Request For Proposal (RFP) For Implementation of State Wide Area Network (SWAN) On Build Own Operate Transfer (BOOT) Model

<< NIT No ____>>

<<Date >>

Government of << Sate>> << Address>>

IMPORTANT INFORMATION

Non-Refundable	Rs/- in cash or through demand draft from				
Tender Cost	a scheduled bank, drawn in favour of "",				
	payable at				
Sale of RFP	9.00 am to 5.00 pm on all working days starting				
document	from till				
EMD	Rs/- in the form of Demand Draft in				
	favour of payable at from a				
	scheduled bank				
Last Date of	< <please 2="" date="" days="" mention="" pre-bid<="" prior="" th="" to=""></please>				
Submission of	Conference with mode of submission of				
written queries	queries>>				
on Bid document					
Pre bid	At P.M. on				
conference	Venue:				
Last date for	Up to P.M. on				
submission of					
Bids					
Opening of Pre-	P.M. on				
Qualification Bids					

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Preface

- 1.1. Government of India is committed to leveraging advances in Information and Communication Technologies (ICT) for the benefit of the common man, especially in the rural areas. The Government of <<State>> is also determined to make efforts to effectively use Information Technology for delivering quality services to citizens and quicken the overall development of the State through improvement of Intra-government and Government citizen Interface.
- 1.2. For successful implementation of the e-Governance projects, robust communication corridor is the first and foremost requirement. The said communication corridor can only be obtained by setting up of a State wide Area Network (SWAN).
- 1.3. Government of <<State>> is considering the appointment of a **Bidder** (herein after referred to as "bidder"") to install and maintain State Wide Area Network (SWAN) in an efficient and effective manner on an appropriate Public Private Partnership (PPP) model. Bidder has to quote for the implementation and management of the SWAN in Build, Own, Operate and Transfer (BOOT) model for duration of five years, in accordance with the various provisions of this RFP document.
- 1.4. Government of <<State>> now invites sealed technical and financial proposals from short-listed eligible Bidders for selection as bidder, to implement and operate State Wide Area Network (SWAN) in the <<State>>. The bidder shall be selected as per the procedures described in this Request For Proposal (RFP).
- 1.5. Bidder shall submit three sealed envelopes containing:

Part I: Three hard copies of Pre-qualification Bid

Part II: Three hard copies and one soft copy of the Technical Bid.

Part III: Three hard copies and one soft copy of the Commercial Bid

1.6. 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 <<Date>> latest by << time>> to the following address which is to be used for all communication in regards to this bid process

<<Address>>

- 1.7. Please note that a pre-bid conference would be held on << Date and Time>> in the office of << Contact Name>> and << address>>
- 1.8. Bidders are requested to acknowledge this communication within seven days of receiving it.
- 1.9. All the communication including this RFP and the bid documents should be signed on each page by the authorized representative of the bidder.

Section 1 Letter for Invitation

	Date of Issuance:	
	Ref. No.:	
To,		
Dear Sir,		

Government of <<State>> invites proposals to provide implementation and operations of State Wide Area Network (SWAN) for a period of five years on a Build, Own, Operate and Transfer (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,

<< Name>> << Designation>> Government of <<State> <<Address>> Section - 2

Project Profile

Section 2 - Project Profile

[Please provide information about the State, Objective of SWAN, Current IT infrastructure and State e-governance initiative etc. in two – three pages.]

About State [Please insert a section about the State]

The Government of <<State>> wishes to establish a State Wide Area Network (SWAN). The SWAN is envisaged as the backbone network for data, voice and video communications throughout the State. SWAN would act as the vehicle for effective implementation of Electronic Governance (e-Governance) across the state.

The National e-Governance Plan (NeGP) has identified 22 Mission Mode Projects, which are to be implemented in a phased manner over the next 3-4 years by the Line Ministries/Departments concerned at the Central and State level, as applicable, in addition to the various other e-Governance initiatives being taken by the respective States and Central Ministries. State Wide Area Network (SWAN) has been identified as an element of the core infrastructure for supporting these e-Governance initiatives.

Various departments in <<State>> have separate applications pertaining to their specific usage and purpose, for providing services to the citizens. A typical government department having an e-governance application requires the following:

- A delivery platform for e-Governance applications
- A mechanism for fast internal communication
- Increase access to services for the citizens and multiply usage
- Carry progressively increasing data and applications
- Speed up the transfer of information between employees in different locations and to allow them to share common files
- Carriage of voice and data in an integrated manner rather than having separate networks for voice and data

 Have a secure and reliable channel to transfer data across locations

To fulfill these requirements, implementation of a SWAN is required. SWAN is expected to cater to the information communication requirements of the entire state government and its departments. Through implementing SWAN, the Go < I > wishes to achieve the following:

- Ensure that every citizen in the state has access to Government services and information whenever and wherever they need it
- Provide reliable, vertical and horizontal connectivity within the state administration to make the Government more productive.
- Provide the Government agencies, the ability to leverage a robust infrastructure to provide a complete array of Government services and information
- Reduce communication cost.
- Provide a secure backbone for encouraging electronic transactions.
- Provide efficient service management
- Strengthen Disaster Management Capacity.
- Make services available in a cost-efficient manner, offering public constituencies' equivalent access at an equivalent price, regardless of their location in the State of <<State>>.
- Move toward the provisioning of converged communication Services (voice, data and video) and the interconnection and interoperation of network platforms and encouraging vendors to consider any network architecture to determine the most efficient and cost effective approach.



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Section 3

Instructions to Bidders

Section 3 - Instructions to Bidders

1. Definitions

[Please define all the terms which are going to be used in this RFP document]

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 SWAN 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 Government of <<State>> 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 authorised 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 Government of <<State>> signs the agreement for rendering of services for SWAN.
- 6. **"BLOCK"** means Block Head Quarter to be located at a place as decided by <<*State>>*.
- 7. **"Centre**" means SHQ, DHQ, SDHQ/BLOCK.

- 8. **"Co-located Office"** means the office situated within a range of 3-5 KM form the respective Centre.
- 9. **"Contract"** is used synonymously with Agreement.
- 10. **"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.
- 11. "DHQ" means District Head Quarter to be located at a place as decided by Government of <<State>>.
- 12. "**Default Notice**" shall mean the written notice of Default of the Agreement issued by one Party to the other in terms hereof.
- 13. **"Final Acceptance Test (FAT)"** means the acceptance testing of the network including equipment at SHQ, all DHQs, all SDHQs/ BLOCKs and all co-located & remote offices.
- 14. **"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 Government of <<State>> of the benefits of free and open competition.
- 15. "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.
- 16. "GoI" shall stand for the Government of India.
- 17. "**Guaranteed Revenue**" means the rate payable to the Bidder under the Agreement for the performance of the Bidder's Contractual obligations.
- 18. "Implementation Period" shall mean the period from the date of signing of the Agreement and upto the issuance of Final Acceptance Certificate of SWAN.
- 19. "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 Government of

- <<State>> or any other Government or regulatory authority or political subdivision of government agency.
- 20. **"LOI"** means issuing of Letter of Intent which shall constitute the intention of the Tenderer to place the Purchase Order with the successful bidder.
- 21. **"BOOT model"** the services as required by the Tenderer are specified in Schedule of Requirements on Build Own Operate and Transfer (BOOT) model.
- 22. **"Bidder"** means the company providing the services under Agreement.
- 23. "Partial Acceptance Test (PAT)" means the provisional acceptance testing of SHQ and all DHQs.
- 24. **"Party**" means Government of <<State>> or Bidder, individually and "Parties" mean Government of <<State> and Bidder, collectively.
- 25. **"Period of Agreement**" means 5 years from the date of final acceptance of the SWAN.
- 26. "Proposal" means the Technical Proposal and the Financial Proposal.
- 27. "Remote Office" means the office located at a distance of more than 1Km from the respective Centre.
- 28. "Request for Proposal (RFP)", means the detailed notification seeking a set of solution(s), services(s), materials and/or any combination of them.
- 29. **"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.
- 30. **"Site"** shall mean the location(s) for which the Contract has been issued and where the service shall be provided as per agreement.
- 31. **"SHQ**" means State Head Quarter to be located at a place as decided by Government of <<State>>.
- 32. **"Service"** means provision of Contracted service viz., operation, maintenance and associated services for SWAN as per this RFP.

- 33. **"SDHQ"** means Sub-Division Head Quarter to be located at a place as decided by Government of <<State>>.
- 34. **"Third Party Agency"** means any agency other then the successful bidder, appointed by Government of <<State>> for monitoring the SWAN during commissioning and operation.
- 35. **"Termination Notice"** means the written notice of termination of the Agreement issued by one Party to the other in terms hereof.
- 36. **"Uptime"** means the time period when specified services/network segments with specified technical and service standards as mentioned in this RFP are available to Government of <<State>>. The uptime will be calculated as follows: Total time in a quarter (in minutes) less total Service Down time (in minutes) in the quarter.
- 37. **"%Uptime"** means ratio of 'up time' (in minutes) in a quarter to Total time in the quarter (in minutes) multiplied by 100.
- 38. "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 <<State>>. 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 centres at all tiers/levels are working, providing all/specified services as mentioned in full capacity at all locations in the network.

