

Request for Proposal for Selection of Software Development Agency (SDA) for Web Portal, VAT Support Modules, Migration of Application & Maintenance

For

Department of Excise and Taxation, Punjab

Excise and Taxation Technical Services Agency Improvement Trust Building, 3rd floor, Chhoti Baradari, Patiala Phones: 0175-2225191 e-mail: ceoettsa@gmail.com

Key Events & Dates

S. No.	Particular	Details
1.	Start date of issuance / sale of RFP document	20 th March, 2017
2.	Last date for Submission of Queries	27 th March, 2017 6:00 PM
3. Pre-Bid Conference		28 th March, 2017 3:00 PM
4.	Issue of Corrigendum	31 st March, 2017
5.	Last date and time for RFP Submission	10 th April, 2017 3:00 PM
6.	Date and time of opening of Pre-Qualification bids	10 th April, 2017 3:00 PM
7.	Date and time for opening of Technical bids	12 th April, 2017 3:00 PM
8.	Date and time for opening of Commercial bids & Award of Contract	18 th April, 2017 3:00 PM

Glossary

1	A&M	Approach & Methodology	
2	ATS	Annual Technical Support	
3	BCA	Bachelor of Computer Applications	
4	CCN	Change Control Notes	
5	CD	Compact Disc	
6	сотѕ	Commercially Off The Shelf	
7	CS	Computer Science	
8	CV	Curriculum Vitae	
9	CVC	Central Vigilance Commission	
10	DD	Demand Draft	
11	DR	Disaster Recovery	
12	EMD	Earnest Money Deposit	
13	ESH	Extender Service Hours (9:00 PM to 9:00 AM)	
14	GFR	General Financial Rules	
15	GIGW	Guidelines for Indian Government Websites	
16	GIS	Geographical Information System	
17	Gol	Government of India	
18	ICT	Information and Communication Technology	
19	INR	Indian National Rupee	
20	SDA	Software Development Agency	
21	Іт	Information Technology	
22	LD	Liquidated Damages	
23	LLP	Limited Liability Partnership	
24	LoA	Letter of Award	
25	Lol	Letter of Intent	
26	MCA	Master of Computer Applications	
27	MSA	Master Services Agreement	

28	0&M	Operations and Maintenance	
20	Uaivi	Operations and Maintenance	
29	OEM	Original Equipment Manufacturer	
30	PAN	Permanent Account Number	
31	PBG	Performance Bank Guarantee	
32	РВН	Primary Business Hours (9:00 AM to 9:00 PM)	
33	РоА	Power of Attorney	
34	РоС	Proof of Concept	
35	RFP	Request for Proposal	
36	RoC	Registrar of Companies	
37	SLA	Service Level Agreement	
38	SOW	Scope of Work	
39	ToR	Terms of Reference	
40	UAT	User Acceptance Test	

Table of Contents

Contents

		Selection of SDA for Web Portal, VAT Support & Migration of	••
1.1		Sheet	
1.2	•	uest for Proposal	
1.3		cture of the RFP	
1.4	Bacl	kground Information	
1.4.1	1	Basic Information	
1.4.2	2	Project Background	
1.4.3	3	Project Information	12
1.4.4	4	About the Department	13
1.4.	5	Overview of Functions & Services	14
1.5	Insti	ructions to the Bidders	16
1.5.3	1	General	16
1.5.2	2	Compliant Proposals / Completeness of Response	16
1.5.3	3	Pre-Bid Meeting & Clarifications	
1.5.4	4	Key Requirements of the Bid	
1.5.	5	Preparation and Submission of Proposal	20
1.5.0	6	Deviations	21
1.5.7	7	Evaluation Process	21
1.6	Crite	eria for Evaluation	23
1.6.3	1	Pre-Qualification (PQ) Criteria	23
1.6.2	2	Technical Evaluation Criteria	24
1.6.3	3	Scoring Model	24
1.6.4	4	Commercial Bid Evaluation/ Final Evaluation	27
1.7	Арр	ointment of Software Implementation Agency/Partner	
1.7.3	1	Award Criteria	
1.7.2	2	Right to Accept Any Proposal and To Reject Any or All Proposal(s)	28
1.7.3	3	Notification of Award	28
1.7.4	4	Performance Guarantee	

1.7	.5	Signing of Contract	
1.7	.6	Failure to Agree with the Terms and Conditions of the	RFP29
1.8	Sco	pe of Work	
1.8	1.8.1 COVIS Migration Erro		Error! Bookmark not defined.
1.8	.2	Maintenance of VAT 15	Error! Bookmark not defined.
1.8	.3	Development and Maintenance of Return Forms	Error! Bookmark not defined.
1.8	.4	Web Portal	
1.8	.5	Other Functional Requirements	
1.8	.6	Non Functional requirements	
1.8	.7	Application Architecture	
1.8	.8	Proposed Application Architecture:	
1.9	Acc	eptance Testing	
1.10	Оре	erations and Maintenance (AMC)	
1.1	0.1	Application and Software Management	
1.1	0.2	Database Administration and Troubleshooting	
1.1	0.3	Software Change & Version Control	
1.1	0.4	Maintain Configuration information	
1.1	0.5	Maintain System documentation	
1.1	0.6	Other Responsibilities	40
1.11	Кеу	Personnel	
1.12	Deli	iverables & Timelines	41
1.13	Рау	ment Schedule	
1.14	Ser	vice Level Agreement	46
1.1	4.1	Pre Implementation - Service Level Agreement	47
1.1	4.2	Operations & Maintenance Service Level Agreement	
1.1	4.3	Updating the Service Level Agreement	
1.15	Pen	alty and Liquidated Damages	50
1.1	5.1	Penalty	50
1.16	Ter	mination	50
1.1	6.1	Termination for Bankruptcy	50
1.1	6.2	Termination for Default	51
1.1	6.3	Termination for Convenience	51
1.17	Mir	imum Qualifications for the Manpower	53
1.18	.18 Fraud and Corrupt Practices		

	Apper	ndix I	: Pre-Qualification & Technical Bid Templates	58
	For	m 1:	Compliance Sheet for Pre-Qualification Proposal	59
	For	m 2:	Particulars of the Bidder	60
	For	m 3:	Bank Guarantee for Earnest Money Deposit	61
	For	m 4:	Compliance Sheet for Technical Proposal	63
	For	m 5:	Letter of Proposal	65
	For	m 6:	Project Citation Format	66
	For	m 7:	Proposed Solution	67
	For	m 7 /	A: Compliance to requirements	67
	For	m 7 I	B: Solution Proposed	68
	For	m 7 I	B: Bill of Material (Software)	68
	For	m 8:	Proposed Work Plan	69
	For	m 9:	Team Composition	70
	For	m 10	: Curriculum Vitae (CV) of Key Personnel	71
	For	m 11	: Deployment of Personnel	73
	For	m 12	: Deviations	74
	Apper	ndix I	I: Financial Proposal Template	76
	For	m 1:	Covering Letter	76
	For	m 2:	Financial Proposal	78
	For	m 2A	: Details of Financial Bid	78
	Apper	ndix I	II: Template for PBG & CCN	80
	For	m 1:	Performance Bank Guarantee	80
	For	m 2:	Change Control Notice (CCN) Format	82
2	Anr	nexu	re I	. 84
	2.1	Por	tal Requirements	84
	2.1.	1	CMS Portal	84
	2.1.	2	e-Payment of Taxes	84
	2.2	Ov	erview of COVIS application	85
	2.2.	1	COVIS Architecture	87
	2.3	Fur	nctional Requirement Matrix	87
	2.4	No	n Functional requirement Matrix	88
3	Anr	nexu	re II - Approach and Methodology	. 90
	3.1	Kic	koff	90
	3.2	Pro	ject Plan	90

3.3	Project Documentation9				
3.4	Desi	ign Software Solution	.91		
3.4.	1	System Study	.91		
3.4.	2	Solution design	.92		
3.4.	3	Solution Development	.93		
3.4.	4	Testing	.93		
3.4.	5	User Acceptance Testing	.94		
3.5	Acce	eptance Testing by Assessment Agency	.94		
3.6	6 Go- Live9				

1 RFP for Selection of SDA for Web Portal, VAT Support & Migration of Application & Maintenance

1.1 Fact Sheet

Clause Reference	Торіс	
<section 1.6.4=""></section>	The method of selection is: Least Cost (L1)	
<section 1.5.4.2=""></section>	RFP can be	
	Collected from the following address on or before 10 th April, 2017,	
	3:00 PM :	
	CEO ETTSA	
	Excise and Taxation Technical Services Agency	
	Improvement Trust Building, 3rd floor,	
	Chhoti Baradari, Patiala	
	Phones: 0175-2225191, 098149-16291	
	Fax: 0175-2220463	
	E-mail: ceoettsa1@punjab.gov.in, ceoettsa@gmail.com	
	by paying the document Fee of Rs. 10,000 by Demand Draft in favour	
	of CEO ETTSA and payable at Patiala from any of the scheduled	
	commercial bank	
	OR	
	Downloaded from http://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 1.5.4.3=""></section>	Earnest Money Deposit of amount Rs. 100,000 by Demand Draft in	
	favour of CEO ETTSA and payable at Patiala from any of the	
	nationalized Scheduled commercial Bank	
	OR	
	Bank Guarantee as mentioned in Appendix I- Form 3	
<section 1.5.3=""></section>	A pre bid meeting will be held on 28th Mar 2017 3:00 PM . 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: ceoettsa@gmail.com	
	All the queries should be received on or before 27th Mar 2017, 19:00 IST	
	All the queries should be received on or before 27th Mar 2017, 18:00 IST	
Continue 1 E E Di	either through post or email.	
<section 1.5.5.2=""></section>	Proposals should be submitted in English language only	

Clause Reference	Торіс		
<section 1.5.7.2=""></section>	Proposals must remain valid 180 days after the submission date, i.e., unti		
	10 th Oct, 2017		
<section 1.5.4.4=""></section>	Bidders must submit		
	• 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 1.5.5.3=""></section>	The proposal submission address is:		
	Excise and Taxation Technical Services Agency		
	Improvement Trust Building, 3rd floor,		
	Chhoti Baradari, Patiala		
	Phones: 0175-2225191, 094171-18346		
<pre><section 1.5.5.3=""> Proposals must be submitted no later than the following date</section></pre>			
	10 th April 2017, 15:00 IST		

1.2 Request for Proposal

Tenders are invited from eligible, reputed, qualified Software Development Agencies with sound technical and financial capabilities for design, development, implementation and maintenance of Software Modules as detailed out in the Scope of Work under Section 1.8 of this RFP Document. This invitation to bid is open to all Bidders meeting the minimum eligibility criteria as mentioned in Section 1.6.1 of this RFP Document.

The intent of this RFP is to invite proposals from the agencies/ Firms/Companies (also referred to as 'bidders') to enable the Excise & Taxation Technical Services Agency (here in after referred to as "ETTSA") to select a Software Development Agency for implementation & maintenance of Web Portal, VAT Support Modules, Migration of their existing COVIS Application for Department of Excise and Taxation, Government of Punjab.

ETTSA is the issuing authority for this Request for Proposal

1.3 Structure of the RFP

This Request for Proposal (RFP) document for the project of Implementation & Maintenance of Web Portal, VAT Support Modules & Migration of their existing COVIS Application comprise of the following.

- i. 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 implementation partner
 - c. Payment schedule
 - d. Commercial bid and other formats
- ii. Functional and Technical Requirements of the project. The contents of the document broadly cover the following areas:
 - a. About the project and its objectives
 - b. Scope of work
 - c. Functional and Technical requirements
 - d. Project Schedule
 - e. Service levels for the implementation partner

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 Software developer & Implementation partner of ETTSA.

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.

1.4 Background Information

1.4.1 Basic Information

- a) ETTSA invites responses ("Tenders") to this Request for Proposals ("RFP") from Software Development Agencies/Partners ("Bidders") for the provision of RFP for "Implementation & Maintenance of Web Portal, VAT Support Modules, Migration of their existing COVIS Application" as described in Section 1.8 of this RFP, "Scope of Work" ("the Software Solution and Services").
- b) Any contract that may result from this Government procurement competition will be issued for a term of **4 months** ("the Term") subject to Go-Live is happening as per the Timelines defined in this RFP. Vendor has to provide support for 1 years after Go-Live is declared.
- c) The ETTSA reserves the right to extend the support term for a period or periods of up to 1 year with a maximum of 2 years such extension or extensions on the same terms and conditions, subject to the ETTSA's obligations at law.
- d) Proposals must be received not later than time, date and venue mentioned in the Fact Sheet. Proposals that are received late WILL NOT be considered in this procurement process.

1.4.2 Project Background

With a view to improve operational efficiency and transparency and to enhance tax-payers' convenience, Excise & Taxation Department, Punjab, implemented a scheme for computerization of Sales Tax procedures in July, 2000. To implement this, the Government created an autonomous body, Excise and Taxation Technical Services Agency (ETTSA). It is a Society registered under the Societies Act. It now oversees the task of computerization of the Excise and Taxation Department, Punjab.

In this project all the offices of the Department had been linked through leased-lines and V-SAT to a Data Center at Patiala. The department is now in process of implementing PAWAN as their bandwidth backbone for all their IT systems across the State. The PAWAN is expected to be operational by Feb 2017.

1.4.3 Project Information

In this era of Technology, new up-gradations are coming every day and department wants to migrate the existing IT solution for VAT Administration & Excise – "COVIS" already running in Oracle 10 g Suite and 11g database for their existing VAT cases/dealers to the latest update of Oracle Suite and Oracle Database.

Along with the above scope, department wants to accept online Returns from dealers of state to bring transparency and create convenience for them. For this department wants to get a department portal to be developed and different e-Services hosted on the same.

1.4.4 About the Department

The Department of Excise and Taxation, Government of Punjab, looks after the activities of Excise, Value Added Tax and other commercial taxes in the state. The Department is organized with its Head Office at Patiala. There are 22 districts in Punjab for which there are about 100 offices at all levels. The Excise & Taxation Department is one of the major revenue collecting agencies in the State. The revenue is collected in the shape of various levies such as Taxes, Excise duties and fees etc., under the various Taxation and Excise Acts enforced by the department. It plays an important role in the fiscal structure of the State.

