to BSEDC other remedies under the Agreement shall be 200% of the quarterly guaranteed revenue under the Agreement. If the misuse continues for two quarters, BSEDC may terminate the Agreement. The BOOT operator shall realize returns on the costs



incurred on creating the whole asset (Capital Cost), the operations cost for operating these assets (Operations Cost). The payments shall be released by the Government on a Quarterly basis based on compliance of the services provided by the BOOT operator against the SLA's entered into. For setting up the site, the bidder will have to quote the price separately, which should not be included in the QGR mentioned above. This "site preparation" cost will be paid to the BOOT operator separately by the BSEDC.

### **5. Payment Terms**

No payment shall accrue until after the performance guarantee bond has been furnished. The selected BOOT operator engaged shall be responsible to invest in the project to implement and operate the facilities, for a term of 5 years and on expiry of 5 years, the ownership of the Infrastructure will be transferred to BSEDC. During this period of 5 years, the BOOT operator shall have full responsibility for the delivery of the services, including all operational, maintenance, and management activities, etc.

The BOOT Operator shall be paid Minimum Guaranteed Revenue on quarterly basis in arrears at the end of each quarter for the SecLAN which have been accepted in the Acceptance Test by BSEDC based on the certificate provided by the Third Party Agency, at the rates specified by the BOOT Operator.

#### **5.10 Quarterly Guaranteed Payment**

The payment period will be through the contract period of five years, which would start from the date of issuance of Acceptance certificate after the Acceptance Test of the SecLAN as defined in the RFP.

The selected BOOT operator shall be paid Guaranteed Revenue on quarterly basis at the end of each quarter for SecLAN buildings which has been accepted in the Acceptance Test by BSEDC based on the certificate provided by the Third Party Agency, at the rates specified by the bidder.

Quarterly guaranteed payment for SecLAN shall include the procurement, implementation, operation and maintenance of equipments as specified in the requirements section along with providing the specified services for the entire service period.



Prices indicated for SecLAN should include cost of all equipments, cost of installation, configuring, erection, commissioning, making equipment and services fully operational, maintaining and providing service for the next five years thereafter.

The Selected BOOT operator shall make a payment request after the end of each quarter with the following supporting document:

- Acceptance certificate for SecLAN in QGR
- SLA compliance report as prepared by the Third Party Monitoring Agency

**5.11 Bidder is expected to quote a rate in the given proforma**

Sr. No	Location (Buildings)	Capital Cost per location per Quarter	Operations Charge of the Network (onsite engineers etc) per location per Quarter	Maintenance Charge (field maintenance of equipments, links, etc)	Total QGR Amt in Rs per Location per quarter	Total QGR Amt in Rs. for 20 Quarters (i.e. 5years)
1	Old Secretariat					
2	Vikas Bhavan					
3	Vishveswarayya Bhavan					
4	Sinchai Bhavan					
5	Soochana Bhavan					
6	Technology Bhavan					
7	CM's Secretariat					



8	CM's Residence					
	Grand Total					

. Amt in Words \_\_\_\_\_

## 5.12 Representations and warranties

### 5.12.1 Representations and Warranties by the Bidder

- a. It is a company duly organized and validly existing under the laws of India and has all requisite legal power and authority and corporate authorizations to execute the Agreement and carry out the terms, conditions and provisions hereof;
- b. It has in full force and effect all requisite clearances, approvals and permits necessary to enter into the Agreement and perform its obligations hereof;
- c. It will have the legally valid and enforceable title to all Equipment as may be necessary for proper functioning and it will be free from all encumbrances, liens, charges, any security interest and adverse claims of any description;
- d. The Agreement and the transactions and obligations hereof do not contravene its constitutional documents or any law, regulation or government directive and will not contravene any provisions of, or constitute a default under, any other Agreement or instrument to which it is a party or by which it or its property may be bound or any of its obligations or undertakings by which it or any of its assets are bound or cause a limitation on its powers or cause it to exceed its authorized powers;
- e. There is no pending or threatened actions, suits or proceedings affecting the Bidder or its affiliates or any of their respective assets before a court, governmental agency, commission or arbitrator or administrative tribunal which affects the Bidder's ability to perform its obligations under the Agreement; and neither Bidder nor any of its affiliates have immunity from the jurisdiction of a court or from legal process (whether through service of notice, attachment prior to judgment, attachment in aid of execution or otherwise);
- f. The Bidder confirms that all representations and warranties of the Bidder set forth in the Agreement are true, complete and correct in all respects;
- g. No information given by the Bidder in relation to the Agreement, project documents or any document comprising security contains any material mis-



statement of fact or omits to state as fact which would be materially adverse to the enforcement of the rights and remedies of BSEDC or which would be necessary to make any statement, representation or warranty contained herein or therein true and correct;

- h. All equipment including material to be installed by the Bidder in the SECLAN shall be new and the product should not be de-supported or declared end of life within next 5 years. A certificate to that effect should be furnished from OEM. All equipment shall conform to the codes, standards and regulations applicable to networking facilities and benefit from the usual manufacturer's guarantees.

#### **5.12.2 Representations and Warranties by BSEDC**

- a) It has full legal right; power and authority to execute the SECLAN project and to enter into and perform its obligations under the Agreement and there are no proceedings pending.
- b) The Agreement has been duly authorized, executed and delivered by BSEDC and constitutes valid, legal and binding obligation of BSEDC.
- c) The execution and delivery of the Agreement with the Bidder does not violate any statutory judgment, order, decree, regulation, right, obligation or rule of any court, government authority or arbitrator of competent jurisdiction applicable in relation to BSEDC, its assets or its administration.

