SELECTION OF SYSTEM INTEGRATOR

FOR

Supply, Installation, Commissioning & Maintenance of Client Site Infrastructure for a period of 5 years

Excise and Taxation Technical Services Agency Improvement Trust Building, Chhoti Baradari, Patiala Phone: 0175 – 2225191 E-mail: <u>ceoettsa1@punjab.gov.in</u>

A&M	Approach and Methodology			
CAPEX	Capital Expenditure			
CCN	Change Control Note			
СМС	Central Monitoring Center			
COVIS	Existing ETTSA Application			
CV	Curriculum Vitae			
EMD	Earnest Money Deposit			
ETTSA	Excise and Taxation Technical Services Agency			
FAT	Final Acceptance Test			
FMS	Facility Management Services			
GST	Good and Service Tax			
IOS	Internetwork Operating System			
IP	Internet protocol			
MAF	Manufacturer Authorization Form			
OPEX	Operating Expenditure			
Purchaser	Excise and Technical Taxation Technical Services Agency, Patiala			
PMA	Project Management Agency			
QP	Quarterly Payment			
RPF	Request for Proposal			
SI	System Integrator			
ToR	Terms of Reference			

Glossary

Definition of terms

Term	Definition					
Agreement	The Agreement entered between the ETTSA and the Agency including all					
/Contract	attachments, schedules, annexure thereto and all documents incorporated					
	by reference therein and all amendments, corrigendum /corrigenda, chang					
	thereto					
Bidder	The use of the term "Bidder" in the Tender means the Single Agency					
	offering the proposal.					
Bid/Proposal	Offer by the Bidder to fulfil the requirement of the Client under the					
	RFP/Contract for an agreed price. It shall be a comprehensive technical and					
	commercial response to the Tender					
Confidential	All information (whether in written, oral, electronic or other format) which					
information	relates to the technical, financial and business affairs, dealers, suppliers,					
	products, developments, operations, processes, data, trade secrets, design					
	rights, know-how, plans, budgets and personnel of each stakeholder and its					
	affiliates which is disclosed to or otherwise learned by the other Party in the					
	course of or in connection with this Agreement (including without					
	limitation such information received during negotiations, location visits and					
	meetings in connection with this Agreement);					
Deliverables	Products, infrastructure and services agreed to be delivered by the Bidder					
	in pursuance of the agreement as defined more elaborately in the RFP					
	Implementation and the Maintenance phases and includes all documents					
	related to the user manual, technical manual, design, process and operating					
	manuals, service mechanisms, policies and guidelines (such as security					
	related, etc.), inter alia payment and/or process related etc., source code and					
	all its modifications;					
Commissioning	The date of commencement of Operations and Maintenance phase after the					
	successful completion of each Phase (FAT)					
IPR	All rights in written designs and copyrights, moral rights, rights in databases					
	and Bespoke Software/Pre-existing work including its up-gradation					
	Agreement /Contract Bidder Bid/Proposal Confidential information Deliverables					

		systems and compilation rights (whether or not any of these are registered			
		and including application for registration);			
8	Performance	Unconditional guarantee provided by the Bidder from a Nationalized Bank			
	security	in favor of the ETTSA for 10% of the Contract value			
9	Project	Project Implementation as per the testing standards and acceptance criteria			
	implementation	prescribed by ETTSA or its nominated project management agency;			
10	Request for	Written solicitation that conveys to the Bidder, requirements for products/			
	Proposal/	services that the ETTSA intends to buy and implement			
	Tender				
	Document				
11	SLA	The level of service and other performance criteria which will apply to the			
		Services delivered by the Bidder; Performance and Maintenance SLA			
		executed as part of this Master Service Agreement			
12	SI	The bidder who is qualified & successful in the bidding process and is given			
		the award of Contract and will be referred to as System Integrator(SI)			

Important Dates

Sr. No	Particular	Details
	Start date of issuance/sale of RFP document	21 st Feb 2017
1.		
	Last date for Submission of Queries	6 th March 2017
2.		
	Pre-Bid Conference	14 th March 2017
3.		
	Issue of Corrigendum (If required)	20 th March 2017
4.		
	Last date for Issuance / Sale of RFP Document	10 th April 2017
5.		
	Last date and time for Bid Submission	10 th April 2017
6.		
	Date and time of opening of Pre-Qualification bids	11 th April 2017
7.		15:00 IST
	Date and time for opening of Technical bids	12 th April 2017
8.		15:00 IST
	Date and time for opening of Commercial bids	28 th April 2017
9.		15:00 IST

Fact Sheet

Clause	Торіс					
reference						
Section	The method of selection is: Least Cost Bid					
4.5.11	Bidders, whose bids are responsive, based on minimum qualification criteria/					
	documents as in Pre-Qualification Criteria and score at least 70% in technical score					
	will be considered technically qualified. The financial proposal of all technically					
	qualified bidders will be opened.					
Section	RFP can be collected from the following address:					
4.5.2	CEO ETTSA					
	Excise and Taxation Technical Services Agency					
	Improvement Trust Building, 3rd floor, Chhoti Baradari, Patiala					
	Phones: 0175-2225191, 094171-18346					
	Fax: 0175-2220463					
	<i>E-mail:</i> <u>ceoettsal@punjab.gov.in</u> by paying the document Fee of INR 10,000 by Demand Draft in favour of					
	CEO ETTSA and payable at Patiala from any of the scheduled commercial					
	bank					
	OR					
	Downloaded from					
	www.pextax.com					
	www.dgrpunjab.gov.in					
	However in this case, the Bidders are required to submit the tender cost in the form					
	of a demand draft (details mentioned in above para) along with the Proposal.					
Section	Tender fee: INR. 10000 only (Rupees Ten Thousand only)					
4.5.2						
Section	EMD – INR 30 Lakhs only (INR Thirty Lakhs only) through Demand Draft from a					
4.5.2	nationalized/scheduled/Private/commercial bank in India and payable at Patiala in					
	favour of CEO ETTSA					
Section 4	Procurement is linked to supply, implementation and maintenance of Desktop,					
	Printer, Scanners, UPS, DG set and Switches.					
Section 3.2	The scope of work is divided into two phases.					
	1. Supply and Implementation of Client Site Infrastructure and commissioning					
	to be completed by T+10 weeks.					
	1					

	2. Maintenance of the same for 5 Years from the date of Commissioning
Section 4.3	A pre bid meeting will be held on 14 th March 2017 . Interested eligible Bidders may obtain further information from the following address:
	Excise and Taxation Technical Services Agency Improvement Trust Building, 3rd floor, Chhoti Baradari, Patiala Phones: 0175-2225191, 094171-18346 Fax: 0175-2220463 E-mail: <u>ceoettsal@punjab.gov.in</u>
	All the queries should be received on or before 6 th March 2017, 15:00 IST either
	through post or email.
	Addressee and address to which EMD/DD/original bank guarantee etc. in response
	to RFP notice is to be submitted:
	CEO, ETTSA Excise and Taxation Technical Services Agency Improvement Trust Building, 3rd floor, Chhoti Baradari, Patiala
	Phones: 0175-2225191, 094171-18346 Fax: 0175-2220463 E-mail: <u>ceoettsa1@punjab.gov.in</u>
Section	Proposals to be submitted only in English language
4.5.7	
Section	Proposals must remain valid for 180 days after the submission date
4.5.3	
Section	Bidders must submit
4.5.4	• An original and one additional copies of each proposal along with one copy
	of non-editable CD for Prequalification & Technical Proposal
	One original copy of the Commercial Proposal
Section	Proposals must be submitted no later than the following date and time: 10 th April
4.5.8	2017, 15:00 IST at the below address.
	Excise and Taxation Technical Services Agency Improvement Trust Building, 3rd floor, Chhoti Baradari, Patiala Phones: 0175-2225191, 094171-18346

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1. Request for Proposal

Bids are invited from eligible, reputed, qualified IT Firms with sound technical and financial capabilities for Supply, implementation, commissioning and maintenance of Client Site Infrastructure for Excise & Taxation department, Govt. of Punjab as detailed out in the Scope of Work under Section 3 of this RFP document. This invitation to bid is open to all Bidders meeting the minimum eligibility criteria as mentioned in Section 5 of this RFP Document. The O&M Phase will be for a term of **5 years** from the date of successful commissioning.

ETTSA reserves the right to extend the contract for a period up to 1 more year with a maximum of 2 such extension/extensions on the same terms and conditions, subject to the ETTSA's obligations at law. The AMC cost of the same will be mutually agreed between the SI and ETTSA.

EMD must be received not later than time, date and venue mentioned in the Fact Sheet. Proposals for which EMD are received late **WILL NOT** be considered in this procurement process.

2. Structure of the RFP

This Request for Proposal (RFP) document for the project of Supply, Installation Commissioning and maintenance of Client Site Infrastructure for ETTSA comprise of the following.

- **i.** Scope of Work includes to supply, install, commission, and maintain the Client Site Infrastructure for a period of five (5) years from the date of successful commissioning of the project
- ii. Instructions on the Bid process for the purpose of responding to this RFP. This broadly covers:
 - a) General instructions for bidding process
 - b) Bid evaluation process including the parameters for Pre-qualification, Technical evaluation and commercial evaluation to facilitate ETTSA in determining bidder's suitability as the System Integration.
 - c) Payment schedule
 - d) Commercial bid and other formats
- **iii. Minimum Functional and Technical** Specifications the project. The contents of the document broadly cover the following areas:
 - a) Desktop
 - b) Switches
 - c) Printer
 - d) Scanner
 - e) UPS

- f) DG Sets
- g) Racks
- h) Windows OS Licenses
- i) MS Office Licenses
- j) Antivirus / Endpoint Security Requirement
- k) Gateway Zero-Day Security Requirements

The bidder is expected to respond to the requirements as completely and in as much relevant detail as possible, and focus on demonstrating bidder's suitability to become the implementation partner of ETTSA.

iv. Master Service Agreement (MSA), Service Level Agreement (SLA) and Non-Disclosure Agreement (NDA).

The bidders are expected to examine all instructions, forms, terms, project requirements and other information in the RFP documents. Failure to furnish all information required as mentioned in the RFP documents or submission of a proposal not substantially responsive to the RFP documents in every respect will be at the Bidder's risk and may result in rejection of the proposal.

3. Scope of Work

3.1 Project Background

The GST System Project is a unique and complex IT initiative. It is unique as it seeks, for the first time to establish a uniform interface for the tax payer and a common and shared IT infrastructure between the Centre and States. Currently, the Centre and State indirect tax administrations work under different laws, regulations, procedures and formats and consequently the IT systems work as independent sites. Integrating them for GST implementation would be complex since it would involve integrating the entire indirect tax ecosystem so as to bring all the tax administrations (Centre, State and Union Territories) to the same level of IT maturity with uniform formats and interfaces for taxpayers and other external stakeholders. Besides, GST being a destination based tax, the interstate trade of goods and services (IGST) would need a robust settlement mechanism amongst the States and the Centre. This is possible only when there is a strong IT Infrastructure and Service back bone which enables capture, processing and exchange of information amongst the stakeholders (including tax payers, States and Central Governments, Accounting Offices, Banks and RBI).

Common and shared IT infrastructure for functions facing taxpayers has been assigned to GSTN and these are filing of registration application, filing of return, creation of challan for tax payment, settlement of IGST payment (like a clearing house), generation of business intelligence and analytics. All statutory functions to be performed by tax officials under GST like approval of registration, assessment, audit, appeal, enforcement etc. will remain with the respective tax ETTSAs

Given the GST is set to be implemented by July 2017, ETTSA, Government of Punjab wants to replicate & further improve upon their existing IT solution for VAT Administration & Excise – COVIS for their existing VAT cases/dealers. Though most of the VAT functions will move to GSTN Application post implementation of GST in the country, however, there will be a need to run a VAT administration system in parallel for next 6 years for all legacy cases. Hence the ETTSA wants to build a replica of their existing COVIS application with enhanced functionality.

- a) The new infrastructure will be used to work on both the Applications (i.e. GSTN that will be deployed centrally at GOI level and VAT, Excise) that will be deployed at State Level.
- b) The Client Infrastructure will be installed at Head Office, Divisional Office, and District offices, Mobile Wings, Sub-Offices and Training School. Punjab is divided into 22 Districts, administrative purposes.

- 1. Amritsar
- 2. Barnala
- 3. Bathinda
- 4. Faridkot
- 5. Fatehgarh Sahib
- 6. Fazilka
- 7. Firozpur (Ferozepur)
- 8. Gurdaspur
- 9. Hoshiarpur
- 10. Jalandhar
- 11. Kapurthala
- 12. Ludhiana
- 13. Mansa
- 14. Moga
- 15. Pathankot
- 16. Patiala
- 17. Rup Nagar (Ropar)
- 18. SAS Nagar (Mohali)
- 19. Sangrur
- 20. Shaheed Bhagat Singh Nagar (Nawan Shahr)
- 21. Shri Muktsar Sahib
- 22. Tarn Taran.

The list of the location where these client site equipment's will be installed are given in APPENDIX 3. (BOM).

3.2 Scope of work

The selected Systems Integrator (SI) shall have the overall responsibility to supply, install, commission, and maintain the Client Site Infrastructure for a period of five (5) years from the date of successful Commissioning of the project.

The Parties shall cooperate to procure, maintain and observe all relevant and regulatory and governmental licenses, clearances and applicable approvals (hereinafter the "*Required Consents*") necessary for the System Integrator to provide the Services. The costs of such Approvals shall be borne by the Party normally responsible for such costs according to local custom and practice in the locations where the Services are to be provided.

The SI will be required to supply installation and maintenance of Desktops, Printers, Scanner UPS, DG sets and Switches etc. across all 22 Districts in Punjab. The broad components of the overall scope of work for the project is as follows:

- Supplying installation and commissioning of Desktop, Printer, Scanner, UPS, DG Sets and Switches
- LAN connectivity
- Facility Management System (FMS)
- Client Site Infrastructure Helpdesk

For the logical segregation, the scope of work is divided into two phases:

I. Phase I: Design Supply and Installation Phase

- A. Prepare the detailed network architecture and connectivity roll-out plan
- B. Supplying installation and commissioning of Client Site Infrastructure
- C. Electrical and LAN connectivity
- D. Facility Management System (FMS)
- E. Client Site Infrastructure Helpdesk
- II. Phase II: O&M Phase: After successful acceptance of Client Site Infra, Operation and Maintenance Phase will be for a period 5 years.

Phase I: Design Supply and Installation Phase

3.2.1 Prepare the detailed network architecture and connectivity roll-out plan

The successful SI shall prepare the overall network connectivity roll out plan of the project comprising the following :-

- 1. Deployment plan of network equipment at the locations to be connected over network. SI should take permission from the ETTSA wherever required.
- 2. SI should adhere to Timelines for setting up the entire network. The bidder needs to ensure co-relation of end equipment with network.

3.2.2 Supplying installation and commissioning of Client Site Infrastructure

Supplying Installation and commissioning of Client Site Infrastructure will be subdivided into following points:-

3.2.2.1 Installation and configuration of Desktop

SI are required to note that while executing the project, SI shall finalize the actual place for placement of desktops at each location. SI will configure the desktops as per requirement of Department/ETTSA. The SI shall submit site report capturing actual location and BOM for the project. During the course of project, if some desktops requires change within the city, it should be done by SI without any extra cost, in consultation with ETTSA.

SI should use the industry best practice while installation of the desktops. Some of the check-points which need to be adhered to by the SI while installing/ commissioning desktops are as follows:

- i. Ensure all the OS updates and Antivirus are updated as per the RFP terms and conditions. It needs to be monitored on regular basis.
- ii. OS and other software updates will be checked on quarterly basis and report should be submitted accordingly.
- iii. Carry out proper check of electrical power supply, before switching on the desktop.
- iv. Carry out IP configuration for the desktops. The IP will be provided by ETTSA.

3.2.2.2 Installation & configuration of Printer and Scanners

The SI shall install, configure the Printers and Scanners as per the requirement of the each site. The printers will be divided into 2 types

- Network Printer
- Desktop Printers

SI will have to configure all the devices as per the requirement of the ETTSA. This includes IP configuration for Network printers, testing of the printers etc.