This Department is vested with powers under different Excise and Taxation Acts. The details of the Act administered by the Department are as follows:

EXCISE ACTS

- 1. The Punjab Excise Act, 1914
- 2. The East Punjab Molasses (Control) Act, (XI of 1942)
- 3. The Opium Act (1 to 1878)
- 4. Medicinal and Toilet Preparations (Excise Duties) Act (XIV of 1955)

TAXATION ACTS

- 1. The Punjab Value Added Tax Act, 2005
- 2. The Central Sales Tax Act, 1956
- 3. The Punjab Entertainment Duty Act, 1955
- 4. The Punjab Entertainment Tax (Cinematograph Shows) Act 1954

1.4.5 Overview of Functions & Services

Currently, the department performs the following broad functions:

- Registration of business: The department registers dealers and issues registration certificate. It also records amendments to business details of dealers as notified by the latter. The Department is the sole authority for suspending or cancellation of the registration certificate due to various reasons. The Department also issues Licenses for trading/ handling material coming under the purview of State Excise Duty, and carry out their periodic renewal/ or cancellation of License.
- **Collection of tax**: The department adds to the revenue of the state by collecting commercial tax/ other applicable Fees and charges from the citizens.
- Tax Returns: The department fixes the periodicity of the returns to be filed by the dealers of the State. A defaulter list is generated for monitoring the dealers that have not filed returns and reminders are sent to them. It also verifies the input tax rebate being claimed by the dealer by checking the sales and purchase bills.
- **Refund of tax**: The Department identifies cases related to refund and processes them subsequently for adjustment of refund or its payment with interest.
- **Control of statutory forms**: The department issues statutory forms to dealers and tracks the same. It also maintains the details of forms returned or lost by the dealers.
- Accounting of tax: The department maintains proper records of assets of dealers their financial investment, partner's details and their premises, bank account details and their stake in the business. It maintains records of refunds / adjustments with the returns filled by the dealers. The details of the collection of audited tax unpaid by the dealers are also maintained.
- Recovery: A demand notice is generated and tax is collected from dealers in the form of arrears. In cases of non-payment of tax by the dealers during the prescribed period the department resorts to coercive methods such as arrest or warrant of attachment and sale of movable property, auction of the assets of the defaulter etc. to recover the due amount.
- Audit and Assessment: The department is responsible for auditing and assessment of its registered dealers. Assessment and audit of dealers is done on the basis of the returns filed and allied material available on the dealer. Thereafter, demand notice is generated and the same is monitored for compliance. Refund orders are generated on a case to case basis. The payments are adjusted against any other demands or payment of refund after adjustment is made.
- Investigation: Department is responsible for carrying out Investigation of all suspicious cases or any other case as it thinks fit. Case for investigation can originate from Field information,

or audit/ Assessment data or any other source and will be carried out to find out the anomaly between the declared value and the actual value of transactions, if any, of the concerned dealer.

- Issue and Control of Permits/ Indents/ Pass: The Department manages the issue and control of Permits/ Indents and Passes to concerned License holders for any type of material coming under the purview of State Excise Duty
- Appeals: This department also deals with appeals filed by the dealers and various court cases in which department is a party. Every Dealer or citizen can raise an Appeal if he/ she is not agreeing to the notice or order given by the Excise and Taxation Department. After an appeal is received by the department it is heard and the application is either accepted or rejected.

1.5 Instructions to the Bidders

1.5.1 General

- a) 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.
- b) 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
- c) 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.
- d) This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

1.5.2 Compliant Proposals / Completeness of Response

- a) 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.
- b) Failure to comply with the requirements of this paragraph may render the Proposal noncompliant 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.

1.5.3 Pre-Bid Meeting & Clarifications

1.5.3.1 **Pre-bid Conference**

a. ETTSA shall hold a pre-bid meeting with the prospective Bidders on 28th March, 2017 3:00
 PM 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 below on or before **27th March, 2017 6:00 PM**

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.qov.in, ceoettsa@gmail.com</u>

c. The queries should necessarily be submitted in the following format. No other format will be accepted:

S. No.	RFP Document Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of clarification
1.			
2.			
3.			
4.			
5.			
6.			

d. ETTSA shall not be responsible for ensuring that the Bidders' queries have been received by them. Any requests for clarifications post the indicated date and time may not be entertained by the ETTSA.

1.5.3.2 **Responses to Pre-Bid Queries and Issue of Corrigendum**

- a. The Nodal Officer notified by the ETTSA will endeavour 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.
- b. 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.
- c. The Corrigendum (if any) & clarifications to the queries from all Bidders will be posted on the <u>http://dgrpunjab.gov.in/</u> and emailed to all participants of the pre-bid conference.
- d. Any such corrigendum shall be deemed to be incorporated into this RFP.
- e. 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.

1.5.4 Key Requirements of the Bid

1.5.4.1 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.

1.5.4.2 **RFP Document Fees**

- a. 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 favour of **CEO ETTSA**, payable at **Patiala** from any scheduled commercial banks.
- b. 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.

1.5.4.3 Earnest Money Deposit (EMD)

- a. Bidders shall submit, along with their Bids, EMD of **INR 1,00,000** only, in the form of a Demand Draft OR Bank Guarantee (in the format specified in Appendix I: Form 3) issued by any nationalized bank in favour of CEO ETTSA, payable at Patiala, and should be valid for **7 months** from the due date of the tender/RFP.
- EMD of all unsuccessful Bidders would be refunded by ETTSA within 60 days 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 Appendix III.
- c. The EMD amount is interest free and will be refundable to the unsuccessful Bidders without any accrued interest on it.
- d. The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- e. The EMD may be forfeited:
 - If a Bidder withdraws its bid during the period of bid validity.
 - In case of a successful Bidder, if the Bidder fails to sign the contract in accordance with this RFP.
 - If any of the documents submitted by the firm is found fraudulent, fake or forged.

1.5.4.4 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
 - Technical Proposal (1 Original + 1 Copies + 1 CD) in second envelope
 - Commercial Proposal (1 Original) in third envelope
- 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 SDA for implementation & maintenance of Web Portal, VAT Support Modules, Migration of their existing COVIS Application for Department of Excise and Taxation, Government of Punjab Modules" - < 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 initialled by the person (or persons) who sign(s) the proposals.
- h. All pages of the bid including the duplicate copies, shall be initialled 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.

1.5.4.5 Authentication of Bids

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

1.5.5 Preparation and Submission of Proposal

1.5.5.1 **Proposal Preparation Costs**

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.

1.5.5.2 *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.

1.5.5.3 Venue & Deadline for Submission of Proposals

Proposals, in its complete form in all respects as specified in the RFP, must be submitted to ETTSA at the address specified below:

Addressed To	CEO, ETTSA	
Name	Excise and Taxation Technical Services Agency	
Address	Improvement Trust Building, 3rd floor,	
	Chhoti Baradari, Patiala	
Telephone	0175-2225191, 094171-18346	
Fax Nos.	0175-2220463	
Email ids	<pre>ceoettsa1@punjab.gov.in, ceoettsa@gmail.com</pre>	
Last Date & Time of Submission	10th April, 2017 3:00 PM	

1.5.5.4 Late Bids

- a. Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall be returned unopened.
- b. The bids submitted in by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
- c. ETTSA shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained.

d. ETTSA reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

1.5.6 Deviations

The Bidder may provide deviation to the contents of the RFP document in the format prescribed in Appendix I - Form 12.

The Proposal evaluation committee would evaluate and classify them as "material deviation" or "non material deviation". In case of material deviation, the committee may decide to "monetize" the value of the deviations, which will be added to the price bid submitted by the Bidder OR declare the bid as non-responsive.

The Bidders would be informed in writing on the committee's decision on the deviation, prior to the announcement of technical scores. The Bidders would not be allowed to withdraw the deviations at this stage. The Bidder would not be allowed to withdraw the deviations submitted without the prior consent of the ETTSA.

In case of non-material deviations, the deviations would form a part of the proposal & contract.

1.5.7 Evaluation Process

- a. ETTSA will constitute a Proposal Evaluation Committee to evaluate the responses of the Bidders
- b. 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.
- c. 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.
- d. The Proposal Evaluation Committee can seek clarifications on the proposals submitted by Bidders at any moment of time.
- e. The Proposal Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.
- f. Each of the responses shall be evaluated as per the criterions and requirements specified in this RFP.

1.5.7.1 Tender Opening

The Proposals submitted up to **15:00 IST on 10th April, 2017** will be opened at **15:00 IST on 10th 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.

1.5.7.2 Tender Validity

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

1.5.7.3 Tender Evaluation

- a. Initial Bid scrutiny will be held and incomplete details as given below will be treated as non-responsive. If Proposals;
 - Are not submitted in as specified in the RFP document
 - Received without the Letter of Authorization (Power of Attorney)
 - Are found with suppression of details
 - With incomplete information, subjective, conditional offers and partial offers submitted
 - Submitted without the documents requested in the checklist
 - Have non-compliance of any of the clauses stipulated in the RFP
 - With lesser validity period
- b. 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.

1.6 Criteria for Evaluation

1.6.1 Pre-Qualification (PQ) Criteria

S. No.	Basic	Specific Requirements	Documents Required
5. 140.	Requirement	openne nequilements	botuments nequired
1	Sales Turnover in Software Development	Annual Sales Turnover generated from services related to System development during each of the last three financial years (as per the last published Balance sheets), should be at least Rs. 1 Crore. This turnover should be on account of Software Development, Implementation and maintenance (i.e. revenue should be on account of Software system integration, application development and implementation or associated maintenance or implementation services, COTIS/packaged software, maintenance etc.) only.	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor
2	Technical Capability	Systems Implementation agency must have successfully completed at least the following numbers of Software Systems Development and Implementation engagement(s) of value specified herein : - <u>One project</u> of similar nature more than amount of Rs. 50 Lakhs; OR - <u>Two projects</u> of similar nature more than amount of 30 Lakhs; OR - <u>Three projects</u> of similar nature more than amount of 25 Lakhs "Similar nature" is defined as to work related to software development, enhancement and / or maintenance for any Government department or PSU in India.	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
3	Certifications	Bidder should hold a valid ISO 9001/CMMI-3 certificates or higher as on date of submission of bid. The Bidder should be a Oracle GOLD Partner.	Copy of certificate
4	Consortiums	Consortium of any kind is not allowed.	A Self Certified letter
5	Legal Entity	Should be Company registered under Companies Act, 1956 or a partnership firm registered under LLP Act, 2008 Registered with the Service Tax Authorities Should have been operating for the last three years.	 Certificates of incorporation Registration Certificates
6	Blacklisting	The bidder should not have been blacklisted by any Government Agency in India or be under a declaration of ineligibility for fraudulent or corrupt practices or inefficient/ineffective performance as on date of submission of bid.	A Self Certified letter

1.6.2 Technical Evaluation Criteria

Bidders who meet the pre-qualifications/eligibility requirements would be considered as qualified to move to the next stage of Technical and Financial evaluations.

1.6.3 Scoring Model

TECHNICAL EVALUATION

S. No	Criteria	Basis for Evaluation	Max Marks	Supporting
	COMPANY PROFILE		5	
1.	Average turnover from Software System Integration, Development and/or Implementation Services Work in last 3 years (Turnover in INR Crores)	Greater than or equal to 2 cr. : 5 marks Greater than 1.5 cr. and less than equal 2 cr. : 4 marks Greater than or equal to 1 cr. and less than equal 1.5 cr. : 3 marks	5	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor
	RELEVANT STRENGTHS		20	
2.	Experience in Software Application Development and maintenance in India for Private Sector to be demonstrated in a maximum of 5 engagements of value more than INR 8 Lakhs. The work order should have been issued within the last 5 years, as on 31 st Mar 2017 .	When the No. is: equal to or more than 5 projects: 10 marks equal to 4 projects: 8 marks equal to 3 projects: 6 marks equal to 2 projects: 4 marks Less than 2 projects: 0 marks	10	For Completed Projects: Completion Certificates from the client AND Work Order For Ongoing Projects more than 10 months: Work Order + Phase Completion Certificate & Feedback from the client
3.	Experience of Software Application Development and maintenance in Indian Government department / PSU, to be demonstrated in a maximum of 5 engagements of value INR 8 Lakhs or above that have either been completed or an ongoing project where deliverable or milestone has been successfully met relevant to the experience.	When No. is : equal to or more than 5 projects: 10 marks equal to 4 projects: 8 marks equal to 3 projects: 6 marks equal to 2 projects: 4 marks	10	For Completed Projects: Completion Certificates from the client AND Work Order For Ongoing Projects more than 10 months:

S. No	Criteria	Basis for Evaluation	Max Marks	Supporting
	The work order should have been issued within the the last 5 years, as on 31st Mar 2017 .	Less than 2 projects: 0 marks		Work Order + Phase Completion Certificate & Feedback from the client
	SOLUTION PROPOSED, APPROACH & METHODOLOGY		20	
4.	Solution development methodology proposed for the demonstration of understanding of Software development and implementation, which would be required to deliver the service required by ETTSA	Qualitative assessment based on Demonstration of understanding of the Department's requirements through providing: - Solution proposed and its components, - Technologies used - Scale of implementation, - Learning on Issues - Challenges likely to be encountered Mitigation proposed - Client references	10	A note
5.	Approach and Methodology to perform the work in this assignment	 Qualitative assessment based on Formal approach to Project Management Usage of specific tools Work-plan to meet the project timelines Formal approach for training Approach to Go- live and transition from existing to new system Assumptions and Key asks / support required from ETTSA 	5	A note
6.	Project work break down structure	Qualitative assessment based on timelines, resource assignment, dependencies and milestones	5	A note
	RESOURCE PROFILE		35	
7.	 Project Manager Education - B.Tech and MBA is a must At least 10 years of experience as project manager. Past experience in managing software development related projects / Java based application up-gradations or migration is a must. 	Relevant Experience as Project ManagerMore than 12 years = 3 Marks 10 to 12 Years = 2 Marks Less 10 Years = 0 MarkRelevant Certification PMP/Prince2 = 2 Marks No Certification = 0 MarksExperience of working with at least 2 state / central	10	

