

Request for Proposal (RFP)  
For  
Selection of Service Provider  
For Supply, Installation, Operation and  
Maintenance of Vehicle Tracking  
System



Assam State Transport Corporation (ASTC)

Government of Assam

ASTC, Paltan Bazaar

Guwahati, Assam - 781008

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

### **DISCLAIMER**

This RFP is being issued by Assam State Transport Corporation (hereunder called “ASTC” or the “Purchaser”) for inviting bids for selection of a Service Provider for the Design, Development, Implementation, Operation, Maintenance and Management of Vehicle Tracking System for ASTC vehicles in Assam (hereunder “Project”) on such terms and conditions as set out in this RFP document.

The information contained in this RFP or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of ASTC or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided. This RFP is not an agreement and is neither an offer nor invitation by ASTC to the prospective Bidders or any other person. The purpose of this RFP is to provide Bidder(s) with information that may be useful to them in making their technical proposals and financial offers pursuant to this RFP (the “Bid”).

This RFP includes statements, which reflect various assumptions and assessments arrived at by ASTC in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for ASTC, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP may not be complete, accurate, adequate or correct. Each Bidder should, therefore conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. ASTC accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein. ASTC, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles or restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Bidding Process. ASTC also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. ASTC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP. The issue of this RFP does not imply that ASTC is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and ASTC reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bids including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by ASTC or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and ASTC shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

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## Glossary

#	Terms	Definition
1.	ATS	Annual Technical Support
2.	A&M	Approach & Methodology
3.	BoO	Base of Operation
4.	CCN	Change Control Notes/Notice
5.	CD	Compact Disc
6.	CGST	Central Goods & Services Tax
7.	CV	Curriculum Vitae
8.	DD	Demand Draft
9.	DR	Disaster Recovery
10.	EMD	Earnest Money Deposit
11.	EMS	Enterprise Management System
12.	ETM	Electronic Ticketing Machine
13.	EOI	Expression of Interest
14.	ESH	Extended Service Hours
15.	FRS	Functional requirement specifications
16.	IP	Implementation Partner
17.	INR	Indian National Rupee
18.	ICT	Information and Communication Technology
19.	IT	Information Technology
20.	IVRS	Interactive voice response system
21.	JPEG	Joint Photographic Expert Group
22.	LoA	Letter of Award
23.	LoI	Letter of Intent
24.	LLP	Limited Liability Partnership
25.	LD	Liquidated Damages
26.	MIS	Management information system
27.	MSA	Master Services Agreement
28.	O&M	Operations and Maintenance
29.	OEM	Original Equipment Manufacturer
30.	PBG	Performance Bank Guarantee
31.	PAN	Permanent Account Number
32.	PDF	Portable Document Format
33.	RFE	Request for Empanelment
34.	RFP	Request for Proposal
35.	SGST	State Goods & Service Tax
36.	CCTV	Close Circuit Television Camera
37.	mNVR	Mobile Network Video Recorder
38.	VMS	Video Management System
39.	SOW	Scope of Work
40.	SLA	Service Level Agreement
41.	SP	Service Provider
42.	ToR	Terms of Reference
43.	UAT	User Acceptance Test
44.	FAT	Final Acceptance Test
45.	GoA	Government of Assam
46.	GoI	Government of India
47.	VMU	Vehicle Mounting Unit
48.	VTs	Vehicle Tracking System

## Definition of Terms

#	Term	Definition
1	Agreement /contract	The Agreement entered between the ASTC and the Agency including all attachments, schedules, annexure thereto and all documents incorporated by reference therein and all amendments, corrigendum /corrigenda, changes thereto
2	Bidder	The use of the term “Bidder” in the Tender means the Single Agency offering the proposal.
3	Bid /proposal	Offer by the Bidder to fulfil the requirement of the Client under the RFP/Contract for an agreed price. It shall be a comprehensive technical and commercial response to the Tender
4	Confidential information	All information (whether in written, oral, electronic or other format) which relates to the technical, financial and business affairs, dealers, suppliers, products, developments, operations, processes, data, trade secrets, design rights, know-how, plans, budgets and personnel of each stakeholder and its affiliates which is disclosed to or otherwise learned by the other Party in the course of or in connection with this Agreement (including without limitation such information received during negotiations, location visits and meetings in connection with this Agreement);
5	Deliverables	Products, infrastructure and services agreed to be delivered by the Bidder in pursuance of the agreement as defined more elaborately in the RFP Implementation and the Maintenance phases and includes all documents related to the user manual, technical manual, design, process and operating manuals, service mechanisms, policies and guidelines (such as security related, etc.), inter alia payment and/or process related etc., source code and all its modifications;
6	Go-live	The date of commencement of Operations and Maintenance phase after the successful completion of each Phase (FAT and acceptance of the overall solution by the ASTC)
7	Project implementation	Project Implementation as per the testing standards and acceptance criteria prescribed by ASTC or its nominated agencies
8	Request for Proposal/ Tender Document	Written solicitation that conveys to the Bidder, requirements for products/ services that the ASTC intends to buy and implement
9	SLA	The level of service and other performance criteria which will apply to the Services delivered by the Bidder; Performance and Maintenance SLA executed as part of the Master Service Agreement
10	SP / SI	The bidder who is qualified & successful in the bidding process and is given the award of Contract and will be referred to as Service Provider (SP)/Implementation Agency / System Integrator