SI will have to provide consumables (i.e. cartridges/ tonners for printers) for the 5 years from the date of successful commissioning of project. For estimation of financials, assumption of 1 toner per month per printer to be taken by the bidder. Bidder to also quote unit rates for these consumables. Any additional toner as may be required by ETTSA will be supplied by the bidder at these unit rates and then be claim from ETTSA. Toner should be supplied within 24 hours of requisition. Bidder should keep stock of 10% of toner consumables at each district level for prompt resolution of tickets.

SI will provide diesel for DG sets and will claim the same from ETTSA as per actual cost. Proper tracking mechanism will be arrived at between SI and ETTSA to monitor to consumptions of these consumables.

In addition to this SI will have to do the installation and configuration of the Scanners procured as a part of this RFP.

3.2.2.3 Installation & configuration Switches at site location

The SI shall install, configure the switches at the identified locations and then undertake necessary work towards their commissioning. SI should follow the best security practices of the industry while carrying out the installation of the equipment.

Bidder will have to supply, install & configure all active devices Layer 2 switches, for making the LAN operational at the site, Network Operating System/ software update for 5 years during the warranty period. The equipment needs to be updated with latest version of IOS/ Network Operating System. SI will undertake necessary work related to installation and commission of switch, this includes IP configuration, creating new VLAN or updating existing VLAN etc.

All documentation related to the installation and maintenance for the active components & IP addressing scheme at clients' site need to be documented and the copy of the same should be submitted to the ETTSA

3.2.2.4 Installation & configuration of Gateway Zero-Day Security Requirements

For Successful commission & operationalization of Client site infrastructure, successful bidder must complete the installation and commissioning of gateway zero day security device and ensure that all data travelling on WAN is encrypted. All modules of gateway zero day security must be installed and configured.

3.2.3 Electrical and LAN Connectivity

3.2.3.1 Electrical works

For the successful commissioning & operationalization of the Client Site Infrastructure, the successful bidder will be required to do the electrical cabling work for provide electricity to the Desktop, Printers, Scanners and switches. Bidder will have to install 5/10/20/25 KVA UPS with 30 minutes of back up and 10/20/30/50 KVA DG Set as per the site survey done by the SI and/or as per RFP. SI shall undertake necessary civil and electrical works which include but are not limited to:

- i. Wiring for all UPS from the nearest allowed power point.
- ii. Providing sockets/ MCB
- iii. Panelling for smooth switch over from main power supply to DG set
- iv. Proper earthing for all equipment procured under this RFP.
- v. Provide Diesel for DG sets till the completion of the project of 5 years from the date of successful commissioning. The format for requisition will be provided by SI.
- Replacement of battery for the UPS will be done for a free of cost during 2nd and 4th year of the O&M Operations or replacement of faulty batteries till the completion of 5 years from the date of successful commissioning.
- vii. While laying electricity cables bidder must ensure to commission UPS power supply for desktop, printer, scanner and 2 additional points for each workstation.

3.2.3.2 LAN Connectivity

Work to be done by SI includes but is not limited to:

- i. LAN design
- ii. Engineering
- iii. Structured cabling

- iv. Integration
- i. LAN Design- In consultation with ETTSA address total LAN node requirement (e.g. survey & preparing list of nodes locations), modular design with provision for easy additions, meet all the application requirements, capable of data & video, use CAT 6A technology for backbone & edge.
- ii. **Engineering** Should prepare LAN IP addressing scheme, address all the LAN issues switching configuration.
- iii. Structured cabling installation Cable routing on building blueprint / plan with scales & distances, integration of infrastructure if required, identification of existing cable risers and equipment closets to be used, labeling plan for cabling infrastructure, marking & identification of entire LAN infrastructure, creation of separate cable trays/pathways /raceways if required, faceplates, I/O devices, patch cords, laying of cable. Each workstation should have 2 LAN IP ports.
- iv. Integration Of switches, printers, scanners and desktop through CAT 6 A cable will be done.
 Any additional equipment used to carry out such activity will be provided by the bidder without any additional cost.

3.2.4 Helpdesk & Facility Management Services (FMS)

Helpdesk

The call center/ helpdesk resource will receive the call and update the information manually in the existing helpdesk application currently being maintained by ETTSA.

The helpdesk will serve as a single point of contact for all ICT related incidents and service requests related to client site infrastructure. ETTSA will provide Toll Free number to the SI. The scope of work includes:

- a. 9X6 Help Desk facility for reporting incidents / service requests / problems with the client site IT infrastructure.
- b. To set up following channels for reporting incidents / service requests / problems to helpdesk:
 - Dedicated Phone Numbers (Phone numbers will be provided by ETTSA)
- c. The Help Desk shall undertake the following activities:
 - Log issues / complaints related to IT infrastructure under the scope of this RFP and issue an ID number against the issue / complaint.
 - Track each issue / complaint to resolution.
 - Escalate the issues / complaints, if necessary, as per the escalation matrix defined in discussion with ETTSA.

- Provide feedback to the callers.

For the call center, SI will deploy 2 call center/helpdesk executives. The number of the helpdesk executives will be increased as per the requirement of the ETTSA. In case of additional executive are deployed the cost will be paid on the pro-rata basis as per the price discovered during the bidding.

Monitoring & Support Team

SI shall deploy an on-site Project Manager (with no additional responsibility) to look after the entire operations of the project, and further coordination with his/her team.

Minimum Manpower Requirements:

Sr.	Role	Quantity	Min	Qualification,	Deployment	Location
No.		(Minimum)	Relevant	Expérience &		
			Certifications			
1	Project	1	- BE/ B	B.Tech / MCA +	Throughout	At Patiala or
	Manager		prefe	rably with MBA;	the period of	location decided
			- 7 year	rs of experience;	project	by ETTSA
			- ITIL	/ ITSM / ISO		
			20000) certified.		
2.	Helpdesk/C	2	- Gradu	ıate	Throughout	At Patiala or
	all Center		- 2 year	rs' experience in	the period of	location decided
	Executive		Technical Call Centre		project	by ETTSA
3.	Network	1	- BE/ B	B.Tech/ MCA or	Throughout	At Patiala or
	Engineer /		equiv	alent	the period of	location decided
	Desktop		- 5 years of experience in		project	by ETTSA
	Engineer		Network and Desktop			
			support &			
			troubleshooting			
4.	Resident	22	- BE/M	ICA or equivalent	Throughout	At Each District
	Engineer				the period of	Level
					project	

	- 2 years of experience in	
	Desktop and network	
	Support	

SI shall provide necessary manpower as per the requirement to meet the SLA terms both during implementation and O&M phase.

Helpdesk, and Monitoring Team shall carry out the following activities:

- a. Managing and operating the Helpdesk for day-to-day operations.
- Log calls (incidents / service requests / problems) related to infrastructure and assignment of a call ID number.
- c. Track each call to resolution.
- d. Escalate the calls, to the appropriate levels, if necessary as per escalation matrix decided mutually between the ETTSA and SI.
- e. Provide feedback to callers.

SI will be responsible for preventive maintenance of all components supplied and installed. SI will have to carry out the preventive maintenance exercise at least once in 6 months. SI will be responsible for facilitating the warranty services for a period of 5 years, for all hardware and software/OS procured through this RFP.

SI will also be required to provide one full time support engineer at each district level to provide the L1 support. Technical manpower support will be provided by SI to resolve technical issues and help in day to day activities related to the hardware/ software supplied under this RFP.

In addition to this one Project Manager, one Network Engineer/Desktop Engineer will be deployed at the monitoring center. The Network / Desktop Engineer will act as L2 support for this project. However the Project Manager will be responsible for the overall project.

3.2.5 Positions identified for key personnel

The following are full time positions in the project

Sr.	Role	Quantity	Min	Qualification,	Deployment	Location
No.		(Minimum)	Relevant	Expérience &		
			Certifications			
1	Project	1	- BE / E	B.Tech/ MCA +	Throughout	at Patiala or
	Manager		prefer	ably with MBA;	the period of	location decided
			- 7 year	s of experience;	project	by ETTSA
			- ITIL /	ITSM / ISO		
			20000	certified.		
2.	Call Center	2	- Gradu	ate	Throughout	at Patiala or
	Executive		- 2 year	s' experience in	the period of	location decided
			Techn	ical Call Centre	project	by ETTSA
3.	Network	1	- BE/B.	Tech/ MCA or	Throughout	at Patiala or
	Engineer /		equiva	lent	the period of	location decided
	Desktop		- 5 years of experience in		project	by ETTSA
	Engineer		Network and Desktop			
			support &			
			troubleshooting			
4.	Resident	22	- BE/M	CA or equivalent	Throughout	At Each District
	Engineer		- 2 year	s of experience in	the period of	Level
			Deskte	op and network	project	
			Suppo	rt		

3.2.6 Initial composition, Full time obligation, continuity of personnel

- a) SI shall ensure that each member of the Key Personnel devotes substantial working time to perform the services to which that person has been assigned as per the proposal.
- b) SI shall use commercially reasonable efforts to ensure it retains the services of its Key Personnel, including provisioning of competitive compensation, benefits and other conditions to its Key Personnel so as to incentivize them to remain in SI's employment.
- c) SI shall not make any changes to the composition of the Key Personnel and not require or request any member of the Key Personnel to cease or reduce his or her involvement in the provision of the Services during the Term (or agree to any request other than from ETTSA that

would have the same effect):

- I. Unless that person resigns, is terminated for cause, in case of death, is long-term disabled, is on permitted mandatory leave under Applicable Law or retires; or
- II. With ETTSA's prior written consent.

3.2.7 Replacement

- a) In case the resource has resigned then the bidder has to inform within one week of such resignation.
- b) SI shall promptly initiate a search for a replacement and use commercially reasonable efforts (including the expenditure of reasonable sums, such as to engage the services of a recruiting firm) to ensure that the role of any member of the Key Personnel is not vacant for any longer than 30 days, subject to reasonable extensions requested by SI to ETTSA
- c) Before assigning any replacement member of the Key Personnel to the provision of the Services, SI shall provide ETTSA with:
 - I. A resume, curriculum vitae and any other information about the candidate that is reasonably requested by ETTSA; and
 - II. An opportunity to interview the candidate.
- d) The bidder has to provide replacement resource who score at least the same marks as the resource proposed originally on the same evaluation parameters defined in this RFP document. Once this is confirmation, the ETTSA shall conduct an interview of the candidate and notify SI within ten days after its interview (or if ETTSA does not request an interview within ten working days after SI has provided the information, then it would be deemed as accepted).
- e) If ETTSA does object to the appointment, SI shall not assign the individual to that position and shall seek an alternative candidate in accordance with this Section.
- f) The bidder has to ensure at least 4 weeks of overlap period in such replacements

3.2.8 High Attrition

If in the first 6 month period from the Contract Effective Date or in any rolling 12 months period during the Term, 2 or more members of the Key Personnel cease or reduce their involvement in the Services for any reason other than with ETTSA's prior written consent, SI shall:

- I. Provide ETTSA with a reasonably detailed explanation as to the reasons for such change, including, where applicable and permitted, notes from any exit interviews conducted by SI with any departing member of the Key Personnel; and
- II. If such change to Key Personnel has or is likely to have any material adverse impact on the provision of the Services or any substantial part thereof, undertake, at its own costs, such remediation acts as are reasonably necessary in order to improve the retention of the Key Personnel including making reasonable changes to the human resources policies and procedures applicable to the Key Personnel (including those related to compensation, benefits and other conditions so that they are competitive with the market) as may be necessary to ensure that such policies and procedures comply with Standard Industry Practice.

Other Requirements:

- SI shall supply to the ETTSA, 5 (five) days prior to the effective date of commencement of works/services or kick-off meeting whichever is earlier, an organization chart showing the proposed manpower to be provided by the SI for execution of the work/facilities including the identities and Curriculum-Vitae of the personnel to be deployed. The SI shall promptly inform the ETTSA in writing of any revision or alteration of such organization charts.
- 2. The SI shall be responsible for the deployment, transportation, accommodation and other requirements of all its employees required for the execution of the work and for all costs/charges in connection thereof.
- 3. The SI shall provide and deploy manpower for carrying out the work, only those manpower who are skilled and experienced in requisite area and who are competent to execute or manage/supervise the work in a proper and timely manner.

3.2.9 Change Control

All planned changes shall be coordinated within established Change Control processes to ensure that:

- I. Appropriate communication on change required has taken place
- II. Proper approvals have been received
- III. Schedules have been adjusted to minimize impact on the production environment

SI shall define the CCN process and obtain approval for the same from ETTSA. For any changes to the hardware, SI has to prepare detailed documentation including proposed changes, impact to the system in terms of technical and financial. SI shall obtain approval from ETTSA for all the proposed changes before delivery and commissioning of the same into production environment and such documentation is subject to review at the end of each quarter of operations & maintenance support.

4. Instruction to bidders

4.1 General

- While every effort has been made to provide comprehensive and accurate background information and requirements and specifications, Bidders must form their own conclusions about the solution needed to meet the requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.
- 2) All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by the ETTSA on the basis of this RFP
- 3) No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of the ETTSA. Any notification of preferred bidder status by the ETTSA shall not give rise to any enforceable rights by the Bidder. The ETTSA may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of the ETTSA.
- This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

4.2 Compliant proposals /completeness of response

- Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.
- 2) Failure to comply with the requirements of this paragraph may render the Proposal non-compliant and the Proposal may be rejected. Bidders must:
 - i. Include all documentation specified in this RFP;
 - ii. Follow the format of this RFP and respond to each element in the order as set out in this RFP
 - iii. Comply with all requirements as set out within this RFP.

4.3 Pre-bid Meeting and clarifications

- a) ETTSA shall hold a pre-bid meeting with the prospective bidders on 14th March 2017, 15:00 IST at Head Office, Excise & Taxation, Bhupindra Road, Patiala.
- b) The Bidders will have to ensure that their queries for Pre-Bid meeting should reach to

Excise and Taxation Technical Services Agency Improvement Trust Building, 3rd floor, Chhoti Baradari, Patiala Phones: 0175-2225191, 094171-18346 Fax: 0175-2220463 E-mail: <u>ceoettsa1@punjab.gov.in</u>

by post, facsimile or email on or before 6th March 2017.

c) The queries should necessarily be submitted in the following format:

Sr. No	RFP Document Reference(s)	Content of RFP	Points of clarification
	(Section & Page Number(s))	requiring	
		Clarification(s)	
1			
N			

4.4 Response to Prebid queries and issue of corrigendum

The Nodal Officer notified by the ETTSA will endeavor to provide timely response to all queries. However, ETTSA makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does ETTSA undertake to answer all the queries that have been posed by the bidders.

- At any time prior to the last date for receipt of bids, ETTSA may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by a corrigendum.
- b) The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the <u>www.pextax.com</u> and emailed to all participants of the pre-bid conference.
- c) Any such corrigendum shall be deemed to be incorporated into this RFP.

d) In order to provide prospective Bidders reasonable time for taking the corrigendum into account, ETTSA may, at its discretion, extend the last date for the receipt of Proposals.

4.5 Key requirements of the Bid

4.5.1 Right to terminate the process

- a. ETTSA may terminate the RFP process at any time and without assigning any reason. ETTSA makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- b. This RFP does not constitute an offer by ETTSA. The bidder's participation in this process may result ETTSA selecting the bidder to engage towards execution of the contract.

4.5.2 RFP Document fees

- c. RFP document can be purchased at the address & dates provided in the Fact sheet by submitting a non-refundable bank demand draft of INR 10,000 drawn in favor of CEO ETTSA, payable at Patiala from any scheduled commercial banks.
- d. The Bidder may also download the RFP documents from the website www.pextax.com. In such case, the demand draft of RFP document fees should be submitted along with Proposal.
 Proposals received without or with inadequate RFP Document fees shall be rejected.

4.5.3 Earnest Money Deposit

- Bidders shall submit, along with their Bids, EMD of INR 30 Lakhs only, in the form of a Demand Draft issued by any nationalized scheduled commercial bank in favor of ETTSA, Patiala, payable at Patiala
- 2) EMD of all unsuccessful bidders would be refunded by ETTSA within 2 weeks of the bidder being notified as being unsuccessful. The EMD, for the amount mentioned above, of successful bidder would be returned upon submission of Performance Bank Guarantee as per the format provided in Form 3.
- 3) The EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.
- 4) Bid will be valid for a period of 120 days from the date of submission of bid.
- 5) The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- 6) The EMD may be forfeited:

- a) If a bidder withdraws its bid during the period of bid validity.
- b) In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP.