S.	Criteria	Basis for Evaluation	Max	Supporting
No	Relevant Certification is preferred (PMP / Prince2 etc.)	government department as Project Manager 2 Govt. Departments = 2 Marks Less than 2 Govt. Departments = 0 Marks	Marks	
		More than 5 Software Development Projects as Project Manager = 3 Marks		
		3 to 5 Projects = 2 Mark		
		Less than 3 Projects = 0 Marks		
8.	Subject Matter Expert At least 7 years of Commercial Taxation experience with State / Central Govt. Departments	Taxation Experience with State /Central Government Departments	10	
	Must have been involved/worked as a SME in projects related to computerization of Commercial Taxes.	More than 10 years = 10 Marks 7 to 10 Years of = 5 Marks Less than 7 Years = 0 Mark		
9.	Senior Architect		5	
	B.E/B.Tech/MCA is a must At least 8 years' experience in Architect Roles in designing software / application. Experience with Commercial Taxation	More than 5 Projects as Senior Architect/ Architect = 5 Marks 3 to 5 Projects = 3 Mark Less than 3 Projects = 0 Marks		
	is preferred.			
10.	TOGAF certified is preferred.	Relevant Experience in	5	
10.	Quality Analyst	application testing and handling quality assurance tools	5	
	B.E/B.Tech/MCA is a must	More than 10 Years = 3 Marks 8 years to 10 Years = 2 Marks		
	At least 8 years of experience in application testing and handling quality assurance tools.	Less than 8 = 0 Mark 2 or more Projects as Quality Analyst = 2 Marks		
		Less than 2 Projects = 0 Marks		
11.	Database Administrator B.E/B.Tech/MCA is a must	Relevant Experience as DBA More than 10 Years = 3 Marks 7 years to 10 = 2 Marks	5	
	At least 7 years of experience as a database administrator.	Less than 7 = 0 Mark More than 3 Projects as DBA = 1 Marks		

S. No	Criteria	Basis for Evaluation	Max Marks	Supporting
	Relevant Database Certification is preferred.	Less than 3 Projects = 0 Marks		
		DBA certification		
		Yes= 1 Mark else 0 Marks		
	TECHNICAL PRESENTATION		20	
12.	Technical Presentation 30 minutes	Technical presentation to demonstrate the bidders proposal to the client including approach and methodology, software/platform/ technology to be used, Number of software licenses required etc.	20	

Bidders, whose bids are responsive, based on minimum qualification criteria / documents as in Pre-Qualification Criteria and score at least **70%** in the (given) defined scoring mechanism would be considered technically qualified. Price Bids of such technically qualified Bidders alone shall further be opened.

1.6.4 Commercial Bid Evaluation/ Final Evaluation

- a. The Financial Bids of technically qualified Bidders will be opened on the prescribed date in the presence of Bidder representatives.
- b. The Bidder, who has submitted the lowest Commercial bid, shall be selected as the L1 and shall be called for further process leading to the award of the assignment
- c. Only fixed price financial bids indicating total price for all the deliverables and services specified in this bid document will be considered.
- d. The bid price will include all taxes and levies and shall be in Indian Rupees.
- e. Any conditional bid would be rejected
- f. Errors & Rectification: 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".

1.7 Appointment of Software Implementation Agency/Partner

1.7.1 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.

1.7.2 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 ETTSA action.

1.7.3 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 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.

The ETTSA shall reserve the right to negotiate with the Bidder(s) whose proposal has been ranked best value bid on the basis of Technical and Commercial Evaluation to the proposed Project, as per the guidance issued by CVC.

On this basis the draft contract agreement would be finalized for award & signing.

1.7.4 Performance Guarantee

The ETTSA will require the selected Bidder to submit the performance Guarantee of **10%** of the Total Contract value quoted by him in commercial proposal. 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 SDA fails to discharge their contractual obligations during the period or ETTSA incurs any loss due to SDA's negligence in carrying out the project implementation as per the agreed terms & conditions.

1.7.5 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, corrigendum and the proposal of the Bidder between ETTSA and the successful Bidder. The Draft Legal Agreement is provided as a separate document as a template.

1.7.6 Failure to Agree with the Terms and Conditions of the 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 ETTSA may award the contract to the next best value Bidder or call for new proposals from the interested Bidders.

In such a case, the ETTSA shall invoke the PBG of the most responsive Bidder.

1.8 Scope of Work

The following outlines the key areas of the scope of work for this project.

1.8.1 Web Portal

Web portal is to be developed by SDA for providing information and transaction facilities to general public and registered dealers. The selected SDA shall be responsible for developing e-Services also (for the scope mentioned in section 1.8) on web portal to enable dealers to carry out certain activities online. The website should contains various informative pages (trade circulars, acts, rules, statistics etc.) and should meet the GIGW.

ETTSA is considering to avail the services of PayGov India of NSDL Database Management Limited recommended by Department of Electronics and Information Technology for payment gateway, so the SDA would be required to integrate the departmental portal with PayGov India or any other payment gateway, as required by ETTSA.

The details regarding the e-Services required to be developed by SDA are detailed in Section 2.1 Annexure I of this RFP. The SDA need to host the web portal and maintain it for the period of 1 year which can be further extended for another 1 year up to maximum of 5 years.

1.8.2 Development and Maintenance of Return Forms

SDA needs to develop VAT 16, VAT 16A, VAT 16B and VAT 20 Returns for which the smart excel forms are already available. These smart forms accepts input from the dealer and save that information into an XML file. Vendor need to develop modules to get these XML uploaded and extract the data from these XML and save the same in proper table structure which can be used to derive reports at later stage.

SDA also has to develop ITC profile also. In this SDA has to pull data from the returns filed by dealers and ITC claimed by him from other dealers and any mismatches in the purchases claimed by the dealer and sales shown by the other dealer from which purchases are shown.

The SDA need to host the developed modules/ forms and maintain them for the period of 1 year which can be further extended for another 1 year up to maximum of 5 years.

1.8.3 COVIS Migration

In this era of Technology, new up-gradations are coming every day and department wants to migrate the existing IT solution for VAT Administration & Excise – "COVIS" already running in Oracle 10 g Suite and 11g database for their existing VAT cases/dealers to the latest update of Oracle Suite and Oracle Database.

The current deployment of COVIS is Three Tier Architecture using Citrix on Windows Server which needs to be completely web enabled using 12C Weblogic Server on LINUX environment. Any desktop/ Laptop machine to be used to launch application using any common browser.

The SDA would be required to close all the security issues lying in the COVIS application. The details of security issues can be referred in Annexure III of this RFP.

The SDA would be required to migrate the existing COVIS application as per details mentioned above. SDA is free to conduct study of existing application "COVIS", if required before the preparation of response to this RFP. For details of COVIS application and Database please refer **Annexure I Section 2.2**

1.8.4 Maintenance of VAT 15

ETTSA has got VAT 15 module developed by some external agency to accept the returns of dealers all over state. The selected SDA needs to maintain the same for the period of 1 year which can be further extended for another 1 year up to maximum of 5 years.

1.8.5 Other Functional Requirements

- I. The web-portal should also support integration of e-Services like e-Return, e-Payment and excise related applications.
- II. The web portal should be developed in accordance with the Government of India guidelines for portal development
- III. The Portal Solution should be based on Open Standards.
- IV. Portal should support Security protocols for secure authentication.
- V. Portal should support cross-browser running (IE, Mozilla, Firefox, Chrome etc.).
- VI. The Portal should be bilingual (English and Punjabi languages).
- VII. The web portal should support email and SMS integration.
- VIII. Dealers should be provided with a username and password to login on Portal to access e-Services.
 - IX. The web portal should support web services and APIs.
 - X. The web portal functions should support integration/ creation of Mobile Applications.

1.8.6 Non Functional requirements

Non Functional Requirements of the system are the properties that emerge from the combination of all functional parts or modules. These emergent properties or system qualities can drive architectural decisions and can be used to validate the architecture. The system should meet the below minimum non-functional requirements:

Measurable

a. Compliance to specifications like Response Time, Processing time and Availability time, performance of various resources should be possible to be monitored and measured. SDA to submit these reports to the Department as and when required.

Recoverability

a. System should not allow deletion of any data by any user.

Traceability

a. System should be able to trace all error messages on committed data, Failed Log-in attempts, unauthorized access, failed transactions etc.

Flexibility

- a. System should be modular in approach, loosely coupled and allow for ease of change in business rules, flow-control and other such components without any impact on other applications.
- b. System should provide a flexible data structure which can manage increase in data size commensurate with the growth of transactions.

Scalability

a. System should be able to be to scale (processing capacity, storage etc.) to support higher volume/rate of transactions dynamically, without any loss of service time.

Portability Requirements

a. System should be independent of the core Hardware infrastructure and accessories used.

Maintainability Requirements

- a. System should have a clean object oriented design allowing good maintainability.
- b. System should have Header information of user and time of change for each development or change in code lines.
- c. System should have Header tag information of SRS no., Technical Requirement Specs no. etc. for all changes in code.
- d. System should have provision of extensive documentation for both user and system developer.

Interface Requirements

- a. System should be accessible to users on the internet with just a web browser.
- b. Easy to use and visually attractive interface for the external and internal users especially keeping in mind the low IT literacy of various internal and external users.
- c. System should be able to track the user ID details of the user before allowing access to interface.
- d. User Interface screens to be self-explanatory with interactive and user friendly messages and error handling procedures.
- e. System should be able to interact with other internal and external applications running on different platforms/infrastructure.
- f. System should be able to accept pre-formatted transactional data from other systems

- g. System should be able to provide transactional data or reports for download or for dispatch to other systems.
- h. System should be able to receive and transmit data in all standard forms (MS Office formats, CSV file, XML etc.).

Documentation Requirements

- a. To facilitate the usage of the new system, SDA should provide detailed user manual, online help and downloadable tutorials for all types of users for the web-portal.
- b. SDA should also provide Troubleshooting guide explaining all possible error scenarios and their resolution (Problem Solving Manual). The same should be available online as well as in the form of a downloadable tutorial. SDA should be updating the Troubleshooting Guide at a regular interval during the software development and maintenance stage.
- c. SDA should be able to provide the complete system development guide detailing each stage, and all changes there upon (Developer Manual).
- d. SDA should be able to give the detailed documentation about the interfaces and the linking between various modules.

Reliability Requirements

a. System uptime should not be less than 99.95%. This excludes the planned / scheduled downtime.

Security Requirements

- a. System should be able to encrypt the sensitive data while storing in the database.
- b. System should be able to prevent any unauthorized access to data.
- c. System should be able to ensure the integrity of the system from accidental or malicious damage to data.
- d. System should be able to check the authenticity of the data entering the system.
- e. Back up of all System data should be carried out at the frequency decided at time of SRS preparation and the backup copies stored in a secure location.
- f. System should not allow the simultaneous log in of the same user in more than one systems.
- g. System should be able to generate a report on all "Authorization Failure" messages per user ID.
- h. System should be able to automatically log out if the user ID is idle for a sufficiently long time (30 mins).
- i. System should be able to monitor the IP address of the system, and match it with the user ID of the transaction.
- j. Retention periods, archival policies and read-only restrictions must be strictly enforceable on all logs maintained in the system.

Look and Feel of Application developed

- a. The modules developed by the SDA should look similar to the existing COVIS application being used by the department.
- b. The application should be simple to use.
- c. The screens should be simple to understand.

Note: *Please refer Annexure I for details of existing application (COVIS).*

Other Key Requirements

a. It will be sole responsibility of the selected SDA to ensure uptime of the application.

1.8.7 Application Architecture

It has been proposed that the application modules designed and developed for the department must follow some best practice and industry standards. In order to achieve the high level of stability and robustness of the application, the system development life cycle must be carried out using the industry standard best practices and adopting the security constraints for access and control rights. The various modules should have a common Exception Manager to handle any kind of exception arising due to internal/ external factors.

Similarly the modules of the application are to be supported by the Session and Transaction Manager for the completeness of the request and response of the client request. The system should have a module exclusively to record the activities/ create the log of activities happening within the system/application to avoid any kind of irregularities within the system by any User/Application.

1.8.8 Proposed Application Architecture:

An indicative 3-tier architecture (also referred to as multi-tier or N-tier architecture) has been proposed for the Web Portal Solution.

The entire processing should take place in n-tier architecture:

- i. **Front-end software (Presentation tier)** SDA need to develop Presentation Layer of Web Portal to provide services to Taxpayers. The design should be simple to understand and operate.
- ii. **Business Process / Service Layer (Logic tier)** All the business logics/ rules to be written in this layer that will determine how data can be created, displayed, stored or changed.
- iii. Database Layer (Data tier) This layer is responsible for the manipulation and storage of data. The data tier includes the data persistence mechanisms (database servers, file shares, etc.) and the data access layer that encapsulates the persistence mechanisms and exposes the data.

1.8.8.1 High Level Design (HLD)

Once the SRS are approved, the SDA shall complete the High Level Designing and all HLD documents of all the functionalities, integration with existing application and external application. The SDA shall prepare the HLD and have it reviewed and approved by ETTSA. State Nodal Office will sign off on the HLD documents based on the advice of the Consultant.

1.8.8.2 Detailed (Low Level) Design (LLD)

The LLD shall interpret the approved HLD to help application development and shall include detailed service descriptions and specifications, application logic (including "pseudo code") and UI design (screen design and navigation). The preparation of test cases will also be completed during this stage. The SDA shall have the design documents reviewed and approved by the ETTSA. ETTSA will sign off on the LLD documents based on the advice of Consultant.