2. Bid Documents

<< Please specify documents and mechanism for submission of bid document>>

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 << Date>>:

- 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 bids 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 Demand draft issued by a Nationalized / Scheduled Bank, in favour of << Name of the authority>>.
 - 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 << State>> 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.

B. Technical bid

- a. Bid particulars
- b. Bid letter
- c. Proposed 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 Appendix11)
- d. Quarterly Guaranteed Payment (template Provided in Appendix 12)
- e. Quarterly Payment for Horizontal Office (template provided in Appendix 13)

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.

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 << Designation, department>> in writing to be received at least 2 (two) days prior to the PBC. Queries not submitted within this deadline may not be taken up at the PBC.
- (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 <<URL>>.

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

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 <<State>>. The <<State>> will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bid process.

6. Bid Security i.e. Earnest Money Deposit (EMD)

<< Please provide amount in Rupees to be submitted as part of Bid security. State can also consider Bank guarantee instead of demand draft as per policy/standard followed by the State>>

- a) The Bid security shall be in Indian rupees (INR) and shall be a Demand Draft, issued by a nationalized 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 Demand Draft of << upto 2% of the contract price>>.
- 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 Go<<State>>.
- 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 <<State>> on account of one or more of the following reasons:
 - 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

7. Bid Prices

- a) The Price Bid as prescribed should be filled up and sealed along with enclosures in a separate cover superscribed as "Price Bid Envelop B, Tender No: ______ Due on DD.MM.YYYY".
- 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.

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.

9. Bid validity

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

10. Submission of Proposals

<< Please provide instructions to be followed by the bidder at the time of bid submission including number of hard copies and soft copies>>

a) All the proposals will have to be submitted in hard 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) No bid will be considered unless and until each page of the bid document is duly signed by the authorized signatory
- c) 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 only 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.,
 - Envelope 1: Pre- qualification documents super scribed as
 "Envelope 1- Pre- qualification Documents" containing
 EMD, Pre- qualification documents complete with all details.
 - 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.
 - Envelope-3: Commercial Proposal containing Price Schedule super scribed as "Envelope 3 – Commercial Proposal".

g)	All the three seale	ed envelopes	should a	igain be	placed in	a single
	sealed envelop sup	er scribed a	s "SWAN	Tender	No	, Bid
	from:)″ "I	от то	BE C	PENED	BEFORE
	< <dd.mm.yyy :="" th="" ti<=""><th>me>>, whic</th><th>h will be r</th><th>received</th><th>in the off</th><th>ice of <<</th></dd.mm.yyy>	me>>, whic	h will be r	received	in the off	ice of <<
	Contact person ar	nd address	>> up to	o the d	ue date	and time
	mentioned in the	Schedule of	Events ((Section-	II - 2.18	3) of this
	document.					

11. Language

The Bids and all correspondence and documents relating to the bids, shall be written in the English language.

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.

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.

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. Go<i> shall not be bound by any printed conditions or provisions in the Bidder's Bid Forms

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.

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 <<State>> officers after office hours and/ or out side <<State>> office premises, from the time of the bid opening till the time the Contract is awarded.

17. Eligibility Criteria

<< This section should include bidder's eligibilityin terms of annual turnover, relevant experience, bidder credentials, Staff experience etc. Supporting Documents for the same should be submitted by the bidder>>

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 XX Crores and above in the last three financial years.
- d. The Net Worth of the bidder (lead member of the consortium) should be minimum INR xx Crores.
- e. The bidder (all members of the Consortium together) must have successfully completed at least any one of the following:
 - 1 project of minimum _____ WAN nodes
 - 2 projects of minimum _____ WAN nodes
- f. 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.
- g. The bidder (all members of the consortium together) must have completed at least one network involving converged services (Voice, Video, Data) with minimum of 25 nodes.
- h. 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.
- i. The bidder (lead member of the consortium) must have had at least 100 employees on roll over each of the last three years (as on March 31, 2003, 2004 & 2005)
- j. The bidder (lead member of the Consortium) shall have Quality certification from an accredited and internationally reputed / renowned firm (viz. ISO 9000)
- k. The bidder (any member of the Consortium) should have office in <<State>>. In case bidder has no presence in <<State>>, bidder shall furnish an undertaking that an office shall be opened in

- <<State>>, 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.
- m. 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.
- n. 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.
- o. The consortium shall be evaluated based on the lead bidder's strength as defined in this bid document. Once short listed in pre qualification, change of consortium shall not be allowed.

18. Schedule of Events

<< Please provide date of all the major events which are part of operator selection with timelines>>

Sr.	Events	Date
NO		
1	Last date for queries on the bid	
2	Pre-bid Conference at the < <state>></state>	
	Premises	
3	Last date and time of proposal	
	Submission	
4	Date and time of opening of the	
	Prequalification Documents and	
	Technical Proposals at < <state's></state's>	
	Premises	
5	Date of opening of the Commercial	
	Proposal at < <state>> premises</state>	
6	Contract Signing	

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:

- Pre-qualification
- Technical Proposals
- Commercial Proposals

20. Evaluation

<<Please provide the process to be followed by the State for the bid
evaluation. The State may select Option 1 - QCBS or option 2 - Lowest
commercial cost as per the State policy/norms >>

An evaluation committee so constituted by <<State>> 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
 _____ on ____ 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.
 - **Preliminary** Examination of **Pre-qualification** (a) documents: The Pre-qualification document 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.

Sr No	Parameters	Score
1	Organisation Capability	15

2	Proposed Technical (Network) Solution	50
3	Proposed Staff at SNC/DNC	05
3	Compliance with Requirement	10
4	Experience in FMS	15
5	Local Presence in State	05

Option 1: Quality and Cost base selection (QCBS)

The individual bidder technical scores will be normalized as per the formula below

$$T_n = T_b/T_{max} * 100$$

Where

 T_n = normalized technical score for the bidder under consideration

 T_b = absolute technical score for the bidder under consideration

 T_{max} = maximum absolute technical score obtained by any bidder <<State may also consider minimum technical score required to qualify the technical bid>>

No further discussion/interface will be held with the bidder whose bid has been technically disqualified/rejected.

Evaluation of Commercial Bids

Commercial bids of those bidders who qualify the technical evaluation will only be opened. All other Commercial bids will be returned unopened. The place, date and time for the opening of the financial bids shall be announced separately.

The commercial scores will be calculated as

$$F_n = F_{min} / F_b * 100$$

Where

 F_n = Normalized financial score of the bidder under consideration

 F_b = Evaluated cost for the bidder under consideration

 F_{min} = Minimum evaluated cost for any bidder

<<State may also consider minimum cut required to qualify the commercial bid>>

Evaluation of Bid - Final Evaluation The overall score will be calculated as follows:-

$$B_n = W_t * T_n + W_c * F_n$$

Note Weightage to the technical evaluation and commercial evaluation should be given on the State guidelines during the final calculation of overall score.

Where

Bn = overall score of bidder under consideration

 T_n = normalized technical score for the bidder under consideration

 F_n = Normalized financial score of the bidder under consideration

Wt = Weightage for technical score

Wc = Weightage for commercial score

Option 2:- 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 bid.

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 <<State>> 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 Center(NOC) of the Bidder for Services, any time before the issue of Letter of Award.
- b) <<State>> 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. <<State>> 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.

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, transactions, proposed transactions accounts, or 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.

23. Publicity

Any publicity by the bidder in which the name of SWAN is to be used, should be done only with the explicit written permission from <<State>>.

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 <<State>>.

25. Arbitration

Tender No

State 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 ______, State, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

Section III

SPECIAL CONDITIONS OF CONTRACT

Section III - Special Conditions of Contract

The following clauses shall supplement the Instructions to Bidders.

1. Responsibility Matrix

Sr. No	Activity	Go <i>/ State implementation agency</i>	Consultants	Operator	Third Party Monitoring Agency (to be identified)
1	Preparation of RFP for the Selection of SWAN Operator		V		,
2	Tender Process for the Selection of SWAN Operator	1	1		
3	Approval for Appointment of SWAN Operator	√			
4	Review and suggestion on the Network Architecture			1	
5	Site Identification	\checkmark			
6	Site Handover	√		1	
7	Site Survey and Preparation			1	
8	Installation and Commissioning of the SWAN			\	
9	Monitoring the Installation and Commissioning of the SWAN	√	1		√
10	Acceptance Tests (Partial & Final Acceptance)		V	1	1
11	Onsite Inspection and Verification of Acceptance Tests	√	V	1	1
12	Trial Run			1	√
13	Witness of Trial Run	V	V		1
14	Issue of Final Acceptance Test Certificate	1			√

15	Operation, Management and Maintenance of the SAWN		1	
16	Centralized Monitoring from NOC (24x7)		√	
17	Supervision of the Monitoring of the SWAN			1
18	Periodical Generation of NMS report		√	√
19	Verification of the NMS Report			\checkmark
20	Approval of NMS Report	1		
21	Periodical Auditing of the SWAN			√
22	Submission of the Audited Report of SWAN as advised by Consultant		V	√

2. Third Party Monitoring Agency

Go<state> shall appoint a Third Party Agency, which shall monitor the SWAN during implementation, commissioning and operation. The Third Party Agency shall also conduct the Partial and Final Acceptance Test as per the technical requirement of the Agreement and shall issue the Certificate of Completion for SHQ, DHQ, SDHQ/BLOCK and co-located & remote office. Third Party Agency shall verify the services as mentioned in Section III 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 QGR.