## Important Dates

#	Particular	Details
1	Publication of Bid	1 <sup>st</sup> June, 2019
2	Start date of issuance of RFP document	3 <sup>rd</sup> June, 2019
3	Last date for issuance of RFP Document	2 <sup>nd</sup> July, 2019 (5:00 PM)
4	Last date & time for Submission of Queries	11 <sup>th</sup> June, 2019 (5:00 PM)
5	Pre-Bid Conference	13 <sup>th</sup> June, 2019 (11:30 AM)
6	Last date for Bid Submission	3 <sup>rd</sup> July, 2019 (5:00 PM)
7	Technical Presentation	5 <sup>th</sup> July, 2019 (11:30 AM)
8	Date and time for opening of Technical bids	8 <sup>th</sup> July, 2019 (11:30 AM)
9	Date and time for opening of Commercial bids	9 <sup>th</sup> July, 2019 (11:30 AM)



## 1. Background information

Assam State Transport Corporation (“ASTC”), the State owned road transport corporation of Assam, invites responses (“Bids”) to this Request for Proposal (“RFP”) from service providers / systems implementation agencies (“Bidders”) for the design, development, integration, implementation, operation, maintenance and management of the Vehicle Tracking System for ~149 ASTC vehicles – 60 buses, 6 trailers and 73 ambulances.

### 1.1. Fact Sheet

a.	Bids are invited through <b>e-procurement portal of Government of Assam <a href="http://www.assamtenders.gov.in">www.assamtenders.gov.in</a></b> , from eligible, reputed, qualified Bidders with sound technical and financial capabilities for the scope as detailed out in the scope of work under “Project Overview” section of this RFP.										
b.	Any Contract that may result from this RFP will be issued for a term of 5 years after Final Go-live Acceptance Date (“Term”).										
c.	ASTC reserves the right, with concurrence of the Bidder, to extend the Term of the Project for a period or periods of up to one year with a maximum of two such extensions on the same terms and conditions, subject to ASTC’s obligations at law.										
d.	<p>The Bidder will download the RFP document(s) from the website <a href="http://www.assamtenders.gov.in">www.assamtenders.gov.in</a>. Amount of <b>INR 10,000</b> will have to be paid to following bank account number of ASTC:</p> <table border="1"><thead><tr><th colspan="2">ASTC Bank Account Details</th></tr></thead><tbody><tr><td>Name of Bank:</td><td>State Bank of India</td></tr><tr><td>Name of Payee:</td><td>Assam State Transport Corporation</td></tr><tr><td>Account Number:</td><td>10281982321</td></tr><tr><td>IFSC Code:</td><td>SBIN0001244</td></tr></tbody></table> <p>Snapshot of proof of RFP document fee payment should be attached with the Technical Proposal.</p>	ASTC Bank Account Details		Name of Bank:	State Bank of India	Name of Payee:	Assam State Transport Corporation	Account Number:	10281982321	IFSC Code:	SBIN0001244
ASTC Bank Account Details											
Name of Bank:	State Bank of India										
Name of Payee:	Assam State Transport Corporation										
Account Number:	10281982321										
IFSC Code:	SBIN0001244										
e.	Along with the Bid, Bidders are required to deposit an amount of <b>INR 3 Lakh (Rupees Three Lakh)</b> as Earnest Money Deposit (“EMD”) by means of either (i) Demand draft in favour of <b>Assam State Transport Corporation</b> and payable at <b>Guwahati</b> from any Scheduled commercial bank, or (ii) Bank guarantee in the format prescribed at Appendix I- Form 3.										
f.	The eligibility criteria for Bidders are mentioned in the “Eligibility and Evaluation Criteria” section of this RFP.										
g.	The Bidder shall be selected on the basis of <b>Least Cost</b> out of the technically eligible bidders defined in this RFP. Proposals received after the deadline mentioned in this RFP will not be entertained.										
h.	On receipt of a Letter of Acceptance (“LoA”) from ASTC, the successful Bidder will furnish a bank guarantee, by way of performance security, equivalent to <b>10% of the total project cost</b> defined in this RFP on or before the signing of the subsequent Contract, typically within 15 days from notification of the LoA, unless specified to the contrary.										
i.	<p>The name, address, and telephone numbers of the nodal officer is:</p> <p>Managing Director, Shri Anand Prakash Tiwari, IPS,</p>										

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	Assam State Transport Corporation, Paltan Bazaar, Guwahati 781008 Phone: 0361-2739552 Email: astcmd.assam@gov.in Alternate Email: astc2009@gmail.com
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## 2. Instructions to Bidders

### 2.1. 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.
- 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 Purchaser. Any notification of preferred Bidder status by the Purchaser shall not give rise to any enforceable rights by the Bidder. The Purchaser may cancel this RFP at any time prior to a formal written contract being executed by or on behalf of the Purchaser.
- d) This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such prior communication.
- e) Proposals should be submitted in the English language only
- f) Proposals must remain valid for 120 days after the submission date.
- g) Technical Bids shall be received by the Purchaser on the e-Procurement portal, **[www.assamtenders.gov.in](http://www.assamtenders.gov.in)**, before the time and date specified in the RFP. Original copy of the EMD and hard copy of Technical Proposal shall also be submitted to:  
**MD, Assam State Transport Corporation, Paltan Bazaar, Guwahati 781008**
- h) In the event of the specified date for the submission of Bids being declared a public holiday by the Government of Assam, the Bids will be received up to the appointed time on the next working day. The Purchaser may, at its discretion, extend this deadline for submission of offers by issuing a corrigendum and uploading the same on e-Procurement portal.
- i) Bids received later than the due time and date mentioned in the RFP will not be considered for this procurement process.
- j) Bids received via telex, cable or facsimile will be rejected.

### 2.2. Eligible Bidders

Bids may be submitted as a Sole Bidder as described below. Consortium is not allowed.

- a) Sole Bidder

The Sole Bidder must be a company, which has the capabilities to deliver the entire scope of work as mentioned in the RFP. The Sole Bidder cannot bid as

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a part of any other Consortium Bid under this RFP. Sole Bidder should not be a blacklisted entity by any Government Agency.