4.5.4 Means of Submission of proposals

- a. The Bidders should submit their responses as per the format given in this RFP in the following manner
 - Response to Pre-Qualification Criterion : (1 Original + 1 Copies + 1 CD) in first envelope (Appendix 1 Form 1)
 - Technical Proposal (1 Original + 1 Copies + 1 CD) in second envelope (Appendix 1 Form 2 to Form 12, Appendix 3 and compliance sheet to Appendix 4)
 - Commercial Proposal (1 Original) in third envelope (Appendix 2 Form 1, 2 & 3)
- b. The Response to Pre-Qualification criterion, Technical Proposal and Commercial Proposal (As mentioned in previous paragraph) should be covered in separate sealed envelopes super-scribing "Pre-Qualification Proposal", "Technical Proposal" and "Commercial Proposal" respectively. Each copy of each bid should also be marked as "Original" OR "Copy" as the case may be.
- c. Please Note that Prices should not be indicated in the Pre-Qualification Proposal or Technical Proposal but should only be indicated in the Commercial Proposal.
- d. The three envelopes containing copies of Pre-qualification Proposal, Technical Proposal and Commercial Proposal should be put in another single sealed envelope clearly marked "Response to RFP for Selection of SI for Supply, Installation, Commissioning & Maintenance of " Client Site Infrastructure" for a period of 5 years - < RFP Reference Number> and the wordings "DO NOT OPEN BEFORE <Date and Time>".
- e. The outer envelope thus prepared should also indicate clearly the name, address, telephone number, E-mail ID and fax number of the Bidder to enable the Bid to be returned unopened in case it is declared "Late".
- f. All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.
- g. The original proposal/bid shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the Bidder itself. Any such corrections must be initialed by the person (or persons) who sign(s) the proposals.

- h. All pages of the bid including the duplicate copies, shall be initialed and stamped by the person or persons who sign the bid.
- i. In case of any discrepancy observed by ETTSA in the contents of the submitted original paper bid documents with respective copies, the information furnished on original paper bid document will prevail over others.
- j. Bidder must ensure that the information furnished by him in respective CDs is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by ETTSA in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.
- k. Please note that ETTSA will not be responsible for in case there is a discrepancy between the hard copy and the soft version of the bid submitted by the bidders. In this case original hard copy documentation will prevail.
- 1. The outer and inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in the case it is declared "late" pursuant, and for similar purposes.
- m. If the outer envelope is not sealed and marked as above, ETTSA will bear no responsibility for the misplacement or premature opening of the Bid.
- n. Only detailed complete bids in the form indicated above shall be received prior to the closing time and date of the bids shall be taken as valid.
- Bidders are requested to submit their proposal through Speed Post / Registered Post / Courier to the address mentioned below. Submission of proposal through other mode will not be accepted.

4.5.5 Authentication of bids

Bids should be accompanied by a power-of-attorney in the name of the signatory of the Proposal.

4.5.6 Preparation and Submission of Proposal

The bidder shall be responsible for all costs incurred in connection with participation in the RFP process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by ETTSA to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

ETTSA will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4.5.7 Language

The Proposal should be filled by the Bidder in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the Proposal, the English translation shall govern.

4.5.8 Venue and deadline for submission of proposal

Proposals, in its complete form in all respects as specified in the RFP, must be submitted to ETTSA. The last date and time for submission of proposals is 10th April 2017, 15:00 IST.

4.5.9 Late Bids

- a) The bids submitted by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
- b) ETTSA reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

4.5.10 Evaluation process

- 1. ETTSA will constitute a Proposal Evaluation Committee to evaluate the responses of the bidders
- 2. The Proposal Evaluation Committee constituted by the ETTSA shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
- 3. The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.
- 4. The Proposal Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their proposals
- 5. The Proposal Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.

- 6. Each of the responses shall be evaluated as per the criterions and requirements specified in this RFP.
- 7. Bidders who meet the pre-qualifications/eligibility requirements would be considered as qualified to move to the next stage of Technical evaluation.
- 8. Bidder who score more than 70% of marks in Technical Qualification will qualify for the Commercial Evaluation.

4.5.11 Tender Opening

The Proposals submitted up to 15:00 IST on 10th April 2017 will be opened at 15:00 IST on 11th April 2017 by CEO ETTSA or any other officer authorized by ETTSA, in the presence of such of those Bidders or their representatives who may be present at the time of opening.

The representatives of the bidders should be advised to carry the identity card or a letter of authority from the tendering firms to identify their bonafides for attending the opening of the proposal.

4.5.12 Tender validity

The offer submitted by the Bidders should be valid for minimum period of 180 days from the date of submission of Tender.

4.5.13 Tender Evaluation

Initial Bid scrutiny will be held and incomplete details as given below will be treated as non-responsive, if Proposals:

- i. Are not submitted in as specified in the RFP document
- ii. Received without the Letter of Authorization (Power of Attorney)
- iii. Are found with suppression of details
- iv. With incomplete information, subjective, conditional offers and partial offers submitted
- v. Submitted without the documents requested in the checklist
- vi. Have non-compliance of any of the clauses stipulated in the RFP
- vii. With lesser validity period

All responsive Bids will be considered for further processing as below:

ETTSA will prepare a list of responsive bidders, who comply with all the Terms and Conditions of the Tender. All eligible bids will be considered for further evaluation by a Committee according to the Evaluation process define in this RFP document. The decision of the Committee will be final in this regard.

5. Criteria for evaluation

5.1 Prequalification criteria

Sr. No	Qualification Criteria	Documents information to be provided		
		in the submitted proposal		
1.	Legal Entity	a) Copy of Certificate of Incorporation		
	The Company should be in the IT/ITES business	b) Copy of Registration Certificate		
	for at least 5 (five) years as of 31^{st} March 2016 and			
	should be registered under Companies Act, 1956			
2.	Bidder's annual average turnover during the last 3	Audited accounts of the company as filed		
	financial years ending 31st March 2016 must be	before the Registrar of Companies. Or		
	INR 80 Crores or above from sales, supply,	Certificate to this effect from the statutory		
	installation and maintenance from IT products and	auditor of the company		
	services such as Laptop / Desktop, Printers,			
	Scanners, networking components, UPS etc. and			
	manpower			
	In case Bidder is a wholly owned subsidiary, the			
	financial experience of parent company would be			
	considered for eligibility, provided the parent			
	company operates in India. In that case parent			
	company needs to provide an undertaking that the			
	parent company will take complete responsibility			
	of the project in case of failure of its subsidiary.			
3.	The Net Worth of the bidder must be positive for	Separate Chartered Accountant		
	each of the last 3 financial years ending 31^{st} March	Certificate for positive Net worth		
	2016.			
4.	The bidder must have executed 3 projects of	Project citation format and Work order or		
	supply and commissioning of IT products each of	completion certificates		
	value INR 2.5 crores or above for Central / State			
	Governments/ PSUs in last three years upto $31^{\mbox{\scriptsize st}}$			
	Mar 2016.			

Sr. No	Qualification Criteria	Documents information to be provided		
		in the submitted proposal		
5.	Should have office in the State of	Undertaking from the authorized		
	Punjab/Chandigarh or a undertaking that the	signatory		
	bidder is will open the office in the State of			
	Punjab/ Chandigarh with 1 month from the date of			
	singing of contract			
6. The bidder should be have ISO 9001:		Copy of certification which is valid on		
	(industry accepted quality management standards)	date of Submission.		
7.	The bidder must be an authorized partner of the	Copy of the relevant proof		
	products quoted by him			
8.	The bidder must submit the MAF for the quoted	Copy of MAF		
	products indicating the required service support			
	during the project tenure			
9. The bidder must have at least 4 service Centres		Copy of relevant proof		
	Punjab/partner service centers.			
10.	Any organization debarred / black-listed by	Self-attestation		
	Central / State Government in India, at the time of			
	submission of the RFP, shall not be allowed to			
	participate in this tender. Bidder (all members in			
	case of consortium) need to submit a self-			
	certification in this regard			

5.2 Technical evaluation criteria

S.N.	Criteria	Basis of Valuation	Maximum	Supporting documents
			Marks	
Α	Relevant Experience		60	
A1.	Bidder's annual average turnover	When revenue turnover is:	20	
	during the last 3 financial years ending	equal to or more than INR 100 Cr : 20		Extracts from the audited Balance
	31^{st} March 2016 must be INR 80	marks		sheet and Profit & Loss;
	Crores or above from sales, supply,			OR
	installation and maintenance from IT	Between INR 80 Cr and INR 100 Cr :15		Certificate from the statutory auditor
	products and services such as Laptop /	marks		
	Desktop, Printers, Scanners,			
	networking components, UPS etc. and	INR 80 Cr: 12 marks		
	manpower			
A2.	The bidder must have executed 3	More than 5 projects: 30 marks	30	Completion Certificates for
	projects of supply and commissioning	3-5 projects : 25 marks		implementation from the client;
	of IT products each of value INR 2.5	3 projects : 20 marks		OR
	crores or above for Central / State			
	Governments/ PSUs in last three years			Work Order/Proof of award of work +
	upto Mar 2016.			Certificate of Completion by
				authorized signatory of the Bidder

S.N.	Criteria	Basis of Valuation	Maximum	Supporting documents
			Marks	
				counter signed by Statutory Auditor/
				Company Secretary;
				OR
				Work Order + Percentage Completion
				of implementation Certificate (for
				ongoing projects) from the client.
A3	Service network in Punjab/ partner	More than 6 Service centers : 10 marks	10	Name and Address of Service centers
	service centers.	4 - 6 Service centers : 7 marks		Partner service centers with proof of
		4 Service centers : 5 marks		partnership
В	Project Scope		20	
B1	Understanding of Project	Understanding Note	10	
B2	Approach and Methodology	Approach Note	10	
С	Key Resource Profile		20	
C1	Project Manager	Experience of Managing IT	10	Resume as per the format given
	- BE/ B.Tech / MCA + preferably	implementation Projects as Project		
	with MBA; or equivalent	Manager:		
	- 7 years of experience;	Equal to or more than 5 Projects : 10		
	ITIL / ITSM / ISO 20000	Marks		
	certified.	3 to 5 Projects: 7 marks		

S.N.	Criteria	Basis of Valuation	Maximum	Supporting documents
			Marks	
		2 project: 5 mark		
C2	Network/Desktop Engineer	Experience of Network Projects as	10	Resume as per the format given
		Desktop Engineer :		
	- BE/ B.Tech / MCA + or	Equal to or more than 5 Projects : 10		
	equivalent	Marks		
	- 5 Years of experience in Network	3 to 5 Projects: 7 marks		
	and Desktop support &	2 project: 5 mark		
	troubleshooting			

- Bidder will have to provide required supporting documentation as per the requirement given above.
- Bidder who score more than 70% of marks in both A, B & C parts of Technical Qualification will qualify for the Commercial Evaluation.
- Sub-contracting / out sourcing would be allowed only for work like Passive Networking & Civil Work during implementation

5.3 Commercial bid evaluation

- a) The Financial Bids of technically qualified bidders will be opened.
- b) The bid with the lowest evaluated total price will be declared as L1 bidder
- c) Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.
- d) For commercial bid evaluation, the bid price will be exclusive of all taxes and levies and shall be in Indian Rupees and mentioned separately. Though, bidder to provide the final amount inclusive of taxes, as applicable during the bid submission.
- e) Any conditional bid would be rejected.
- f) 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 there is a discrepancy between words and figures, the amount in words will prevail".

5.4 Appointment of System Integrator

5.4.1 Award criteria

ETTSA will award the Contract to the successful bidder whose proposal has been determined to be substantially responsive and has been determined as the most responsive bids as per the process outlined above.

5.4.2 Right to Accept Any Proposal and To Reject Any or All Proposal(s)

ETTSA reserves the right to accept or reject any proposal, and to annul the tendering process / Public procurement process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for ETTTSA action.

5.4.3 Notification of award

Prior to the expiration of the validity period, ETTSA will notify the successful bidder in writing or by fax or email, that its proposal has been accepted. In case the tendering process / public procurement

process has not been completed within the stipulated period, ETTSA, may like to request the bidders to extend the validity period of the bid.

The notification of award will constitute the formation of the contract. Upon the successful bidder's furnishing of Performance Bank Guarantee, ETTSA will notify each unsuccessful bidder and return their EMD.

5.4.4 Signing of Contract

After the ETTSA notifies the successful bidder that its proposal has been accepted, ETTSA shall enter into a contract, incorporating all clauses, pre-bid clarifications and the proposal of the bidder between ETTSA and the successful bidder. (Refer Annexure - A MSA for your reference)

5.4.5 Failure to agree with terms and condition of RFP

Failure of the successful bidder to agree with the Draft Legal Agreement and Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event ETTTSA may award the contract to the next best value bidder or call for new proposals from the interested bidders.

5.4.6 Performance Guarantee

ETTSA will require the selected bidder to provide a Performance Bank Guarantee, within 15 days from the Notification of award, for a value equivalent to 10% of the total cost of project. The Performance Guarantee should be valid for a period of 72 months. The Performance Guarantee shall be kept valid till completion of the project and Warranty period. The Performance Guarantee shall contain a claim period of three months from the last date of validity. The selected bidder shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the project and Warranty period. In case the selected bidder fails to submit performance guarantee within the time stipulated, the ETTSA at its discretion may cancel the order placed on the selected bidder without giving any notice. ETTSA shall invoke the performance guarantee in case the selected Vendor fails to discharge their contractual obligations during the period or ETTSA incurs any loss due to Vendor's negligence in carrying out the project implementation as per the agreed terms & conditions.

6. Deliverables and Timelines

Sl.	Activity/Task	Deliverables/ Milestone	Timelines (In weeks)
No			
1.	Project Award & Contract signing		Project Start Date = T
	between ETTSA and successful System		Date of Issue of Signing of
	Integrator		Contract
2.	Project Planning	a) Project plan	T + 1
	 Resourcing schedule 	b) Inception Report	
	 Development Implementation and 		
	Maintenance approach		
3.	Site Survey	a) Site Survey report and	T + 4
		Final BOM	
4.	Complete Hardware Delivery	Submission of POD	T + 6
5.	Commissioning of Desktop, Printer,	Submission of	T + 8
	Scanner, UPS, LAN, Electrical	Commissioning report	
		for Desktop, Printer,	
		Scanner, UPS, LAN,	
		Electrical	
6.	Complete Commissioning	Submission of Complete	T + 10
		Commissioning report	
7.	Post Commissioning Support (O & M)	SLA adherence report on	60 months after acceptance of
		a Quarterly basis	Final Commissioning

All the deliverables will be validated by ETTSA or its nominated project management agency. All deliverables will be approved by an authorized personnel of ETTSA. The tasks that are provided in this document and under "Deliverables" are to be performed by the SI in such a manner that it will not affect the Project Schedule. The SI shall adhere to the above time schedule for timely and successful completion of the Project and submit the acceptance to this time schedule.

*Validation of IT infrastructure: System Integrator has to carry out a detailed assessment of all types of IT infrastructure existing and desired at all the defined ETTSA locations for the successful implementation and its usage by appropriate user personnel. This will cover the study of

- 1. All IT infrastructure components at site locations
- 2. Network connectivity enabling components across all ETTSA locations
- 3. End user Hardware/peripheral configuration at all defined ETTTSA location

6.1 Service Level Agreement

For purposes of this Service Level Agreement, the definitions and terms as specified in the contract along with the following terms shall have the meanings set forth below:

"Scheduled Maintenance Time" shall mean the time that the system is not in service due to a scheduled activity as defined in this SLA. Scheduled maintenance time is planned downtime with the prior permission of the ETTSA.

S.No	Type of Office	Business Hours (Monday – Saturday)
1.	Head Office	9:00 AM to 5:30 PM
2.	Site locations	9:00 AM to 5:30 PM
3.	Help Desk	9X6

"Scheduled Operation Time" means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the systems and applications within the monitoring center and ETTSA will be 9X6. The total operation time means when the manpower is required at Head Office, Site location and Helpdesk / Monitoring Center.

"Availability" shall mean the time for which the services and facilities offered by the SI are available for conducting operations from the equipment installed at the ETTSA and monitoring center.

Availability is defined as:

{(Scheduled Operation Time – System Downtime) / (Scheduled Operation Time)} x 100% "Downtime" means accumulated time during which the system is inoperable within the Scheduled Operation Time but outside the scheduled maintenance time and measured from the time the ETTSA and/or site location (office) log a call for the failure or the failure is known to the SI from the availability measurement tools to the time when the system is returned to proper operation. The SLA metrics provided specifies performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on quarterly basis. The SLA also specifies the penalties for lower performance and breach conditions.