3. Site Preparation and Site Survey

As per implementation plan, Go<state> shall arrange the necessary minimum constructed rooms/ space permanent construction for locating State Head Quarter (SHQ), District Head Quarters (DHQs), Sub district Head Quarters (SDHQ/BLOCKs) and co-located & remote offices for operation of the SWAN. The space cannot be used for any purpose other than for delivering the services as mentioned Section III as contracted under the Agreement. Go<state> shall arrange for necessary clearances, which shall enable the Bidder to undertake civil, electrical, and mechanical works including false ceiling, partitioning, installation of air conditioning equipment, installation of diesel generator sets, installation of UPS equipment, cable laying etc., at the respective sites. Bidder shall provide the Video conference infrastructure facilities including Furniture, Lights and Air Conditioner at all DHQs and SHQs. Infrastructure required for installation of equipment (for 8-10 persons) including power shall also be the responsibility of the Bidder.

Go<state> may decide at its discretion to change the location of SDHQ/BLOCK/ DHQ/ SHQ/ co-located & remote office during implementation or after implementation but during the Agreement period. The services shall be operational as per Section III within a period of 15 days from the date the space is provided by Go<i>. Go<I> shall reimburse the actual cost of relocation incurred by the Bidder as verified by the Third Party Agency.

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.

Go<state> 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 SWAN infrastructure. The Bidder would prepare a detailed report detailing status of each site.

4. Acceptance Test

Partial Acceptance: The provisional acceptance of 75%{Indicative number for the state} of the sites including SHQ, DHQs, BHQs, and all co-located & remote offices in accordance with the requirements in Section III shall be conducted. After successful testing by the Third Party Agency a Partial Acceptance Test Certificate shall be issued by Go<I> to the Bidder. The test shall include the following

- 1. All hardware and software items must be installed at particular site as per the specification.
- 2. 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.
- 3. Detailed test plan shall be defined by the third party monitoring agency in consultation with Go<state>.
- 4. Successful bidder will arrange the test equipment required for performance verification. Successful bidder will also provide documented test results.

Final Acceptance Testing: After successful installation of 90%{Indicative number for the state} of SHQ, DHQs, BHQs and all colocated & remote offices, an acceptance test 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 Go<state> to the Bidder. The date on which Final Acceptance certificate is issued shall be deemed to be the date of successful commissioning of the SWAN.

The test shall include the following

- 1. All hardware and software items must be installed at particular site as per the specification.
- 1. 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 for each site.
- 2. Detailed test plan shall be defined by the third party monitoring agency in consultation with Go<state>.
- 3. Successful bidder will arrange the test equipment required for performance verification. Successful bidder will also provide documented test results.
- 4. 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.
- 5. All documentation as defined should be completed before the final acceptance test.
- 6. The training requirements as mentioned should be completed before the final acceptance test.

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

In the event the Bidder is not able to complete the installation linking SHQ, all DHQs, all SDHQ/BLOCKs and all co-located & remote offices as defined by Go<i> due to non availability of bandwidth from the bandwidth service providers, the Bidder and Go<state> may mutually agree to redefine the Network so the Bidder can complete installation and conduct the Partial Acceptance Test/ Final Acceptance Test within the specified time.

5.Performance Security for Operations

Within 7 days of the issuance of LoI the Bidder shall furnish revolving Performance Guarantee, as provided, to Go<state> 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 Go<state> 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 <City> in the format provided by <<State>>. 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 Go<i>. 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.

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.

7.Bandwidth

The required bandwidth for the SWAN will be provided by Go<state>. This will be obtained through multiple bandwidth operators. There will be a designated Nodal officer of Go<state> for coordination. The Bidder shall take all necessary steps for restoration of bandwidth in case of any problem and shall report to Go<state> in writing regarding the action taken. The Bidder shall arrange to obtain all relevant consents/ approvals from BSNL or alternate basic service provider if required for operation of SWAN. It is responsibility of the bidder to highlight to the <<State>>, if the bandwidth usage is more then 70% of the time. The Bidder is responsible for coordination and maintenance of the bandwidth during the period of the Agreement

8. Implementation Schedule

Sr NO	Activity	Completion Schedule
1	Issue of LOA (Letter of Acceptance) of Tender.	
2	Site Preparation	
3	Dispatch of Networking Hardware to the Centers.	
4	Implementation of the network	
5	Partial Acceptance testing	
6	Acceptance test	
6	Trial Period and Commencement of Operation.	

9.SLA Requirement

- 1. Service Level Agreement (SLA) is the contract between the State Government and the SWAN Implementation Agency. SLA defines the terms of the operator's responsibility in ensuring the performance of the SWAN based on the agreed Performance Indicators as detailed in the Agreement. This section defines various Service Level Indicators for SWAN, 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 SWAN Operator, which can be considered by the States to evolve their own SLA section to be included in the RFP. The detailed description of the performance indicators, SLA Terms and their definitions are discussed in the following sections.

S.No	Indicative SLA Parameter	SLA Target
1	Circuit Availability in SHQ - DHQ during	99.5 %
	Prime Business Hours	
2	Circuit Availability in DNC - SDNC/BNC	99%
	during Prime Business Hours	
3	Circuit Availability in SNC - DNC during	95%
	Extended SLA Hours	
4	Circuit Availability in DNC - SDNC/BNC	90%
	during Extended SLA Hours	
5	SWAN Backbone Latency (in Milliseconds)	90 ms – 120 ms
6	SWAN Backbone Packet Loss	<=1 %
7	SWAN Jitter	30 ms
8	Internet Availability	95 %
9	Firewall Outage	0%
10	IDS Outage	0%

Note: Inability to access Internet shall also be considered as data downtime.

3. SWAN SLA Terms & Definitions

	SLA	
S.No	Terms	Description
1	SWAN	'SWAN Backbone' refers to Internet Protocol (IP)
	Backbone	based routing infrastructure consisting network of
		selected SWAN points of presence identified by the
		State at which, SWAN operator has installed
		network devices ("Selected POPs") for Wide Area
		Network within the State.
2	Uptime	'Uptime' refers to SWAN backbone availability
		across various segments i.e. between State Head
		Quarters to District Head Quarters and District Head
		Quarters to BlockHead Quarters. "%Uptime" means
		ratio of 'up time' (in minutes) in a month to Total
		time in the month (in minutes) multiplied by 100.
3	Latency	'Latency' refers to the average time required for
		round-trip packet transfers between Selected POPs
		on the selected portions of the SWAN Backbone
		during a calendar month.
4	Packet	'Packet Loss' refers to the average percentage of IP
	Loss	packets transmitted between Selected POPs during
		a calendar month that are not successfully
		delivered.
5	Average	'Average Jitter' refers to the average variation in
	Jitter	delay for packet transfers between Selected POPs
		during a calendar month.
6	Maximum	'Maximum Jitter' refers to the maximum variation in
	Jitter	delay for packet transfers between Selected POPs.
7	Prime	PBH refers to the prime network utilization period
	Business	for SWAN, which shall be typically starting from

S.No	SLA Terms	Description				
	Hours	08:00 hrs till 20:00 hrs Monday to Saturday or any				
	(PBH)	other period to be defined by the state.				
8	Extended	ESH refers to the lean network utilization period for				
	SLA Hours	SWAN, which shall be typically starting from 20:00				
	(ESH)	hrs till 08:00 hrs on Monday to Saturday and 00:00				
		hrs to 23:59 hrs on Sunday or any other period to				
		be defined by the state.				
9	Planned	'Planned Network Outage' refers to unavailability of				
	Network	network services due to infrastructure maintenance				
	Outage	activities such as configuration changes, up				
		gradation or changes to any supporting				
		infrastructure. Details related to such planned				
		outage shall be agreed with the State government				
		and shall be notified to the DHQ's, THQ/BHQ's and				
		related Departments in advance (at least five				
		working days).				
10	Unplanned	'Unplanned Network Outage' refers to an instance in				
	Network	which no traffic can pass in or out of the Selected				
	Outage	POP through which Departments connects to the				
		SWAN Backbone for more than 5 consecutive				
		minutes.				