#### **5.12.3 Each Day during the Agreement**

The Parties agree that these representations and warranties are taken to be made on each Day during the term of the Agreement.

#### **5.12.4 No title to the equipment**

The Bidder and Government of Bihar agree that BSEDC shall have no title to any of the equipment and construction/ pre-fabricated site & laid cables made available for delivery of services by the Bidder during the period of the Agreement. After 5 years, it shall be transferred to BSEDC.



### 5.13 Approval / Clearances

- a) Necessary approvals/ clearances from concerned authorities, as required, for fire protection, government duties/ taxes/ octroi, shall be obtained by the short listed Bidder.
- b) Necessary approvals/ clearances, from concerned authorities (like Municipalities, Public Works Department (PWD), Department of Irrigation, State Electricity Board etc. for “Right of way”), as required, shall be obtained by the short listed Bidder for laying their own cables to meet SECLAN requirements
- c) Necessary approvals/ clearances from concerned authorities, as required, for providing Internet Service shall be obtained by the short listed Bidder.

### 5.14 Exit Management

1. Upon completion of the contract period or upon termination of the agreement for any reasons, the SecLAN Bidder shall comply with the following:  
Notify to the Government of Bihar forthwith the particulars of all Project Assets;  
Deliver forthwith actual or constructive possession of the SecLAN Project free and clear of all Encumbrances and execute such deeds, writings and documents as may be required by the Government of Bihar for fully and effectively divesting the SecLAN Bidder of all of the rights, title and interest of the SecLAN Bidder in the SecLAN Project and conveying the SecLAN Project;  
Comply with the Divestment Requirements set out in Section 2 except in case if Termination of this Agreement is due to Government of Bihar Event of Default, Indirect Political Event or Political Event the SecLAN Bidder shall have implemented the maintenance schedule as well as any repairs pointed out by the Independent Consultant in its Operations & Maintenance Inspection Report prior to date of Termination Notice. In case of Termination due to Non-Political Force Majeure Event, the Divestment Requirements shall be agreed between Government of Bihar and the SecLAN Bidder; and Pay all transfer costs and stamp duty applicable on hand back of project assets except in case the Project is being transferred due to Government of Bihar of Default, Indirect Political Event, Political Event or expiry of Concession period, where Government of Bihar shall be responsible for transfer costs and stamp



- duty, if any. For clarification of doubt, transfer costs in this Clause relate to taxes and duties applicable at transfer of SECLAN Project, if any.
2. Subject to clause 1 of exit management, upon completion of the contract period or upon termination of the agreement, the SECLAN Bidder shall comply and conform to the following Divestment Requirements in respect of the SecLAN Project:
    - (i) All Project Assets including the hardware, software, documentation and any other infrastructure shall have been renewed and cured of all defects and deficiencies as necessary so that the SecLAN Project is compliant with the Specifications and Standards set forth in the RFP, Agreement and any other amendments made during the contract period;
    - (ii) The SecLAN Bidder delivers relevant records and reports pertaining to the SecLAN Project and its design, engineering, operation, and maintenance including all operation and maintenance records and manuals pertaining thereto and complete as on the Divestment Date;
    - (iii) The SecLAN Bidder executes such deeds of conveyance, documents and other writings as the Government of Bihar may reasonably require to convey, divest and assign all the rights, title and interest of the SecLAN Bidder in the SecLAN Project free from all Encumbrances absolutely and free of any charge or tax unto the Government of Bihar or its Nominee; and
    - (iv) The SecLAN Bidder complies with all other requirements as may be prescribed under Applicable Laws to complete the divestment and assignment of all the rights, title and interest of the SecLAN Bidder in the SecLAN Project free from all Encumbrances absolutely and free of any charge or tax to Government of Bihar or its nominee.
  3. Not earlier than 3 (three) months before the expiry of the contract Period but not later than 30 (thirty) days before such expiry, or in the event of earlier Termination of the contract, immediately upon but not later than 15 (fifteen) days from the date of issue of Termination Notice, the Independent Consultant as nominated by the State Government shall verify, in the presence of a representative of the SecLAN Bidder, compliance by the SecLAN Bidder with the Divestment Requirements set forth in Section 2 in relation to the SecLAN Project and, if required, cause appropriate tests to be carried out at the SecLAN Bidder's cost for determining the compliance therewith. If either Party finds any shortcomings in the Divestment Requirements, it shall notify the other of the same and the SecLAN Bidder shall rectify the same at its cost.



4. Upon the SecLAN Bidder conforming to all Divestment Requirements and handing over actual or constructive possession of the SECLAN Project to Government of Bihar or a person nominated by Government of Bihar in this regard, Government of Bihar shall issue a certificate substantially in the form set forth in Section 2, which will have the effect of constituting evidence of divestment of all rights, title and lien in the SECLAN Project by the SECLAN Bidder and their vesting in SECLAN Project pursuant hereto. State Government shall not unreasonably withhold issue of such certificate. The divestment of all rights, title and lien in the SecLAN Project shall be deemed to be complete on the date when all the Divestment Requirements have been fulfilled or the Certificate has been issued, whichever is earlier, it being expressly agreed that any defect or deficiency in any Divestment Requirement shall not in any manner be construed or interpreted as restricting the exercise of any rights by State Government or its nominee on or in respect of the SecLAN Project on the footing as if all Divestment Requirements have been complied with by the Concessionaire.