### **2.3. Bidder to Inform**

The Bidder shall be deemed to have carefully examined the Terms & Conditions, Scope, Service Levels, Specifications, and Schedules of this RFP. If bidder has any doubts/clarifications as to the meaning of any portion of the Conditions or the specifications he shall, before the last date for submission of Pre-Bid Queries, set forth the particulars thereof and submit them to Purchaser in writing in order that such doubt may be removed or clarifications are provided.

### **2.4. Fraud and Corrupt Practices**

- a) The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained in this RFP, the Purchaser shall reject a Bid 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 Bidding Process. In such an event, the Purchaser 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 Purchaser for, inter alia, time, cost and effort of the Purchaser, in regard to the RFP, including consideration and evaluation of such Bidder’s Bid.
- b) Without prejudice to the rights of the Purchaser and the rights and remedies which the Purchaser may have under the [LOI] or the [Agreement], if a Bidder or Service Provider, 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 Bidding Process, or after the issue of the LOI or the execution of the Agreement, such Bidder or Service Provider shall not be eligible to participate in any tender or RFP issued by the Purchaser during a period of 2 (two) years from the date such Bidder or Service Provider, as the case may be, is found by the Purchaser to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive 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 Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Purchaser who is or has been associated in any manner, directly or indirectly with the Bidding 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 Purchaser,

shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Bidding 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 Purchaser 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 Bidding Process;
- iii. "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 Bidding Process;
- iv. "Undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by Purchaser with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding 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 Bidding Process.

## **2.5. Conflict of Interest**

- a) A Bidder shall not have a conflict of interest that may affect the Bidding 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 Purchaser shall forfeit and appropriate the EMD, if available, and as mutually agreed genuine pre-estimated compensation and damages payable to the Purchaser for, inter alia, the time, cost and effort of the Purchaser including consideration of such Bidder's Bid, without prejudice to any other right or remedy that may be available to the Purchaser hereunder or otherwise.
- b) The Purchaser requires that the Service Provider provides solutions which at all times hold the Purchaser's interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work. The Service Provider 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 Purchaser.
- c) Without limiting the generality of the above, a Bidder shall be deemed to have a Conflict of Interest affecting the Bidding Process, if:

The Bidder 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, in the other Bidder. For the purposes of this Clause, indirect shareholding held through one or more intermediate persons shall be computed as follows:

- i. 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

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- 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 a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each other's' information with regard to this RFP, or to influence the Bid of either or each of the other Bidder; or
  - v. 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 Service Provider will depend on the circumstances of each case. While providing software implementation and related solutions to the Purchaser for this particular assignment, the Service Provider shall not take up any assignment that by its nature will result in conflict with the present assignment; or
  - vi. A firm hired to provide software solution and services for the implementation of a project, and its Consortium Members or Associates, will be disqualified from subsequently providing goods or works or services related to the same project;
- d) A Bidder eventually appointed to implement the Solutions for this Project, its Associates, affiliates, 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 Purchaser in continuation of this systems implementation or to any subsequent systems implementation executed for the Purchaser in accordance with the rules of the Purchaser.

### **2.6. Termination**

- a) The Purchaser may, terminate this Contract in whole or in part by giving the Bidder a prior and written notice indicating its intention to terminate the Contract under the following circumstances:
- i. Where the Purchaser is of the opinion that there has been such Event of Default on the part of the Bidder / Bidder's Team which would make it proper and necessary to terminate this Contract and may include failure on the part of the Bidder to respect any of its commitments with regard to any part of its obligations under its Bid, the Tender or under this Contract.
  - ii. Where it comes to the Purchaser's attention that the Bidder (or the Bidder's Team) is in a position of actual conflict of interest with the interests of the Purchaser, in relation to any of terms of the Bidder's Bid, the Tender or this Contract.



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- iii. Where the Bidder / any of Bidder's Consortium partner(s) ability to survive as an independent corporate entity is threatened or is lost owing to any reason whatsoever, including inter-alia the filing of any bankruptcy proceedings against the Bidder or its consortium partner(s), any failure by the Bidder or its consortium partner(s) to pay any of its dues to its creditors, the institution of any winding up proceedings against the Bidder / Bidder's consortium partner(s) or the happening of any such events that are adverse to the commercial viability of the Bidder / Bidder's consortium partner(s). In the event of the happening of any events of the above nature, the Purchaser shall reserve the right to take any steps as are necessary, to ensure the effective transition of the project to a successor agency, and to ensure business continuity.
- iv. **Termination for Insolvency:** The Purchaser may at any time terminate the Contract by giving written notice to the Bidder, without compensation to the Bidder, if the Bidder becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.
- v. **Termination for convenience:** The Purchaser may at any time terminate the Contract in whole or in part for convenience by giving written notice of sixty (60) days to the bidder. In the event of termination under this para (e), the financial payments, if any, to be paid to the bidder shall be either mutually decided between the Parties or through third party determination/ arbitration at that point of time.
- b) In the event of termination of this Contract by the Purchaser before the expiry of the term, the Bidder shall be given a period of 30 days to demobilize itself.
- c) The Bidder may, subject to approval by the Purchaser, terminate this Contract before the expiry of the term by giving the Purchaser a prior and written notice of at least 3 months in advance indicating its intention to terminate the Contract or as mutually agreed to by both the parties.

### **2.7. 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 Bid non-compliant and the Bid may be rejected. Bidders must:
  - Include all documentation specified in this RFP;
  - Follow the format of this RFP and respond to each element in the order as set out in this RFP

## **2.8. Pre-Bid Meeting & Clarifications**

### **2.8.1.Pre-bid Conference**

- a. Purchaser may hold a pre-bid meeting with the prospective Bidders as per information given in the Fact Sheet.
- b. The Bidders will have to ensure that their queries for pre-bid meeting should reach the point of contact (Nodal Officer) through email only as mentioned in the Fact Sheet.
- c. The queries should necessarily be submitted in the following format:

#	RFP document reference(s) (Section & page number)	Content of RFP requiring clarification(s)	Points of clarification
1.			
2.			
3.			
4.			
5.			
6.			