4. Considerations for Service Level Agreement with SWAN Operator

This section discusses various parameters of the Service Level Agreement (SLA) for SWAN Operator.

a) Network Availability

SLA Parameter	Network	Availability		
	Network Outage			
Network Segment	РВН	ESH	Remarks	
SNC-DNC	99.5 %	95 %	SLA	allows

			approximately four hours of down time in the connectivity between the State Head Quarters and the District Head Quarters.
DNC-SDNC/BNC	99%	90%	SLA allows approximately 7 hours of aggregate down time in the connectivity between the District Head Quarters and the Sub Division / Block Head Quarters.

5. SWAN Backbone Latency

The Latency on the SWAN Backbone shall be maintained at (i) 90 milliseconds or less for the District level Network and (ii) 120 milliseconds or less for the Sub Division/Block level Network. As a delay-sensitive application, voice cannot tolerate much delay. Latency is the average travel time it takes for a packet to reach its destination. If bandwidth utilization is high, the voice packet will be delayed to the point that the quality of the call is compromised. The maximum amount of latency that a voice call can tolerate one way is typically 150 milliseconds (100 milliseconds is optimum). Similar latency requirements exist for video traffic also ranging 150-200 ms one way.

SLA Parameter		SWAN B	ackbone Latency
Network Segment Network		Latency	Remarks
			SLA allows a
			maximum of 90
			Milliseconds in the
SNC-DNC	90 MS		connectivity between
			the State Head
			Quarters and to all
			the District Head

		Quarters.
		SLA allows a
		maximum of 90
	130 MS	Milliseconds in the
DNC CDNC/RNC		connectivity between
DNC -SDNC/BNC		the District Head
		Quarters to all the
		Sub Division or
		Blocks.

6. SWAN Backbone Packet Loss

The Packet Loss on the SWAN Backbone shall be maintained typically at less than 1% measured on a monthly basis.

Packet loss for voice and video applications: Dropped voice packets are the discarded packets which are not retransmitted. Voice traffic can tolerate typically less than a 3 percent loss of packets (1% is optimum) before end users experience disconcerting gaps in conversation. Similarly video applications can not tolerate typically a packet loss > 1%.

SLA Parameter				Packet L	oss		
Network Se	gmei	nt	Packet L	oss	Rema	rks	
					SLA	allows	а
				maxim	num of 1%	of	
		<=1%		packet	oacket loss in t	he	
SHQ-DHQ				connec	ctivity betwe	en	
SDHQ/BHQ				the	State He	ad	
				Quarte	ers and to	all	
					the	District He	ad
					Quarte	ers.	

7. SWAN Average and Maximum Jitter

States shall aim to keep Average Jitter on the SWAN Backbone typically to 20 microseconds or less; and for Maximum Jitter typically not to exceed 30 milliseconds. Jitter shall be measured by averaging sample measurements taken during a calendar month between Hub Routers.

Jitter for Voice and Video Applications: In order for voice to be intelligible, consecutive voice packets must arrive at regular intervals. Jitter describes the degree of variability in packet arrivals, which can be caused by bursts of data traffic or just too much traffic on the line. Voice packets can tolerate typically about 75 milliseconds (40 milliseconds is optimum) of jitter delay. For video applications to work on SWAN, Jitter should be typically less than < 30ms.

SLA Parameter	Jitter	
Network Segment	Jitter	Remarks
Average Jitter	250 Microseconds	
Maximum Jitter	10 Milliseconds	

8. Internet Availability

SLA Parameter			Internet Availability		
Network Segn	nent	%		Remarks	
				SLA allo	ws a
Overall	Internet	95		maximum of	7 hours
Availability	111011100			internet	services
Availability				unavailability	, per
				month.	

9. Firewall Outage

SLA Parameter		Firewall Outage		
Network Segment		Firewall Outage		Remarks
Internet	Firewall	0 %		SLA allows no down
Availability		0 70		time in the Internet

			firewall availability.
Intranet	Firewall		SLA allows no down
Availability		0 %	time in the Intranet
Availability			firewall availability.

10. IPS Outage

SLA Parameter	IDS Outa	IDS Outage		
Network Segment	IDS Outage	Remarks		
		SLA allows no down		
IDS for In Bound &	0 %	time in the IDS		
Outbound Traffic	0 70	deployed inbound		
		traffic to SWAN.		

11. 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/SWAN users or SWAN maintenance personnel within 15 minutes of intimation to the helpdesk. The Denial of Service attach can be defined as sudden burst of network traffic leading to more than 90-95% utilization of the SWAN 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 SWAN backbone and resolve the issue to ensure availability and performance of the backbone.

The SWAN 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.

12. Network Operations Management

The operator is required to establish Contact Center (Helpdesk) at the State 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 SWAN. 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 shall be monitored by SWAN Project Management Unit (PMU) established by the State.

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

13. Severity Level Definition

Level 1:	The network outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services in State Head Quarter.
Level 2:	The network outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services in one or more Districts.
Level 3:	The network outage, security or performance related issues impacting the network availability/performance and leading to unavailability of the services to one or more departments in Sub division/Block.

14. Other Information related to SLA management are provided below.

a. Capacity and Performance Management

The SWAN operator shall provide capacity planning services through network base lining and trending, to determine the resources required for SWAN and to plan and complete network upgrades before a capacity problem causes SWAN down time or performance problems. In addition to availability, latency, jitter and packet loss, SWAN 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 SWAN infrastructure upgration. SWAN operator shall perform the planned network upgrades with prior notification to the departments/users in the network segment (s) affected by the planned outages. SWAN 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.

The overall responsibility of ensuring the SWAN performance rests with the SWAN operator and the following are critical areas in performance management which shall be monitored by the SWAN operator on a constant basis.

- CPU utilization
- Backplane or I/O
- Memory and buffers
- Link Utilization
- i. CPU Utilization

CPU is used by both the control plane and data plane on any network device. In capacity and performance management, SWAN operator must ensure that the device and network have sufficient CPU capacity to function at all times. SWAN operator shall configure the NMS to monitor the CPU utilization of the critical network devices implemented in POP's. In case the average CPU utilization is above 80 % on a continuous basis, SWAN operator shall perform the diagnostic review of the device and provide recommendations on addressing the issue. SWAN operator shall own the

overall responsibility of the performance and shall accordingly escalate any performance related issues to the state government.

ii. Backplane or I/O

Backplane or I/O refers to the total amount of traffic that a device can handle, usually described in terms of BUS size or backplane capability. Any issues with backplane or I/O need to be monitored and recommendations need to be provided to address the performance issues.

iii. Memory and buffers

Memory is another resource that has data plane and control plane requirements. When devices run out of memory, operations on the device can fail. In case the average memory utilization is above 70 % on a continuous basis, SWAN operator shall perform the diagnostic review of the device and provide recommendations on addressing the issue. SWAN operator shall own the overall responsibility of the performance and shall accordingly escalate any performance related issues to the state government.

iv. Link Utilization

SWAN operator shall monitor the utilization of SWAN links across the segments to verify the current utilization and the trends to ensure that enough bandwidth is made available for the applications and services to function with out performance issues. SWAN operator shall provide fortnightly reports on the link utilization and in case the link utilization on a constant basis is exceeding 70 %, SWAN operator shall provide recommendations to the State government on procurement of additional bandwidth.

b. Measurement of SLA

The Measurement of SLA shall be performed by a third party agency, independent of the SWAN 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 SWAN's. The NMS/EMS implemented for SWAN shall conform to the open network management standards such as Simple Network Management Protocol and Remote Monitoring (RMON) features. State reserves the right to periodically change the measurement points and methodologies it uses without notice to the Operator.

c. SLA Reporting

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

d. SWAN Security Auditing

Upon completion of SWAN Installation and before the 'go-live' phase, it is mandatory for the SWAN operator to get the SWAN 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 Head Quarter and the infrastructure at District and sub division on a sample basis. Such sampling rate shall be agreed mutually between the state PMU, consultant and the implementation partner.

e. Certification

The SWAN operator is required to obtain certifications such as BS 7799 for the processes and procedures established for monitoring and management of SWAN Infrastructure.

10. Penalties

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

Link	Availability	Penalty	Availability	Penalty	
	during PBH		during ESH		
SNC - DNC	>= 99.5%	Nil	>= 95%	Nil	
	Less by 1%	0.5% of the	Less by 1%	0.25% of the	
		QGR		QGR	
	Less by >1%	Additional	Less by >1%	Additional	
	but < 2%	1% of the	but < 2%	0.5% of the	
		QGR		QGR	
	Less by >2%	Additional	Less by >2%	Additional	
	but <5%	2% for every	but <5%	1% for every	
		%age		%age	
	Less by >5%	Additional	Less by >5%	Additional	
	but <20%	2.5% for	but <20%	1.25% for	
		every %age		every %age	
	>20%	No payment	>20%	No payment	
DNC -	>/= 99%	Nil	>/= 90%	Nil	
SDNC/BNC					
	Less by 1%	0.5% of the	Less by 1%	0.25% of the	
		QGR		QGR	
	Less by >1%	Additional	Less by >1%	Additional	
	but < 2%	1% of the	but < 2%	0.5% of the	
		QGR		QGR	
	Less by >2%	Additional	Less by >2%	Additional	
	but <5%	2% for every	but <5%	1% for every	
		%age %		%age	
	Less by >5%	Additional	Less by >5%	Additional	
	but <20%	2.5% for	but <20%	1.25% for	
		every %age		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 atleast 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 SWAN from the date of Final acceptance testing. The BOOT 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 Go<state>.