The quarterly payment shall be made after deducting the penalty as mentioned above. ETTSA or its nominated project management agency will validate the SLA reports submitted by the vendor for payment clearance.

The SLA parameters shall be measured on the basis of individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SI and audited by ETTSA or its nominated project management agency for accuracy and reliability.

Total penalty to be levied on the SI shall be capped at 10% of the total CAPEX during the Pre – Implementation Stage and 10% of the OPEX during the Post-Implementation stage (Maintenance period). ETTSA would have right to invoke termination of the contract in case " The overall penalty applicable in any 3 consecutive quarters during the contract period is equal to more than 10% in each quarter."

Any delay or defect not directly attributable to the Implementation Partner, shall not amount to breach or Material breach by the Implementation Partner of this Agreement. ETTSA shall be entitled to, at its discretion, to extend the time period for implementation and acceptance of the Total Solution of the Project, for any delay or defects or nonperformance not directly attributable to the Partner.

Any planned software / hardware downtime would not be included in the calculation of software / hardware availability, in that case;

- 1. SI will have to take written approval from the ETTSA at-least 5 days in advance.
- 2. Any planned outage should not be more than 60 minutes and that too the planned outage should be done during the non- business hours.
- 3. All SLA will be calculated on per-site basis.
- 4. For simplification the CAPEX / OPEX per site will be calculated as "Total CAPEX/ OPEX value / Number of sites."

Service Level Requirement and Targets

The SLAs have been logically segregated in the following categories:

- I. Pre Implementation
- II. Post Implementation (Maintenance period)

The following measurements and targets shall be used to track and report performance on a regular basis. The targets shown in the following table are applicable for the duration of the contract.

6.1.1 Pre Implementation SLA and associated Penalties

Project Activities	Baseline Timeline (in Week) T= Date of signing of Contract	Penalty
Site Survey report & Final BOM to be submitted	T+4	@INR 25,000 per week delay
Delivery of Hardware and Software on all sites	T+6	@INR 1 Lakh per week delay
Installation and commissioning of the required Hardware and Software on all sites	T+10	@INR 1 Lakh per week delay
Deployment of Manpower	T+10	Project Manager & Network/.Desktop Engineer: INR.25000/ per day on incremental basis. Support engineer & Helpdesk Engineers: INR.10000/ per day / per site on incremental basis.

6.1.2 Post Implementation SLA

All the SLA and penalty calculation will be done manually basis the complaints/tickets logged at the helpdesk.

AETC of respective locations will validate and certify the reports given by SI. Post validation quarterly payments may be released after deducting appropriate amount of penalty. All the tickets resolution time is 24hrs for rectification of fault or replace the respective item. If the SI fails to rectify the faulty within 24 hours penalty @ 1% per day of respective item unit rate as mentioned in Appendix 2 Form 3 Details of Financial bid and maximum penalty will be 10% of respective

item unit rate as mentioned in Appendix 2 Form 3 Details of Financial bid. If the problem is not rectified within maximum time of 2 months, total value will be deducted of the respective item unit rate as mentioned in Appendix 2 Form 3 Details of Financial bid. *No of working days per week: 6 days*

6.2 Acceptance Testing and Certification

The primary goal of Acceptance Testing and Certification is to ensure that the Project (including all the project components as discussed in the scope of work) meets requirements, standards, specifications and performance, by ensuring that the following are associated with clear, quantifiable metrics for accountability:

- Functional requirements
- Infrastructure (Hardware and Network) Compliance Review
- Availability of the project Services in the defined locations
- Performance
- Security
- Manageability
- SLA Reporting System
- Project Documentation (Implementation, configuration and maintenance)

As part of Acceptance testing, performed through ETTSA or its nominated project management agency shall review all aspects of project development and implementation covering software, hardware and networking including the processes relating to the design of solution architecture, design of systems performance in relation to defined requirements, interoperability, scalability, availability and compliance with all the technical and functional requirements of the RFP and the agreement.

The procedures and parameters for testing will be laid down by ETTSA or its nominated management agency; the solution deployed by the vendor has to satisfy management agency acceptance testing upon which the system shall Commissioning, subject to ETTSA approval.

ETTSA will establish appropriate processes for notifying the selected vendor of any shortcomings from defined requirements at the earliest instance after noticing the same to enable the selected vendor to take corrective action. All gaps identified shall be addressed by the vendor immediately prior to Commissioning of the solution. It is the responsibility of the selected Bidder to take any corrective action required to remove all shortcomings, before the roll out of the project.

It is to be noted that the involvement of the ETTSA or its nominated project management agency for acceptance testing and certification, does not absolve the vendor of his responsibilities to meet all SLAs as laid out in this RFP document.

Following discusses the acceptance criteria to be adopted for the project as mentioned above. The list below is indicative and the activities will include but not be limited to the following:

Infrastructure compliance review

ETTSA or its nominated project management agency shall perform the Infrastructure Compliance Review to verify the conformity of the Infrastructure (both IT, non IT as well as Network infrastructure) supplied by the selected Bidder against the requirements and specifications provided in the RFP and/or as proposed in the proposal submitted by the selected Bidder. Compliance review shall not absolve the vendor from ensuring that proposed infrastructure meets the SLA requirements.

Security Review

The Solution Deployed shall be audited by the agency from a security and controls perspective. Such audit shall also include the IT infrastructure and network deployed for the project. Following are the broad activities to be performed by the Agency as part of Security Review. The security review shall subject the solution to the following activities.

- Audit of Network, Hardware mechanisms
- Assessment of authentication mechanism provided in the components

Availability

The solution should be designed to remove all single point failures. Appropriate redundancy shall be built into all the critical components to provide the ability to recover from failures. The agency shall perform various tests including network, security, fail-over tests to verify the availability of the services in case of component failures. The agency shall also verify the availability of the project services to all the users in the defined locations.

Manageability Review

The agency shall verify the manageability of the solution and its supporting infrastructure deployed by the SI. The manageability requirements include requirements such as remote monitoring, administration, configuration, inventory management, fault identification etc.

SLA Reporting System

The selected Bidder shall use existing helpdesk managed by ETTSA for the SLA management. The Acceptance Testing and Certification agency shall verify the accuracy and completeness of the information captured by the SLA monitoring system and shall certify the same or its agency to calculate the payment to be paid to bidder after deducting the necessary penalties.

Project Documentation

The Agency shall review the project documents developed by the selected Bidder including requirements, design, installation, Any issues/gaps identified by the Agency, in any of the above areas, shall be addressed to the complete satisfaction of the ETTSA.

6.3 Payment schedules

Sl. No	Payment Milestone	Deliverables/ Milestone	Timelines*	Payment
		(for marking closure of	(In weeks).	Due
		SI Activity & Task)	T=Date of signing	
			Contract	
1.	Complete	Validation of bills	T + 10	25%
	Hardware Delivery	submitted by SI along		
		with acknowledgement		
		from the site officer		
2.	Complete	Final Acceptance Test	T + 14	35%
	Implementation (Final	report by ETTSA or its		
	Commissioning)	nominated PM agencies		
3.	Post Commissioning	Validation of SLA	60 months after	40% (QP:
	Support	adherence report on a	acceptance of Final	Quarterly
		Quarterly basis	Commissioning	Payment) (20
				Quarterly
				Payments
				after
				deduction of
				SLA
				Penalties)

*Any delay in the SI milestones timelines as mentioned in the section 6 Deliverables & Timelines of this *RFP*, will directly impact these timelines as well.

ETTSA or its nominated project management agency to validate the above SI deliverables & SLA reports submitted by the vendor for the above payment clearance.

6.4 Acceptance criteria

The Final Acceptance of the System will be carried out by ETTSA or its nominated project management agency. After successful Installation, Commissioning & Implementation of all hardware and their services as defined in the RFP & its corrigendum, SI will conduct test run for complete solutions and services as defined in scope of work & BOM, mentioned in the RFP for a minimum period of 7 (seven) days continuously at the site, in an integrated manner.

The SI will submit a detailed documentation for acceptance test plan to ETTSA in line with scope of work as per RFP & its corrigendum and solution proposed. Test Plan would include above acceptance criteria but not limiting to the same.

The FAT certificate would be released by ETTSA to the SI after successful completion of FAT

6.5 Fraud and corrupt practices

- A. The Bidders/Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, ETTSA shall reject a Proposal without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the "Prohibited Practices") in the Selection Process. In such an event, the ETTSA shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority, in regard to the RFP, including consideration and evaluation of such Bidder's Proposal.
- B. Without prejudice to the rights of the ETTSA under Clause above and the rights and remedies which the ETTSA may have under the LOI or the Agreement, if an Bidder or Systems Implementation Agency, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOI or the execution of the Agreement, such Bidder or SI shall not be eligible to participate in any tender or RFP issued by the ETTSA during a period of 2 (two) years from the date such Bidder or SI, as the case may be, is found by the ETTTSA

- C. For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:
 - i. "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the ETTSA who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOI or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the ETTSA, shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of the <Nodal Agency> in relation to any matter concerning the Project;
 - ii. "Fraudulent practice" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;
 - "Coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person's participation or action in the Selection Process;
 - "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by ETTSA with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and
 - v. "Restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

6.6 Conflict of Interest

- A. A bidder shall not have a conflict of interest that may affect the Selection Process or the Solution delivery (the "Conflict of Interest"). Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the ETTSA shall forfeit and appropriate the EMD, if available, as mutually agreed genuine pre-estimated compensation and damages payable to the ETTSA for, *inter alia*, the time, cost and effort of the ETTSA including consideration of such Bidder's Proposal, without prejudice to any other right or remedy that may be available to the ETTSA hereunder or otherwise.
- B. ETTSA requires that the SI provides solutions which at all times hold ETTSA interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The Systems SI shall not accept or engage in any assignment that would be in conflict with its prior or current obligations to other clients, or that may place it in a position of not being able to carry out the assignment in the best interests of the ETTSA.

APPENDIX -1 Prequalification and Technical Bid templates

S no	Basic requirement	Required	Provided	Reference	
				and page number	
1	Document Fee	Demand Draft	Yes / No		
2	Power of Attorney Copy of Power of Attorney in the name of the Authorized signatory Yes / No	Power of Attorney Copy of Power of Attorney in the name of the Authorized signatory Yes / No	Yes / No		
3	Particulars of the Bidders	As per Form 2	Yes / No		
4	Earnest Money Deposit	Demand Draft / Bank Guarantee (Form 3)	Yes / No		
5	Sales Turnover of SI	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor	Yes / No		
6	Net Worth	Certificate from the statutory auditor	Yes / No		
7	Technical Capability	Completion Certificates from the client; OR Work Order + Self Certificate of Completion (Certified by the Statutory Auditor); OR Work Order + Phase Completion Certificate from the client	Yes /No		
8	Certifications	ISO 9001: 2005,	Yes /No		
9	Copy of certificate of incorporation		Yes/no		
10	Blacklisting	Self-certificate letter	Yes/ no		

Form -1 Compliance sheet for prequalification proposal

11	The bidder must be an	Copy of the relevant proof	Yes/ no
	authorized partner of the		
	products quoted by him		
12	The bidder must submit the	Copy of MAF	Yes/ no
	MAF for the quoted		
	products indicating the		
	required service support		
	during the project tenure		
13	The bidder must have at	Copy of relevant proof	Yes/ no
	least 4 service Centres in		
	Punjab/partner service		
	centers.		
14	Any organization debarred /	Self-Attestation	Yes/ no
	black-listed by Central /		
	State Government in India,		
	at the time of submission of		
	the RFP, shall not be		
	allowed to participate in this		
	tender. Bidder (all members		
	in case of consortium) need		
	to submit a self-certification		
	in this regard		

Form -2 Particulars of the bidder

S no	Information Sought	Details to be furnished
1.	Name and address of the bidding Company	
2.	Incorporation status of the firm (public limited / private	
	limited, etc.)	
3.	Year of Establishment	
4.	Date of registration	
5.	ROC Reference No.	
6.	Details of company registration	
7.	Details of registration with appropriate authorities for	
	service tax	
8.	Name, Address, email, Phone nos. and Mobile Number of	
	Contact Person	

Form -3 Performance Bank Guarantee

(BANK GUARANTEE)

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank).

From: Name and Address of the Bank..... To: The CEO ETTTSA Limited,

IRREVOCABLE BANK GUARANTEE NO.

BENEFICIARY:

ETTSA

At the request of M/s <SI name > a company incorporated in India under the Companies Act, 1956 and having its registered office <SI office ADDRESS > (India), we hereby guarantee to pay you a sum of Rs <amount>/- (<amount in words>) in connection with the RFP for providing SI services in the project for Supply, Installation and Maintenance of Client Site Infrastructure against Work Order/Letter of Intent vide letter no. <> dated <> against **Earnest Money Deposit/Security Deposit** as prescribed under the RFP <RFP no> dated <date> and its subsequent corrigendum.

This guarantee is valid for a period of 72 months with effect from <> and after which no claim will be entertained by us and this guarantee will automatically become null and void.

Any claim under the guarantee must be made in writing duly signed by ETTSA and must be received and acknowledged by us on or before the guarantee expiry date.

This bank guarantee may be renewed from time to time upon a written request by both the parties before

the expiry of the validity.

Notwithstanding anything contained herein

- a) Our liability under this guarantee shall not exceed the amount mentioned above i.e. Rs <>/- (Rupees <> Only)
- b) This Bank Guarantee shall be valid up to <DATE >
- c) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee and only if served upon us a written claim on or before

Dated the------day of------ (Month) ----- (Year) for------

(Name of the Bank with fully address)

Details of Bank Guarantee i.e. no. date etc.

Authorized signatory/ Branch Manager

Form -4 Compliance sheet for technical proposal

S no	Basic requirement	Required	Provided	Reference and
				page number
1	Covering letter of technical proposal as per form 5	As per form 5		
2	Bidder's annual average turnover during the last 3 financial years ending 31 st March 2016 must be INR 80 Crores or above from sales, supply, installation and maintenance from IT products and services such as Laptop / Desktop, Printers, Scanners, networking components, UPS etc. and manpower The bidder must have	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor	Yes / No Yes / No	
	executed 3 projects of supply and commissioning of IT products each of value INR 2.5 crores or above for Central / State Governments/ PSUs in last three years upto Mar 2016.	for implementation from the client; OR Work Order/Proof of award of work + Certificate of Completion by authorized signatory of the Bidder counter signed by Statutory Auditor/ Company Secretary;		

		OR		
		Work Order + Percentage Completion of implementation Certificate (for ongoing projects) from the client.		
4	Service network in Punjab	Name and Address of Service centers	Yes / No	
5	Understanding of Project	Presentation	Yes / No	
6	Approach and	Presentation	Yes / No	
	Methodology			
7	ResumeofProjectManager,DesktopEngineer/NetworkEngineer,SupportEngineer	CV & a Note (Form 9, 10 and 11)	Yes / No	

Form -5 Letter of proposal

To, CEO ETTTSA.

Subject: Submission of the Technical bid for <Name of the Systems Implementation assignment>

Dear Sir/Madam,

We, the undersigned, offer to provide Systems Implementation solutions to the ETTSA on <Name of the Systems Implementation engagement> with your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Proposal, which includes this Technical bid and the Financial Bid sealed in a separate envelope.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for 120 days as stipulated in the RFP document.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Location: Date:

Form -6 Project citation format

Relevant IT project exper	ience
Name of the project	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the project	
Scope of services	
Service levels being offered/ Quality of service (QOS)	
Technologies used	
Outcomes of the project	
Other details	
Total cost of the project	
Total cost of the services provided by the respondent	
Duration of the project (no. of months, start date,	
completion date, current status)	
Other relevant information	
Letter from the client to indicate the successful	
completion of the projects	
Copy of Work Order	

Form -7 Proposed Solution

For each hardware, provide the following information in a table. Reference of the Desktop/ Switch / Printer / Scanner information in the Submitted Proposal (Please provide page number/section number/ volume)

- 1. Quantity
- 2. Make and Model
- 3. Year of Introduction
- 4. Operating System along with version (if applicable)
- 5. Processor and Number of Cores Offered (if applicable)
- 6. RAM/HDD/LAN Ports (as relevant)
- Additional Information as required to indicate the compliance to the requirements in the RFP (ex, Capacity, Disk Space) (if applicable)
- 8. Name of OEM

Form -8 Proposed work Plan

No	Activity		Calendar Months		
1		1	2	3	12
2					
3					
4					

1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Purchaser approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.