1.8.8.3 Solution Development

- I. The SDA will ensure that the development of the overall solution will be as per the SRS finalized with the ETTSA.
- II. A standard methodology shall be adopted for software engineering. Any future requirements like change in processes or any modification in the application will also need to be taken into account at the time of developing the Software.
- III. Requirement of any software license or any other component to meet the functional and technical requirements would be fully borne by SDA at no additional cost to the ETTSA. All these licenses shall be procured in the name of ETTSA by SDA. SDA will mention the number of software licenses required in its technical bid along with details of software proposed/ required.
- IV. The selected SDA shall be responsible for enabling all the functionalities as defined in the overview of Functional Requirements. These requirements provide brief on the functional requirements for various modules of the solution, and the processes that needs to be enabled by the system.
- V. The SDA will perform unit testing and integration testing of the developed software.
- VI. SDA will provide the rights to developed code after QA to ETTSA
- VII. It is envisaged that selected SDA shall set up separate environment at ETTSA premises for the ETTSA or any other Agency nominated by the ETTSA, to perform UAT.

1.8.8.4 **Test Plan**

Once the SRS is approved and design is started, the SDA shall prepare all necessary Test Plans (including test cases), i.e., plans for Acceptance Testing. Test cases for Initial and Final User Acceptance Testing shall be developed in collaboration with domain experts identified at the nodal agency. Initial and Final User Acceptance Testing shall involve Test Case development, Unit Testing, Integration and System Testing, Functional testing of Application, Performance testing of the Application including measurement of all Service Levels as mentioned in this RFP and finally SDA shall also carryout Load/ Stress testing. The SDA will submit the test plans and test result reports to the state nodal agency for comprehensive verification and approval.

1.8.8.5 Adherence to Open Source Standard

The solution must be designed following open standards, to the extent feasible and in line with overall system requirements set out in this RFP, in order to provide for good interoperability with multiple platforms and avoid any technology or technology provider lock-in.

1.8.8.6 Compliance with Industry Standards

In addition to above, the proposed solution has to be based on and compliant with industry standards (their latest versions as on date) wherever applicable. This will apply to all the aspects of solution including but not limited to design, development, security, installation, and testing. There are many standards that are summarized below. However the list below is for reference purposes only and is not to be considered as exhaustive.

- i. Portal development W3C specifications
- ii. Information access/transfer protocols SOAP, HTTP/HTTPS
- iii. Photograph JPEG (minimum resolution of 640 x 480 pixels)
- iv. Scanned documents TIFF (Resolution of 600 X 600 dpi)
- v. Latest HTML standards

1.8.8.7 Specification

- i. Project Documentation IEEE/ISO specifications for documentation
- ii. While developing an application in response to this RFP, the SDA shall adhere to all applicable standards published by:
 - Department of Electronics and Information Technology, Government of India as updated from time to time. The latest version of the standards may be found at <u>https://egovstandards.gov.in</u>
 - National Informatics Corporation The latest version of the standards may be found at web.guidelines.gov.in/

1.8.8.8 Go-Live

- I. **Rolled Out:** The individual modules will be rolled out State wide in a phase wise manner after successful completion of UAT of each module.
- II. All requisite hardware for production environment will be provided by ETTSA whereas to manage application and database related all activities on those servers will be responsibility of the SDA.
- III. SDA will Set up and configure the Production environment
- IV. SDA will migrate the whole COVIS application to Oracle latest version software procured by ETTSA.
- V. **Go Live:** Go-Live is the Successful roll out of all modules and web portal in whole State, with all functionalities achieved, zero defects (from the test cases signed off by ETTSA), Assessment of the modules done by ETTSA or Assessment Agency as nominated by ETTSA and Go-live signoff received from ETTSA.
- VI. SDA will prepare a detailed operations and management plan and resource plan. ETTSA will approve operations and management plan and resource plan. The development team shall hand over the entire applications to the operation team.
- VII. The SDA will be required to submit a Go-Live report, including compliance to all actions mentioned in Go-Live plan for approval from ETTSA.
- VIII. SDA will provide additional resources as required by ETTSA to be deployed at onsite to perform day to day changes/ Modification/ Additions in the COVIS application

desired by department. Payment for the resources will be made on quarterly basis based on the unit prices quoted in Commercials upon submission of Invoice by SDA.

1.9 Acceptance Testing

ETTSA will get the solution verified & validated independently by the Assessment Agency. The primary goal of Acceptance Testing 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
- Localisation compliance review
- Availability of the project Services in the defined locations
- Security
- Manageability
- Project Documentation (Design, development, configuration, training and administration manuals etc.)

As part of Acceptance testing, performed through an Assessment Agency shall review all aspects of project development and implementation covering software development and implementation, including the processes relating to:

- Design of solution architecture, design of other related/required applications, coding, testing, business process description, documentation, version control, change management, security, service oriented architecture
- Interoperability, scalability, availability, performance with respect to defined requirements, and compliance with all the technical and functional requirements of the RFP and the agreement.

ETTSA will establish appropriate processes for notifying the selected SDA of any shortcomings from defined requirements at the earliest instance after noticing the same to enable the selected SDA to take corrective action. All gaps identified shall be addressed by the SDA immediately prior to Go-live 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.

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:

Functional Requirements Review

The solution developed/customized by selected Bidder shall be reviewed and verified by the Assessment Agency against the Functional Requirements signed-off between the ETTSA and the selected Bidder. All gaps, identified shall be addressed by the SDA immediately prior to Go-live of the solution. One of the key inputs for this testing shall be the traceability matrix to be developed by the SDA for the solution. The acceptance testing w.r.t. the functional requirements may be performed by

the Assessment Agency as well as the select internal department users (User Acceptance Testing) and system has to satisfy both Assessment Agency testing and internal user acceptance testing, upon which the system shall go-live.

For conducting the User Acceptance Testing, ETTSA/ The Department shall identify the employees from respective divisions, who shall be responsible for day-to-day operations of the functions automated through the project. The system, during the functional requirements review, shall necessarily satisfy the user acceptance testing process.

Localisation Compliance Review

A Assessment Agency supports shall perform the Localisation Compliance Review to verify the bilingual/multilingual architecture design of the application with input/saved/output data as per localisation guidelines and the latest UNICODE standard (refer Annexure I).

Security Review

The software developed/customized shall be assessed by the Assessment Agency from a security and controls perspective. Such assessment "may" also include the IT infrastructure deployed in connection with the software 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 at least the following activities.

- Assessment of authentication mechanism provided in the application /components/modules
- Assessment of data encryption mechanisms implemented for the solution
- Assessment of data access privileges, retention periods and archival mechanisms
- Server and Application security features incorporated etc.

Project Documentation

The Assessment Agency shall review the project documents developed by the selected Bidder including requirements, design, source code, installation, training and administration manuals, version control etc.

Any issues/gaps identified by the Agency, in any of the above areas, shall be addressed to the complete satisfaction of the Department.

1.10 Operations and Maintenance (AMC)

1.10.1 Application and Software Management

The selected SDA shall be responsible for the day to day maintenance of the applications for the entire period of Contract of 1 year after the date of commissioning. For achieving the same, there is no mandate to deploy resources at onsite whereas the operations should be smooth to resolve issues/ bugs/ suggestions, if any. During this phase, the selected SDA will be responsible for smooth Operations and Maintenance Services for all modules developed as part of this RFP along with Form VAT 15 for the period of 1 year of O&M from the date of Go-Live covering the following:

I. Resolve any bugs reported by the Department/ ETTSA or dealers or any other user.

- II. Resolve usage issues.
- III. Resolve performance and other related issues, tweaking and tuning on regular basis.
- IV. Resolve application access related problems.
- V. Creation, customization, updating of reports as and when required.
- VI. Optimization of stored procedures.
- VII. Bug fixing, ensuring smooth access of application from / through relevant mode.
- VIII. Management of database like addition/deletion of tables/columns, uploading of data, generation and analysis of reports, transaction logs monitoring.
 - IX. SDA is free to provide best solutions/practices to increase the performance/ efficiency/ optimization of application.
 - X. Close Coordination with ETTSA IT team for smooth and timely application execution
 - XI. Closure of issues arising out of Security Assessment done by assessment agency.
- XII. Application and database backups

1.10.2 Database Administration and Troubleshooting

Undertake end-to-end management of database on an on-going basis to facilitate smooth functioning and optimum utilization including regular database backup and periodical testing of backup data, conducting configuration review to tune database, maintaining the necessary documentation and managing schemes to database schema, disk space, user roles, and storage.

1.10.3 Software Change & Version Control

All planned changes to application systems 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

SDA shall define the Software Change Management & Version control process and obtain approval for the same from ETTSA. For any changes to the software, SDA has to prepare detailed documentation including proposed changes, impact to the system in terms of functional outcomes/additional features added to the system etc. SDA shall obtain approval from ETTSA for all the proposed changes before implementation of the same into production environment and such documentation is subject to review at the end of each quarter of operations & maintenance support.

1.10.4 Maintain Configuration information

Maintain version control and configuration information for application software and any system documentation.

1.10.5 Maintain System documentation

Maintain and update documentation of the software system. SDA shall ensure that:

- I. Source code is documented
- II. Functional specifications are documented
- III. Application documentation is updated to reflect on-going maintenance and enhancements including SRS.
- IV. User manuals & training manuals are updated to reflect on-going changes/ enhancements.
- V. Standard practices are adopted & followed for version control and management.

1.10.6 Other Responsibilities

- I. Undertake reactive maintenance (any corrective action, maintenance activity that is required post the occurrence of an incident) that is intended to troubleshoot the system with sufficient teams
- II. Application and Database backups and patch management

Following are the minimum deliverables for the entire O&M phase

- I. Issue tracker reports
- II. Monthly Activities and Status Reports

1.11 Key Personnel

As defined in the Section 1.6.3, following are the key personnel for the project.

- Project Manager
- Subject Matter Expert
- System Architect
- Quality Assurance Manager
- Database Administrator

The SDA to ensure that there is no change in the above key personnel throughout the duration of this contract. Any change on account of medical incapacity, resignation etc., which is beyond the control of SDA has to be communicated in writing to ETTSA and approved.

The SDA has to mandatory deploy (either Onsite or Offshore) Project Manager as well as Subject Matter Expert until the project Go-Live. In case of offshore deployment, PM/ SME should be available at client location for any important meetings scheduled to discuss progress/ issues in the project. However, Project Manager will be required to coordinate all the activities with client for entire duration of the project/contract.

In addition to above, SDA is required to provide additional resources at onsite as required by ETTSA for day to day changes/ modifications/ additions to be carried out at onsite. SDA to also provide unit man month rate of all the resources stated in his technical proposal including Senior Software Engineer, Database Administrator, Server Administrator and Project Manager in their Commercial Bid.

Details of minimum manpower qualification is provided in section 1.17

1.12 Deliverables & Timelines

A project module would be considered successfully rolled out when all activities and deliverables pertaining to that module (as detailed below) have been approved by ETTSA.

S.No.	Project Milestones	Required Activities	Deliverables	Completi on Timeline				
1	Project Kick Off	High level project plan for all components	Deliverable High level project plan including Go-live plan of all Modules and Migration as per the defined scope	T* + 1 Week				
WEB PO	WEB PORTAL							

S.No.	Project Milestones SRS Signoff for Web	Required Activities Deliverables Preparation of SRS Deliverable		Completi on Timeline T + 1
	Portal		System Requirement Specifications Document	Week
2	Development of Web Portal	 Software Development Preparation of Test Strategy & Test Plan Preparation of Test Cases Perform Unit Testing Perform Integration Testing Preparation of Requirement Traceability matrix 	 Deliverable High Level Design Document Low Level Design Document Requirement Traceability Matrix Test strategy and Test Plan Functional & Nonfunctional Test cases. 	T + 3 Weeks
3	UAT Sign off of Web Portal	 Setup Test environment Preparation of Test Data setup Execute Test Cases & document results Report the bugs Bug fixing Regression Testing Update Traceability Matrix Error correction & retesting 	 Deliverable UAT Test Plan UAT Test Results Bug reports Regression test results Updated traceability matrix UAT Closure Report 	T + 4 Weeks
4	Rollout of Web Portal	Perform Statewide roll out	Deliverable Web Portal Roll out Sign off	T + 5 Weeks
RETURN	FORMS			
5	SRS Signoff for Return Forms Requirement	Preparation of SRS	Deliverable System Requirement Specifications Document	T + 3 Week

S.No.	Project Milestones	Required Activities	Deliverables	Completi
				on
				Timeline
6	Development of Return Forms	 Software Development Preparation of Test Strategy & Test Plan 	 Deliverable High Level Design Document 	T + 10 Weeks
		 Preparation of Test Cases Perform Unit Testing Perform Integration Testing Preparation of Requirement Traceability matrix 	 Low Level Design Document Requirement Traceability Matrix Test strategy and Test Plan Functional & Nonfunctional Test cases. 	
7	UAT Sign off of Return Forms	 Setup Test environment Preparation of Test Data setup Execute Test Cases & document results Report the bugs Bug fixing Regression Testing Update Traceability Matrix Error correction & retesting 	 Deliverable UAT Test Plan UAT Test Results Bug reports Regression test results Updated traceability matrix UAT Closure Report 	T + 12 Weeks
8	Rollout of Return Forms	Perform Statewide roll out	Deliverable Return Forms Roll out Sign off	T + 13 Weeks
COVIS M	IGRATION			
9	Migration Planning	 Identification of Migration requirements Migration Strategy and Methodology 	Deliverable Migration Strategy and Methodology	T + 12 weeks
10	Migration Assessment	Migration PreparationMigrationQuality Assessment	 Deliverable Migration Quality Assessment Report 	T + 17 weeks
11	Migration Sign off	Testing of Application on new Environment	Deliverable Testing Report	T + 18 weeks
GO LIVE	& INTIATE OPERATIONS &	MAINTAINENCE (O&M) PHASE	E	
12	Assessment of Modules by ETTSA or Agency nominated by ETTSA	Assessment of Modules	Deliverable Assessment report	T + 16 weeks

S.No.	Project Milestones	Required Activities Deliverables	Completi on Timeline
13	Go-Live	 Submit Go-live compliance report. Conduct post-implementation review/ audit Detailed Operations and Maintenance plan with resource details. Prepare Lessons Learned Report Closure of issues identified in Assessment by ETTSA/ nominated Agency Submit Go-live and Deliverable 12 a) Operation and Maintenance Plan Deployment Plan Five Year product evolution & resource plan 	T + 18 weeks

S.No.	Project Milestones	Required Activities	Deliverables	Completi
				on
				Timeline
15	Operations &	Regular Updating of the	Deliverable 13	Next 1
	Maintenance	department web portal	a) Issue tracker reports	year post
		as per directions of	b) Monthly Activities and	Go live
		ETTSA	Status Reports	phase
		• Software maintenance,	c) Application Availability	
		including preventive	Reports	
		maintenance and	d) SLA compliance reports	
		troubleshooting		
		problems reported		
		User support to		
		department staff and		
		officers		
		Making the applications		
		compatible with all the		
		major browsers, whenever a new version		
		is introduced		
		 Software support for 		
		new features to be		
		developed or		
		modifications in the		
		Portal.		
		 Suggest and implement 		
		new features on the		
		applications keeping		
		user's convenience in		
		mind.		
		Database administration		
		and trouble-shooting		
		 Maintaining system 		
		documentation		
		Source code		
		• User manual & Training		
		manuals		
		Update SRS		
		 Review meetings with 		
		Senior management of		
		the SDA - at least once in		
		a month		
		Closure of issues arising		
		out of Security		
		Assessment.		