- d. Purchaser 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 Purchaser.

### **2.8.2. Responses to Pre-Bid Queries and Issue of Corrigendum**

- a. The Nodal Officer notified by the Purchaser will endeavour to provide timely response to all queries. However, Purchaser makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does Purchaser 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, Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP by a corrigendum.
- c. The corrigendum (if any) & clarifications to the queries from all Bidders will be posted on the [www.assamtenders.gov.in](http://www.assamtenders.gov.in) 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, the Purchaser may, at its discretion, extend the last date for the receipt of Bids.

### **2.8.3. Correspondence**

Bidder requiring any Techno-Commercial clarification of the bid documents may contact by email or phone.

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

<b>Name</b>	<b>Email</b>	<b>Contact No.</b>
Shri Hanif Noorani, OSD	astc2009@gmail.com	0361-2739552

Verbal clarifications and information given by ASTC or its employees or its representatives shall not be entertained in any way.

### **2.8.4. Key instructions of the Bid**

#### **A. Right to Terminate the Process**

Notwithstanding anything contained in this RFP, the Purchaser reserves the right to accept or reject any Bid and to annul the Bidding Process and reject all Bids at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.

- 1) The Authority reserves the right to reject any Bid and appropriate the Bid Security if:
  - i. at any time, a material misrepresentative is made or uncovered, or
  - ii. the Bidder does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Bid.
  - iii. Such misrepresentative/ improper response shall lead to disqualification of the Bidder. If the Bidder is a Consortium, then the entire Consortium shall be disqualified/ rejected. If such disqualification/ rejection occur after the Bids have been opened and the lowest Bidder gets disqualified/ rejected, then the Purchaser reserves the right to:
    - a. invite the remaining Bidders to submit Bids in accordance with terms of RFP and or
    - b. take any such measure as may be deemed fit in the sole discretion of the Purchaser, including annulment of the Bidding Process.
- 2) In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the pre-qualification conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Service Provider either by issue of the LoA or entering into of the Agreement, and if the Bidder has already been issued the LoA or has entered into the Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in the RFP, be liable to be terminated, by a communication in writing by the Purchaser to the Bidder, without the Purchaser being liable in any manner whatsoever to the Bidder, as the case may be. In such an event, the Purchaser shall 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 Purchaser for, inter alia, time, effort, cost and effort of the Purchaser, without prejudice to any right or remedy that may be available to the Purchaser.
- 3) The Purchaser reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP or the Bidding Documents. Failure of the Purchaser to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Purchaser thereunder.



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### B. RFP document fees

- a. The Bidder will download the RFP document(s) from the website [www.assamtenders.gov.in](http://www.assamtenders.gov.in). Amount of **INR 10,000** will have to be paid to following bank account number of ASTC:

ASTC Bank Account Details	
Name of Bank:	State Bank of India
Name of Payee:	Assam State Transport Corporation
Account Number:	10281982321
IFSC Code:	SBIN0001244

Snapshot of proof of RFP document fee payment should be attached with the Technical Proposal.

### C. Earnest Money Deposit (EMD)

- a. Bidders shall submit an EMD in the form of a demand draft OR bank guarantee (in the format specified in Appendix I: Form 3) issued by a scheduled commercial bank in favour of "Assam State Transport Corporation" payable at "Guwahati" and should be valid for 6 months from the last date of submission of the Bid.
- b. EMD of all unsuccessful Bidders would be refunded by the Purchaser within 2 months 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 (Form 1)**.
- c. The EMD amount is interest free and will be refundable to the unsuccessful Bidders without any accrued interest on it.
- d. Bids not accompanying the EMD or containing EMD with infirmity (ies) (relating to the amount or validity period etc.), mentioned above, shall be summarily rejected.
- e. The EMD may be forfeited in the event of:
- A Bidder withdrawing its Bid during the period of Bid Validity
  - A successful Bidder fails to sign the subsequent Contract in accordance with this RFP
  - The Bidder being found to have indulged in any suppression of facts, furnishing of fraudulent statement, misconduct, or other dishonest or other ethically improper activity, in relation to this RFP
  - A Bid contains deviations (except when provided in conformity with the RFP) conditional offers and partial offers.

### D. Performance Bank Guarantee (PBG)

On receipt of a Letter of Acceptance ("LoA") from ASTC, the successful Bidder will furnish a bank guarantee, by way of performance security, equivalent to **10% of the total project cost** on or before the signing of the subsequent Contract, typically within 15 days from notification of the LoA, unless specified to the contrary. In case the successful Bidder fails to submit Performance Guarantee within the time stipulated, ASTC may at its sole discretion cancel the LoA without giving any notice and encash the EMD furnished by the Bidder, in addition to any other right available to it under this RFP.

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The Performance Guarantee furnished by the successful Bidder shall be in the manner prescribed at Appendix III (Form-1). The successful Bidder shall ensure, the Performance Guarantee is valid for 6 years from the date of signing of agreement and during the term of the subsequent Contract (any renewal) and for a period of 60 days beyond all contractual obligations, including warranty terms.

ASTC may invoke the Performance Guarantee in the event of a material breach by the successful Bidder leading to termination for material breach.

### 3. Preparation of Proposal

- a. Bidders are required to submit the bid both in online (soft copy) and offline (hard copy) mode. The offline documents are to be submitted in a single cover envelope. It should be duly sealed and signed. Also, a scanned copy of these original documents needs to be submitted online as part of the online bid submission.
- b. Bidders should submit their responses as per the formats given in this RFP. Bids needs to be uploaded on the website [www.assamtenders.gov.in](http://www.assamtenders.gov.in)
- c. Commercial proposal (Price Quotation) shall be submitted **only** through online mode.