2 Duration of activities shall be indicated in the form of a bar chart.

Form -9 Team composition

Name of Staff with	Area of Expertise	Position Assigned	Task Assigned	Time	committed
qualification and				for	the
experience				engage	ement

Form -10 CV of Key Personnel

Name of the person	
Current Designation / Job Title	
Current job responsibilities	
Proposed Role in the Project	
Proposed Responsibilities in the Project	
Academic Qualifications:	
• Degree	
Academic institution graduated from	
• Year of graduation	
• Specialization (if any)	
• Key achievements and other relevant	
information (if any)	
Professional Certifications (if any)	
Total number of years of experience	
Number of years with the current company	
Summary of the Professional / Domain Experience	
Number of complete life cycle implementations	
carried out	
The names of customers (Please provide the	
relevant names)	
Past assignment details (For each assignment	
provide details regarding name of organizations	
worked for, designation, responsibilities, tenure)	
Prior Professional Experience covering:	
• Organizations worked for in the past	
Organization name	
• Duration and dates of entry and exit	
• Designation Location(s)	
Key responsibilities	
Prior project experience	

Project name	
• Client	
• Key project features in brief	
• Location of the project	
Designation	
• Role	
Responsibilities and activities	
• Duration of the project	
Please provide only relevant projects.	
Proficient in languages (Against each language	
listed indicate if speak/read/write)	

Form -11 Manufacturers'/Producers' Authorization Form

(This form has to be provided by the OEMs of the products proposed)
No. Date:
To:
OEM Authorization Letter
Dear Sir: **Ref: Your RFP Ref: [*] dated [*]**

We, <Manufacturer name>having our registered office at<Manufacturer address>, are an established and reputed manufacturer of

We confirm that we have understood the delivery & installation time lines defined in the RFP. We confirm that we have worked out all necessary logistics and pricing and there won't be any delay in delivery, testing, installation and support due to any delay from our side. Our full support is extended to them in all respects for the supply and maintenance of our products during warranty period of three years. We confirm support of 5 years on our product.

In case of product becoming end of life (EOL), we shall proactively inform ETTSA about the replacement product (with matching specifications) along with proper comparison and sample for evaluation. We also undertake that incase of non availability of equivalent product, we shall supply product with higher specification during the empanelment/extended empanelment.

We understand that any false information/commitment provided here will result in getting debarred from doing business with ETTSA for minimum period of three years.

For <**Manufacturer name**> < (Authorized Signatory)> Name: Designation:

Note:

1. This letter of authority should be on the letterhead of the manufacturer and should be signed by authorized signatory of Company. Attach authorization letter.

2. Any deviation from the above Pro-forma will lead to summary rejection of such bids.

Form 12: Change Control Notice (CCN) Format

Change Control Note	<u>,</u>	CCN Number:
Part A: Initiation		-
Title:		
Originator:		
Sponsor:		
Date of Initiation:		
Details of Proposed C	Change	
(To include reason for	change and appropriate de	etails/specifications. Identify any
attachments as A1, A2	, and A3 etc.)	
Authorized by :	Date:	
Name:		
Signature:	Date:	
Received by the IP Name:		
Signature:		
Change Control Note		CCN Number:
Part B : Evaluation	,	Certifumber:
(Identify any attachme	nts as B1, B2, and B3 etc.)
Changes to Services, c	harging structure, paymen	t profile, documentation, training, service
levels and component	working arrangements and	l any other contractual issue.
Brief Description of S	Solution:	
Impact:		

Deliverables:	
Timetable:	
Charges for Implementation:	
(including a schedule of payments)	
Other Relevant Information:	
(including value-added and acceptance criteria)	
Authorized by the	Date:
Implementation Partner	
Name:	
Signature:	

APPENDIX -2 Financial Proposal Template

Form – 1 Financial Proposal Submission Form

(Location, Date)

FROM: (Name of the Firm)	To: (Name and address of the Client)

Sir,

Subject: <SUBJECT>

We, the undersigned, offer to provide the services for the above in accordance with your Request for Proposal dated *[Date]*, and our proposal (technical and Financial Proposals).

Our attached financial proposal as is 'Part A' that contains the consolidated Project Cost [Amount in words and figures]. This amount is inclusive of all project related expenses and taxes (computed as per the current rate) payable under the local laws. We understand that this amount is subject to deduction of tax at source as provided under applicable law. Any variation in taxes rates during the contract tenure will be to the ETTSA account supported by relevant documentation.

'Part B' provides the five year maintenance costs [Amount in words and figures.] This amount is inclusive of all project related expenses and taxes (computed as per the current rate) payable under the local laws.

Our financial proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal, i.e. *[Date]*

We solemnly affirm that we will strictly adhere to the laws against fraud, corruption and unethical practices, including but not limited to "Prevention of Corruption Act, 1988", during the bidding process and execution of the contract, in case we are awarded the work.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signatory

Name and Title of Signatory,

Name of the Firm

Address:

Form – 2 Financial Proposal

Project Cost

Part A: Supply, Installation, Commissioning of Client Site Infrastructure.

S.No.	Component	Total Cost (INR)
1	One time hardware cost (inclusive of site readiness like, Electrical, Lan Cabling)	
2	Total Cost of Software licenses (If any)	
3	Taxes	
Total C	ost PART A: Project Value (1+2+3)	

TAXES WILL BE AS PER APPLICABLE RATES PREVALENT

Part B: Post Go-Live Annual Support Cost

SNO	AMC Cost	Total Cost (INR)
1	Total AMC cost for 5 years support for the hardware and software and manpower	
2	Taxes	
Total (Cost PART B: Value (1+2)	

SI will submit a resource plan before AMC starts with details of the type of resources and the roles and responsibility of each resource.

TOTAL PROJECT COST	VALUE in INR
Total cost of PART A	
Total cost of PART B	
Total cost of Project PART A + PART B (in figures)	
In Words	

*Conditional bids will be rejected.

Form – 3 Details of Financial bid

						Freight &	
S.No	Equipment	Unit	Unit Price	Sub Total	Taxes (if any)	Insurance	Total Cost
	A	b	с	d = b x c	e	f	g = d + e + f
1.	Layer 2 24 Port Switch	66					
2.	Layer 2 48 Port Switch	5					
3.	Desktop*	1104					
4.	Desktop Printer	373					
5.	Network Printer	65					
6.	Scanner	373					
7.	5 KVA UPS	11					
8.	10 KVA UPS	20					
9.	20 KVA UPS	25					
10.	25 KVA UPS	10					
11.	10 KVA DG Set	11					
12.	20 KVA DG Set	20					
13.	40 KVA DG Set	25					
14.	50 KVA DG Set	10					

						Freight &	
S.No	Equipment	Unit	Unit Price	Sub Total	Taxes (if any)	Insurance	Total Cost
	LAN Cabling (including cable conduits, faceplate and						
15.	I/O)	1					
16.	Patch Cord						
17.	Electrical Cabling	1					
18.	Toner*	26280					
19.	16 U Racks	71					
20.	Helpdesk Engineer	2					
21.	End Point Security Requirement	1104					
22.	Gateway Zero-Day Security Requirements	1					
23.	MS office	1104					
24.	Project Manager	1					
25.	Network/ Desktop Engineer	1					
26.	Support Engineer	22					
	AMC cost of 5 years for all the components procured						
27.	and deployed by SI						
	Total						

*Distribution of 222 Desktop will be planned and discussed later. Accordingly Endpoint security and MS Office licenses may be procured separately at later stage

• Toner assumption is 1 toner per printer per month. Assumption is for 5 years. Toner price will be paid as per actual usage of number of toners as per unit price

APPENDIX -3 Bill of Material

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
1	Abohar	Excise & Taxation Officer, Sunder Nagari Gali No. 1, Abohar	 SUB Office Mobile Wing 	1	0	4	1	4	11		2				2		
2	Ahmadg arh	Excise & Taxation officer Anaj Mandi, Ahmedgarh.	3. SUB Office	1	0	1	1	1	3		1				1		
3	Amritsar	Bhai Ganhiya Market, Pinglwara Road, Amritsar	4. Mobile Wing	1	0	5	1	5	9			1				1	
4	Amritsar	AETC, Amritsar-I, # 10, Court Road, Amritsar	 DETC District office 	2	0	14	1	14	32			2				2	
5	Amritsar	AETC, Amritsar -II, #10 Macload Road, PNB	7. District Office	2	0	12	1	12	28				1				1

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
		Complex, opp Sanfrancisco school, Rani Ka Bagh, Amritsar															
6	Barnala	AETC, Barnala, Distt. Administrative Complex, 2nd floor Court Chowk, Barnala	8. District office	1	0	3	1	3	9		1				1		
7	Batala	Excise & Taxation Officer, Amar Palace, Shastri Nagar Batala	9. Sub office	1	0	2	1	2	6		1				1		
8	Bhatind a	Mini Secretariat, 2nd Floor, Bathinda	 Mobile wing 11. District office 	2	0	15	2	15	41			2				2	
9	Budhlad ha	Excise & Taxation Officer, Bhikhi Road, Near Grid,Budhladha Mandi	12. Sub office	1	0	1	1	1	2	1				1			

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
10	Dera Bassi	Excise & Taxation Officer, Barwala Road, Opp. ATS Society, Tehsil Derabasi.	13. Sub office	1	0	3	1	3	7		1				1		
11	Dhuri	Excise & Taxation officer, Balmiki Chowk Bank Road, Dhuri	14. Sub office	1	0	1	1	1	2	1				1			
12	Faridkot	Mini Secretariat 2nd Floor, Faridkot -151203	 District office DETC 	2	0	8	2	8	14		2				2		
13	Fatehgar h Sahib	AETC, FatehgarhSahibMiniSecretariat,2ndfloor,RoomNo.305,FatehgarhSahib	17. District office	1	0	10	1	10	17			1				1	
14	Fazilka	AETC Fazilka, Malout Road, opp. Sonalika Tractor Agency. Fazlika.	18. District Office	1	0	4	1	4	5		1				1		
15	Ferozep ur	AETC, Ferozepur Opposite: Central Jail, Ferozepur City	19. District Office	2	0	18	2	18	37			2				2	

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
			20. DETC Office														
16	Guraya	Excise & Taxation Officer, c/o Nagar Panchayat, G.T.Road, Goraya - 144409	21. Sub office	1	0	1	1	1	2	1				1			
17	Gurdasp ur	AETC, Gurdaspur BSF road, Back Side Arora Hospital near rice mill railway station, Gurdaspur	22. District Office	2	0	11	1	11	23				1				1
18	Hoshiar pur	AETC, Hoshiarpur Mini Secretariat, 5th floor, Room No.511, Islamabad, Near DAV College, Hoshiarpur	23. District office	1	0	7	1	7	20			1				1	
19	Jagraon	Bhachat bhawan, sherpur chowk, near market Committee Jagraon	24. Sub office	1	0	1	1	1	2	1				1			

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
20	Jaito	Navi Abadi, old Electricity office,Near Durga Chakki, Jaito	25. Sub office	1	0	1	1	1	2	1				1			
21	Jalandha r	AETC, Jalandhar, Opp Bus Stand, 5 story building, Jalandhar	 26. Mobile Wing 27. DETC office 28. District office- Jalandhar 1 29 District office- Jalandhar 1 	4	0	37	4	37	77			4				4	
22	Kapurth ala	AETC, Kapurthala, Aman Nagar, Backside D.C. Residence, Kapurthala	30. District office	1	0	6	1	6	14			1				1	
23	Khanna	New Address is not confirmed but planning to shift the location is running.	31. Sub office	1	0	3	1	3	6		1				1		

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
24	Kotkapu ra	Sr. Gurbachan Singh, Muktsar Road, Kotakpura	32. Sub office	1	0	1	1	1	2	1				1			
25	Ludhian a	SCO -66, Phase -2, Urban Estate, Dugri Road, Ludhiana	33. Mobile Wing	1	0	5	1	5	9			1				1	
26	Ludhian a	Mini Secretariat, 2nd floor,Ludhiana	 34. DETC Ludhiana, 2nd floor 35. District office, Ludhiana1 36. District office, Ludhiana2 37. District office, Ludhiana3 	6	0	62	4	62	130				4				4
27	Malerko tla	Thandi Sadak, Opp BSNLTelephoneExchange,Malerkotla	38. Sub office	1	0	2	1	2	4		1				1		

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
28	Malout	Excise & Taxation Officer,Near Post Office, Main Bazar Edward Ganj ,Malout	39. Sub office	1	0	3	1	3	7		1				1		
29	Mandi Gobindg arh	# 224 Sector-1 Block-C, Nasrali Road, Near Lakshmi colony Mandi Gobindgarh.	40. Sub office	1	0	4	1	4	10		1				1		
30	Mansa	AETC, Mansa,New Court Road, Opposite: Daily Ajit Sub office, Mansa	41. District office	1	0	5	1	5	15			1				1	
31	Moga	Beas Complex, 2nd floor District Administrative Complex, Ferozpur Road, Moga 142001, 01636- 238240	42. District office	1	0	5	1	5	17			1				1	
32	Mohali	ETTSA Building, Sector 69, Mohali.	43. MobileWing44. Districtoffice	5	0	31	5	31	85			4				4	

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
			 45. Other office 46. other office 47. Other offce 														
33	Mukatsa r	AETC, Mukatsar,Mini Secretariat, 3rd floor, Room No.61,Chak Road, Mukatsar	48. District office	1	0	4	1	4	11			1				1	
34	Nabha	Excise & Taxation Officer, Railway Road,Near New Bus Stand,Nabha, Modi Mill Colony	49. Sub office	1	0	1	1	1	3	1				1			
35	Nakodar	Excise & Taxation Officer,B.D.O.Complex, Near DAV College,Phagwara Road,Nakodar	50. Sub office	1	0	1	1	1	2	1				1			

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto P Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
36	Nangal	Excise & Taxation Officer, Nangal, House No. 500, NFL Colony, Sector 1 Naya Nangal.	51. Sub office	1	0	1	1	1	2	1				1			
37	Nawan Shahar	AETC, Nawasahar Karyam Road, Near Bhalla Petrol Pump Nawasahar	52. District office	1	0	5	1	5	14			1				1	
38	Pathank ot	ETC Pathankot,Gurkartar farms, Saili Road Pathankot	53. District office	1	0	6	1	6	10			1				1	
39	Patiala	Office of Excise & Taxation, Head office,Bhupindra Road, Patiala	54. HeadOffice55. MobileWing		2	26	2	26	66				2				2
40	Patiala	AETC, Patiala Jail Road near Hotel Dhillon Passi Road, Near Dukhniwaran Chownk,Patiala	56. District office		1	10	1	10	26				1				1

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
41	Patiala	Deputy Excise & Taxation Commissioner,Patiala Division, Jila Parishad ComplEx,Opp Oriental Bank of Commerce,Sirhind Road,Patiala -147001	57. DETC office	1	0	5	1	5	6		1				1		
42	Patiala	Training School, o/o Excise & Taxation Commissioner, Pb.,Head Office, Passey Road, Patiala	58. Other office	1	0	4	1	4	5		1				1		
43	Patiala	Excise& TaxationTechnicalServicesAgency,3rdfloor,ImprovementTrustBuilding,ChhotiBaradari,Patiala	59. Other office		1	1	1	1	25			1				1	

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto P Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
44	Phagwar a	Excise & Taxation Officer,Improvement Trust Building,Hargobind Nagar,Phagwara - 144401	60. Sub office	1	0	1	1	1	4		1				1		
45	Rajpura	Plan to shift to Mini secretariat Rajpura	61. Sub office	1	0	2	1	2	4		1				1		
46	Rampur a Phul	Excise & Taxation Officer, Railways Road, Near LIC Office Building	62. Sub office	1	0	1	1	1	2	1				1			
47	Ropar	Mini Secretariat, 1st floor, Ropar	63. DETCoffice64. Districtoffice	2	0	6	2	6	15		2				2		
48	Sangrur	Red Cross Building, Near Barnala Chowk Sangrur	65. District office		1	9	1	9	29				1				1
49	Sunam	Excise & Taxation Officer, Near ITI Chowk,under Railway Overbridge,Bhatinda Road,Sunam - 148028	66. Sub office	1	0	1	1	1	3	1				1			

S.No	Geo Locatio n	Site Address	Offices	Switch 24 Port	Swi tch 48 Por t	Deskto p Printer s	Netwo rk Printe r	Scan ner	Deskt op	5 KVA UPS	10 KVA UPS	20 KVA UPS	25 KVA UPS	10 K V A D G	20 KV A DG	40 KV A DG	50 K V A D G
50	Tarn Taran	District Administration Complex, Tarn Taran	67. District office	1	0	3	1	3	7		1				1		
51	Others	Others*	Others	0	0	0	0	0	222	0	0	0	0	0	0	0	0
				66	5	373	65	373	1104	11	20	25	10	11	20	25	10

*Procurement & Distribution of additional 222 Desktop will be planned and discussed later. Accordingly Endpoint security and MS Office licenses may be procured separately at later stage. Bidder to include the cost of these 222 desktops & its related software in its financial bid.