### 5.15 Maintenance of Equipment

The selected vendor shall ensure that services of a professionally qualified person is available for providing comprehensive on-site maintenance and administration (on 24x7 basis at all the SecLAN locations

Comprehensive Maintenance and Administration of the network shall include, among other things, day to day administration and maintenance of the system as per the policy, regular log monitoring, reconfiguring of switches, etc. when required. In case of network failure, the vendor shall ensure that the network is made operational to the full satisfaction of BELTRON / BSEDC within the MTTR (Mean Time To Repair) committed by the bidder.

In the event of network break down or failures at any stage, protection available, which would include the following, shall be specified.

- Diagnostics for identification of hardware failures
- Recovery/restart network

The selected Vendor shall ensure the SLA's on 24X7X365 basis (shutting down of equipment at BELTRON's discretion and Planned outage will not be considered for calculation of uptime.



The list of critical spares, the vendor proposes to stock at the major sites should be furnished separately along with the technical bid. The scope of the contract will include at least one scheduled servicing (Preventive Maintenance) at quarterly intervals and any number of breakdown calls. The comprehensive maintenance would be inclusive of all spares need to be replaced and excluding consumables.

The vendor shall guarantee the availability of spares for a period of at least five years in respect of all the hardware and software

### 5.16 Bankruptcy and Insolvency:

Bihar Government can terminate the contract if the bidder becomes bankrupt and/or losses the desired state of insolvency with a notice of 15 days. Bihar Government, in such cases of termination, will not be responsible for any loss or financial damage to the service provider resulted due to the termination. The Government will also, in such cases have the right to recover any pending dues by invoking the performance bank guarantee or any such instrument available with the Government.



## Section 6

# Annexure – Template



## Section 6 – Annexure & Templates

### 6 Appendix -1 Bid Letter (Technical) Template

Date: dd/mm/yyyy

To,  
<< Address>>

**Reference:** Tender Number ..... Dated .....

Sir,

We hereby declare:

- i. We are the authorised agents of the manufacturers of the networking equipment proposed in our solution.
- ii. That we are equipped with adequate maintenance and service facilities within India for supporting the offered equipment. Our maintenance and service facilities are open for inspection by representatives of Government of Bihar.

We hereby offer to supply the equipment and provide the services at the prices and rates mentioned in the attached commercial bid.

In the event of acceptance of our bid, we do hereby undertake:

- i. To supply the equipment and commence services as stipulated in the schedule of delivery forming a part of the attached technical bid.
- ii. To undertake the project on BOOT basis for a period of 5 years, for quarterly guaranteed revenue as mentioned in the financial bid.
- iii. We affirm that the prices quoted are inclusive of delivery, installation, and commissioning charges and all sales/service taxes. (Octroi and any local levies will be charged on actual on submission of proof of remittance.)

We enclose herewith the complete Technical Bid as required by you. This includes:

1. Bid particulars
2. This bid letter
3. Proposed Network architecture, detailed technical solution, details of equipment and services offered



4. Proposed Project Plan and Implementation Schedule
5. Statement of deviation from requirement specifications
6. Statement of deviation from tender terms and conditions
7. Schedule of delivery
8. Warranty
9. Manufacturer's authorization form(s)

We agree to abide by our offer for a period of 180 days from the last date of submission of commercial bid prescribed by Government of Bihar and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and conditions of the tender and the conditions of the contract applicable to the tender. We do hereby undertake to provision as per these terms and conditions.

- i. The deviations from the requirement specifications of tendered items and schedule of requirements are only those mentioned in section

*OR (Strike out whatever is not applicable)*

There are no deviations from the requirement specifications of tendered items and schedule of requirements.

- ii. The deviations from the terms and conditions of the tender are only those mentioned in section

*OR (Strike out whatever is not applicable)*

There are no deviations from the terms and conditions of the tender.

We hereby certify that the Bidder is a Directorate and the person signing the tender is the constituted attorney.

Bid Security in the form of a Bank Guarantee issued by \_\_\_\_\_ (bank), valid till \_\_\_/\_\_\_/\_\_\_\_\_ (dd/mm/yyyy), for an amount of **Rs. 20,00,000/- (Rupees twenty Lakhs)** is enclosed in the cover containing pre-qualifying requirements.

We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.



		<b>Signature of Bidder (with official seal)</b>
	<b>Date</b>	
	<b>Name</b>	
	<b>Designation</b>	
	<b>Address</b>	
	<b>Telephone</b>	
	<b>Fax</b>	
	<b>E-mail address</b>	
<b>Details of Enclosures:</b>		



### 6.1 Appendix 2 – Bidder profile

Sr. No	Details	
1	Name of the Firm	
2	Registered Office address Telephone Number Fax Number e-mail	
3	Correspondence/ contact address	
4	Details of Contact person (Name, designation, address etc.) Telephone Number Fax Number e-mail	
5	Is the firm a registered company? If yes, submit Documentary proof. Year and Place of the establishment of the Company	
6	Former name of the company, if any.	
7	Is the firm <ul style="list-style-type: none"> <li>➤ Government/ Public Sector Undertaking propriety firm</li> <li>➤ partnership firm (if yes, give partnership deed)</li> <li>➤ limited company or limited corporation</li> <li>➤ member of a group of companies (if yes, give name and address, and description of other companies)</li> <li>➤ Subsidiary of a large corporation (if yes give the name and address of the parent organisation) If the company is subsidiary, state what involvement if any, will the parent company have in the project.</li> <li>➤ Joint venture consortia (if yes, give name and address of each partner)</li> </ul>	
8	Is the firm registered with sales tax department? If yes,	