*(Please note that prices should be indicated in the Financial Proposal as per the **Appendix II: Detailed Financial breakup** provided in the RFP. Bidders are advised against providing unreasonable price information. Pricing information which deviate significantly from the market rate may render the proposal non-responsive)*

- d. Only Technical Proposal must be submitted in hard copy.
- c) The solutions proposed must be expandable for future requirements. The system shall not require individual client licenses and the system shall not require any reoccurring license fees. (Additionally, the VENDOR must propose the expansion of the system along with the submitted bid, clearly marked as SYSTEM EXPANSION.)
- e. The cover page of Technical and Financial Form 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 found to be received after the time and date of Bid submission prescribed herein.
- f. All the pages of the Bid 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 Bidder's Bid.
- g. The authorized representative (or representatives) of the Bidder shall initial in all pages of the Proposal. The Bid 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 authorised signatory of the Bidder.

### **3.1 Bidder's authorized signatory**

A Bid should be accompanied by an appropriate board resolution and power of attorney in the name of an authorised signatory of the Bidder stating that he/ she is authorised to execute documents and to undertake any activity associated with the Bidder's Bid.

Please enclose the Power of Attorney in the technical proposal.

### **3.2 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 Bid, in providing any additional information required by Purchaser to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

Purchaser will in no event be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding Process.

### **3.3 Language**

The Proposal should be filled by the Bidder in English language only. For purposes of Bid evaluation, the English translation shall govern.

### **3.4 Proposals received after designated time of submission**

- 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 by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.
- c) The Purchaser 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) The Purchaser reserves the right to modify and amend any of the above-stipulated conditions/criteria depending upon project priorities vis-à-vis urgent commitments.

### **3.5 Downloadability / Visibility of the uploaded document**

The Bidder shall ensure that the Bid uploaded on the e-procurement portal is clearly visible and downloadable.

### **3.6 Format and Numbering of the uploaded document**

The Bidder shall ensure that the documents uploaded are correctly numbered so that any specific document can be easily and quickly found

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using the appropriate serial/page no. All documents shall only be uploaded in the formats mentioned here: PDF, MS Office, Compatibility Mode, and JPEG Format. The unsuccessful opening or download ability of documents which are uploaded in any format other than those mentioned above shall not be entitled for any claim whatsoever.

### **3.7 Issues in uploading document due to internet connectivity**

No claims shall be entertained owing to issues of internet connectivity. The Bidders are advised to upload the bid online well in advance of the deadline to avoid difficulties.

### **3.8 Deviations, Exclusions and Assumptions**

All deviations, exclusions and assumptions if unavoidable shall be submitted along with technical proposal.

## **4. Eligibility & Evaluation Criteria**

### **4.1. Eligibility Criteria**

#	Eligibility Condition	Proof Document Required
1.	a) Bidder must be a single entity to submit their Bid. b) Bidder should be incorporated/registered in India under the Companies Act 1956 for at least 5 years* or LLP Act 2008 or the Partnership Act 1932 c) Bidder should be compulsorily registered with the Service Tax Authorities in India	Bidder shall provide copies of the following: a. Certificate of Incorporation b. CGST/SGST Registration Details
2.	Bidder should have an annual turnover of INR 5 Crores or higher in each of the last 3 financial years (till 2017-18). Last 3 financial years are FY 2015-16, FY 2016-17, FY 2017-18.	Audited financial statements for each of the last three years/CA certificate on its Letter Head (CA membership number should be clearly mentioned and visible in the certificate).
3.	Bidder should have a positive net worth in each of the last 3 financial years	Certificate from the Statutory Auditor/ CA certificate.
4.	Bidder should be ISO 9001:2008 or later certified IT company	Copy of valid Certificate
5.	Bidder should not be currently blacklisted or banned by any Govt./Govt. Department/ Govt. Agency/ PSU in India for corrupt or fraudulent practices or non- delivery or non-performance in last 3 years.	An undertaking duly attested by the notary should be provided

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#	Eligibility Condition	Proof Document Required
6.	The Bidder shall have at least 3 projects with at least 200 VTUs (GPS based). Each project should include procurement, installation, operation and maintenance of VTUs for each such project as on Proposal Due Date.	a. Copy of Work Order. b. Project Completion Certificate/ Customer satisfaction certificate/ certificate Go live for project.
	Implemented or currently managing GPS/VTs Solution/ live vehicle tracking via mobile application including software in the last 3 years.	a. Copy of relevant and valid PO/WO/LOA/Contract within last 3 years before the date of bid submission. b. The last three years will comprise of periods counted from Apr 2015 onwards. c. Completion Certificate would be preferred.

### 4.2. Evaluation

#### 4.2.1. Evaluation process

- a) The Purchaser will constitute a committee to evaluate the Bid of the Bidders (“Proposal Evaluation Committee”).
- b) The Proposal Evaluation Committee constituted by the Purchaser shall evaluate the Bid to the RFP and all supporting documents / documentary evidence. Inability of a Bidder to submit requisite supporting documents / documentary evidence may lead to the Bidder’s Bid being declared non-responsive.
- c) The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained in this regard.
- d) The Proposal Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their Bids.
- e) The Proposal Evaluation Committee reserves the right to reject any or all Bids on the basis of any deviations contained in them.
- f) Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

#### 4.2.2. Bid opening

ASTC will inform date, time and venue for Bid opening. The Bids submitted up to the last date and time mentioned above will be opened on the mentioned place, time and date by the Nodal Officer or any other officer authorized by the Purchaser, in the presence of the Bidder’s representatives who may be present at the time of opening.