Note: The BOM will be finalized post site survey by the selected bidder. Any variance in final BOM will be adjusted as per unit rates provide by the selected bidder.

APPENDIX -4 Minimum Hardware Specifications

	UTP- CAT6A	
S.No	Required Minimum Specifications	Compliance (Yes/No)
	4 pair, should confirm or exceed the EIA/TIA 568 C.2-10 (CAT	
1	6A) standards for physical & electrical specifications, UL/ETL	
	listed & verified	
2	Should be certified by independent test lab for 10G Gigabit	
2	Ethernet Performance up to 100 mts ,23 AWG solid bare copper	
3	Jacket: LSZH	
	Patch Panel	
S.No	Required Minimum Specifications	Compliance (Yes /No)
1	19 inch 1U Patch Panel for 24 x RJ45 connection module.	
2	Should confirm or exceed the EIA/TIA 568 C.2 (CAT 6A)	
2	standards, Metallic / high strength or equivalent.	
	1U height, zig-zag / angular/straight IO placement for better alien	
3	cross talk, transmission channels of Class EA with up to 2/4	
5	plugged connections acc. to ISO/IEC 11801 ed. 2.2, June 2011, as	
	well the U.S. standard Cat. 6A according to TIA 568-C.2	
	I/O Devices	Γ
S.No	Required Minimum Specifications	Compliance (Yes/No)
1	Cat 6 compliant Datagate Jacks	
2	Jacks should have Spring Loaded Shutter	
3	IDC V Shaped contacts	
4	Plastic Housing - Polycarbonate, UL 94V-0 rated	
5	Insulation Resistance - more than 100 megaohm	
Su	pply, Installation & Termination ,Documentation & Site certifica	ation for UTP Cabling
S.No	Specification	Compliance (Yes /No)
0.110	Specification	

1	Laying of UTP E CAT 6 A cable with cable route survey & detailed cable route diagram , termination of cable with labels & marking as per approved labeling plan & documentation	
2	Supply & fixing of ISI marked PVC Conduit of material thickness not less than 1.5 mm , Medium Mechanical Strength (MMS)	
3	Supply & fixing of Metal MS cable tray/ raceway with covers for mounting on ceiling / floor /wall , with all connecting fittings & sections for hanging ,T, cross , L , vertical up /down routing/ branching of cables etc.	
4	Installation & termination of UTP cables on Patch Panel with wire Manager & on Information outlet	
5	Performance testing of the laid UTP cable (Penta scanner report) for Channel Link as per EIA/TIA TSB-67 standard or higher in particular wire map (Short , open, transpose ,reverse ,split) , NEXT , PSNEXT, FEXT , PSFEXT, ACR, PSACR, Return Loss , length , propagation delay, delay skew , Site certification for performance warranty of 20 years through OEM .	
6	Removal of old UTP / Fiber / Coaxial /RS232 / telephone cables where ever required.	

	16 U RACK							
S.No	Required Minimum Specifications	Compliance (Yes /No)						
1	19 " Rack , Floor mount min 600 mm depth, 16 U height, Front glass door (lockable, toughened 4mm),							
2	19 " mountable ,1U , Universal power socket design to fit both round & flat socket with built in surge protection & over load circuit breaker							

	5 AMP AC power distribution channel made of high flame retardant	
3	& insulating material, CE approved with 6 no's sockets (2 no's),	
	with wall mounting hardware	
4	Copper earthing kit (19" copper bar) & equipment mounting	
4	screws/hardware packets (2 no's)	
5	Fan tray with two fans (low noise, good quality, ball bearing type ,90	
5	CFM)	
6	Surface Finish: EC Dip Coat Primed and Powder Coated to 80-	
0	100micrones with RAL 7035 Light Grey	
7	Should confirm To DIN 41494 & IEC 297 standard , Load bearing	
/	capacity of 50 Kgs	
8	Castors with brakes	

	L2 24 Port Switch								
S. No	Required Minimum Specifications	Compliance (Yes /No)							
1	Shall be 19" Rack Mountable. The switch shall be non-blocking in architecture								
2	24 RJ-45 autosensing 10/100/1000 ports with 2SFP+ port								
3	1 console port with console cable								
4	Shall have switching minimum capacity of 88 Gbps for providing non- blocking performance on all Gigabit ports								
5	Shall have minimum 65 million pps switching throughput to achieve wire-speed forwarding on all Gigabit ports								
6	IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol, IEEE 802.3ad Link Aggregation Control Protocol (LACP)								

7	Shall support minimum 4K active VLAN or IEEE 802.1Q-based	
,	VLANs	
8	Support for minimum 1K MAC addresses	
9	Should support IGMP v1, v2 and v3 for multicast applications	
	Should support for IPv6 features like Neighbor discovery, Syslog,	
10	Telnet, SSH, Web GUI, SNMP, NTP, DNS, RADIUS over IPv6,	
	classification and marking.	
11	Should support IPv4/IPv6 from day 1	
12	Should have minimum 8 hardware based queues per port	
13	Configuration through the CLI, console, Telnet, SSH and Web	
10	Management	
	Switch should support on-line software reconfiguration to implement	
14	changes without rebooting. Any changes in the configuration of	
	switches related to Layer-2functions, VLAN, STP, Security, and QoS	
	should not require rebooting of the switch.	
15	SNMPv1, v2, and v3 and Remote monitoring (RMON) support	
16	Power : Input 100-240VAC, 50/60Hz	
17	Operating Temperature: 0C to 50 C	
18	Should have EAL / NDPP certification from day 1.	

	L2 48 Port Switch							
S. No	Required Minimum Specifications	Compliance (Yes /No)						
1	Shall be 19" Rack Mountable. The switch shall be non-blocking in architecture							
2	Switch should have 48 10/100/1000BASE-T ports with 2SFP+ port							
3	Shall have minimum switching capacity of 136 Gbps for providing non- blocking performance on all Gigabit ports							
4	Shall have minimum 101 million pps switching throughput to achieve wire-speed forwarding on all Gigabit ports							

S. No	Required Minimum Specifications	Compliance (Yes /No)
5	Switch should have 1k MAC address	
6	Switch should have 4K VLAN	
7	Should have minimum 8 hardware based queues per port	
8	Switch should support IEEE Standards of Ethernet: IEEE 802.1d, 802.1s, 802.1w, 802.3ad, 802.3x, 802.1D, 802.1p, 802.1Q, 802.3, 802.3u 802.3ab 802.3z 1000PASE T 1000PASE X (mini	
0	802.3u, 802.3ab, 802.3z, 1000BASE-T, 1000BASE-X (mini- GBIC/SFP), 1000BASE-SX, 1000BASE-LX/LH, 10GBASE-SR SFP+ , 10GBASE-LR SFP+ & 10GBASE-X SFP+ Direct Attach Cables	
9	Switch should have static ip route up to 16. switch should be capable of Layer 3 features like RIP ,OSPF , VRRP, ECMP , PIM-SM, should support policy based routing	
10	Switch should support internal redundant power supply and cooling	
11	Switch should have secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), Simple Network Management Protocol (SNMPv1,2,3)	
12	Should support IGMP v1, v2 and v3 for multicast applications. MLD v1, v2 or equivalent.	
13	Should support for IPv6 features like Neighbor discovery, Syslog, Telnet, SSH, Web GUI (internal/ external), SNMP, NTP, DNS, RADIUS over IPv6, classification and marking	
14	Should support IPv4/IPv6 from day 1	
15	Switch should support on-line software reconfiguration to implement changes without rebooting. Any changes in the configuration of switches related to Layer-2 functions, VLAN, STP, Security, and QoS should not require rebooting of the switch.	
16	It shall support IEEE 802.1AB Link Layer Discovery Protocol (LLDP) & support IEEE 802.1p traffic prioritization delivering data to devices based on the priority and type of traffic & strict priority queuing or high strict priority queue	

	L2 48 Port Switch		
S. No	S. No Required Minimum Specifications		
17	Power : Input 100-240VAC, 50/60Hz		
18	Operating Temperature: 0C to 50C		
19	Should have EAL / NDPP certification from day 1.		

Technical Specifications for Scanner			
S.No.	Required Minimum Specifications	Compliance (Yes/No)	
1.	Scan Speed - 35ppm or higher (A4)		
2.	Scan size Sheet feed – A4, legal		
3.	Scan type Colour & B/W		
4.	Resolution 600x600 dpi (optical)		
5.	ADF Capacity Minimum 100/50 Pages		
6.	Duty cycle 2500 Pages per day		
7.	Interface USB 2.0		
8.	Min. Scanning Speed 35 PPM/70IPM @ 200 dpi, Black & White (A4)		
9.	Scanning Software OCR		
10.	Drivers & accessories- Required Driver CDs, Power & USB Cable		
11.	Environmental Compliance Energy Star, RoHS		
12.	OEM listed in IDC INDIA Ranking top 3 as per latest report		

	Endpoint Security Requirements		
S.No	Required Minimum Specifications	Compliance (Yes/ No)	
	Solution on Endpoint should be able to run following		
	important feature		
1	AV (Signature based)		
2	IPSEC VPN With Central VPN gateway		
	Should be able to sand box day zero malware on the machine		
3	itself of should be able to integrate with network sandbox		
	natively or via API		
4	Policy Enforcement (Removable media)		
5	Encryption of Removable media , hard disk		
	Should be able to run on demand forensic with complete		
6	visibility of how malware entered, what all damage malware		
6	has done, and timeline view. Forensic should be triggered		
	both natively or via API's		
7	CnC Detection /BOT discovery		
8	Anti-Ransomware with a capability detecting ransomware at		
0	post infection stage		
9	Solution Must be evasion resistant (e.g. ROP Exploit		
7	Technique, DEP bypass)		
	Solution should be able to remove Sanitizes and deliver		
	documents in a totally safe format to users. Pre-emptively		
	removes potentially malicious content, removes active		
	content, Disables any active functionality in documents		
10	regardless of its intent for example minimum following action		
	(but not limited to) should be removed but not limited to		
	Sensitive hyperlinks, Macros and code, Embedded objects,		
	Database queries, Fast Save Data, Pdf launch app, Pdf GoTor		
	Actions		
	1	1	

S.No	Required Minimum Specifications	Compliance	
5.110	Required Minimum Specifications	(Yes/No)	
	PDF Launch Actions, Pdf play audio, Pdf play video, Pdf		
	open URL, Pdf execute code, Pdf submit form, Pdf go to		
	remote, Custom properties		
	Fast save data etc.		
11	Management should be Single and centralized for all the		
	components asked in the above specification		
	Solution should integrate with Network Solution like Firewall,		
	UTM , Sandbox etc. either natively or via SIEM tool .in case		
12	of SIEM tool integration bidder has to provide all the		
	necessary component (for 1000 event per second) along with		
	the solution		

	Technical Specifications for Desktop Printer	
S.No.	S.No. Required Minimum Specifications	
1	Print Speed A4/Legal - 22 PPM	
2	Paper Sizes - A4, Legal	
3	Warm Up time - Less than 27 Sec	
4	First Page out - 6 Sec	
5	Resolution 1200X600 Dpi	
6	Input Capacity - Standard Tray-150 Sheet, Bypass:-1	
7	Rating Power - 220-240 V	
8	RAM - 128 MB	
9	Duty cycle - 20,000 Pages	
10	PDL - PCL 6	

	Technical Specifications for Desktop Printer		
S.No.	Required Minimum Specifications	Compliance (Yes /No)	
12	OEM listed in IDC INDIA Ranking top 3 as per latest report		

Technical Specifications for Network Printer		
S.No.	o. Required Minimum Specifications	
1	Media Size supported: A4, Legal, Letter, transparencies.	
2	Printing Speed: min 50 ppm	
3	Resolution: 1200 X 1200 dpi printing	
4	Paper Tray: Input Min 500 sheets	
5	High speed USB 2.0 port/ Ethernet networking	
6	Compatibility: Common OS such as Windows, Linux etc.	
7	Processor: 400 MHz or higher	
8	RAM: Minimum 128 MB	
9	Automatic Duplex Printing	
10	Duty Cycle: 2,00,000 pages per month	
11	Support for local language: Printers to support Punjabi also	
12	Drivers & Accessories: Interface cables & accessories, Drivers for common OS such as	
13	OEM listed in IDC INDIA Ranking top 3 as per latest report	
14	Connectivity - Host Interface: High Speed USB 2.0, Ethernet 10/100BASE-TX, IEEE 802.11b/g/n	

	Technical Specifications for Desktop		
S.No.	Required Minimum Specifications	Compliance (Yes /No)	
1.	Processor: Intel Core i5 or above with latest generation/		
1.	processor with minimum 2.4 GHz, 6MB cache.		
2.	Motherboard with compatible chipset with 4DIMM slots with a		
2.	maximum memory expandable upto 64GB		
3.	8GB DDR4 RAM (2133Mhz) or better with 4DIMM Slots		
5.	expandable upto 64GB		
4.	Hard Disk Drive: 500 GB SATA		
5.	Hard Disk: Integrated On-Board Hard Disk Controller		
5.	supporting Serial ATA Interfaces		
6.	21.5" Wide TFT TCO 06 monitor. Minimum resolution to be		
0.	1280*1024 with internal speakers		
7.	Power : Min 200W SMPS		
8.	USB / PS2 104 Keys or more Multimedia Keyboard Rupee		
0.	ready isolated keyboard		
9.	USB/PS2 Optical Scroll Mouse		
10.	Integrated on board Ethernet Controller 10/100/1000 with PXE		
10.	support and Remote wake up		
11.	Interface : 1Serial, 1 parallel, Minimum 6 USB Ver. 2.0 (with 2		
	in front) & 2 NOS USB VER 3.0. Audio Ports		
12.	Expansion: Total 4PCI series slots with at least 1PCIe X16 slot		
13.	Integrated on board audio controller		
	Licenses:		
14.	• Operating System: Windows 10 PRO Preinstalled		
	• MS office standard edition.		

S.No.	Required Minimum Specifications	Compliance (Yes /No)
15.	Certifications : Win 10, Energy Star, MET/UL/FCC	
16.	OEM listed in IDC INDIA Ranking top 3 as per latest report	
17.	Wi-Fi card should be integrated within the desktop	

	Technical Specifications for 10 Kva Generator		
S.No	Required Minimum Specifications	Compliance (Yes /No)	
1.	Supply of Diesel Generating set having Prime Power Rating of 5 KVA		
	, at 1500 RPM, 0.8 lagging power factor , 50 Hz, 230/240 Volts ,Single		
	phase synchronous Alternator , load factor as 0.8 and consisting of		
	followings:		
	• 4 stroke Air cooled/ water cooled electric start capable of		
	developing 10 BHP (not exceeding under NTP conditions)		
	at 1500 RPM suitable for above output.		
	• specified alternator rated at 40 Degree Centigrade		
	conforming to BS 5514, BS 649, IS 10000, capable of taking		
	10% over loading for one hour after 12 hours of continuous		
	operation		
2.	Synchronous alternator rated 6.0 kVA (Minimum) at 40 degree		
	centigrade, 230/240 Volts at 1500 RPM, Single Phase, 50 Hz, AC		
	supply with 0.8 lagging power factor.		
3.	The Diesel Generating set should be fitted with following major		
	accessories:		
	• Both the engine and alternator shall be mounted on suitable		
	base frame made of folded CRCA/ HR sheet Steel.		
	• Dry exhaust mainfold with residential type silencer.		
	• Dry exhaust mainfold with residential type silencer.		