	submit valid sales tax registration certificate.	
9	Is the firm registered for service tax with Central Excise Department (Service Tax Cell)? If yes, Submit valid service tax registration certificate.	
10	Is the firm registered under Labour Laws Contract Act? If yes, submit valid registration certificate.	
11	Attach the organizational chart showing the structure of the organization including the names of the directors and the position of the officers. Total number of employees	
12	Number of years of experience: as a prime contractor in a joint venture/ Consortium	
13	Are you registered with any Government/ Department/ Public Sector Undertaking (if yes, give details)	
14	How many years has your organization been in business under your present name? What were your fields when you established your organization? When did you add new fields (if any)?	
15	What type best describes your firm? (documentary proof to be submitted) <ul style="list-style-type: none"> <li>· Manufacturer</li> <li>· Supplier</li> <li>· System Integrator</li> <li>· Consultant</li> <li>· Service Provider (pl. specify details)</li> <li>· Software Development</li> <li>· Total solution provider (Design, Supply, Integration, O&amp;M)</li> <li>· IT Company</li> </ul>	
16	Number of Offices / Project Locations	
17	Do you have a local representation /office in Government of Bihar? If so, please give the address and the details of staff, infrastructure etc in the office and no. of years of operation of the local office	
18	Do you intend to associate any other organization for the	



	works for which you are bidding? If so, please give full particulars of that organization separately.	
19	Please give details of Key Technical and Administrative staff who will be involved in this project, their role in the project, their Qualifications & experience and the certification attained from network product vendor. (documentary proof to be submitted)	
20	Is your organization has SEI –CMM / ISO 9000 certificates? If so, attach copies of the certificates. State details, if certified by bodies, other than that stated.	
21	List the major clients with whom your organization has been/ is currently associated.	
22	Were you ever required to suspend a project for a period of more than three months continuously after you started? If so, give the names of project and reasons for the same.	
23	Have you in any capacity not completed any work awarded to you? (If so, give the name of project and reason for not completing the work)	
24	In how many projects you were imposed penalties for delay? Please give details.	
25	The bidder/ prime member of the consortium shall disclose details pertaining to all contingent liabilities, claims, disputes, matters in appeal & in court and any pending litigation against the bidder or any member of the Consortium. If nil, an undertaking from the bidder/ prime member of the consortium mentioning the same.	
26	Whether your organisation has Bank's certificate of solvency. If yes, submit documentary proof.	
27	Have you ever been denied tendering facilities by any Government/ Department/ Public sector Undertaking? (Give details)	



## 6.2 Appendix 3 Financial Information Summary

S. NO	Name of the Bidder	Equity Contribution Proposed	Turn Over ( Rs. Crores)		
			03-04	04-05	05-06

**6.2.1 Note: Please enclose balance sheet and Profit & Loss statement.**



### 6.3 Appendix -4 Manufacturer's Authorization Form

Date: dd/mm/yyyy

To,

**Reference:**

Sir,

We \_\_\_\_\_, (*name and address of the manufacturer*) who are established and reputed manufacturers of \_\_\_\_\_ having factories at \_\_\_\_\_ (*addresses of manufacturing locations*) do hereby authorize M/s \_\_\_\_\_ (*name and address of the bidder*) to bid, negotiate and conclude the contract with you against the above mentioned tender for the above equipment manufactured by us.

Yours faithfully,

For and on behalf of M/s \_\_\_\_\_ (*Name of the manufacturer*)

Signature \_\_\_\_\_

Name \_\_\_\_\_

Designation \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

**Directorate Seal**

**Note:** This letter of authority should be on the letterhead of the concerned manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer.



## 6.4 Appendix 5 Firm Experience

Assignment Name:		
Location within Country:		Professional Staff Provided by Your Firm
Name of Client:		No. of Staff:
Address:		No. of Staff-Months; duration of assignment
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services :
Name of Associated Consultants, if any:		No. of Months of Professional Staff, provided by Associated Consultants:
Name of Senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:		
Narrative Description of Project:		
Description of Actual Services Provided by Your consultant :		



### 6.5 Appendix 6 Team Composition and Task Assignments Summary

Name	Qualifications	Years of Experience	Area of Expertise	Task & Position Assigned



## 6.6 Appendix 7 Curriculum Vitae for Proposed Staff

1. **Proposed Position** [*only one candidate shall be nominated for each position*]:
2. **Name of Firm** [*Insert name of firm proposing the staff*]:
3. **Name of Staff** [*Insert full name*]:
4. **Date of Birth:** **Nationality:**
5. **Education** [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment*]:
6. **Membership of Professional Associations:**
7. **Other Training** [*Indicate significant training since degrees under 5 - Education were obtained*]:
8. **Countries of Work Experience:** [*List countries where staff has worked in the last ten years*]:
9. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]:
10. **Employment Record** [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*]:

From [Year]: To [Year]:

Employer:

Positions held:



<p style="text-align: center;"><b>11. Detailed Tasks Assigned</b></p> <p><i>[List all tasks to be performed under this assignment]</i></p>	<p style="text-align: center;"><b>12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned</b></p> <p>[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]</p> <p>Name of assignment or project:</p> <p>Year:</p> <p>Location:</p> <p>Client:</p> <p>Main project features:</p> <p>Positions held:</p> <p>Activities performed:</p>
--	---

**13. Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date:

*[Signature of staff member or authorized representative of the staff] Day/Month/Year*

Full name of authorized representative:



### 6.7 Appendix 8 Statement of deviation from requirement Specification

Date: dd/mm/yyyy

To,

**Reference:**

Sir,

There are no technical deviations (null deviations) from the requirement specifications of tendered items and schedule of requirements. The entire work shall be performed as per your specifications and documents.