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The representatives of the Bidders are advised to carry an identity card or a letter of authority from the Bidding entity to identify their bonafide representatives for attending the opening of the Bid.

### **4.2.3. Bid validity**

The Bid submitted by the Bidders should be valid for minimum period of 120 days from the last date of submission of the Bid.

### **4.2.4. Right to Accept Any Bid and To Reject Any or All Bid(s)**

ASTC reserves the right to accept or reject any Bid, and to annul the Bidding Process / public procurement process and reject all Bids 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 ASTC action.

### **4.2.5. Notification of award**

Prior to the expiration of the validity period, ASTC will notify the successful bidder in writing or email, that its proposal has been accepted. In case the tendering process /public procurement process has not been completed within the stipulated period, ASTC, may like to request the bidders to extend the validity period of the bid.

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

### **4.2.6. Signing of Contract**

Upon the Successful Service Provider complying the terms and conditions of the LoA, the service provider's agreement shall be signed between the successful bidder and the authority. The terms and conditions of this tender shall constitute the major part of the agreement. Such agreement may have all correspondence (to be discussed and agreed upon separately) between authority and the successful bidder and additional clauses and/or provisions that further explain or clarify provisions of this RFP or certain provisions which Authority may be required to include as per law or being a publicly owned institution, as per its practices. ASTC hereby reserves the right to modify the terms of the service provider agreement. It is clarified that the issuance of the Letter of Acceptance shall be followed by signing of the service provider agreement and the successful bidder shall commence the project on receipt of Letter of Acceptance. The signing of the service provider agreement shall be completed such time as the Authority may specify. Any and all incidental expenses of execution of the service provider agreement shall be borne by the successful bidder including cost of stamp duty, registration charges and any other incidental costs and charges relating to the agreement.

### **4.2.7. Failure to agree with terms and condition of RFP**

Failure of the successful bidder to agree with the Draft Legal Agreement and Terms & Conditions of the RFP shall constitute sufficient grounds for the



annulment of the award, in which event ASTC may award the contract to the next best value bidder or call for new proposals from the interested bidders.

#### **4.2.8. Laws Governing the Contract**

This contract shall be governed and interpreted in accordance with the laws of India and the rules of Government of Assam. The Courts of Assam or the place where the contract is to be performed shall have exclusive jurisdiction over all matters arising out of or in respect of the contract.

#### **4.2.9. Dispute Resolution & Arbitration**

The Service Provider and the Purchaser shall endeavour their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:

- a. The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within seven (7) days of receipt of the notice.
- b. The matter will be referred for negotiation between Nodal Officer of Purchaser/Purchaser and the Authorized Official of the Service Provider. The matter shall then be resolved between them and the agreed course of action documented within a further period of 15 days.

In case any dispute between the Parties, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in “Guwahati” and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.

The “Arbitration Notice” should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within 45 days from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.

The arbitrators shall hold their sittings at “Guwahati”. The arbitration proceedings shall be conducted in English language. Subject to the above, the courts of law at “Guwahati” alone shall have the jurisdiction in respect of all matters connected with the Contract/Agreement even though other Courts in India may also have similar jurisdictions. The arbitration award shall be final, conclusive and binding upon the Parties and judgment may be entered thereon, upon the application of either party to a court of competent jurisdiction. Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides.

The Service Provider shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions

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of the Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

### **4.2.10. Proposal evaluation**

- i. Initial Proposal scrutiny will be held and to confirm that Proposals do not suffer from the infirmities detailed below. The proposal will be treated as non-responsive, if a Proposal is found to have been:
  - Submitted in manner not conforming with the manner specified in the RFP document
  - Submitted without appropriate EMD as prescribed herein
  - Received without the appropriate power of attorney
  - Containing subjective/incomplete information
  - Submitted without the documents requested in the checklist
  - Non-compliant with any of the clauses stipulated in the RFP
  - Having lesser than the prescribed validity period.
  - The EMD of all non-responsive bids shall be returned to the bidders.
- ii. All responsive Bids will be considered for further processing as below. Assam State Transport Corporation (ASTC) will prepare a list of responsive Service Providers, 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.

### **4.3. Evaluation Criteria**

Bidders who meet the eligibility requirements will be further evaluated for Commercial proposal (Price Quotation). The price quote shall be that of the cost of the entire project including taxes and additional charges wherever applicable. Bidders may also be required to make a presentation on their technical proposal to ASTC.

#### **4.3.1. Commercial Proposal Evaluation**

- a) The Price Quotation of technically qualified bidders will be opened on the prescribed date in the presence of bidder representatives and ASTC officials.
- b) The Price Quotation provided by the bidders shall be used for evaluation.

### **4.4. Successful Bidder Selection**

#### **4.4.1. Award of Contract**

- a) Based on the price quoted by the bidders, ASTC shall arrange the bids in the ascending order i.e. L1, L2, L3, \_ \_ \_ and so on (L1 being the lowest quote).



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- b) The Bidder who has submitted the lowest Price Quote shall be selected as the L1 and shall be called for further process leading to the award of the assignment.
- c) In case L1 Bidder refuses, then the next lowest Bidder, L2 will be called and so forth.

## 5. Project Overview

### 5.1. Project Background

Assam State Transport Corporation (ASTC), a State Government undertaking and one of the premier public enterprises of the State with its headquarter in Guwahati, is mainly providing effective and secure public transport system.

ASTC has taken multiple steps to improve the current operating module and infrastructure to match up with the ever growing demand in the state of Assam and thus keeping the same endeavour, would like to introduce and utilize the modern day advanced tools, technology and techniques to further improve the quality of services. It envisages providing a world-class operational system for managing the transport system for a better and reliable passenger services as well as increase in revenue.