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

2. Penalties for delay in implementation

If the BOOT Operator fails to complete the Partial Acceptance Test within the time period (s) specified in the implementation plan, Go<I> 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 75% of the overall site (SNC,DNCs, BNCs and location connection) 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 for 75% of overall site (SNC, DNC, BNC). If the delay continues beyond 18 weeks, Go<state> may terminate the Agreement.

Failure to complete the Final Acceptance Test as specified in the implementation plan, Go<state> 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 95% of the overall site (SHQ, DHQs, BHQ) 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 5% of the arithmetic sum of five years Guaranteed Revenue for overall site (SNC, DNCs, BNCs and local office). If the delay continues beyond 20 weeks, Go<state> 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 POPs during two quarters in a year or five quarters during the five years of the contract, Go<state> 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 Go<state> other remedies under the Agreement, shall be 200% of the quarterly guaranteed revenue under the Agreement for all the centres. If the misuse continues for two quarters, Go<state> 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), for maintaining these assets (Maintenance Cost) and for providing the horizontal connectivity (Horizontal Cost is asked for as separate QGR). 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 Go<state>.

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 Go<state>. 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 SNC, each DNC, each SDNC/BNC and each co-located & remote office which have been accepted in the Partial Acceptance Test by Go<state> based on the certificate provided by the Third Party Agency, at the rates specified by the BOOT Operator.

11. Quarterly Guaranteed Payment for Backbone

- a) The payment period will be through the contract period of five years, which would start from the date of issuance of Final Acceptance certificate after the Final Acceptance Test of the POP's as defined in the RFP.
- b) The selected BOOT operator shall be paid Guaranteed Revenue on quarterly basis at the end of each quarter for each backbone POP which has been accepted in the Final Acceptance Test by

- Go<state> based on the certificate provided by the Third Party Agency, at the rates specified by the bidder.
- c) Quarterly guaranteed payment for each POP shall include the procurement, implementation, operation and maintenance of equipments as specified in the requirements section of each tier along with providing the specified services for the entire service period.
- d) Eligible quarterly payments, for the POPs accepted in the Acceptance Test shall become due from the date of issuance of final Acceptance Certificate. The quarterly guaranteed revenue in the Agreement shall be adjusted in proportion to the actual number of POPs included in the Acceptance Test of SWAN i.e. total revenue shall depend on the number of POPs.
- e) If the bandwidth requirement for any link goes beyond 8 Mbps, additional hardware charges shall be borne by Go<state>. The rates shall be verified by a third party.
- f) Prices indicated for each POP should include cost of all equipments for the specified POP, cost of installation, configuring, erection, commissioning, making equipment and services fully operational, maintaining and providing service for the next five years thereafter.
- g) The Selected BOOT operator shall make a payment request after the end of each quarter with the following supporting document:
 - Acceptance certificate for inclusion of new POPs in QGR
 - SLA compliance report as prepared by the Third Party Monitoring Agency
- h) Bidder is expected to quote a rate for a single POP at each tier in the given proforma

Sr.	POP	Total	QGR per POP	Total QGR
No		POP		

1	SHQ		
2	DHQ		
3	SDNC/BNC		

- i) Total number of POPs in each tier as mentioned in the table may vary depending on the actual distances and would be adjusted accordingly after the initial survey conducted by the BOOT operator.
- j) Quarterly Payment for horizontal connectivity
 - i) The horizontal connectivity cost shall include lump sum charges for implementation and QGR charges for maintenance; it will not include any hardware/software cost.
 - ii) The selected BOOT operator is expected to prepare the backbone for providing horizontal connectivity up to the upper limit of horizontal offices as specified for each tier without any additional cost.
 - iii) The Agency shall specify rates for horizontal connectivity at SHQ, DHQ and BHQ.
 - iv) Equipments required at horizontal office end shall be provided by Go<i> or the concerned department.

Charge for Implementation

Sr.	Payment Head	Lump	sum
No		Charge	for
		Implement	ation
1	Horizontal office at SHQ		
2	Horizontal Office at DHQ		
3	Horizontal Office at BHQ		

Charge for Maintenance

Sr. Payment Head	Maintenance	Charge
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No		per	location	per
		Quart	ter	
1	Horizontal Office at SHQ			
2	Horizontal Office at DHQ			
3	Horizontal Office BHQ			

12. Representations and warranties

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 authorisations to execute the Agreement and carry out the terms, conditions and provisions hereof;
- 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 judgement, 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 Go<I> 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 SWAN 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.

12.2. Representations and Warranties by Go<I>

a) It has full legal right; power and authority to execute the SWAN 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 Go<I> and constitutes valid, legal and binding obligation of Go<I>.
- 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 Go<I>, its assets or its administration.

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.

12.4. No title to the equipment

The Bidder and Go<I> agree that Go<I> 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 Go<I>.

13. Approval / Clearances

a) Necessary approvals/ clearances from DoT/ TEC/ TRAI/ Concerned authorities/ BSNL/ any service provider, for establishing the network and connecting different Network elements/ ports to BSNL/ any service provider's circuits, shall be obtained by the Bidder.

- b) Necessary approvals/ clearances from concerned authorities, as required, for fire protection, government duties/ taxes/ octroi, shall be obtained by the Bidder.
- c) 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 Bidder for laying their own cables to meet SWAN requirements
- d) For use of Radio/ Microwave/ Wireless links in Intracity/ Intercity, an approval from Wireless Planning Commission (WPC) wing and Standing Advisory Committee for Frequency Allocation (SACFA), as required, shall be obtained by the Bidder for the range of frequencies that the equipment is going to use.
- e) Necessary approvals/ clearances from concerned authorities, as required, for providing Internet Service shall be obtained by the Bidder.
- f) Approvals for Leased Lines: To transmit data between computer and electronic information devices, BSNL provides data communication services to its subscribers, it offers a choice of High, Medium and low speed Leased Data Circuits as well as Dialup lines. Bandwidth is available on demand in most of the places. Managed Leased Lines Network (MLLN) offers flexibility of providing circuits with speeds of nx64 Kbps upto 2Mbps useful for internet Leased Lines and international principle Leased Lines (IPLCs).

14. Exit Management

- Upon completion of the contract period or upon termination of the agreement for any reasons, the SWAN Bidder shall comply with the following:
 - (a) notify to the <State Govt.> forthwith the particulars of all Project Assets;
 - (b) deliver forthwith actual or constructive possession of the SWAN Project free and clear of all Encumbrances and execute such deeds, writings and documents as may be required by the <State Govt.> for fully and effectively divesting the SWAN Bidder of all of the rights, title and interest of the SWAN Bidder in the SWAN Project and conveying the SWAN Project;
 - (c)comply with the Divestment Requirements set out in Section 2 except in case if Termination of this Agreement is due to <State Govt.> Event of Default, Indirect Political Event or Political Event. In case of Termination due to <State Govt.> Event of Default, Indirect Political Event or Political Event, the SWAN 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 <State Govt.> and the SWAN Bidder; and
 - (d) pay all transfer costs and stamp duty applicable on handback of project assets except in case the Project is being transferred due to <State Govt.> of Default, Indirect Political Event, Political Event or expiry of Concession period, where <State Govt.> 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 SWAN Project, if any.
- 2. Subject to clause 1 of exit management, upon completion of the contract period or upon termination of the agreement, the SWAN Bidder shall comply and conform to the following Divestment Requirements in respect of the SWAN 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 SWAN 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 SWAN Bidder delivers relevant records and reports pertaining to the SWAN 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 SWAN Bidder executes such deeds of conveyance, documents and other writings as the <State Govt.> may reasonably require to convey, divest and assign all the rights, title and interest of the SWAN Bidder in the SWAN Project free from all Encumbrances absolutely and free of any charge or tax unto the <State Govt.> or its Nominee; and
- (iv) the SWAN 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 SWAN Bidder in the SWAN Project free from all Encumbrances absolutely and free of any charge or tax to <State Govt.> 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 SWAN Bidder, compliance by the SWAN Bidder with the Divestment Requirements set forth in Section 2 in relation to the SWAN Project and, if required, cause appropriate tests to be carried out at the SWAN Bidder's cost for determining the compliance therewith. If any shortcomings in the

- Divestment Requirements are found by either Party, it shall notify the other of the same and the SWAN Bidder shall rectify the same at its cost.
- 4. Upon the SWAN Bidder conforming to all Divestment Requirements and handing over actual or constructive possession of the SWAN Project to <State Govt.> or a person nominated by <State Govt.> in this regard, <State Govt.> shall issue a certificate substantially in the form set forth in <Section x.x>, which will have the effect of constituting evidence of divestment of all rights, title and lien in the SWAN Project by the SWAN Bidder and their vesting in SWAN Project pursuant hereto. Issue of such certificate shall not be unreasonably withheld by State Government. The divestment of all rights, title and lien in the SWAN 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 SWAN Project on the footing as if all Divestment Requirements have been complied with by the Concessionaire.