OR (*Strike out whatever is not applicable*)

Following is the exhaustive list of technical deviations and variations from the requirement specifications of tendered items and schedule of requirements. Except for these deviations and variations, the entire work shall be performed as per your specifications and documents.

S. No.	Section No.	REQ No.	Page No.	Statement of deviations and variations
1.				
2.				

Witness		Bidder	
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	
		<b>Directorate Seal</b>	



## 6.8 Appendix 9 Statement of deviation from tender terms and conditions

Date: dd/mm/yyyy

To,

**Reference:**

Sir,

There are no deviations (null deviations) from the terms and conditions of the tender. All the terms and conditions of the tender are acceptable to us.

*OR (Strike out whatever is not applicable)*

Following are the deviations from the terms and conditions of the tender. These deviations and variations are exhaustive. Except these deviations and variations, all other terms and conditions of the tender are acceptable to us.

S. No.	Section No.	Page No.	Para	Statement of deviations and variations
1.				
2.				

Witness		Bidder	
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	
		<b>Directorate Seal</b>	



## 6.9 Appendix 10 - Bid letter – Commercial

Date: dd/mm/yyyy

To,

### Reference:

Sir,

We hereby declare:

- iii. We are the authorized agents of the manufacturers of the networking equipment proposed in our solution.
- iv. That we / our principals (manufacturer) are equipped with adequate maintenance and service facilities within India for supporting the offered equipment. Our maintenance and service facilities are open for inspection by representatives of Bihar.

We do hereby undertake that, in the event of acceptance of our bid, the supply of equipment and commencement of services shall be made as stipulated in the schedule of delivery forming a part of the attached technical bid.

In the event of acceptance of our bid, we do hereby undertake that:

- iv. To supply the equipment and commence services as stipulated in the schedule of delivery forming a part of the attached technical bid.
- v. To undertake the project on BOOT basis for a period of 5 years, for quarterly guaranteed revenue as mentioned in the financial bid.
- vi. We affirm that the prices quoted are inclusive of delivery, installation, and commissioning charges and all sales/service taxes. (Octroi and any local levies will be charged on actual on submission of proof of remittance.)

We enclose herewith the complete Commercial Bid as required by you. This includes:

1. This bid letter
2. Bid particulars
3. Statement of commercial deviation
4. Quarterly Guaranteed Payment



We agree to abide by our offer for a period of 180 days from the last date of submission of commercial bid prescribed by BSEDC and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and conditions of the tender and the conditions of the contract applicable to the tender. We do hereby undertake to provision as per these terms and conditions.

- i. The deviations from the requirement specifications of tendered items and schedule of requirements are only those mentioned in section 12.1.4

OR *(Strike out whatever is not applicable)*

There are no deviations from the requirement specifications of tendered items and schedule of requirements.

- ii. The commercial deviations of tendered items are only those mentioned in section 12.2.3.

OR *(Strike out whatever is not applicable)*

There are no commercial deviations.

- iii. The deviations from the terms and conditions of the tender are only those mentioned in section 12.1.5

OR *(Strike out whatever is not applicable)*

There are no deviations from the terms and conditions of the tender.

We hereby certify that the Bidder is a Directorate and the person signing the tender is the constituted attorney.

Bid Security in the form of a Bank Guarantee issued by \_\_\_\_\_ (bank), valid till \_\_\_/\_\_\_/\_\_\_\_ (dd/mm/yyyy), for an amount of Rs. 20,00,000/- (Rupees twenty lakhs only) is enclosed in the cover containing pre-qualifying requirements.

We do hereby undertake, that, until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and notification of award of contract, shall constitute a binding contract between us.



		<b>Signature of Bidder (with official seal)</b>
	<b>Date</b>	
	<b>Name</b>	
	<b>Designation</b>	
	<b>Address</b>	
	<b>Telephone</b>	
	<b>Fax</b>	
	<b>E-mail address</b>	
<b>Details of Enclosures:</b>		
1.		



## 6.10 Appendix 11 - Appendix Statement of Commercial Deviation

Date: dd/mm/yyyy

To,

**Reference:**

Sir,

There are no deviations (null deviations) from the requirement specifications of tendered items and schedule of requirements and hence there are no commercial deviations. The entire work shall be performed as per your specifications and documents.

*OR (Strike out whatever is not applicable)*

Following is the exhaustive list of commercial deviations and variations from the exceptions to the specifications and documents for the above mentioned tender. Except for these deviations and variations, the entire work shall be performed as per your specifications and documents.

S. No.	Section No.	REQ No.	Page No.	Statement of deviations and variations
1.				
2.				
<b>Witness</b>			<b>Bidder</b>	
Signature			Signature	
Name			Name	
Designation			Designation	
Address			Address	
Directorate			Directorate	
Date			Date	
			<b>Directorate Seal</b>	



### 6.11 Appendix 12 - Quarterly Guaranteed Payment.

Sl. No	Location	No. of Connections	Capital Cost per location per Quarter	Operations Charge of the Network (onsite engineers, NOC, etc) per location per Quarter per POP	Maintenance Charge (field maintenance of equipments, links, etc) per location per Quarter	Total QGR Amount in Rs.
1	Technology Bhavan					
2	Old Secretariat					
3.	Soochana Bhavan					
4.	Sinchai Bhavan					
5.	Vikas Bhavan					
6.	Vishveswarayya Bhavan					
7.	CM Secretariat and Residence					
	Grand Total					