	0	12V DC starting system comprising of starter motors, voltage	
		regulator and arrangement for initial excitation complete with	
		one Lead acid type automotive battery (88 AH capacity).	
_	0	Acoustic enclosure with arrangement for fresh air intake for	
		cooling of the engine & alternator, discharge of hot air in to	
		the atmosphere as per design specifications of Manufacturer	
		to ensure reliable performance.	
	0	Built in type (inside Acoustic enclosure) Fuel Tank having	
		capacity of 65 liters approx.	
	0	The Diesel Generating Set should be supplied along with	
		Genset Control Unit (GCU) and should have display &	
		protection of various Electrical & Mechanical parameters.	
		Apart from above, GCU should have alarm provisions against	
		various protection like Lubricating Oil Pressure, High	
		Cylinder Temperature, Over & Under voltage, Over & Under	
		frequency, charging alternator failure etc.	
	0	The Genset Control Unit (GCU) should be SNMP compatible	
		for communication purposes.	
4.	The Di	iesel Generating set should have AMF Control Panel facilitating	
	auto cl	hangeover facility in the event of commercial power supply and	
	have for	ollowing major components in it: -	
	0	Cubicle made out of 16 gauge CRCA sheet powder coated	
	0	Genset Controller (KG 934 or above)	
	0	Control Transformers of suitable capacity	
	0	Control MCB's of suitable capacity	
	0	Relay cards	
	0	Fuses of suitable capacity	
	0	Line Voltage Monitor	

0	Suitably Rated Auto Changeover System	
0]	Battery Charger SMPS type	

	Technical Specifications for 20 Kva Generator			
S.No	Required Minimum Specifications	Compliance (Yes /No)		
1.	Supply of Diesel Generating set having Prime Power Rating of 10 KVA			
	, at 1500 RPM, 0.8 lagging power factor , 50 Hz, 230/240 Volts ,Single			
	phase synchronous Alternator , load factor as 0.8 and consisting of			
	followings:			
	• 4 stroke Air cooled/ water cooled electric start capable of			
	developing 16 BHP (not exceeding under NTP conditions)			
	at 1500 RPM suitable for above output			
	• Specified alternator rated at 40 Degree Centigrade			
	conforming to BS 5514, BS 649, IS 10000, capable of taking			
	10% over loading for one hour after 12 hours of continuous			
	operation			
	• Synchronous alternator rated 12.5 kVA (Minimum) at 40			
	degree centigrade , 230/240 Volts at 1500 RPM, Single Phase,			
	50 Hz, AC supply with 0.8 lagging power factor. The			
	synchronous alternator have SPDP enclosure, brushless, self-			
	excited and self-regulated through AVR conforming to			
	IS:4722/BS2613 suitable for tropical conditions and with			
	class H insulation.			
2.	The Diesel Generating set should be fitted with following major			
	accessories:			
	• Both the engine and alternator shall be mounted on suitable			
	base frame made of folded CRCA/ HR sheet Steel			
	• Dry exhaust mainfold with residential type silencer.			

• 12V DC starting system comprising of starter motors, voltage regulator and arrangement for initial excitation complete with one Lead acid type automotive battery (88 AH capacity) • Acoustic enclosure with arrangement for fresh air intake for cooling of the engine & alternator, discharge of hot air in to the atmosphere as per design specifications of Manufacturer to ensure reliable performance . • Built in type (inside Acoustic enclosure) Fuel Tank having capacity of 65 liters approx. • The Diesel Generating Set should be supplied along with Genset Control Unit (GCU) and should have display & protection of various Electrical & Mechanical parameters. Apart from above, GCU should have alarm provisions against various protection like Lubricating Oil Pressure, High Cylinder Temperature, Over & Under voltage, Over & Under frequency, charging alternator failure etc. • The Diesel Generating set should be SNMP compatible for communication purposes 3. The Diesel Generating set should have AMF Control Panel facilitating auto changeover facility in the event of commercial power supply and have following major components in it: - • Cubicle made out of 16 gauge CRCA sheet powder coated • Genset Controller (KG 934 or above) • Control MCB's of suitable capacity • Relay cards				
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3. The Diesel Generating set should have AMF Control Panel facilitating auto changeover facility in the event of commercial power supply and have following major components in it: - • Cubicle made out of 16 gauge CRCA sheet powder coated • Genset Controller (KG 934 or above) • Control Transformers of suitable capacity • Control MCB's of suitable capacity • Relay cards • Fuses of suitable capacity		0	The Genset Control Unit (GCU) should be SNMP compatible	
auto changeover facility in the event of commercial power supply and have following major components in it: - O Cubicle made out of 16 gauge CRCA sheet powder coated O Genset Controller (KG 934 or above) O Control Transformers of suitable capacity O Control MCB's of suitable capacity O Relay cards O Fuses of suitable capacity			for communication purposes	
have following major components in it: - • Cubicle made out of 16 gauge CRCA sheet powder coated • Genset Controller (KG 934 or above) • Control Transformers of suitable capacity • Control MCB's of suitable capacity • Relay cards • Fuses of suitable capacity	3.	The Di	iesel Generating set should have AMF Control Panel facilitating	
• Cubicle made out of 16 gauge CRCA sheet powder coated • Genset Controller (KG 934 or above) • Control Transformers of suitable capacity • Control MCB's of suitable capacity • Relay cards • Fuses of suitable capacity		auto cl	hangeover facility in the event of commercial power supply and	
• Genset Controller (KG 934 or above) • Control Transformers of suitable capacity • Control MCB's of suitable capacity • Relay cards • Fuses of suitable capacity		have for	ollowing major components in it: -	
· Control Transformers of suitable capacity · Control MCB's of suitable capacity · Control MCB's of suitable capacity · Relay cards · Fuses of suitable capacity		0	Cubicle made out of 16 gauge CRCA sheet powder coated	
· Control Transformers of suitable capacity · Control MCB's of suitable capacity · Control MCB's of suitable capacity · Relay cards · Fuses of suitable capacity				
o Control MCB's of suitable capacity o Relay cards o Fuses of suitable capacity		0	Genset Controller (KG 934 or above)	
o Control MCB's of suitable capacity o Relay cards o Fuses of suitable capacity				
• Relay cards • Fuses of suitable capacity		0	Control Transformers of suitable capacity	
• Relay cards • Fuses of suitable capacity		0	Control MCB's of suitable capacity	
• Fuses of suitable capacity			~ ~	
		0	Relay cards	
			Euses of suitable capacity	
		0	i uses of suitable capacity	
• Line Voltage Monitor	<u> </u>	0	Line Voltage Monitor	

 Suitably Rated Auto Changeover System 	
 Battery Charger SMPS type 	

	Technical Specifications for 40 Kva Generator			
S.No	Required Minimum Specifications	Compliance (Yes /No)		
1.	Supply of Diesel Generating set having Prime Power Rating of 20			
	KVA , at 1500 RPM, 0.8 lagging power factor , 50 Hz, 230/240 Volts			
	,Single phase synchronous Alternator , load factor as 0.8 and			
	consisting of followings:			
	• 4 stroke Air cooled/ water cooled electric start capable of			
	developing 32 BHP (not exceeding under NTP conditions)			
	at 1500 RPM suitable for above output			
	• Specified alternator rated at 40 Degree Centigrade			
	conforming to BS 5514, BS 649, IS 10000, capable of taking			
	10% over loading for one hour after 12 hours of continuous			
	operation			
	• Synchronous alternator rated 25 kVA (Minimum) at 40			
	degree centigrade, 230/240 Volts at 1500 RPM, Single			
	Phase, 50 Hz, AC supply with 0.8 lagging power factor. The			
	synchronous alternator have SPDP enclosure, brushless, self-			
	excited and self-regulated through AVR conforming to IS:			
	4722/BS2613 suitable for tropical conditions and with class			
	H insulation.			
2.	The Diesel Generating set should be fitted with following major			
	accessories:			
	• Both the engine and alternator shall be mounted on suitable			
	base frame made of folded CRCA/ HR sheet Steel			
	• Dry exhaust mainfold with residential type silencer.			

	 12V DC starting system comprising of starter motors, voltage regulator and arrangement for initial excitation complete with one Lead acid type automotive battery (105 AH capacity) Acoustic enclosure with arrangement for fresh air intake for cooling of the engine & alternator, discharge of hot air in to the atmosphere as per design specifications of Manufacturer to ensure reliable performance . 	
	 Built in type (inside Acoustic enclosure) Fuel Tank having capacity of 65 liters approx. 	
	 The Diesel Generating Set should be supplied along with Genset Control Unit (GCU) and should have display & protection of various Electrical & Mechanical parameters. Apart from above, GCU should have alarm provisions against various protection like Lubricating Oil Pressure, High Cylinder Temperature, Over & Under voltage, Over & Under frequency, charging alternator failure etc. 	
	• The Genset Control Unit (GCU) should be SNMP compatible for communication purposes	
3.	The Diesel Generating set should have AMF Control Panel facilitating auto changeover facility in the event of commercial power supply and have following major components in it: - • Cubicle made out of 16 gauge CRCA sheet powder coated	
	 Genset Controller (KG 934 or above) 	
	 Control Transformers of suitable capacity Control MCB's of suitable capacity 	
	 Relay cards 	

• Fuses of suitable capacity	
 Line Voltage Monitor 	
 Suitably Rated Auto Changeover System 	
 Battery Charger SMPS type 	

	Technical Specifications for 50 Kva Generator			
S. No	Required Minimum Specifications	Compliance (Yes /No)		
1.	Supply of Diesel Generating set having Prime Power Rating of 30KVA , at 1500 RPM, 0.8 lagging power factor , 50 Hz, 230/240 Volts,Single phase synchronous Alternator , load factor as 0.8 andconsisting of followings:o4 stroke Air cooled/ water cooled electric start capable of developing 40 BHP (not exceeding under NTP conditions)			
	 at 1500 RPM suitable for above output Specified alternator rated at 40 Degree Centigrade conforming to BS 5514, BS 649, IS 10000, capable of taking 10% over loading for one hour after 12 hours of continuous operation 			
	 Synchronous alternator rated 35 kVA (Minimum) at 40 degree centigrade, 230/240 Volts at 1500 RPM, Single Phase, 50 Hz, AC supply with 0.8 lagging power factor. The synchronous alternator have SPDP enclosure, brushless, self-excited and self-regulated through AVR conforming to IS: 4722/BS2613 suitable for tropical conditions and with class H insulation. 			
2.	The Diesel Generating set should be fitted with following major accessories:			

	 Both the engine and alternator shall be mounted on suitable base frame made of folded CRCA/ HR sheet Steel 	
	• Dry exhaust mainfold with residential type silencer.	
	 12V DC starting system comprising of starter motors, voltage regulator and arrangement for initial excitation complete with one Lead acid type automotive battery (105 AH capacity) 	
	 Acoustic enclosure with arrangement for fresh air intake for cooling of the engine & alternator, discharge of hot air in to the atmosphere as per design specifications of Manufacturer to ensure reliable performance . 	
	• Built in type (inside Acoustic enclosure) Fuel Tank having capacity of 65 liters approx.	
	 The Diesel Generating Set should be supplied along with Genset Control Unit (GCU) and should have display & protection of various Electrical & Mechanical parameters. Apart from above, GCU should have alarm provisions against various protection like Lubricating Oil Pressure, High Cylinder Temperature, Over & Under voltage, Over & Under frequency, charging alternator failure etc. 	
	 The Genset Control Unit (GCU) should be SNMP compatible for communication purposes 	
3.	The Diesel Generating set should have AMF Control Panel facilitating auto changeover facility in the event of commercial power supply and have following major components in it: -	
	 Cubicle made out of 16 gauge CRCA sheet powder coated Genset Controller (KG 934 or above) 	
	• Control Transformers of suitable capacity	

0	Control MCB's of suitable capacity
0	Relay cards
0	Fuses of suitable capacity
0	Line Voltage Monitor
0	Suitably Rated Auto Changeover System
0	Battery Charger SMPS type

	Technical Specifications for 5 Kva Online UPS System(Standalone)					
Sl. No.	Parameter / Feature	Specification	Compliance (Yes /No)			
1	Technology	Rectifier & Inverter both with IGBT based DSP Processing Design, Double Conversion True On-line UPS. Cold Start & No Battery Start shall be possible				
2	Input Voltage &	120-280V AC ,Single Phase on full load & upto				
3	Range	80VAC for 50% load				
4	Input Frequency Range	50 Hz ± 10%				
5	Model Name & NumberkVA / kW	Make / Model / Part No to be specified by the vendor				
6	Input Phase	Single Phase with ground				
7	Input Power Factor	>=0.95 at full load				
8	Output	2 KVA / 1600 W				
9	Voltage	230 VAC				
10	Output Frequency regulation	Free running Mode 50Hz ± 0.5Hz				

	Technical Specifications for 5 Kva Online UPS System(Standalone)					
	Overall Efficiency					
11	(AC to AC) - Online	>90% (On Full R Load)				
	(Double Conversion)					
12	O/p Voltage Distortion	< 6% (Non-linear load)				
12	O/p voltage Distortion	< 3% (linear load)				
13	Output Waveform	Pure Sine wave				
14	Battery Backup	30 min on each UPS System				
15	Battery Type	Sealed lead maintenance free VRLA type				
16	Battery brand	Exide / Rocket / Relicell / Quanta / Amron				
17	VDC	48 VDC or more				
18	Battery Ratings / VAH	Min. 1980 VAH on each UPS System				
19		General				
20	Noise level	<55 dB @ 1 Meter				
21	Protection	IP 20				
22	Bypass	Automatic Bypass Switch				
23	DG Compatibility	UPS to be compatible with DG Set supply and				
23		mains supply				
24	Standard	USB port & Mini Slot with software for				
24	Standard	monitoring with SNMP connectivity				
		All necessary alarms & indications essential for				
25	Alarms & Indications	performance monitoring of UPS to be				
		incorporated.				
		Intelligent battery management shall be the				
26	Battery Management	integral part of S/w being supplied by the UPS				
		OEM. Remote battery test shall also be possible				
		Back-up time, Load, battery, Mode of operation,				
27	LCD Display(inbuilt)	Fault, KVA, KW, MIN, Battery Status in Bar on				
		display, Temp Info, Load Info				
		Two UPSs shall be Redundant by using Rack				
28	Redundant	Mountable Static Transfer Switch of min.				
		16Amp				
29	Manufacturer	QMS: As per ISO 9001: 2008				

Supply, Installation, Commissioning & Maintenance of Client Site Infrastructure for Department of Excise & Taxation, Govt. Of Punjab

Techr	Technical Specifications for 5 Kva Online UPS System(Standalone)	
	EMS: As per ISO 14001: 2004	
	OSHAS: As per ISO 18001: 2007	

	Technical Specifications for 10 Kva Online UPS System(Standalone)			
Sl. No.	Parameter / Feature	Specification	Compliance (Yes /No)	
1	Capacity (in kVA / kW)	5 kVA (4.5 kW); 1-Phase Input / 1-Phase Output ; Requires in Parallel Redundant Mode		
2	Technology and Capability	 a) True Online configuration with double conversion UPS b) Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>15kHz) c) Active Power Factor Correction (APFC) in converter to improve Input Power Factor > 0.99 d) Possibility of enhancing UPS capacity / redundancy by operating UPS in 1+1 Parallel Redundant Configuration(PRS). f)UPS should be designed at Rated output PF of 0.9 g) Cold Start & No Battery Start shall be possible 		
3	Model Name & NumberkVA / kW	Make / Model / Part No to be specified by the vendor		
4	Input facility -Phases / Wires	1-Phase / 2-Wire & Gnd (Phase & Neutral + Ground)		
5	Input Voltage Range	180 - 290V AC (On Full Load)		

	Technical Specific	ations for 10 Kva Online UPS System(S	tandalone)
6	Nominal Input Frequency	50 Hz	
7	Input Frequency Range	45 to 55 Hz	
8	Input Power Factor	> 0.99 on Full Load	
9	Input Current Harmonic Distortion (THDi)	< 6% on full resistive Load	
10	Generator Compatibility	Compatibility to genset supply required	
11	Input Protection (Thru	Should be provided at the input of the UPS	
	In-built 1P MCB)	suitable for the full rated capacity of the UPS	
12	Nominal Output voltage	230 VAC	
13	Output Voltage Regulation	±2%	-
14	Nominal Output Frequency	50 Hz	-
15	Output Frequency Regulation	+/- 0.05 Hz (Free Running / Self Clocked Mode)	
16	Output Wave Form	Pure sine wave	-
17	Output Voltage Distortion (THDu)	<= 2%	
18	Crest Factor	3 : 1 On Full Load (Minimum)	_
19	Output Short circuit Protection	Electronic / Fused	
20	Transfer Time (Mode of operation)	Nil from Mains mode to Battery Mode Nil from Battery Mode to Mains mode	
21	Transfer Time (Inverter to Bypass / Bypass to Inverter)	< 2 ms (Synchronized Mode)	