The Assam State Transport Corporation is strongly dedicated to achieve the key objectives to provide best transport services to citizens at reasonable price with the use of modern information technology. This project is conceptualized for services that are being provided to other PSUs by ASTC.

Main modules of the project are as follows:

- a) **Vehicle Tracking System** – The system will help ASTC to track the position of vehicles in the command centre and also monitor the CCTV camera footage.
- b) **Command Centre** – The command centre will display vehicle positions and monitor the footage from the CCTV cameras. A help desk will also be stationed in the command centre for any grievance redressal.
- c) **Web Portal** – The portal will be used by various internal stakeholders of ASTC for the purpose of viewing reports, device data maintenance etc.
- d) **Mobile application** – A mobile app for live tracking of the vehicles.
- e) **Billing System** – A billing system which will record daily data (distance travelled per bus etc.) and compute & generate the monthly bills at the end of each month.

The functionality expected from each of the modules mentioned above is explained in section “Detailed Scope of Work”. The RFP is to invite Service Provider (SP) to implement the project with the above functionalities.

The details of the vehicles where GPS devices are to be installed are given below:

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Type of Vehicle	No. of vehicles
Bus	60
Trailers	6
Ambulance	73
<b>Total</b>	<b>149</b>

A variation of +/- **10%** of the above total figure should be considered by the Bidder.

### 5.2. Detailed Scope of Work

The following outlines the broad areas of scope of work for the Service Provider (SP) and the later sections highlight the detailed scope of work for SP in each of the following areas.

- 1. Requirements Study:** Preparation of Software Requirements Specification ("SRS") and Functional Requirement Specification ("FRS").
- 2. Software Development:** Software design, development, testing, installation and commissioning for the services and functions given in this RFP.
- 3. Procurement and installation of required hardware:**
  - a. Vehicle Tracking Unit:** GPS devices to be installed for live tracking of vehicular movements.
  - b. CCTV cameras:** CCTV cameras to be fitted inside all the buses for monitoring and recording of footage.
  - c. Command Centre:** Wall mount TV Screen with real time tracking of vehicle location on google maps and measuring performance of operational efficiency of vehicle operations through relevant dashboards and reports.
  - d. Cloud Infrastructure:** Storage and servers to be hosted on cloud and disaster recovery to be provisioned.
  - e. Network:** Network connectivity required for communication between the systems (VTUs, Display & Tracking systems)- LAN, GPRS (SIMs) etc.

Final Bill of Materials ("BOM") and sizing of cloud server shall be finalized after site survey by the SP. Current BOM is indicative only.

- 4. User Support and Maintenance for 5 years:** Service delivery, software and hardware & connectivity provisioning ("O&M") for a total period of 5 years from Go-Live Acceptance Date. The O&M shall include complete IT infrastructure maintenance and application support. Helpdesk for systems needs to be provided.
- 5. Training and Capacity Building:** Design & execution of training and capacity building for successful implementation and operations.

6. **Project Documentation:** At each stage of Project implementation SP should submit relevant detailed documents such as user manuals, test cases, technical and functional specifications of the system etc.

#### 5.2.1. Requirements Study

SP shall prepare detailed System Requirement Specifications (SRS) detailing processes for all modules based on non-functional requirements and functional requirements mentioned in this RFP and also additional requirements as may be identified in consultation with ASTC and other stakeholders during the Requirement Study phase. The SRS approved by ASTC will form the baseline for all subsequent phases of application development and deployment from a Solution requirements perspective (e.g. for testing, identifying “change” to requirements etc.).

As part of Requirement Study, the SP shall develop a Project Implementation Plan encompassing the activities mentioned below:

- i. Design and development plan
- ii. Pre-commissioning, delivery, installation, operational and user acceptance testing plan
- iii. Training plan
- iv. Warranty service plan
- v. Task, time schedules
- vi. Post-warranty service plan
- vii. Technical support plan
- viii. Quality assurance and control process details which must include (but not limited to) detailing on metrics, reviews, problem reporting and corrective action, system audit etc.
- ix. Any other item in consultation with ASTC.

#### 5.2.2. Software Development

In the software development phase below are the expectations from the SP:

- A. Application Requirement Study and Analysis
- B. Application development.
- C. Application testing.

#### **A. Application Requirement Study and Analysis**

The SI shall perform the detailed assessment of the functional requirements for the services listed.

#### **B. Application Development**

Detailed functionality of each module are described as follows:

- i. Web Portal for ASTC stakeholders

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- ii. Vehicle Tracking System
- iii. Video Management System
- iv. **Billing System**
- v. Command Centre
- vi. Mobile Application
- vii. Reporting/Dashboard
- viii. Documentation

### **I. Web Portal for stakeholders**

The solution proposed has following stakeholders, for whom SP will be responsible to develop appropriate user interfaces:

- i. Management staff – The management staff at different locations should be able to track the live movement of vehicles at any given point of time.
- ii. Staff at command center – The staff at the command center will be getting the information from across all the locations. The command center staff should be able to see real time vehicle position through GPS photo tagging on google maps, dashboards/reports measuring performance of vehicle operations against KPIs. Important KPIs related report measuring performance of vehicle operations, health status of the cloud server among others.