Amt in Words \_\_\_\_\_

Witness		Bidder	
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	
		<b>Directorate Seal</b>	





## 6.12 Annexure 13: Component wise pricing

Brief particulars of the goods and services, which shall be supplied/ provided by the Bidder, are as under:

Item No.	Description of the Item	Unit of Measurement	Quantity (A)	Unit Rate (B)	Total Price (A x B)
<b>1</b>	<b>SWITCH</b>				
1.1	Building Switch	Nos	6		
1.2	Floor Switches	Nos	117		
<b>2</b>	<b>IP PHONE</b>				
2.1	IP Phones Type 1 & 2 @ 20:80 ratio	Nos	270		
2.2	NMS for monitoring of Switches and IP Phones with necessary hardware	No	1		
<b>3</b>	<b>UPS</b>				
3.1	UPS 5KVA	Nos	1		
3.2	UPS 20 KVA	Nos	1		
3.3	UPS 40 KVA	Nos	2		
3.4	UPS 60 KVA	Nos	1		
3.5	UPS 120 KVA	Nos	1		
3.6	UPS 160 KVA	Nos	1		
<b>4</b>	<b>Generator</b>				
4.1	Generator 8 KVA	Nos	1		
4.2	Generator 20 KVA	Nos	1		
4.3	Generator 63 KVA	Nos	3		
4.4	Generator 140 KVA	Nos	1		
4.5	Generator 250 KVA	Nos	1		
<b>5</b>	<b>Electrical Wiring</b>				
5.1	7/20 Wire from UPS to MCBs	Mtrs	11000		



Item No.	Description of the Item	Unit of Measurement	Quantity (A)	Unit Rate (B)	Total Price (A x B)
5.2	3/20 Wire from MCBs to Sockets	Mtrs	18000		
5.3	MCBs 32A with Fixing box	Mtrs	550		
5.4	5A Sockets with Switch	Nos	6000		
5.5	Cable laying charges / Mtr	Mtrs	29000		
5.6	MCB Fixing Charges / MCB	Nos	550		
5.7	Socket Fixing Charges / Socket	Nos	6000		
5.8	PVC Conduit Laying	Mtrs	20000		
5.9	PVC Conduit laying charges / Mtr	Mtrs	20000		
5.10	Panel Boards & Fixing Charges	Nos	3000		
<b>6</b>	<b>Passive Cabling and components</b>				
6.1	CAT 6E UPT 4 Pair cable (From nearest switch point to Data Outlet at an average of 60 mtrs per each node)	Box of 305 Mtr	670		
6.2	CAT 6E Patch Cords 3 Mtr crimped both sides with RJ-45 Pins and sleeved	Nos	2000		
6.3	Cat 6E Patch Cords 2 Mtrs crimped both sides with RJ-45 Pins and sleeved	Nos	2000		
6.4	Surface Mounting Box ISI Make Dual Port RJ-45	Nos	2000		
6.5	Dual Port face Plate British Type – RJ-45	Nos	2000		
6.6	Cat 6E Keystone Ivory (I/O)	Nos	4000		
6.7	CAT 6E Patch Panel 24 Port	Nos	120		



Item No.	Description of the Item	Unit of Measurement	Quantity (A)	Unit Rate (B)	Total Price (A x B)
6.8	Surface Mounting Box ISI Make Dual Port RJ-11	Nos	1000		
6.9	Dual Port face Plate British Type RJ-11	Nos	1000		
<b>7</b>	<b>Fiber Components (9Micron Single mode)</b>				
7.1	6 Core Fiber Optic multitube Armored single mode cable	Mtrs	20000		
7.2	6 Core Fiber Optic Multi Mode Cable	Mtrs	1000		
7.3	Fiber Patch Cord Duplex SM (3 Mtrs)	Nos	24		
7.4	Fiber Patch Cord Duplex MM (3 Mtrs)	Nos	210		
7.5	12-fiber, Single mode, 19- inch Rack mount Patch Panel, 1U, Loaded with adapter Plates	Nos	As reqd**		
7.6	24-fiber, Multimode, 19-inch Rack mount Patch Panel, 1U, Loaded with adapter Plates	Nos	As reqd**		
7.7	SC Port coupling single mode	Nos	As reqd**		
7.8	SC Port coupling Multi mode	Nos	As reqd**		
7.9	Pigtail single mode	Nos	As reqd**		
<b>8</b>	<b>Conduit</b>				



Item No.	Description of the Item	Unit of Measurement	Quantity (A)	Unit Rate (B)	Total Price (A x B)
8.1	Conduit Pipe : Double Wall Corrugated HDPE-PLB Pipe ISI mark 38 mm ID/50 mm OD	Mtrs	20000		
8.2	PVC casing Capping 1" ( Int Dia )	Mtrs	12000		
8.3	PVC Casing Capping 2" ( Int Dia)	Mtrs	12000		
<b>9</b>	<b>Network Rack &amp; Accessories</b>				
9.1	32U 19" floor Mount Rack with all accessories	Nos	6		
9.2	15U 19" Wall Mount with all accessories	Nos	16		
9.3	9U 19" Wall Mount Rack with all accessories	Nos	16		
9.4	6U 19" Wall Mount Rack with all accessories	Nos	24		
9.5	AC Mains Distribution Box with hardware	Nos	64		
9.6	Cable Manager, 1U, 19" Mounting	Nos	64		
9.7	Tray Fan , 1U, 2 Fan Position	Nos	As reqd		
9.8	Tray Fan, 1U, 4 Fan Position	Nos	As reqd		
9.9	Fan 230 VAC, 90 CFM	Nos	As reqd		
<b>10</b>	<b>Network testing tools</b>				
10.1	UTP cable Checker	Nos	7		
10.2	UTP Cable crimping tool	Nos	20		
10.3	Standard tool kit for network maintenance	Nos	7		
10.4	Fiber Kit	Nos	1		