*T is the date of award of Contract to the successful SDA.

Note: If there is any change in the sequence of development of modules / timelines, mutual written consent of both SDA as well as ETTSA will be required.

1.13 Payment Schedule

The payments shall be released post acceptance of the submitted all deliverables for respective project phases as mentioned in section 1.12 above.

Every attempt will be made to make timely payments after acceptance of relevant documentation submitted for respective project phases as mentioned in section 1.12 above and calculation of penalty applicable as per Section 1.14

S. No	Milestone	Payment %		
1.	State wide Rollout of Web Portal	20% of Total Contract Value		
2.	State wide Rollout of Return Module	15% of Total Contract Value		
3.	Completion of Migration of COVIS after Quality Assessment 15% of Total Contract Value			
4.	Assessment by ETTSA / Nominated Agency	15% of Total Contract Value		
5.	Go Live	15% of Total Contract Value		
6.	Operation & Maintenance	20% of Total Contract Value equated quarterly for 4 quarters		

1.14 Service Level Agreement

1.14.1 Pre Implementation - Service Level Agreement

	Service metric	Baseline	Low Performan		ce	Basis of
S.N.	parameters	Metric	Penalty	Metric	Penalty	Measurement
					1% Penalty of Payment due	The delay will be measured from T + 5. The max
		On or before		Delay of every	for the milestone (Refer	penalty is capped at 10% of Payment due for the
		Timeline (T* +		1 Week after T	Payment Schedule) for delay	milestone. Beyond T + 15 weeks, it will be
1.	Rollout of Web Portal	5 weeks)	No Penalty	+ 5	of each week	considered as breach of contract.
					1% Penalty of Payment due	The delay will be measured from T + 13. The max
		On or before		Delay of every	for the milestone (Refer	penalty is capped at 10% of Payment due for the
	Rollout of Return	Timeline (T* +		1 Week after T	Payment Schedule) for delay	milestone. Beyond T + 23 weeks, it will be
2.	Forms	13 weeks)	No Penalty	+ 13	of each week	considered as breach of contract.
					1% Penalty of Payment due	The delay will be measured from T + 17. The max
		Within		Delay of every	for the milestone (Refer	penalty is capped at 10% of Payment due for the
		Timeline (T* +		1 Week after T	Payment Schedule) for delay	milestone. Beyond T + 27 weeks, it will be
3.	COVIS Migration	17 weeks)	No Penalty	+ 17	of each week	considered as breach of contract.
					1% Penalty of Payment due	The delay will be measured from T + 18. The max
		On or before		Delay of every	for the milestone (Refer	penalty is capped at 10% of Payment due for the
		Timeline (T* +		1 Week after T	Payment Schedule) for delay	milestone. Beyond T + 28 weeks, it will be
4.	Go-Live	18 weeks)	No Penalty	+ 18	of each week	considered as breach of contract.

*T = Date of Award of Contract

1.14.2 Operations & Maintenance Service Level Agreement

Service Level Agreement

		Baseline		Low Performance		Poor Performance		Basis of
S.N.	Service metric parameters	Metric	Points	Metric	Points	Metric	Points	Measurement
								Time will be
								calculated based on
				> 1 and				ticket logging date
	Closure of Critical priority calls (Incidents /			<= 2				and time to closure
1.	Service Requests)	< 1 day	40	days	30	> 2 days	0	date and time
								Time will be
								calculated based on
				> 3 and				ticket logging date
	Closure of Medium priority calls (Incidents /			<= 7				and time to closure
2.	Service Requests)	< 3 days	30	days	20	> 7 days	0	date and time
								Time will be
								calculated based on
				> 7 and				ticket logging date
	Closure of Low priority calls (Incidents / Service			<= 15		> 15		and time to closure
3.	Requests)	< 7 days	30	days	20	days	0	date and time

1.14.3 Updating the Service Level Agreement

- I. Any and all changes to the agreement will be initiated in writing between the ETTSA and the SDA. The service levels in this agreement are considered to be standard for the ETTSA and will only be modified if both parties agree to an appended set of terms and conditions.
- II. This Service Level Agreement is not a fixed document to be produced once and used forever. Instead, it must be re-evaluated and updated as the work environment changes. As technology changes, the services and systems covered by this Agreement will change. New areas of responsibility must be documented.
- III. This document will be reviewed and revised annually. Changes to the Service Level Agreement may be required at other times to include new systems, change in operating hours, etc.

All points assigned on the basis of SLAs defined for successful Implementation Bidder's performance in a particular quarter will be computed by adding the points of **Operations & Maintenance Service Level Agreement** from the matrix given above and will then be accumulated to arrive at final score for a particular quarter. This score will be divided by 100 to arrive at the percentage (%) on basis of which penalty will be calculated as per Penalty section in this RFP.

Illustration: If the Successful Bidder is able to achieve all the baseline performance levels in a quarter he will have a credit score of 100 for that particular quarter and hence he will be eligible for full quarterly payment.

S. No.	SLA Terms	Description
1.	Critical priority calls (Incidents /	Critical bugs / issues – Bugs / issues on web portal /
	Service Requests)	application affecting most of the intended users. E.g.
		Clearance of ICC form or Declaration of ICC form.
2.	Medium priority calls (Incidents /	Bugs in Back Office or Portal which is in one particular
	Service Requests)	functionality of module and does not stop complete flow
		and effects not more than 100 users
3.	Low priority Incidents / Service	Bugs in Back Office or Portal which is in one particular
	Requests	functionality of module and does not stop complete flow
		and effects not more than 10 users

1.15 Penalty and Liquidated Damages

1.15.1 Penalty

In case SLA (Detailed in Section 1.14) is not met as required by this RFP, respective penalty would be imposed by deducting a certain amount as applicable from the payment due to implementation SDA for the respective deliverable or period as per the scheme suggested in this RFP.

Penalty Chart

S.No.	Parameter	Penalty
1.	Credit total of quarter (as mentioned in section 1.14.2 of this RFP) is >=95%	0% of Quarterly Payment
2.	Credit total of quarter (as mentioned in section 1.14.2 of this RFP) >= 90% and < 95%	2% of Quarterly Payment
3.	Credit total of quarter (as mentioned in section 1.14.2 of this RFP) >=85% and < 90%	5% of Quarterly Payment
4.	Credit total of quarter (as mentioned in section 1.14.2 of this RFP) >= 80% and < 85%	10% of Quarterly Payment
5.	Credit total of quarter (as mentioned in section 1.14.2 of this RFP) is <80%	15% of Quarterly Payment

In case of continuous unsatisfied performance of SDA (Penalty of 15% for 3 continuous quarters), ETTSA reserves the right for termination of the contract.

Further, failure to meet any obligation under this project as defined in the agreement or agreed with ETTSA in writing, ETTSA reserves right to impose a penalty from INR 10,000 to INR 50,000 per obligation depending upon the gravity of default.

1.16 Termination

1.16.1 Termination for Bankruptcy

- I. ETTSA may serve written notice on SDA at any time to terminate the Agreement with immediate effect in the event of a reasonable apprehension of bankruptcy of the SDA.
- II. SDA shall in the event of an apprehension of bankruptcy immediately inform ETTSA, well in advance (at least 4 months) about such a development.

1.16.2 Termination for Default

- I. ETTSA reserves the right to terminate the contract in case SDA gets blacklisted by the Government of Punjab, or any other Ministry of Government of India or any of their agencies during the course of this project on account of corrupt or fraudulent practice or if the SDA is penalized in a tax evasion case or convicted for any offence by any court of Law.
- II. If at any stage of tendering process or during the currency of the Contract, any suppression / falsification of information with respect to any of the conditions in the RFP comes to the knowledge of ETTSA, ETTSA shall have the right to reject the bid or terminate the contract, as the case may be, without any compensation to the SDA.
- III. In the event that ETTSA or any of its nominated agencies reasonably believes that the SDA is in breach of its obligations under this Agreement, ETTSA may terminate this Agreement upon written notice of not less than 30 days to the other. Any notice served pursuant to this Article shall give reasonable details of the breach, which includes but is not limited to the following:
 - a. If there is breach which translates into default in providing services by the SDA as per any SLA and this Agreement, continuously for more than three payment periods and penalty of 15% of quarterly payment, then ETTSA or any of its nominated agencies will serve a thirty days' notice for curing this material breach. In case the material breach continues after the notice period, ETTSA will have the option to terminate the Agreement. ETTSA would further have the right to encash the Performance Bank Guarantee. A notice of at least 30 days to be given in any case of termination.
 - b. Because time is the essence of the contract, in case, for reasons prima facie attributable to the SDA, if the penalty cap of 10% is exhausted because of delay in project 'Go-Live', ETTSA may terminate this Agreement after affording a reasonable opportunity to the SDA to explain the circumstances leading to such a delay. Further, ETTSA may also invoke the Performance Guarantee of the SDA.

1.16.3 Termination for Convenience

- I. ETTSA, by written notice sent to the SDA, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for its convenience and the SDA will be given 3 months before termination of contract takes effect.
- II. On termination of the Agreement for any reason, the SLAs shall automatically terminate forthwith and ETTSA will decide the appropriate course of action.

Effects of Termination

I. In the event of ETTSA, terminating the Agreement for its convenience, the SDA will be paid the amount due to it for the services rendered. The compensation will be decided in accordance with the Terms of Payment Schedule including other aspects such as cost of selection of alternate service provider, penalties, pro-rata payments etc. Upon termination of the Agreement for any reason, the Parties will comply with the Exit Management Schedule.

1.17 Minimum Qualifications for the Manpower

Manpower	Minimum Qualifications (illustrative)
Project Manager	Minimum Education: MCA/ MBA & B.Tech / B.E. from a reputed institute
	Total Exp: At least 10 yrs.
	 Languages known (Read, Write and Speak): Hindi, English
	Should have operating knowledge of Software technologies and development
	methodologies
	 Prior project management experience of at least 5 years of handling such large projects
	 Excellent writing, communication, time management and multi-tasking skills
Programmer	• MCA / B.Tech / BE (IT or CS) / Certified DBA with minimum of 5 years of work
_	experience with 2 years or more as a DBA for an IT project.
	• At least 3 years of experience of working on proposed ERP / COTS solution.
System Analyst	• MCA / B.Tech / BE (IT or CS) / GNIIT, BCA with minimum 3 years of experience
	in support role for an IT project
	Adequately skilled on the software application platforms proposed for the
	project
	 Experience of System integration and software deployment
	Experience in software applications support etc.
Database	 MCA / B.Tech / BE (IT or CS) / Certified DBA with minimum of 5 years of work
Administrator	experience with 2 years or more as a DBA for an IT project.
	• Experience in database activities like instance tuning, schema management,
	space management, backup and recovery, disaster recovery, data replication,
	database refresh etc.
Data Entry	• Adequate computer skills and knowledge of application modules like DMS etc.
Operator	Rewrite content and update it
	• Must have good typing speed (at least 6000 key depressions per hour)
	Should have good knowledge of MS office.
	• At least 4 to 5 months experience in data entry.
	 Should be comfortable in spoken and written English and <local language=""></local>
	• Accurately enter data from Hard Copies; maintain productivity and consistency;
	ensure quality; deliver on deadlines.
	 Candidate must be willing to learn & work under pressure.
Senior Software	B.E/B.Tech/MCA least 8 year experience as Application developer. Working
Engineer	knowledge of Java required. Prior experience on finance/Account related project is
-	must. Knowledge of PL/SQL is a must.
System	B.E/B.Tech/MCA, Should have done 2 or more projects involving Data Center and
, Administrator/ DC	Should have relevant certifications and at least 3 years of work experience.
Expert	

1.18 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, the 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 Software Development 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 Software Development Agency 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 Software Development Agency, as the case may be, is found by the ETTSA to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice, fraudulent practice, coercive practice, undesirable practice, fraudulent practice, coercive practice, as the case may be.
- 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 ETTSA 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.
- d. 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.
- e. The ETTSA requires that the SDA provides solutions which at all times hold the ETTSA's interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The SDA 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.
- f. Without limiting the generality of the above, an Bidder shall be deemed to have a Conflict of Interest affecting the Selection Process, if:
 - i. the Bidder, its consortium member (the "Member") or Associates (or any constituent thereof) and any other Bidder, its consortium member or Associate (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of an Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than 5 per cent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be)

in the other Bidder, its consortium member or Associate is less than 5% (five per cent) of the subscribed and paid up equity share capital thereof. For the purposes of this Clause, indirect shareholding held through one or more intermediate persons shall be computed as follows:

- where any intermediary controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on
- a proportionate basis; provided, however, that no such shareholding shall be reckoned under this Sub-clause if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or
- ii. a constituent of such Bidder is also a constituent of another Bidder; or
- iii. such Bidder or its Associate receives or has received any direct or indirect subsidy or grant from any other Bidder or its Associate; or
- iv. such Bidder has the same legal representative for purposes of this Application as any other Bidder; or
- v. such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each others' information about, or to influence the Application of either or each of the other Bidder; or
- vi. there is a conflict among this and other Software solution and services assignments of the Bidder (including its personnel and other members, if any) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders. The duties of the Systems Implementation Agency will depend on the circumstances of each case. While providing software implementation and related solutions to the ETTSA for this particular assignment, the Systems Implementation Agency shall not take up any assignment that by its nature will result in conflict with the present assignment; or
- vii. A firm hired to provide Software solution and services for the implementation of a project, and its Members or Associates, will be disqualified from subsequently providing goods or works or services related to the same project;
- g. An Bidder eventually appointed to implement software solutions for this Project, its Associates, affiliates and the Financial Expert, shall be disqualified from subsequently providing goods or works or services related to the construction and operation of the same Project and any breach of this obligation shall be construed as Conflict of Interest; provided that the restriction herein shall not apply after a period of 12 months from the completion of this assignment; provided further that this restriction shall not apply to software solutions

delivered to the ETTSA in continuation of this systems implementation or to any subsequent systems implementation executed for the ETTSA in accordance with the rules of the ETTSA.