SECTION III

Schedule of Requirements

Section 4: Schedule of Requirements

1) SWAN architecture

SWAN is required to be open standards based, scalable, high capacity Network to carry Voice, Data and Video traffic between designated Government of <<State>>(Go<state>) offices at State, District and Sub Division /Block levels. The connectivity to the end-user is based on either one or more of the standard technologies like leased circuits, VSAT, Radio Frequency dial-up circuits or using Ethernet ports as appropriate for the individual offices. The Network should have single point Gateways of adequate capacity to Internet. SWAN shall be built vertically on three tiers of Network connectivity comprising:

- Primary Tier consisting of SHQ
- Secondary Tier consisting of DHQs
- Tertiary Tier consisting of SDHQs/BLOCKs

The Bidder shall be solely and exclusively responsible to design, implement and maintain on a BOOT (Build, Own, Operate, and Transfer) model the network as mentioned in this RFP and to provide the services as specified

2) **Network Design Principles**

The key design considerations for building this network is as follows:

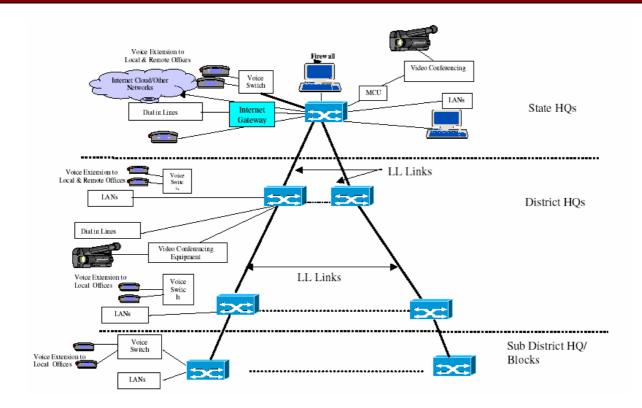
- a) **Protocol:** All the protocols used should be industry standard protocols. The network protocol to be used would be the industry standard Internet Protocol (IP). The design should also support IPV6 in future.
- b) **Redundancy:** The network should be designed to minimize the single point of failure. The network shall have capability for defining and enabling alternate routes to avoid disruption in service. Bidder shall

provide the details of redundancy and the level of redundancy provided in the network. The network shall have redundancy of relevant elements at appropriate levels so that any one failure does not cause a total disruption of services. The design at DHQs shall cater for providing redundancy, whenever required by <<State>>, to the extent that each DHQ may be connected to the adjacent DHQs to form a ring and each DHQ is connected to SHQ.

- c) **Scalability**: The network design shall accommodate future scalability. Chassis based switches and access equipment shall be used to ensure future scalability at the equipment level as well. The design shall be scalable with respect to number of centres; number of interfaces per centre and bandwidth at all the levels. The various interfaces shall be realized on plug-in cards with hot swappable facility. (Applicable for SHQ, DHQ & SDHQ).
- **d) Optimization** The Network shall have industry efficient compression engine to optimize bandwidth utilization
- e) **Performance Considerations:** The equipment selected to ensure adequate back plane capacity to route under peak load to prevent any performance issues. Performance of the network will be periodically monitored using Network Management tools and capacity will be upgraded proactively. Necessary memory slots to be provided on all routers to accommodate future performance scalability.
- f) Manageability: A centralized Network Management System (NMS) should be deployed to manage Wide Area Network (WAN). NMS should also support SNMP. The Network Management System used shall be capable of doing fault management (at the network and server level) performance management, configuration management, security management and also accounting management (if inter-departmental

accounting is needed). The Network Management System should be scalable as well and would be able to provide a hierarchical, topological view of the entire network and provide trouble ticketing. The design shall have sufficient diagnostic facilities to identify & locate the faults and easy rectification of faults. The bidder shall specify the details & level of diagnostics provided.

- g) Standards The equipments/ interfaces shall comply with relevant ITU-T/ IEEE/ IETF/ EIA/ TIA/ ANSI/ NEBS/ TEC etc. standards as applicable. The design shall comply to interconnect and security guidelines issued by Government of <<State>> and Department of Information Technology (DIT), GoI from time to time.
- h) Configurable The network shall route the data traffic as per the requirement from any location to any other location. The network shall allow Internet connectivity to all/ selective users at all/ selective centres/ locations as per requirement using the same network infrastructure.
- i) Interconnect with Existing network The proposed network design shall allow the connectivity of existing networks with proposed SWAN using standard protocol.
- j) Security:- The proposed design should adhere to security guidelines issued by DIT, GoI and Government of <<State>>. The design shall also take care of all the security requirements mentioned in this RFP. The architecture design of the SWAN is as follows
 [Please provide the State network architecture design



Requirements

The scope of work for bidder shall include the following: -

1. Design/Review the SWAN architecture and provide recommendations on gaps/issues

- a. Wide Area Network Connectivity
 - i. The Bidder shall design/review the architecture of the SWAN to provide Data, Voice and Video services that will integrate the PoPs identified across the state and provide recommendations on areas of improvement or the gaps in the SWAN architecture.
- b. Local Area Network Connectivity at PoPs
 - i. The Bidder shall design the LAN architecture at all the PoPs identified for SWAN.
 - ii. The bidder shall plan and design the structured cabling and power cabling and all related works for the successful installation and commissioning of the SWAN.

2. Design of other SWAN elements including IP Addressing, Voice Dial Planning, Wireless, Security etc for SWAN

- a. IP addressing & Voice Dial Plan design
 - i. The Bidder shall design the IP-addressing schema and Voice Dial Plan schemes for the SWAN. Wherever applicable and feasible within the guidelines specified by DIT, GoI It is desired that the current IP addressing scheme at the state level network should be retained, however if the Bidder feels that it needs to be modified to be inline with the proposed IP addressing scheme, he should plan for any migration with minimal disruption in service.
 - ii. The Bidder has to prepare an integration plan for the voice and video communication systems required for the state.

b. Network Redundancy and Security

- i. The Bidder must consider in the design/review that the redundancy should be available at all critical points of the network, viz. State Head Quarters, District Head Quartes etc.
- ii. Security: Since the network is to be used by various agencies of the Go<state>, therefore, the successful bidder is required to prepare detailed IT Security Policy, Security architecture and deployment document for securing the IT infrastructure in the SWAN and the same shall be submitted to the tenderer for approval along with the other documents/designs as mentioned. The guideline and framework to be used for the IT security policy is enclosed in the appendix 5. (www.cert.org- IT security policy guideline). The bidder shall also ensure SWAN security to be in line with DIT-GoI guidelines.

c. Wireless

i. Bidder should provision for wireless base station at all the BHQ's for last mile connectivity. The base station should support

minimum 20 remotes per radio, at a distance of 15 KMs, at a perlink bandwidth of 256 kbps minimum, with concurrent sessions.

3. Supply of Products/equipment including active and passive components for SWAN and Factory Acceptance Testing

- a. The Bidder is responsible for the supply of all the Products/equipment specified in the Bill of Materials included in the tender and their appropriate quantity & capacity, which will meet the Technical Specifications as per the SWAN design approved by the State.
- b. The bidder is responsible for supply of passive components specified in the Bill of Materials section of the tender viz. Cables, Racks etc.
- c. The Bidder shall also quote as optional items for all such items and their appropriate quantities that are not listed in the Bill of Material Section of the tender but are considered necessary for the successful implementation of the project. The bidder selected for implementation should not submit any further bill of material during the implementation stage.
- d. The Bidder shall undertake minimum five years comprehensive on-site Warranty for all the supplied products/equipment.
- e. Factory Acceptance Testing: The Bidder will get the Factory Acceptance Tests done for the products listed in BoM or agreement. (Checking of the part or whole of the products to be supplied by the Bidder against the Bill of Materials and the respective Technical Specifications shall be performed by the team designated by the Tenderer).
- 4. Installation and Commissioning of SWAN connecting all the PoPs listed in the tender document in line with the requirements outlined.