Item No.	Description of the Item	Unit of Measurement	Quantity (A)	Unit Rate (B)	Total Price (A x B)
<b>11</b>	<b>CIVIL WORK FOR ISNTALLATION OF PASSIVE COMPONENTS</b>				
11.1	Digging and Refilling of trenches for OFC & duct laying in soft soil, hard soil. Payment will be as per actual length.	Km	25		
11.2	Soft soil	Km	1		
11.3	Hard soil	Km	1		
11.4	Laying of 38/50 mm HDPE-PLB pipe	Km	25		
11.5	Laying of PVC Casing Capping 1" (Internal Dia)	Km	12		
11.6	Laying of PVC Casing Capping 2" (Internal Dia)	Km	12		
11.7	Optical fiber laying as specified and directed	Km	25		
11.8	UTP Cable laying	Km	200		
11.9	Cable splicing	Nos	As Reqd		
	<b>Sub Total Part A1</b>				

\* Unit price is inclusive of all taxes and duties

**Operation and Maintenance for 5 year W.E.F final commissioning date of Secretariat LAN**

SI No.	Description	Amount of Part A1	Percentage of Part A1 per year	Amount per year	Total Amount for Five years
1	Operation and maintenance of Secretariat LAN up to end level for 5 years including coordination with different				



	agencies (no charges will be payable for commissioning period)				
	<b>Sub total Part A2</b>				

<b>Secretariat LAN consolidated</b>			
<b>SI No</b>	<b>Description</b>	<b>QGR Amount in Rs</b>	<b>Total QGR Amt for 5 year (20 Quarters)</b>
1	Part A1		
2	Part A2		
	<b>Total Secretariat</b>		
<b>Note:</b> QGR rate for Secretariat LAN (All Inclusive)			

<b>Witness</b>		<b>Bidder</b>	
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	
		<b>Directorate Seal</b>	



**6.13 Appendix 14: Bank Guarantee- for Earnest Money Deposit**

**To**  
**The Managing Director**  
**Bihar State Electronics Development Corporation Limited**  
**Government of Bihar**  
**BELTRON Bhavan, Shastri Nagar,**  
**Patna**

Whereas..... (Hereinafter called “the Bidder”) has submitted its Bid dated..... (date of submission of Bid) for execution of Turnkey Information Technology project on Build, Own, Operate and Transfer (BOOT) basis for the Bihar State Wide Area Network (BSWAN) in terms of the Tender dated ..... issued by the Managing Director of Bihar State Electronics Development Corporation Limited, Patna, (hereinafter called “the Bid”).

Whereas as per Clause \*\* Section \*\* of the Bid, the Bidder is required to furnish a bank guarantee as Earnest Money Deposit from a scheduled commercial bank (Bank Guarantee)

In consideration of the fact that the Bidder is our valued customer and the fact that he has submitted the Bid, we, (name and address of the bank), (hereinafter called “the Guarantor Bank”), has agreed to bind ourselves, our successors, and assigns to irrevocably issue this Bank Guarantee and guarantee as under

NOW THIS GUARANTEE WITNESSETH: -

1. If the Bidder
  - (a) Withdraws its Bid proposal during the period of Bid validity specified by the Bidder on the Technical Proposal Cover Letter; or
  - (b) Having been notified of the acceptance of its Bid by the Managing Director, Bihar State Electronics Development Corporation Limited during the period of Bid Proposal validity:



- (i) Fails or refuses to enter into the Contract; or
- (ii) Fails or refuses to furnish the performance guarantee, in accordance with the Terms of Reference of the Tender document issued to the Bidders.

The Guarantor Bank shall immediately on demand pay the Managing Director, Bihar State Electronics Development Corporation Limited without any demur and without the Managing Director, Bihar State Electronics Development Corporation Limited having to substantiate such demand a sum of Rs 2.00 Crores ( Two Crores) (Guaranteed Amount).

2. The Guarantor Bank will make the payment of the Guaranteed Amount forthwith on the demand made by the Managing Director, Bihar State Electronics Development Corporation Limited, notwithstanding any objection or dispute that may exist or arise between the Managing Director, Bihar State Electronics Development Corporation Limited and the Bidder or any other person.
3. The demand of the Managing Director, Bihar State Electronics Development Corporation Limited on the Guarantor Bank for the payment of the Guaranteed Amount, shall be deemed as the final proof of fulfillment of the conditions stipulated in (1) above.
4. This Guarantee shall be irrevocable and shall not be discharged except by payment of the above amount by us to the Managing Director, Bihar State Electronics Development Corporation Limited and our liability under this Guarantee shall be restricted to the Guaranteed Amount being Rs 2.00 Crores ( Two Crores).
5. If it is necessary to extend this Guarantee on account of any reason whatsoever, we undertake to extend the period of this Guarantee on the request of the Bidder under intimation to the Managing Director, Bihar State Electronics Development Corporation Limited.
6. To give full effect to the Guarantee contained herein, the Managing Director, Bihar State Electronics Development Corporation Limited shall be entitled to act as if the Guarantor Bank is the principal debtor in respect of claims against the Bidder and the Guarantor Bank hereby expressly waives all its rights of surety-ship and other



rights, if any, which are in any way inconsistent with any of the provisions of this Guarantee.