Appendix I: Pre-Qualification & Technical Bid Templates

The Bidders are expected to respond to the RFP using the forms given in this section and all documents supporting Pre-Qualification / Technical Evaluation Criteria.

Pre-Qualification Bid & Technical Proposal shall comprise of following Forms:

Forms to be used in Pre-Qualification Proposal

Form 1: Compliance Sheet for Pre-qualification Proposal Form 2: Particulars of the Bidder Form 3: Bank Guarantee for Earnest Money Deposit

Forms to be used in Technical Proposal

Form 4: Compliance Sheet for Technical Proposal Form 5: Letter of Proposal Form 6: Project Citation Format Form 7: Proposed Solution Form 8: Proposed Work Plan Form 9: Team Composition Form 10: Curriculum Vitae (CV) of Key Personnel Form 11: Deployment of Personnel Form 12: Deviations

Form 1: Compliance Sheet for Pre-Qualification Proposal

(The pre-qualification proposal should comprise of the following basic requirements. The documents mentioned in this compliance sheet along with this form, needs to be a part of the Pre-Qualification proposal)

#	Basic Requirement	Required	Provided	Reference & 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	
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 in Software Development	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory	Yes / No	
		auditor		
6	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	
7	Certifications	Copy of a valid ISO 9001/CMMI-3 certificates or higher Oracle Gold Partner Cetrificate	Yes / No	
8	Consortiums	Self-Certified Letter signed by Authorized signatory	Yes / No	
9	9 Legal Entity Copy of Certificate of Incorporation; and Copy of Service Tax Registration Certificate		Yes / No	
10	Blacklisting	A self-certified letter	Yes / No	

Form 2: Particulars of the Bidder

SI	Information Sought	Details to be Furnished
No.		
Α	Name and address of the bidding	
	Company	
В	Incorporation status of the firm	
	(public limited / private limited, etc.)	
С	Year of Establishment	
D	Date of registration	
E	ROC Reference No.	
F	Details of company registration	
G	Details of registration with	
	appropriate authorities for service tax	
н	Name, Address, email, Phone nos.	
	and Mobile Number of Contact	
	Person	

Form 3: Bank Guarantee for Earnest Money Deposit

Τo,

<Name> <Designation> <Address> <Phone Nos.> <Fax Nos.> <email id>

Whereas <<Name of the Bidder>> (hereinafter called 'the Bidder') has submitted the bid for Submission of RFP # <<RFP Number>> dated <<Date>> for <<Name of the assignment>> (hereinafter called "the Bid") to <ETTSA>

Know all Men by these presents that we << >> having our office at <<Address>> (hereinafter called "the Bank") are bound unto the <ETTSA> (hereinafter called "the ETTSA") in the sum of Rs. <<Amount in figures>> (Rupees <<Amount in words>> only) for which payment well and truly to be made to the said ETTSA, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this <<Date>>

The conditions of this obligation are:

- 1. If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
- 2. If the Bidder, having been notified of the acceptance of its bid by the ETTSA during the period of validity of bid
 - (a) Withdraws his participation from the bid during the period of validity of bid document; or

(b) Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the ETTSA up to the above amount upon receipt of its first written demand, without the ETTSA having to substantiate its demand, provided that in its demand the ETTSA will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <<insert date>> and including <<extra time over and above mandated in the RFP>> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

NOTHWITHSTANDING ANYTHING CONTAINED HEREIN:

- I. Our liability under this Bank Guarantee shall not exceed Rs. <<Amount in figures>> (Rupees <<Amount in words>> only)
- II. This Bank Guarantee shall be valid upto <<insert date>>)
- III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before <<insert date>>) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

Form 4: Compliance Sheet for Technical Proposal

(The Technical proposal should comprise of the following basic requirements. The documents mentioned in this compliance sheet along with this form, needs to be a part of the Technical proposal)

For Technical Evaluation (Category 1)

		Documents Required	Compliance	Reference
No.				& Page Number
1.	Covering Letter for Technical	As per Form 5	Yes / No	
	Proposal			
2.	Average turnover from Software	Extracts from the audited Balance	Yes / No	
	Development and	sheet and Profit & Loss;		
	Implementation Services Work in	OR		
	last 3 years (Turnover in Rs	Certificate from the statutory		
	Crores)	auditor;		
		AND		
		Project citation (Form 6)		
3.	Experience in Software	Completion Certificates from the	Yes / No	
	Application, Development and	client; OR		
	Maintenance in India for Private			
	Sector (last 5 years)	Work Order + Self Certificate of		
		Completion (Certified by the		
		Statutory Auditor); OR		
		Work Order + Phase Completion		
		Certificate (for ongoing projects)		
		from the client		
4.	Experience of Software	Completion Certificates from the	Yes / No	
	Application, Development and Maintenance in Indian	client; OR		
	Government department / PSU	Work Order + Self Certificate of		
	(last 5 years)	Completion (Certified by the		
		Statutory Auditor); OR		
		Work Order + Phase Completion		
		Certificate (for ongoing projects)		
		from the client		
5.	Solution development	A note (Form 7) and Forms 7A, 7B	Yes / No	
	methodology proposed for the	& 7C		
	demonstration of understanding			
	of Software development and	The note should highlight		
	implementation (As per the	understanding of the ETTSA's		
	requirements specified in	requirements through providing		
	Technical evaluation)	justifications for:		

RFP for Selection of SDA for Web Portal, VAT Support Modules, Migration of Application & Maintenance - ETTSA

S. No.	Specific Requirements	Documents Required	Compliance	Reference & Page Number
6.	Approach and Methodology to perform the work in this assignment	 Solution proposed and its components, Technologies used, Scale of implementation Challenges likely to be encountered Learning on how to deal with the challenges Mitigation proposed Client references Form 8 A note on the basis of Qualitative assessment based on Formal approach to Project Management Usage of specific tools Work-plan to meet the project timelines Formal approach for training Approach to Go- live and transition from existing to new system Assumptions and Key asks / support required from ETTSA 	Yes / No	
7.	Project work break down structure	A note on the basis of Qualitative assessment based on timelines, resource assignment, dependencies and milestones	Yes / No	
8.	Resume of all key resources proposed for the assignment	CV & a Note (Form 9, 10 and 11)	Yes / No	
9.	Deviations (if any)	Form 12	Yes / No	

Form 5: Letter of Proposal

To:

<Location, Date>

<Name> <Designation> <Address> <Phone Nos.> <Fax Nos.> <email id>

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 agree to provide the hardware requirements required to meet the SLA and submit the same along with technical proposal.

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 <90> days as stipulated in the RFP document.

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

_Date:

Form 6: Project Citation Format

Relevant IT project experience (provide no more than	5 projects in the last 5 years)
General Information	
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

Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present Approach and Methodology divided into the following sections:

- a) Solution Proposed
- b) Understanding of the project (how the solution proposed is relevant to the understanding)
- c) Technical Approach and Methodology

Form 7 A: Compliance to requirements

S.No	Module	Solution Proposed	Requirements	Compliance to Requirement (put "Y" or "N" only)
1	[To be filled by ETTSA]	< <provide product<br="" the="">Name or fill Custom Built, in case of a new development>></provide>	[To be filled by ETTSA in detail – refer Guidance]	
			[To be filled by ETTSA in detail – refer Guidance]	
2				

Form 7 B: Solution Proposed

S. No	Proposed Solution (Provide the Product Name or fill Custom Built, in case of a new development)	Version & Year of Release	OEM	Features & Function alities	O&M Support (Warranty/ATS/ : as required as per RFP)	Reference in the Submitted Proposal (Please provide page number/section number/ volume)

Form 7 B: Bill of Material (Software)

S.N o	Item	Proposed Solution (Provide the Product Name or fill Custom Built, in case of a new development)	Unit of Measurement	Number of Licenses (Development Environment)	Number of Licenses (UAT)

Form 8: Proposed Work Plan

Nia	a					(Calen	dar M	onths					
No	Activity ¹	1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
N														

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as ETTSA 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.
- 3 All activities should meet the 8/80 criteria i.e should at least take 8 hours and a maximum of 80 hours.

Form 9: Team Composition

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

Form 10: Curriculum Vitae (CV) of Key Personnel

General Information	
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 	
o Client	<u> </u>

 Key project features in brief 	
 Location of the project 	
 Designation 	
o 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: Deployment of Personnel

No	No Name of Staff Staff input in Months (in the form of a bar chart) ²					Total staff man- months proposed									
		1	2	3	4	5	6	7	8	9	10	11	12	n	Total
1															
2															
3															
N															
											Tota				

1. Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category

2 Months are counted from the start of the assignment.

Full time input

Part time input

Form 12: Deviations

To:

<Location, Date>

<Name> <Designation> <Address>

Dear Sir:

Subject: Deviations < Provide Name of the Implementation Assignment>

We declare that all the services shall be performed strictly in accordance with the Tender documents except for the variations and deviations, all of which have been detailed out exhaustively in the following statement, irrespective of whatever has been stated to the contrary anywhere else in our bid.

Further we agree that additional conditions, if any, found in the Tender documents, other than those stated in deviation schedule, shall not be given effect to.

A - On the Terms of Reference

[Suggest and justify here any modifications or improvement to the Scope of Work you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

No.	Deviation	Material	Non-	Impacted	Impacted	Financial
			Material	Deliverable(s)	Timeline(s)	Impact
1.	<deviation description=""></deviation>	<yes <="" td=""><td><yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes></td></yes>	<yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes>	<name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)>	<effect on<="" td=""><td><value></value></td></effect>	<value></value>
		No>	No>	Deliverables to get	Timelines	
				affected by the	due to the	
				Deviation>	Deviation>	
2.	<deviation description=""></deviation>	<yes <="" td=""><td><yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes></td></yes>	<yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes>	<name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)>	<effect on<="" td=""><td><value></value></td></effect>	<value></value>
		No>	No>	Deliverables to get	Timelines	
				affected by the	due to the	
				Deviation>	Deviation>	
З.	<deviation description=""></deviation>	<yes <="" td=""><td><yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes></td></yes>	<yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes>	<name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)>	<effect on<="" td=""><td><value></value></td></effect>	<value></value>
		No>	No>	Deliverables to get	Timelines	
				affected by the	due to the	
				Deviation>	Deviation>	

B – Any other areas

RFP for Selection of SDA for Web Portal, VAT Support Modules, Migration of Application & Maintenance - ETTSA

No.	Deviation	Material	Non-	Impacted	Impacted	Financial
			Material	Deliverable(s)	Timeline(s)	Impact
1.	<deviation description=""></deviation>	<yes <="" td=""><td><yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes></td></yes>	<yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes>	<name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)>	<effect on<="" td=""><td><value></value></td></effect>	<value></value>
		No>	No>	Deliverables to get	Timelines	
				affected by the	due to the	
				Deviation>	Deviation>	
2.	<deviation description=""></deviation>	<yes <="" td=""><td><yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes></td></yes>	<yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes>	<name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)>	<effect on<="" td=""><td><value></value></td></effect>	<value></value>
		No>	No>	Deliverables to get	Timelines	
				affected by the	due to the	
				Deviation>	Deviation>	
3.	<deviation description=""></deviation>	<yes <="" td=""><td><yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes></td></yes>	<yes <="" td=""><td><name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)></td></yes>	<name(s) of<="" td=""><td><effect on<="" td=""><td><value></value></td></effect></td></name(s)>	<effect on<="" td=""><td><value></value></td></effect>	<value></value>
		No>	No>	Deliverables to get	Timelines	
				affected by the	due to the	
				Deviation>	Deviation>	

Yours sincerely,

Authorized Signature: Name and Title of Signatory: Name of Firm:

Address:

Appendix II: Financial Proposal Template

Form 1: Covering Letter

To:

<Location, Date>

<Name> <Designation> <Address> <Phone Nos.> <Fax Nos.> <Email id>

Subject: Submission of the Financial bid for <Provide Name of the Implementation Assignment>

Dear Sir/Madam,

We, the undersigned, offer to provide the Implementation services for <<*Title of Implementation Services>>* in accordance with your Request for Proposal dated <<*Date>>* and our Proposal (Technical and Financial Proposals). Our attached Financial Proposal is for the sum of <<*Amount in words and figures>>*. This amount is inclusive of the local taxes.

1. PRICE AND VALIDITY

- All the prices mentioned in our Tender are in accordance with the terms as specified in the RFP documents. All the prices and other terms and conditions of this Bid are valid for a period of <days> calendar days from the date of opening of the Bid.
- We hereby confirm that our prices include all taxes. However, all the taxes are quoted separately under relevant sections.
- We understand that the actual payment would be made as per the existing tax rates during the time of payment.