- a. The Bidder shall install, integrate and commission the SWAN connecting all the PoPs identified for the state inline with the requirements specified in the RFP.
- b. The Bidder shall interact / coordinate with the Bandwidth Service Provider for successful commissioning of Leased Line, VSAT/Wire less connectivity as appropriate.
- c. The Bidder shall also install and commission backup link for providing redundancy to the primary Leased Lines.
- d. The Bidder shall be responsible for configuring and implementing the security components of the SWAN such as firewalls and IDS as approved by the <<State>>.

e. Structured Cabling

- a. The Bidder is required to install and commission on a turnkey basis, the structured cabling with in the POP's involving CAT5E/CAT6 cables, Surface Mount I/Os, 3' CAT 5E/CAT6 patch cord, 7' CAT 5E/CAT6 patch cords, Jack Panel, Racks, PVC conduit / casing / capping with accessories, any other required components such as labels, ferrules etc., and all associated civil works at all the PoPs in accordance with the following guidelines.
 - (i) Carrying out of the required surveys prior to installation work is the responsibility of the Successful Bidder, if deemed necessary.
 - (ii)The cabling job should be carried out under the supervision of certified engineers.
 - (iii) All the wiring should be fully concealed inside the conduit and no cable (except patch cords) should be visible to the naked eye.
 - (iv) The actual ratio of trenching and casing work will depend upon the site layout. The Bidder is advised to familiarize itself

with the site layout of POP locations through representative surveys/site visits and ascertain the actual ratio.

- (v) The cabling shall be properly labeled and ferruled so as to facilitate easy identification and maintenance. The labeling and ferruling shall be documented.
- (vi) All civil work like cutting, chiseling, drilling, etc. shall be finished to ensure smooth leveled surfaces matching the existing surface finish without disturbing the existing aesthetics of the office to the extent possible.
- (vii) All waste material shall be properly disposed off from POP premises in an environment friendly manner and compliant to applicable civil / municipal guidelines.
- b. Testing, in conformance to measurement procedures and test parameters for V.35, CAT 5E / CAT 6 and other communication cables installation as defined in TIA/EIA-568-B standards, of each node at each site. The certified test results are to be submitted to State in hard copy.
- c. Certification of each site for minimum 15 years performance warranty based on the above test results from the manufacturer of the structured cabling components.
- d. Fixing & installation of existing hubs/switches, if any, inside the supplied rack(s)

f. Power Cabling

a. The Bidder is required to install & commission the Power Cabling from the power source to the UPS & from the UPS to the network equipments that involves design, laying, fixing, installation, & commissioning of the power cabling system including electrical box / boards, cables, UPS, MDB, MCB, and associated civil works at each of the PoPs on a turnkey basis in accordance with the following guidelines.

- (i) The power-cabling job should be carried out under the supervision of licensed electrical technicians.
- (ii)All the wiring should be fully concealed inside the conduit / G.I. pipe / Aluminum Channel and no cable should be visible to the naked eye.
- (iii) The cabling shall be properly labeled and ferruled so as to facilitate easy identification and maintenance. The labeling and ferruling shall be as documented.
- (iv) All civil work like cutting, chiseling, drilling, etc. shall be finished to ensure smooth leveled surfaces matching the existing surface finish without disturbing the existing aesthetics of the office.
- (v) All waste material shall be properly disposed off from the PoP premises in an environment friendly manner and compliant to applicable civil / municipal guidelines.
- b. **Earthing** The Bidder is required ensure a proper electrical earth for Power Cabling is available in the PoPs. The bidder is also required to properly earth the UPS. The Bidder also shall repair the existing power earth(s), if any, and make sure that the existing earth is working properly.
- c. **Testing** Each electrical point should be tested with line tester / multi-meter. Test results are to be submitted to sate in hard copy.
- g. IP Telephony and Video Conferencing Services
 - (i) The Bidder has to install and commission one IP Telephone connection at each of the PoPs.
 - (ii) The Bidder has to integrate these IP Phones with the dial plan designed for the state.
- h. Network Redundancy and Security

- (i) The Bidder should make sure that the redundancy is available at all PoPs. The Bidder must make sure that all Primary Links (Leased Lines) shall be properly backed up.
- (ii)The Successful bidder shall ensure by necessary configuration & security policies for the SWAN that the whole network is totally secure and is not prone to any type of hacks/attacks from intruders.
- i. **Final Acceptance Testing**: The Bidder should get the Final Acceptance Tests and shall cover the Functional Tests of WAN components, Structured Cabling and Power Cabling. The Final Acceptance Test Procedure shall also include tests to verify the data, voice and video traffic handling capability of the SWAN.

5. SWAN Maintenance Services

The Successful Bidder shall provide the following services for Management of the SWAN. The Successful Bidder shall ensure that appropriate System and Processes are in place for delivering them.

- Configuration Management
- Problem Management
- Performance Management
- Change Management
- Help Desk Management
- Service Level Management
- Quarterly Performance Audits
- Quarterly Capacity Audits

6. Network Management Services:

a) Network management services are to be provided which includes managing ALL the SWAN elements like routers and switches for required uptime, security, configuration of the network and performing suitable test to ensure high availability of the network elements & connectivity. This service is to be provided for a period of five years.

b) The Bidder is responsible for maintenance of all the supplied hardware & software supplied for SWAN. This maintenance is comprehensive onsite maintenance as part of the Warranty service.

7. Remote Management of Network Equipment and Monitoring of WAN Connectivity:

- a. The Bidder will implement a centralized helpdesk available on a toll free number for problem management, which will act as the 1st level helpdesk for all users of the SWAN. The scope of this helpdesk will be to Accept all user calls, Respond to all calls related to the management and maintenance of SWAN and its related assets, Issue a trouble ticket number to each call, resolve the issue or escalate calls to OEM's or Bandwidth Service Providers as per requirement. It is bidder's responsibility to ensure issue resolution within the timelines specified in the agreement.
- b. The Successful Bidder shall undertake the various responsibilities of the problem management functions of the helpdesk viz. to propose and adhere to an appropriate escalation matrix, to assign severity level to each call, to track each call to resolution, and make sure that the resolution time requirements, as per the definitions, is met with, to escalate calls as required, if necessary and to analyze the call statistics.
- c. The Successful Bidder should generate call reports using an automated tool. The reports should be generated and submitted at a monthly and quarterly basis.
- d. The successful bidder shall establish a portal solution for publishing the SWAN performance and availability metrics. Such solution shall be made accessible to the select state representatives based on a user id and password.

- e. The Successful Bidder will implement a mechanism to ensure that all issues noted, complaints made and problems faced are identified by a unique Trouble ticket number within the timeline stipulated in the tender. All trouble tickets will be centrally noted, monitored and logged in the Successful Bidders NOC/Helpdesk facility. The Successful Bidder will mark all trouble tickets as "closed" upon resolution of the issue noted.
- f. The Successful Bidder has to manage the whole network system and provide Help Desk to remotely monitor the network availability, reliability, maintenance and quality of service for a period of three years.
- g. The Successful Bidder has to have skilled and certified manpower as L1/L2/L3 engineers for Management of the network round-the-clock, in his NOC.
- h. Bidder has to coordinate with the Bandwidth provider for day-to-day maintenance and upkeep of the SWAN Links.
- i. The Successful Bidder has to provide the following reports on a monthly basis to State as part of their scope:
 - i. WAN Links Uptime Report (including backup links)
 - ii. WAN Links Utilization Report (including backup links)
 - iii. Scheduled Down Time Activities Report
 - iv. Problem Management Reports
 - v. Performance Management Reports
 - vi. Bi-annual Performance Audit Reports and Recommendations Report (bi-annual)
 - vii. Bi-annual Capacity Audit Reports and Recommendations Report (bi-annual)

8. Training

 Upon completion of the implementation, successful Bidder shall provide training free of cost to the personnel identified for the state. (The numbers of personnel required to be trained are to be specified by the state). The training should cover system design, installation, configuration, set-up, upgrade, administration, testing, management, and maintenance of all the equipment (hardware and software) supplied. This Training shall be held at the location (s) identified by the state. Separate training modules for the following components must be provided:

- Routers, WAN setup, configuration & documentation
- Switch, other LAN components in PoP, configuration & documentation
- Firewall, IDS, their configuration & documentation
- Interconnection details of attached hardware
- Capabilities and technologies involved and configuration and troubleshooting of the equipment.
- UPS, Structured Cabling, Power Cabling & documentation
- Servers and system software configuration & documentation
- Other supplied equipment.
- This training should cover the day-to-day maintenance, management, and operations related aspects of the Routers, Switches, Servers, related system software, and UPS etc.
- The training modules and their duration shall be finalized in consultation with the state.
- The Successful Bidder shall also supply detailed training material to state,
 to enable them to train more number of officers independently.

9. Handover

After the training is over, the Bidder must properly handover the network to the Network Operations (Remote Management) team with all required documentation at the end of five years. If state wishes to continue the services of the successful bidder, further negotiations shall be held and a contract shall be signed for further support period identified at the end of five years.

10. General Scope of Work Clauses

- a. **Implementation Methodology** The Bidder shall adopt industry best practices to ensure smooth implementation of the project including but not limited to: -
 - (i) Preparation of Project Schedule & Charter a detailed location wise project schedule conforming to the overall Time frame of the project
 - (ii) Understanding the requirements for the project with specific details to kick-off the project as per schedule
 - (iii) Formulation of the Project Team with dedicated Project Manager for the project based on the Project Plan. The Successful Bidder shall deploy extra resources to complete the project as per the timelines, if required.

The Bidder shall submit the Project Schedule & charter and the Project Team Structure for approval to state within 2 week from issue of Letter of Award.