	Technical Specific	ations for 10 Kva Online UPS System(Standalone)
22	Automatic & Bi- directional static by-	Should be provided to take care of uninterrupted transfer of load from Inverter to bypass (under overload / fault conditions) & automatic retransfer
	pass (In-built)	from bypass to inverter (on removal of overload / fault conditions)
23	Overall Efficiency (AC to AC) - Online (Double Conversion)	> 90% (On Full R Load)
24	Measurements (On LCD)	Input: Voltage / Frequency ; Output: Voltage / frequency Battery: Remaining time / Voltage; Load: Percentage / kW
25	Fault Indication (On LCD)	Charger Failure; Battery Failed; Battery Low; Overload
26	Indications (LED)	AC indicator/Battery Mode of Operation / Bypass feeding the load / UPS Fault
27	Audible Alarms	Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short ckt fault beep/ Shutdown beep
28	Backup Required	30 Mins on each UPS
29	Battery Bank Voltage	192 V DC
30	Battery Bank Vah	Min. VAH 4900 with each UPS
31	Batteries Type	Sealed Maintenance Free (SMF) - 12V Cells
32	Battery Makes	Exide / Rocket / Relicell / Quanta / Amron
33	Number of Battery Banks	Maximum Two Banks in parallel
34	Battery recharge time (After complete discharge) to 90% capacity	10-12 hours (Min 4Amp or 10% charger capacity, whichever is higher, shall be available w.r.t design of OEM & its VDC / Ah). Also confirm the Ah of battery & charger capacity with model proposed

	Technical Specifica	ations for 10 Kva Online UPS System(Standalone)
35	Serial Communication RS232 Port (Option of USB Port should be available)	RS232 Port should be provided as standard in the UPS. However there should be provision for USB port also in the UPS
36	Interface to NMS (Network Management System) - To be quoted as option	SNMP Card for connecting the UPS to LAN thru Ethernet port & monitoring thru NMS should be available (The cost of SNMP Card / NMS software to be quoted separately)
37	Cold Start	UPS should start up On AC Supply (Mains) without DC Supply (Batteries) On DC Supply (Batteries) without AC Supply (Mains)
38	Automatic Restart	UPS should start up automatically on mains resumption after battery low shutdown
39	Operating Temperature	0 to 40 deg C
40	Storage Temperature	-15 to 50 deg C
41	Operating Humidity	0% ~ 95%RH (No Condensing)
42	Operating Altitude	2000 m.a.s.l (meters above sea level)
43	Type of Cooling	Forced Air
44	Noise Level	< 60 dbA at I meter distance
45	Form Factor	Rack & Tower mountable
46	Air Filters (mandatory)	UPS should have internal anticorrosion air filters for dust filtration
47	Manufacturer	QMS: As per ISO 9001: 2008 EMS: As per ISO 14001: 2004 OSHAS: As per ISO 18001: 2007

1	Technical Specifications for 20 Kva Online UPS System(Standalone)		
Sl. No.	Parameter / Feature	Specification	Compliance (Yes /No)
1	Capacity (in kVA /	10 kVA (9 kW); 1-Phase Input / 1-Phase Output ;	
	kW)	Requires in Parallel Redundant Mode	
		a) True Online configuration with double	
		conversion UPS	
		b) Microprocessor /DSP based control, using	
		IGBT devices and high switching frequency	
		PWM (>15kHz)	
	Tashnalagy and	c) Active Power Factor Correction (APFC) in	
2	Technology and	converter to improve Input Power Factor > 0.99	
	Capability	d) Possibility of enhancing UPS capacity /	
		redundancy by operating UPS in 1+1 Parallel	
		Redundant Configuration(PRS).	
		f)UPS should be designed at Rated output PF of	
		0.9 g) Cold Start & No Battery Start shall	
		be possible	
	Model Name &	Make / Model / Part No to be specified by the	
3	NumberkVA /	vendor	
	Input facility -Phases /	3-Phase / 2-Wire & Gnd (Phase & Neutral +	
4	Wires	Ground)	
5	Input Voltage Range	300V-470VAC	
6	Nominal Input	50 Hz	
	Frequency		
7	Input Frequency	45 to 55 Hz	
	Range		
8	Input Power Factor	> 0.99 on Full Load	

	Technical Specifica	tions for 20 Kva Online UPS System(St	andalone)
9	Input Current Harmonic Distortion (THDi)	< 6% on full resistive Load	
10	Generator Compatibility	Compatibility to genset supply required	
11	Input Protection (Thru In-built 1P MCB)	Should be provided at the input of the UPS suitable for the full rated capacity of the UPS	
12	Nominal Output voltage	230 VAC	
13	Output Voltage Regulation	±2%	-
14	Nominal Output Frequency	50 Hz	-
15	Output Frequency Regulation	+/- 0.05 Hz (Free Running / Self Clocked Mode)	
16	Output Wave Form	Pure sine wave	
17	Output Voltage Distortion (THDu)	<= 2%	
18	Crest Factor	3 : 1 On Full Load (Minimum)	
19	Output Short circuit Protection	Electronic / Fused	
20	Transfer Time (Mode	Nil from Mains mode to Battery Mode	
20	of operation)	Nil from Battery Mode to Mains mode	
21	Transfer Time (Inverter to Bypass / Bypass to Inverter)	< 2 ms (Synchronized Mode)	
22	Automatic & Bi- directional static by- pass (In-built)	Should be provided to take care of uninterrupted transfer of load from Inverter to bypass (under overload / fault conditions) & automatic retransfer from bypass to inverter (on removal of overload / fault conditions)	

	Technical Specifications for 20 Kva Online UPS System(Standalone)			
23	Overall Efficiency (AC to AC) - Online (Double Conversion)	> 90% (On Full R Load)		
24	Measurements (On LCD)	Input: Voltage / Frequency ; Output: Voltage / frequency Battery: Remaining time / Voltage; Load: Percentage / kW		
25	Fault Indication (On LCD)	Charger Failure; Battery Failed; Battery Low; Overload		
26	Indications (LED)	AC indicator/Battery Mode of Operation / Bypass feeding the load / UPS Fault		
27	Audible Alarms	Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short ckt fault beep/ Shutdown beep		
28	Backup Required	30 Mins with each UPS		
29	Battery Bank Voltage	240 V DC		
30	Battery Bank Min VAh	10000 with each UPS System		
31	Batteries Type	Sealed Maintenance Free (SMF) - 12V Cells		
32	Battery Makes	Exide / Rocket / Relicell / Quanta /Amron		
33	Number of Battery Banks	Maximum Two Banks in parallel, if required		
34	Battery recharge time (After complete discharge) to 90% capacity	10-12 hours (Min 4Amp or 10% charger capacity, whichever is higher, shall be available w.r.t design of OEM & its VDC / Ah). Also confirm the Ah of battery & charger capacity with model proposed		
35	Serial Communication RS232 Port (Option of USB Port should be available)	RS232 Port should be provided as standard in the UPS. However there should be provision for USB port also in the UPS		

	Technical Specifica	ntions for 20 Kva Online UPS System(Standalone)
36	Interface to NMS (Network Management System) - To be quoted as option	SNMP Card for connecting the UPS to LAN thru Ethernet port & monitoring thru NMS should be available (The cost of SNMP Card / NMS software to be quoted separately)
37	Cold Start	UPS should start up On AC Supply (Mains) without DC Supply (Batteries) On DC Supply (Batteries) without AC Supply (Mains)
38	Automatic Restart	UPS should start up automatically on mains resumption after battery low shutdown
39	Operating Temperature	0 to 40 deg C
40	Storage Temperature	-15 to 50 deg C
41	Operating Humidity	0% ~ 95%RH (No Condensing)
42	Operating Altitude	2000 m.a.s.l (meters above sea level)
43	Type of Cooling	Forced Air
44	Noise Level	< 56 dbA at I meter distance
45	Form Factor	Rack & Tower mountable
46	Air Filters (mandatory)	UPS should have internal anticorrosion air filters for dust filtration
47	Manufacturer	QMS: As per ISO 9001: 2008 EMS: As per ISO 14001: 2004 OSHAS: As per ISO 18001: 2007

	Technical Specifications for 25 KVA Online UPS System(Standalone)		
Sl. No.	Parameter / Feature	Specification	Compliance (Yes /No)
	Capacity (in kVA /	15 kVA (12 kW); 3-Phase Input / 3-Phase Output	
	kW)	; Requires in Parallel Redundant Mode	
1	Technology and Capability	 a) True Online configuration with double conversion UPS b) Microprocessor /DSP based control, using IGBT devices and high switching frequency PWM (>15kHz) c) Active Power Factor Correction (APFC) in converter to improve Input Power Factor > 0.99 d) Possibility of enhancing UPS capacity / redundancy by operating UPS in 1+1 Parallel Redundant Configuration(PRS). f)UPS should be designed at Rated output PF of 0.9 g) Cold Start & No Battery Start shall be possible 	
2	Model Name & NumberkVA / kW	Make / Model / Part No to be specified by the vendor	
2	Input facility -Phases /	3-Phase / 2-Wire & Gnd (Phase & Neutral +	
3	Wires	Ground)	
4	Input Voltage Range	300V-470VAC	
5	Nominal Input Frequency	50 Hz	
6	Input Frequency Range	45 to 55 Hz	
7	Input Power Factor	> 0.99 on Full Load	
8	Input Current Harmonic Distortion (THDi)	< 6% on full resistive Load	

	Technical Specifica	ntions for 25 KVA Online UPS System(S	Standalone)
9	Generator Compatibility	Compatibility to genset supply required	
10	Input Protection (Thru	Should be provided at the input of the UPS	
10	In-built 1P MCB)	suitable for the full rated capacity of the UPS	
11	Nominal Output voltage	230 VAC	
12	Output Voltage Regulation	±2%	-
13	Nominal Output Frequency	50 Hz	-
14	Output Frequency Regulation	+/- 0.05 Hz (Free Running / Self Clocked Mode)	
15	Output Wave Form	Pure sine wave	
16	Output Voltage Distortion (THDu)	<= 2%	
17	Crest Factor	3 : 1 On Full Load (Minimum)	
18	Output Short circuit Protection	Electronic / Fused	
19	Transfer Time (Mode	Nil from Mains mode to Battery Mode	
17	of operation)	Nil from Battery Mode to Mains mode	
	Transfer Time		
20	(Inverter to Bypass /	< 2 ms (Synchronized Mode)	
	Bypass to Inverter)		
		Should be provided to take care of uninterrupted	
	Automatic & Bi-	transfer of load from Inverter to bypass (under	
21	directional static by-	overload / fault conditions) & automatic retransfer	
	pass (In-built)	from bypass to inverter (on removal of overload /	
	Oreganili Efficience	fault conditions)	
22	Overall Efficiency	> 90% (On Full P L and)	
22	(AC to AC) - Online (Double Conversion)	> 90% (On Full R Load)	

	Technical Specifications for 25 KVA Online UPS System(Standalone)		
23	Measurements (On LCD)	Input: Voltage / Frequency ; Output: Voltage / frequency Battery: Remaining time / Voltage; Load: Percentage / kW	
24	Fault Indication (On LCD)	Charger Failure; Battery Failed; Battery Low; Overload	
25	Indications (LED)	AC indicator/Battery Mode of Operation / Bypass feeding the load / UPS Fault	
26	Audible Alarms	Battery Low beep / DC Fault beep/ UPS Overload beep/ o/p short ckt fault beep/ Shutdown beep	
27	Backup Required	30 Mins with each UPS	
28	Battery Bank Voltage	240 V DC	
29	Battery Bank Min VAh	15000 with each UPS System	
30	Batteries Type	Sealed Maintenance Free (SMF) - 12V Cells	
31	Battery Makes	Exide / Rocket / Relicell / Quanta / Amron	
32	Number of Battery Banks	Maximum Two Banks in parallel	
33	Battery recharge time (After complete discharge) to 90% capacity	10-12 hours (Min 10% charger capacity availablew.r.t design of OEM & its VDC / Ah). Alsoconfirm the Ah of battery & charger capacity withmodel proposed	
34	Serial Communication RS232 Port (Option of USB Port should be available)	RS232 Port should be provided as standard in the UPS. However there should be provision for USB port also in the UPS	
35	Interface to NMS (Network Management System) - To be quoted as option	SNMP Card for connecting the UPS to LAN thru Ethernet port & monitoring thru NMS should be available (The cost of SNMP Card / NMS software to be quoted separately)	

Technical Specifications for 25 KVA Online UPS System(Standalone)				
36	Cold Start	UPS should start up On AC Supply (Mains) without DC Supply (Batteries) On DC Supply (Batteries) without AC Supply (Mains)		
37	Automatic Restart	UPS should start up automatically on mains resumption after battery low shutdown		
38	Operating Temperature	0 to 40 deg C		
39	Storage Temperature	-15 to 50 deg C		
40	Operating Humidity	0% ~ 95%RH (No Condensing)		
41	Operating Altitude	2000 m.a.s.l (meters above sea level)	1	
42	Type of Cooling	Forced Air		
43	Noise Level	< 56 dbA at I meter distance		
44	Form Factor	Rack & Tower mountable		
45	Air Filters (mandatory)	UPS should have internal anticorrosion air filters for dust filtration		
46	Manufacturer	QMS: As per ISO 9001: 2008 EMS: As per ISO 14001: 2004 OSHAS: As per ISO 18001: 2007		

Gateway Zero-Day Security Requirements		
S.No.	Required Minimum Specifications	Compliance (Yes
5. 1 1 0.		/No)

Gateway Zero-Day Security Requirements			
	The Anti- APT appliance should be a purpose built on premise appliance		
1	based solution with integrated support for sandboxing. Cloud based solution		
	will not be accepted		
2	The hardware and software based solution should provide protection for all		
	incoming and outgoing web and email traffic from /to Internet		
3	The APT appliance should be able to handle min 4 Gbps incoming		
5	/outgoing traffic (throughput)		
4	Appliance should have minimum Redundant dual hot swappable 2x 2TB		
+	HDD configured in RAID1		
	The APT appliance should support at least 40 simultaneously running		
5	images for inspection of files and must be supported for at least 20,000		
	users		
	The Hypervisor used by sandboxing solution must not be an OEM solution		
6	such as from VMWare ,Hyper-V, Virtual Box, RHEV etc. however it		
	should be a custom Hypervisor purpose built for sandboxing requirement		
	The solution must support prepopulated LICENSED copies of Microsoft		
7	windows and office images through an agreement with Microsoft. There		
	should be no requirement for the customer to buy additional Microsoft		
	licences for sandboxing solution		
	The engine should detect API calls, file system changes, system registry,		
8	network connections, system processes, kernel code injection, system calls		
	and direct CPU interaction		
9	The solution should be able to detect ROP and other exploitation techniques		
9	(e.g. privilege escalation, directory traversal) by monitoring the CPU flow		
10	The solution should support sandboxing of file sizes between 2 KB to 50		
10	MB		
	The solution must utilize a Global Threat Intelligence feed from OEM		
11	regarding new malware profiles, vulnerability exploits, C&C call-back		
	destinations and obfuscation tactics etc.		

Supply, Installation, Commissioning & Maintenance of Client Site Infrastructure for Department of Excise & Taxation, Govt. Of Punjab

Gateway Zero-Day Security Requirements				
	The solution should have the inherent ability to detect multi-stage attacks.			
	For the purpose of detecting multi stage attacks the solution should include			
12	static analysis technologies like IPS, antivirus, anti-malware/anti bot			
12	however in an integrate mode with the solution. The bidder or SI may use			
	additional appliances(at max 2) for the solution but should be provided by			
	the same OEM in the solution			
	The solution should inspect the web sessions (HTTP and HTTPS both) to			
13	detect and notify the malicious web activity including malicious file			
15	downloads through the internet. Third Party/Separate appliance for SSL			
	offloading will not be accepted			
14	Solution should have an ability to remove all the active content and macros			
14	sending only a clean document to the end user			
15	The endpoint security requirements and Gateway zero day solutions must			
15	be managed by a single management			