2. UNIT RATES

We have indicated in the relevant forms enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to / decrease from the scope of work under the contract.

3. TENDER PRICING

We further confirm that the prices stated in our bid are in accordance with your Instruction to Bidders included in Tender documents.

4. QUALIFYING DATA

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our Tender, we agree to furnish the same in time to your satisfaction.

5. BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in the <Refer Section No.>. These prices are indicated Commercial Bid attached with our Tender as part of the Tender.

6. PERFORMANCE BANK GUARANTEE

We hereby declare that in case the contract is awarded .to us, we shall submit the Performance Bank Guarantee as specified in the <Appendix III> of this RFP document.

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

We hereby declare that our Tender is made in good faith, without collusion or fraud and the information contained in the Tender is true and correct to the best of our knowledge and belief.

We understand that our Tender is binding on us and that you are not bound to accept a Tender you receive.

Yours sincerely,

Authorized Signature: Name and Title of Signatory: Name of Firm: Address:

Form 2: Financial Proposal

S. No.	Item	Total Price	Taxes (wherever applicable)	Total cost (total price + taxes)	
a)	Application Customization / Development and database creation cost (A)				
b)	Software Support and Maintenance Costs (for 1 years of contract after "Go-Live") (B)				
c)	Migration cost (C)				
d)	Maintenance cost for VAT 15 (for 1 year) (D)				
e)	Others (Please specify) (E)				
	Total Cost				
Total co	Total cost in figures:				

Form 2A: Details of Financial Bid

S. No.	Category	Resource Type	Number of Resources (X)	Unit Price in figures (Rate/man-month - INR - Exclusive of Service Tax) (Y)	Total Price (= X*Y)
A: Applica	tion Development & Database Cre	ation			
1.	Return Modules Development				
2.					
3.					
4.	Web Portal Development				
5.					
6.					
Total A:	I	<u> </u>			
B: Operat	ions and Maintenance Costs (Quar	terly Expense	s for 1 year of	contract after "Go-Live") (B	5)
1.	Return Module Maintenance &				
2.	Operational Expense including up gradation, deployment of				
3.	patches, fixes etc.				
4.	Web Portal Maintenance &				
5.	Operational Expense including				
6.	up gradation, deployment of patches, fixes etc.				
Total B:	1 -	<u> </u>			
C: Migrati	on of COVIS				
1.	Cost of Migration of COVIS				

RFP for Selection of SDA for Web Portal, VAT Support Modules, Migration of Application & Maintenance - ETTSA

S. No.	Category	Resource Type	Number of Resources (X)	Unit Price in figures (Rate/man-month - INR - Exclusive of Service Tax) (Y)	Total Price (= X*Y)
2.					
3.					
Total C:		<u> </u>			
D: Maint	enance of VAT 15				
1.	VAT 15 Module Maintenance &				
2.	Operational Expense including up gradation, deployment of				
3.	patches, fixes etc.				
Total D:				•	
Support	Manpower Prices (As used in above	e calculations)		
1.	Senior Software Engineer				
2.	Subject Matter Expert				-
3.	Database Administrator				
4.	Project Manager				
5.	System Administrator				
6.	Programmer				
E : Other	(please specify)				
1					
2					
3					
Total F :					

Note: Cost of each module to be given separately. In case ETTSA decides not to get any module developed, such cost will be deducted from the Contract Value as mentioned in commercial bid by the SDAs. Project timeline shall be amended accordingly in consultation with ETTSA.

Appendix III: Template for PBG & CCN

Form 1: Performance Bank Guarantee

PERFORMANCE SECURITY:

<Name> <Designation> <Address> <Phone Nos.> <Fax Nos.>

<Email id>

Whereas, <<name of the supplier and address>> (hereinafter called "the Bidder") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for <<name of the assignment>> to ETTSA (hereinafter called "the beneficiary")

And whereas it has been stipulated by in the said contract that the Bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of Rs.<Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification. This Guarantee shall be valid until <</nsert Date>>)

Notwithstanding anything contained herein:

- I. Our liability under this bank guarantee shall not exceed Rs. <Insert Value> (Rupees <Insert Value in Words> only).
- II. This bank guarantee shall be valid up to <Insert Expiry Date>)
- III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before *<Insert Expiry Date>*) failing which our liability under the guarantee will automatically cease.

Form 2: Change Control Notice (CCN) Format

Change Control Note			CCN Number:
Part A: Initiation			
Title:			
Originator:			
Sponsor:			
Date of Initiation:			
Details of Proposed Cha	inge		
(To include reason for cl	nange and app	ropriate details	/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			
(Identify any attachmen		•	
-			le, documentation, training, service levels
and component working	garrangements	s and any other	contractual issue.
Brief Description of Solu	ution:		
Impact:			
Deliverables:			

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

2 Annexure I

2.1 Portal Requirements

The detailed requirement for services to be developed by SDA on web portal are as detailed below.

2.1.1 CMS Portal

The web portal should be customizable and an option to login to change the content should be provided to departmental authorized user.

The administrator of portal should be able to select from the categories to update content and format the same. Provision for uploading any document required to be provided along with updation / deletion. The content added/ updated/ deleted along with document (if any) will go for approval from higher authority. Once the content changes are approved, it will be made available on the web portal. The documents and information approved should be visible / available for download to the end user over the web portal even without login.

The portal should be mobile friendly and browser compatible. Multiple languages support should be provided i.e. along with English, all information should be available in local language also. Portal should meet all security standards and guidelines.

The broad categories required are (but not limited to) are as below:

- I. Latest news and updates about department
- II. Government Orders
- III. Transfers and Postings
- IV. Notifications
- V. Circulars
- VI. Tenders
- VII. Acts and Rules
- VIII. Facilitate to archive old news / documents stated above in number 15 for future use and records.

2.1.2 e-Payment of Taxes

The option to make e-Payment of taxes/ demands/ Excise Levy/ License Fee/ Excise Renewal Fee etc. is to be provided on the web portal with the authorized nationalized banks/ treasury/ authorized payment collection agencies (e.g. Paygov). This is to be done after authorization of each such agency from ETTSA.

The functionalities expected (but not limited to) are as below:

- I. Integration of agencies listed above for collecting payments in a secured manner.
- II. Reconciliation of payment collection information via way of scroll/ payment successful/ failure information latest by T+1 days where T is the date of transaction
- III. Creation of reports wherever exception is found or the accounts are unreconciled
- IV. Flagging the records where the agency has not uploaded information about the transaction status via reconciliation scroll and reporting for the same.

2.2 Overview of COVIS application

COVIS System is being used by staff of Punjab Excise and Taxation department at various locations except Head office, district office Patiala and partially at Zirakpur and Balongi barriers. Thin Client technology is used to access COVIS applications hosted in the central data center at ETTSA HQ. Users access the Citrix Servers, get authenticated, and then access COVIS application.

COVIS Application is designed in Oracle Forms and Reports 10g.

COVIS consists of the modules as specified in table below along with list of associated programs that need to be migrated.

MODULE CODE	MODLE DESC	FORMS	REPORTS
2	GLOBAL	19	12
15	FRONT WINDOW	5	0
18	DEALER(PERSON) MANAGEMENT	17	0
22	ARREARS MANAGEMENT	4	0
28	ASSESSMENT	17	0
32	PERSON MANAGEMENT REPORT	0	14
74	ARREAR MANAGEMENT REPORT	0	10
86	TREASURY	4	0
91	ICC	24	0
102	FORMS INVENTORY MANAGMENT	17	0
113	ICC REPORTS	0	22
132	APPEALS/APPLICATIONS	2	0
135	APPEALS/APPL. REPORTS	0	14
158	FORMS INVENTORY REPORTS	0	5
190	REFUNDS	5	0
193	GLOBAL REPORTS	0	13
210	ASSESSMENT REPORTS	0	22
253	REFUND REPORTS	0	2
259	FRONT WINDOW REPORTS	0	5
260	TREASURY REPORTS	0	2
304	CASUAL TRADER MANAGEMENT	3	0
308	CASUAL TRADER REPORTS	0	5
1006	AUDITS	5	0
1012	INVESTIGATION	2	0
1038	NEW EXCISE	23	0
1039	NEW EXCISE REPORTS	18	0
1106	APPEAL	2	0
1108	SCRUTINY MODULE	1	0
1115	APPEAL NEW	1	0
	TOTAL	214	165

ETTSA Gateway: This application consists of approximately 90 forms and 230 reports

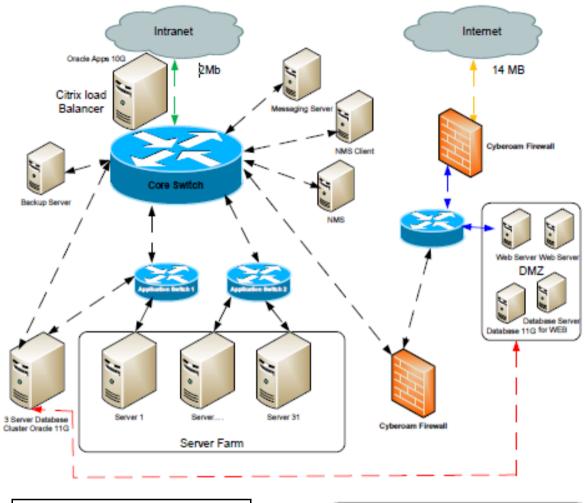
Application Database

The backend database for these application is Oracle 11G ver 11.2.0.1.0 and approximate size of the database is 600G.

Details of database objects that need to be migrated are as follows:

Object Type	Count
Trigger	135
Package	9
Job	8
Table partition	30
Table	862
Lob	14
Index partition	174
Procedure	101
View	33
Function	43
Sequence	17
Index	978
Package body	9
Database link	14

2.2.1 COVIS Architecture



L	Legend		
	Database Sync		
	Intranet		
	DMZ		
	Internet		
	DC LAN		

Assumptions:

- 1. Citrix as Application / Server load balancer
- 2.31 Server in server farm for applications. 3. On 31 servers on load balancing two applications
- are running (COVIS, ETTSA gateway) 4. Internet Leg without redundancy
- 5. In Internet leg 2 Web servers & 2 Database Servers in DMZ
- 6. No EMS Installed to monitor utilization
- 7. All COVIS Windows Servers runs on Win 2000
- 8. Web servers runs on Win 2003
- 9. Applications running on Web Server (E-trip, E-pass, E-ICC) 40. Firewalls in internet leg are not in AMC

2.3 Functional Requirement Matrix

Α	Other Requirements
1	The system should User Name and Password based authentications
2	The web portal should be developed in accordance with the Government of India guidelines for portal
	development.
3	The Portal Solution should be based on Open Standards.

4	Portal should support cross-browser running (IE, Mozilla, Firefox, Chrome etc.).			
5	The Portal should be bilingual (English and Punjabi languages).			
6	The web portal and application should support email and SMS integration.			
7	The web portal should support web services and APIs.			
8	The web portal functions should support integration/ creation of Mobile Applications			

2.4 Non Functional requirement Matrix

Α	Non Functional Requirements					
1	Compliance to specifications like Response Time, Processing time and Availability time, performan					
of various resources should be possible to be monitored and measured. SDA to submit t						
	to the Department as and when required.					
2	System should not allow deletion of any data by any user.					
3	System should be able to trace all error messages on committed data, Failed Log-in attempts,					
	unauthorized access, failed transactions etc.					
4	System should be modular in approach, loosely coupled and allow for ease of change in business rules,					
	flow-control and other such components without any impact on other applications.					
5	System should provide a flexible data structure which can manage increase in data size commensurate					
	with the growth of transactions.					
6	System should be able to be to scale (processing capacity, storage etc.) to support higher volume/rate					
	of transactions dynamically, without any loss of service time.					
7	System should be independent of the core Hardware infrastructure and accessories used.					
8	System should have a clean object oriented design allowing good maintainability.					
9	System should have Header information of user and time of change for each development or change					
	in code lines.					
10	System should have Header tag information of SRS Section no., Technical Requirement Specs no. etc.					
	for all changes in code.					
11	System should have provision of extensive documentation for both user and system developer.					
12	System should be accessible to users on the internet with just a web browser.					
13	Easy to use and visually attractive interface for the external and internal users especially keeping in					
	mind the low IT literacy of various internal and external users.					
14	System should be able to track the user ID details of the user before allowing access to interface.					
15	User Interface screens to be self-explanatory with interactive and user friendly messages and error					
	handling procedures.					
16	System should be able to interact with other internal and external applications running on different					
	platforms/infrastructure.					
17	System should be able to accept pre-formatted transactional data from other systems					
18	System should be able to provide transactional data or reports for download or for dispatch to other					
	systems.					
19	System should be able to receive and transmit data in all standard forms (MS Office formats, CSV file,					
	XML etc.).					
20	To facilitate the usage of the new system, SDA should provide detailed user manual, online help, video					
	tutorials and downloadable tutorials for all types of users (Internal and external) for the web-portal					
	and application.					

SDA should also provide Troubleshooting guide explaining all possible error scenarios and their					
resolution (Problem Solving Manual). The same should be available online as well as in the form of a					
downloadable tutorial. SDA should be updating the Troubleshooting Guide at a regular interval during					
the software development and maintenance stage.					
SDA should be able to provide the complete system development guide detailing each stage, and all					
changes thereupon (Developer Manual).					
SDA should be able to give the detailed documentation about the interfaces and the linking between					
various modules.					
System should be able to encrypt the sensitive data while storing in the database.					
System should be able to prevent any unauthorized access to data.					
System should be able to ensure the integrity of the system from accidental or malicious damage to					
data.					
System should be able to check the authenticity of the data entering the system.					
Back up of all System data should be carried out at the frequency decided at time of SRS preparation					
and the backup copies stored in a secure location.					
System should not allow the simultaneous log in of the internal user in more than one systems.					
System should be able to generate a report on all "Authorization Failure" messages per user ID.					
System should be able to automatically log out if the user ID is idle for a sufficiently long time (30 mins					
and configurable).					
System should be able to monitor the IP address of the system, and match it with the user ID of the					
transaction.					
Retention periods, archival policies and read-only restrictions must be strictly enforceable on all logs					
maintained in the system.					
The application developed by the SDA should look similar to the existing COVIS application being used					
by the department.					
The application should be simple to use and screens should be simple to understand.					
It will be sole responsibility of the selected SDA to ensure uptime of the application.					