- b. It shall be the responsibility of the Successful Bidder to bring all the installation equipment and tools required for the installation of the SWAN.
- c. The Successful Bidder has to provide all necessary assistance to the state in resolving regulatory issues like obtaining Clearances/License from any government agency/regulatory authority, as required for setting up of the communication network.
- d. The Successful Bidder has to be responsible for co-ordinating with the Bandwidth provider for provisioning of the connectivity and related services for successful implementation.
- e. The Successful Bidder shall provide all the test equipments/software required for the Factory Acceptance Tests. The Successful Bidder shall also get the Factory Acceptance Tests done as per Schedule.

- f. The Successful Bidder shall prepare the Final Acceptance Test procedures and submit to the state for approval at least two weeks prior to the schedule of respective activity. The Successful Bidder shall provide all the test equipments/software required for the Final Acceptance Tests. The Successful Bidder shall also get the Final Acceptance Tests done as per Schedule.
- g. Documentation: The Successful Bidder has to submit all relevant documentation pertaining to the entire network, for Remote Management of the Network. This should minimally cover the User Manuals, Operation Manuals, Manufacturer Supplied Technical Documentation, Configuration of all the Network Devices, all relevant diagrams/documentation required in hard copy as well as soft-copy. The documentation for Structured Cabling shall minimally cover detailed schematic layout of the structured cabling system with respect to the floor plan with details of cable numbering (labels and ferrules), wiring diagram for each node, test report for each node and pin-out diagram for each jack panel. The documentation for Power Cabling shall minimally cover the detailed schematic layout of the power cabling system with respect to the floor plan with details of cable numbering (labels and ferrules).

The above requirements shall be provided for the following locations

Data Requirements (Bandwidth Requirements)

Data Require		ics (Ballawiae	ii Kequii eiileiles		
Place		Initial	3 rd year onwards	5 th onwards	year
SHQ TO DHQ		Mbps			
DHQ SDHQ/BLOCK	ТО	Mbps			
Horizontal					
connections SDHQ/Block	at				
Horizontal connections	at				
SHQ Horizontal				+	
connections	at				
SHQ to	ISP				

Tender No	
-----------	--

(internet)	
------------	--

Place	Local Office Requirements		Co-located Office	&	Remote
	Initials	3 rd year onwards	Initials	3 rd onwa	year
SDHQ				011111	11 45
DHQ					
SDHQ/Block					

Note: The number and user details, which are indicative and not exhaustive, of co-located and remote offices in the DHQ, SDHQ & Blocks are given in Annexure respectively.

Section 4

Annexure – Template

Appendix -1 Bid Letter (Technical) Template

Date: dd/mm/yyyy

To,

<< Address>>

Reference: Tender Number Dated

Sir,

We hereby declare:

- i. We are the authorized 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 <<State>>.

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:

- 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 quaranteed 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 <<State>> 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.

 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.

Tend	ler No	0	

Bid Security in the form of a Bank G	Guarantee issued by
(bank), valid till/ (dd	d/mm/yyyy), for an amount of Rupees
XX Lac is enclosed in the cover con	taining pre-qualifying requirements.
We do hereby undertake, that, until	a formal contract is prepared and
executed, this bid, together with yo	ur written acceptance thereof and
notification of award of contract, sha	all constitute a binding contract between
us.	J
	Signature of Bidder (with official seal)
Date	
Name	_
Designation	
Address	_
Telephone	
- Fax	
E-mail	
address _	
Details of Enclosures:	
1. 2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	

Appendix 2 - Bidder profile

Sr.	Details	
No		
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	
	> Government/ Public Sector	
	Undertaking propriety firm	
	partnership firm (if yes, give	
	partnership deed)	
	limited company or limited	
	corporation	
	member of a group of companies (if	
	yes, give name and address, and	
	description of other companies)	
	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.	
	> joint venture consortia (if yes, give	
0	name and address of each partner)	
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	
10	Contract Act? If yes, submit valid	
	registration certificate.	
11	Attach the organizational chart showing	
111	the structure of the organization including	
	the names of the directors and the	
	position of the officers.	
12	Total number of employees Number of years of experience:	
12	· ·	
	as a prime contractor in a joint venture/ Consortium	
13		
13	Are you registered with any Government/	
	Department/ Public Sector Undertaking	
1.4	(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?	
13		
	(documentary proof to be submitted) · Manufacturer	
	· Supplier	
	System IntegratorConsultant	
	· Service Provider (pl. specify details)	
	· Software Development	
	· Total solution provider (Design, Supply,	
	Integration, O&M)	
	· IT Company	
16	Number of Offices / Project Locations	1
17	Do you have a local representation /office	1
* ′	in < <state>>? If so, please give the</state>	
	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	1
13	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	
13	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)	

Appendix 3 Financial Information Summary

S. NO	NO Name Equity		Turn Over (Rs. Crores)		
	of the Bidder	Contribution Proposed	02-03	03-04	04-05

Note: Please enclose balance sheet and profile & Loss statement.

Appendix -4 Manufacturer's Authorization Form

		Date:	dd/mm/yyyy
To,			
		Reference:	
Sir,			
We		, (name and address of the mar	านfacturer)
who are esta	blished and repu	uted manufacturers of	
having factor	ies at	(addresses of manufac	cturing
<i>locations)</i> do	hereby authoriz	ze M/s	(name and
address of th	e <i>bidder)</i> to bid	, negotiate and conclude the contrac	ct with you
against the a	bove mentioned	I tender for the above equipment ma	anufactured
by us.			
Yours faithful	ly,		
	For and o	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.

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 Completion Date Approx. Value of Services :

(Month/Year): (Month/Year):

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:

Appendix 6 Team Composition and Task Assignments Summary

Name	Qualificatio ns	Year of Experience	Area of Expertise	Task & Position Assigned

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:

11. Detailed Tasks Assigned

[List all tasks to be performed under this assignment]

12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

[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.] Name of assignment or project:

Year:

Location:

Client:

Main project features:

Positions held:

Activities performed:

13. **Certification:**

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

Date:

Tender No

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

Full name of authorized representative:

Tend	ler N	In	
T CHU		10	

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

	Witness		Bidder
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	

Appendix 9 Statement of deviation from tender terms and conditions

		Date: dd/mm/yyyy
Го,		

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

	Witness		Bidder
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	

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 << State>>.

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
- 5. Quarterly Payment for Horizontal Office

We agree to abide by our offer for a period of 180 days from the last date of submission of commercial bid prescribed by PSEGS 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.

 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 Rupees
Fifty Lac is enclosed in the cover c	ontaining pre-qualifying requirements.
We do hereby undertake, that, unt	til a formal contract is prepared and
executed, this bid, together with y	our written acceptance thereof and
	hall constitute a binding contract between
us.	3
	
	Signature of Bidder (with official seal)
Date	
Name	
Designation	
Address	
Telephone	
Fax	
E-mail address	
Details of Enclosures:	
1.	
2. 3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Appendix 11 - Appendix Statement of Commercial Deviation

To,							Date: dd/mm/yyyy
Ref	erence	e:					
Sir,							
of te	endered mercia cificatio	d items and	schedule o The entire iments.	f rec	า puirem rk sha	ients a	requirement specifications and hence there are no erformed as per your
the tenc	except ler. Exc	ons to the s	pecification e deviation	ns ar ns ar	nd doc nd vari	cument iations	iations and variations from ts for the above mentioned t, the entire work shall be
pen	S.	Section	REQ No.	Pag			ment of deviations and
	No.	No.		No.		variat	
	1.						
	2.						
		Witness					Bidder
	atur				Signa	ature	
e	_				NI	_	
Name Nam							
Designa			Designati				
tion			on				
Address				Address			
Director					Directorat e		

Tender N	0	
Date		Date
		Directorate Seal

Appendix 12 - Quarterly Guaranteed Payment for POP

Sr.	POP	Total Numbers	QGR per POP	Total QGR
No				
1	SHQ			
2	BHQ			
3	BHQ			

	Witness		Bidder
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	

Appendix 13 - Quarterly Payment for Horizontal Office

Sr. No	Payment Head	Lump sum Implementation charge
1	Horizontal Office at SHQ	
2	Horizontal Office at DHQ	
3	Horizontal Office at BHQ	

Sr. No	Payment Head	Maintenance charge per location per Quarter
1	Horizontal Office at SHQ	
2	Horizontal Office at DHQ	
3	Horizontal Office at BHQ	

	Witness	Bidde	r
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	

Site Preparation Cost

Sr.	Payment Head	Site preparation
No		Charge per location
1	SHQ	
2	DHQ	
3	BHQ	

	Witness	Bidder	
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	

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	Quantity	Price per Unit*	Total Price	Payment Terms

	Witness	Bidder	
Signature		Signature	
Name		Name	
Designation		Designation	
Address		Address	
Directorate		Directorate	
Date		Date	_

Appendix List of all PoP's

Address and Phone Numbers for all POP's

Sr. No	Name of the District	Address	Phone number