7. Any notice by way of demand or otherwise may be sent by special courier, telex, fax, registered post or other electronic media to our address as afore-said and if sent by post, shall be deemed to have been given to us after expiry of 48 hours when the same has been posted.
8. Our liability under this Guarantee will continue to exist until a demand is made by the Managing Director, Bihar State Electronics Development Corporation Limited in writing or up to and including One Hundred and Eighty (180) days after the period of the Bid Proposal validity, i.e. up to \_\_\_\_\_2007, and any demand in respect thereof should reach the Bank not later than the above date.

Dated ..... this ..... Day .....2007....

Yours faithfully,

For and on behalf of the ..... Guarantor Bank,

(Signature)

Designation

(Address and Common Seal of the bank)



## 6.14 Appendix 15: Performance Bank Guarantee Format.

To  
The Managing Director  
Bihar State Electronics Development Corporation Limited  
Government of Bihar  
BELTRON Bhavan, Shastri Nagar,  
Patna

Whereas ..... (Hereinafter called “the Bidder”) has submitted its Bid dated..... (date of submission of Bid) for execution of Turnkey Information Technology project on Build, Own, Operate and Transfer (BOOT) basis for the Bihar State Wide Area Network (BSWAN) in terms of the Tender dated ..... issued by the Managing Director of Bihar State Electronics Development Corporation Limited, Patna, (hereinafter called “the Bid”).

Whereas as per Section \* Clause \* of the Bid, the Bidder is required to furnish a bank guarantee as Performance Guarantee from a scheduled nationalised bank (Bank Guarantee)

In consideration of the fact that the Bidder is our valued customer and the fact that he has submitted the Bid, we, (name and address of the bank), (hereinafter called “the Guarantor Bank”), has agreed to bind ourselves, our successors, and assigns to irrevocably issue this Bank Guarantee and guarantee as under

NOW THIS GUARANTEE WITNESSETH: -

1. If the Bidder
  - (a) Having been notified of the acceptance of its Bid by the Managing Director of Bihar State Electronics Development Corporation Limited, Patna, during the period of Bid Proposal validity:
    - (i) Fails to perform as per the contract obligations.



- (ii) On invoking of Section \* Clause \*\*\* "Termination for Default"; and /or on invoking of Section \* Clause \* "Exit Management Schedule".

The Guarantor Bank shall immediately on demand pay the Managing Director of Bihar State Electronics Development Corporation Limited, Patna, without any demur and without the Managing Director, Bihar State Electronics Development Corporation Limited having to substantiate such demand a sum of Rs \_\_\_\_ Lakhs (\_\_\_\_\_ Lakhs) (Guaranteed Amount).

2. The Guarantor Bank will make the payment of the Guaranteed Amount forthwith on the demand made by the Managing Director, Bihar State Electronics Development Corporation Limited, notwithstanding any objection or dispute that may exist or arise between the the Managing Director of Bihar State Electronics Development Corporation Limited, and the Bidder or any other person.
3. The demand of the Managing Director of Bihar State Electronics Development Corporation Limited, on the Guarantor Bank for the payment of the Guaranteed Amount, shall be deemed as the final proof of fulfillment of the conditions stipulated in (1) above.
4. This Guarantee shall be irrevocable and shall not be discharged except by payment of the above amount by us to the Managing Director of Bihar State Electronics Development Corporation Limited and our liability under this Guarantee shall be restricted to the Guaranteed Amount being Rs \_\_\_\_ Lakhs (\_\_\_\_\_ Lakhs).
5. If it is necessary to extend this Guarantee on account of any reason whatsoever, we undertake to extend the period of this Guarantee on the request of the Bidder under intimation to the Managing Director of Bihar State Electronics Development Corporation Limited.
6. To give full effect to the Guarantee contained herein, the Managing Director of Bihar State Electronics Development Corporation Limited, Patna, shall be entitled to act as if the Guarantor Bank is the principal debtor in respect of claims against the Bidder and the Guarantor Bank hereby expressly waives all its rights of surety-ship and other rights, if any, which are in any way inconsistent with any of the provisions of this Guarantee.



7. Any notice by way of demand or otherwise may be sent by special courier, telex, fax, registered post or other electronic media to our address as afore-said and if sent by post, shall be deemed to have been given to us after expiry of 48 hours when the same has been posted.
8. Our liability under this Guarantee will continue to exist until a demand is made by the Managing Director of Bihar State Electronics Development Corporation Limited, in writing or up to and including 5 year from the date of signing of contract, i.e. up to \_\_\_\_\_2007, and any demand in respect thereof should reach the Bank not later than the above date.

Dated ..... this ..... Day .....2007....

Yours faithfully,

For and on behalf of the ..... Guarantor Bank,

(Signature)

Designation

(Address and Common Seal of the bank)

**Note: To be executed at the time of Signing of Contract by the Selected Vendor**



### 6.15 Appendix 16: Template for Pre-bid Conference queries / Clarifications.

RFP purchase no:

Date:

Name of the Bidder:

Address:

Telephone Nos:

Fax No:

Mobile No:

Email ID:

Sl No:	Clause No:___ Section No:___	Corresponding page no in the RFP Document	Particulars of the query / clarification	Remarks / BSEDC / Govt of Bihar
1				
2				
3				
4				

Authorized Signatory

Designation

(If the queries / clarifications are submitted through e-mail, the bidder should send the queries / clarifications through official e-mail IDs only.)

**Note: The above file should be excel format only.**