3 Annexure II - Approach and Methodology

3.1 Kickoff

The SDA will have a project Kickoff meeting with departmental officials and present a High Level Plan for development of the Solution. The project plan should be in line with the timelines provided in section 1.12

3.2 Project Plan

The System Integrator (SDA) shall develop a Project Plan, in collaboration with department within 2 week of the commencement of services describing all the elements of project management work detailing the scope and schedule.

The Project Plan developed by the SDA should specify the schedule of various tasks, deliverables and deployment of resources. This plan shall be submitted to department for review and approval. The Project Plan shall address, at the minimum, the following:

- I. Description of the SDA's organization with their proposed staffing, roles and responsibilities.
- II. Project Organization and Communication structure.
- III. Prepare a detail risk management plan.
- IV. Security and confidentiality practices in accordance with industry best practices to ensure the security and confidentiality of information, documents, records, software, data, reports, deliverables etc. handled during the entire project and subsequently.
- V. Project plans and schedules giving details of various tasks, task durations, dependencies, deliverables, milestones, resource deployment, meetings, reviews and information required from the department.
- VI. Resource planning and deployment for each phase/activity. Resource planning must also indicate where each resource would be based during that phase, i.e., onsite at the department HQ (if required by SDA) or offshore at the SDA premises.
- VII. Establish and manage resource assignments and responsibilities.
- VIII. Highlight the milestones and associated risks.
- IX. Manage project deadlines and performance objectives.
- X. Communicate the project plan to stakeholders with detailed reports
- XI. Training plan for user acceptance tests and other related training during rollout for the department identified user. The plan shall include description of training, man-days of training etc.
- XII. The Project Plan should be updated every quarter in consultation with department.

During the project implementation the SDA shall report to department, on following items:

- I. Results accomplished during the period (fortnightly).
- II. Cumulative deviations to date from the schedule as specified in the finalized Project Plan.
- III. Corrective actions to be taken to return to planned schedule of progress.
- IV. Proposed revision to planned schedule provided such revision is necessitated reasons beyond the control of SDA.
- V. Other issues and outstanding problems, and actions proposed to be taken.

VI. Identify the activities that require the participation of client personnel (including department, the Project Management Committee etc.) and communicate their time requirements and schedule early enough to ensure their full participation at the required time.

SDA will be required to submit following documents:-

- I. Baseline Project Plan
- II. Planning Assumptions & Constraints, critical success factors, benchmarks, and performance measures
- III. Risk management plan
- IV. Reporting framework
- V. Communications plan

3.3 Project Documentation

Selected SDA shall be responsible for maintenance of a Requirement Traceability Matrix through-out the project.

Selected SDA would ensure that overall solution is fully compliant with the requirements and specifications as mentioned in the RFP. For ensuring this, SDA shall prepare a Requirements Traceability Matrix on the basis of Functional Requirements and Technical Requirements provided by department (updated by selected SDA as necessary) and the System Requirements Specifications (SRS) prepared by selected SDA. SDA has to prepare High Level Design Document and Low Level Design document along with test strategy, test plan and test cases and submit the same to department. This has to be submitted for each Module. Sign off for only SRS and test plan will be provided by ETTSA to SDA.

This matrix would keep track of the requirements and trace their compliance through different stages of the project including software design, coding, unit testing, integration testing, user acceptance testing and final acceptance testing. The requirements traceability matrix would be a live document throughout the project, with the SDA team updating the matrix at every stage to reflect the compliance of each specification at every stage.

Through the duration of the project, ETTSA will periodically review the Traceability Matrix.

3.4 Design Software Solution

3.4.1 System Study

- I. The SDA will go under Knowledge Transfer phase and details of the existing applications will be explained. The relevant documents (FRS documents) will also be shared with the SDA.
- II. Basis the information gathered through Knowledge Transfer phase, FRS and its own analysis, the SDA shall carry out a detailed systems study and formulate the final System Requirements Specifications (SRS) documents.
- III. ETTSA reserves the right to modify the functional requirements in certain cases. ETTSA may also change the sequence of tasks and activities or certain modules to suit the needs of the ETTSA or the project.

- IV. As part of the preparation of SRS, the selected SDA shall be responsible for preparing and submitting detailed requirement specification documents as per IEEE or equivalent standards which meets all the Business, Functional and Technical requirements of the ETTSA. The SDA shall prepare the SRS documents and have it reviewed and approved by the ETTSA.
- V. The selected SDA is required to update the SRS as and when any enhancements modifications are made to the overall solution till the duration of the Contract, including O&M Phase

3.4.2 Solution design

- I. The selected SDA shall design an integrated solution architecture & specifications for meeting the System Requirement Specifications, finalized by the SDA and approved by ETTSA. The solution designed should have seamless integration of all the components comprising of the solution being designed. The solution design shall include, but shall not be limited to, the design of the application architecture, user interface, database structures, security architecture, network architecture etc. The principles of Service Oriented Architecture shall be followed while designing the systems.
- II. The architecture should be proven to be scalable (cater to increasing load of internal and external users and their transactions) and capable of delivering high performance for atleast five years from the date of deployment. In this context, it is required that the application and deployment architecture should provide for Scale-Up and Scale out on the Application and Web Servers, Database Servers and all other solution components.
- III. The selected SDA would have the overall responsibility for development/customization, integration, testing and rollout of all components of the project. The SDA shall provide the overall solution as per the defined scope of work and provide the required manpower for the project and its components.
- IV. All the applications will be designed using a multi-tier architecture.
- V. As part of the solution design phase the SDA will prepare Detailed Design documents which shall include:
 - a. System Requirement Specification
 - b. High Level Design Document
 - c. Low Level Design Document
- VI. SDA shall prepare a Requirements Traceability Matrix on the basis of Functional Requirements(Draft will be shared by the ETTSA with SDA) and Technical Requirements created/updated by selected SDA and the System Requirements Specifications (SRS) prepared by selected SDA
- VII. The SDA shall also design a testing strategy during design phase. The selected SDA shall design the Testing strategy including traceability matrix, Test cases and conduct testing of various components of the software developed for Project. The software testing shall include Unit Testing, System Testing, Performance Testing, Integration Testing etc. following documents to be submitted
 - a. Test strategy document
 - b. Creation of test plan and test cases.

VIII. The SDA shall also prepare the data migration strategy and plan for smooth migration of data form current environment to new environment.

3.4.3 Solution Development

- I. The SDA will ensure that the development of the overall solution will be as per the SRS finalized with the ETTSA.
- II. A standard methodology shall be adopted for software engineering. Any future requirements like change in processes or any modification in the application will also need to be taken into account at the time of developing the Software.
- III. Requirement of any software license or any other component to meet the functional and technical requirements would be fully borne by SDA at no additional cost to the ETTSA. All these licenses shall be procured in the name of ETTSA by SDA. SDA will mention the number of software licenses required in its technical bid along with details of software proposed/ required.
- IV. The selected SDA shall be responsible for enabling all the functionalities as defined in the overview of Functional Requirements. These requirements provide brief on the functional requirements for various modules of the solution, and the processes that needs to be enabled by the system.
- V. The SDA will perform unit testing and integration testing of the developed software.
- VI. SDA will provide the rights to developed code after QA to ETTSA
- VII. It is envisaged that selected SDA shall set up separate environment at ETTSA premises for the ETTSA or any other Agency nominated by the ETTSA, to perform UAT.

3.4.4 Testing

- I. The selected SDA shall enable all necessary tools and software for enabling various stages of testing. This would include functional testing as well as stress/ performance/ load testing.
- II. The selected SDA shall make all necessary arrangement for testing including but not limited to (integration, system, functional and user acceptance testing) and preparation of test scripts, test data, etc.
- III. The selected SDA shall obtain the sign-off from ETTSA on testing approach and plan. The SDA shall perform the testing of the solution based on the approved test plan, document the results and shall fix the bugs/ suggestions found during the testing. Though ETTSA is required to provide formal approval for the test plan, it is the ultimate responsibility of SDA to ensure that the end product delivered by him meets all the requirements (including functional and technical requirements) of the Project.
- IV. As this project involves both the development and hosting of the applications, the following points related to Acceptance, Certification and Roll out shall be considered:
 - a. An acceptance test plan along with test cases and expected results traced to the requirements shall be provided during the development and the same shall be accepted by the ETTSA.
 - b. Any observations/feedback from the ETTSA related to the test plan and test cases shall be duly factored in as relevant.
 - c. ETTSA shall constitute a team of users who will facilitate the test process.

- d. The errors identified during testing, shall be duly rectified and resolved. Maximum of three rounds of testing shall be permitted.
- e. The pre-requisite for the software to be accepted is that it should have ZERO Severity Level defects basis the assessment done by assessment agency engaged by ETTSA.

3.4.5 User Acceptance Testing

The selected SDA or any other agency nominated by the ETTSA shall perform User Acceptance Testing (UAT) before Commissioning of the system. The test cases for UAT shall be prepared by the selected SDA and submitted to ETTSA for approval.

- I. Bugs/ defects/ suggestions identified during acceptance testing in developed custom components should be incorporated/ rectified by the SDA.
- II. On successful completion of the user acceptance testing, User Acceptance Sign off certificate will be provided by the ETTSA.

3.5 Acceptance Testing by Assessment Agency

After development of the solution the SDA shall provide assistance to ETTSA team in undertaking Acceptance Testing of the developed application by the assessment agency selected by ETTSA and undertake the following activities:

- I. Ensure developed application is free from Vulnerability / bugs / defects etc. mandatory for clearing Security Assessment.
- II. Share all the relevant documents like SRS / Test Cases as required by the assessment agency
- III. Incorporate desired changes in the developed application software suggested by the assessment agency

The basic responsibility of testing the system lies with the SDA. The functional testing by an assessment agency appointed by ETTSA is for the purpose of certification. SDA shall provide all the necessary support to the agency in conducting the functional testing services.

The selected SDA shall ensure the following points are duly addressed for successful completion of Go Live Milestone :

Application assessment will include (but not limited to):

- I. Functionality assessment that will map the functionality delivered to the SRS agreed upon during development phase.
- II. Determine systematic measures implemented to control and secure access to the application programs and data including password controls, user authentications, roles and responsibilities, audit trails and reporting, configuration and interface controls, etc.
- III. Review of database structure including (but not limited to):
 - a. Classification of data in terms of sensitivity & levels of access
 - b. Security measures over database installation, password policies and user roles and privileges
 - c. Access control on database objects tables, views, triggers, synonyms, etc.
 - d. Database restoration and recoverability
 - e. Audit trails configuration and monitoring process
 - f. Network connections to database

3.6 Go-Live

- I. All requisite hardware for production environment will be provided by ETTSA as proposed by SDA whereas to manage application and database related all activities on those servers will be responsibility of the SDA.
- II. SDA will set up and configure the Production environment.
- III. SDA shall conduct validation tests on migrated data and obtain signoff for the same from ETTSA.
- IV. SDA will migrate all data from the data migration environment to production environment.
- V. ETTSA may assign an assessment agency to conduct application and performance assessment before Go-Live. The SDA shall close all gaps/defects/bugs mentioned in their reports.
- VI. The SDA will be required to submit a Go- Live report, including compliance to all actions mentioned in Go-Live plan for approval from ETTSA.
- VII. The individual modules will be rolled out after successful completion of UAT of each module.
- VIII. Go-Live is the Successful roll out of all application modules and web portal in all Department offices as well as State of Punjab with all functionalities achieved, zero defects (from the test cases executed by ETTSA) and Go-live signoff received from ETTSA.
 - IX. SDA will prepare a detailed operations and management plan and resource plan. ETTSA will approve operations and management plan and resource plan. The development team shall hand over the entire applications to the operation team.
 - X. SDA will perform minimal Changes/Modification related to Excise Policy at no additional cost to ETTSA for entire period of this project.

4 Annexure III – Security Vulnerabilities– COVIS Application

Sr. No.	Vulnerability Identified	Risk Priority	Affected URLs/Modules	Impact description
1.	Cross-site scripting (XSS)*	High	All modules of web application	An attacker can hijack sessions, read cookie values, embed malicious frames or redirect users to other (i.e. phishing) pages.
2.	SQL injection*	High	http://172.16.1.179: 7778/reports/examp les/Tools/test.jsp	An attacker may gain unauthorized access to the database and any data contained in it.
3.	HTML injection*	High	All modules of web application	An attacker can steal the session cookie and take over the account, impersonating the user. It is also possible to modify the content of the page presented to the user.
4.	Weak passwords supported	High	http://172.16.1.179: 7778/forms/frmservl et?config=webutil	An attacker may be able to conduct password guessing attacks on the application.
5.	Vulnerable version of software in use	Medium	http://172.16.1.179: 7778/forms/frmservl et?config=webutil	As each service pack typically contains many security patches, continuing use of outdated and vulnerable version may increase the risk of server security.
6.	Information disclosure through banners	Low	http://172.16.1.179: 7778/forms/frmservl et?config=webutil	Banners are revealing the information which could aid an attacker to gain knowledge of the server configuration and launch a customized attack.
7.	Unnecessary HTTP methods in use	Low	http://172.16.1.179: 7778/forms/frmservl et?config=webutil	An attacker may trace the path of web requests which are sent to the Web Server and determine the process or logic implemented for processing the HTTP requests.
8.	Multiple concurrent user sessions	Low	http://172.16.1.179: 7778/forms/frmservl et?config=webutil	This weakness can allow misuse of users' accounts.
9.	Error messages not customized	Low	http://172.16.1.179: 7778/forms/frmservl et?config=webutil	Error messages are revealing background information which may help an attacker to devise further attacks.