### **II. Vehicle Tracking System (VTS)**

Vehicle tracking System will be installed in all the 149 vehicles. The VTS should be able to provide information of vehicle location and should be AIS 140 compliant device. The VTS should store and retrieve information from the cloud-hosted server. Any information required for Business Intelligence should be retrieved from the cloud-hosted server and shown in command center wall mounted TVs, portal dashboards, mobile app etc. Additionally, it shall have the below modules:

- Offline tracking
- Trip Report
- Distance travel report
- Idle, Stop report
- Average speed, Over speed report
- Fleet & route performance report

### **III. Video Management System (VMS)**

IP CCTV cameras will be installed in all the buses (60 nos.). The software should be able to record, store and display the footage from the CCTV cameras. It should have the following features:

- Complete video surveillance features
- Video recordings and transfer to storage devices
- Display of live footage as and when required
- Search and playback of archive videos

IV. Billing System

The system will record the distance covered by each vehicle on a daily basis (through GPS or odometer whichever is more accurate, efficient & practical). It will also record the charges applicable for each type of vehicle in the system. At the end of each month, a monthly bill will be generated based on the total distance travelled by each vehicle for that month with the charges applicable for that particular vehicle. The system should be able to generate the bill in not more than **10 mins.**

V. Command Centre

Key objectives of command center are:

1. Informed Decision Making: The Command Center Application shall provide real time vehicle tracking through GPS, KPIs based dashboards among others, which shall enable informed decision making by ASTC stakeholders.
2. Device Monitoring: Command Center shall provide for device management of devices including VTS and CCTV cameras. Device management shall include monitoring services, incident reporting with defined escalation procedures and health monitoring of all components. Also Key management shall be done at CC level. Security access module of all the equipment shall be issued from CC. CC System will act as a live hub to manage and monitor service related data, which will be viewable through a centralized application.
3. Helpdesk Operations: ASTC staff will be stationed in Command Center to redirect any incoming query or incident to the authority best suited to resolve the issue. The helpline shall be in operation during the working hours of vehicle operations. Along with ASTC staff there needs to be employees from the Service Provider to resolve any technical issues that occur. For the sake of clarity, the Service Providers responsibility is to ensure a fully working System for gathering incident related data through the various components.
4. Future Integration with Intelligent Transport initiatives: Command center has been envisaged as the nerve center for transport department operation. This will enable ASTC to integrate existing applications, if required. ASTC has taken initiative to implement best practices in the passenger services. These citizen centric (G2C) as well as G2B, G2G initiative will be integrated with command center for ease of monitoring and management. **Future integration with ASTC's IETS system shall be done by the Bidder at no additional cost.** The integration however will be limited to sharing the required data through APIs.

VI. Mobile Application

This is a one-stop solution to manage, supervise and regularize ASTC activities using smart phones. SMS based services shall be available for user with feature phones also.

The Service Provider shall design, develop and maintain the mobile application & Web based application, which will be accessible over mobile

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and other portable devices. The web-interface developed will be compatible to work on latest mobile operating systems.

Main modules of Mobile App:

- i. Live tracking of buses
- ii. Real-time Estimated Time of Arrival (“ETA”) of vehicles
- iii. Services and schedules
- iv. Compatibility with existing MIS system to monitor reports
- v. Fleet status and monitoring module

All above Mobile App modules must have following general requirement feature for usable, highly secured and stable apps:

- Flexibility and customization.
- Convenient user interface.
- All the content should be accessed in the simplest way possible.
- Speed of loading mustn't keep users waiting.
- Communication should be as quick and simple as possible, with a minimum number of taps and minimum text input. Intuitive system of search and filters.

### **VII. Reporting/Dashboard**

The proposed solution shall be integrated with existing applications. The dashboard must provide:

- i. Preparation of standard reports and charts to measure performance related to vehicle operations so as to support all level of management in decision making related to vehicle operations.
- ii. Instant access to reports on: trips on different routes, break downs and its duration, vehicles offline, accidents – types, impact, losses etc., average speed point to point, travel time analysis, improper stops, deviation in routes, speed violations, at different locations and at different points of time.
- iii. Analytical data (video, text and numerical data) for the top management to support effective management of the services of ASTC. Cater to requirements of dynamic and context based specific reports graphs and charts
- iv. Other standard reports to give a snapshot view to the ASTC management on daily, monthly, quarterly, half-yearly and yearly performance.

The above requirement is the minimum expectation, however SP if deemed fit can suggest more reporting features that can aid in increasing the operational efficiency of ASTC.

### **VIII. Documentation**

The SI shall prepare and provide to ASTC all documentation including source code of application along with SRS, FRS and all other related documents as per latest industry standards and should incorporate necessary version control mechanism. Whenever any major changes are made in the solution during the life time of project, SI must provide all the updated documents to ASTC. All the updated documentation along with the source for stable release

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of the project should be handed over to ASTC at least 3 months prior to contract expiry.

### **C. Application Testing**

The Service Provider shall design the Testing strategy including Traceability Matrix, Test Cases and conduct testing of various components. The testing shall at least include Unit Testing, System Integration Testing, Performance Testing, User Acceptance Testing (UAT), etc. The Service Provider shall obtain the sign-off from ASTC on testing approach and plan (inclusive of Test cases).

User Acceptance Test (UAT) shall be carried out by ASTC on the Vehicle Tracking system. The SI shall first train the department's testing team and then facilitate the UAT. SI shall provide test scripts for conducting the UAT.

The Service Provider shall perform the testing of the solution based on the approved test plan, document the results and shall fix the bugs found during the testing. Though ASTC is required to provide formal approval for the test plan, it is the ultimate responsibility of the Service Provider to ensure that the end product delivered meets all the requirements specified by ASTC in this RFP.

### **D. Final Acceptance Testing**

Final Acceptance Testing shall include Installation & commissioning of all hardware, software supplied under this RFP including customization & deployment of IT application, Helpdesk software, SMS Gateway etc. and it shall also include all documentation related to ASTC and relevant acceptance test document (including IT Components, Non IT components).

#### **5.2.3. Procurement and installation of IT Infrastructure:**

The bidder will be responsible for providing command center infrastructure at a premise provided by ASTC, to monitor the movement of the vehicles. All other infrastructure like internet connection, computer, printer, telephone etc. shall be arranged by the SI on its own costs. Electricity consumption charges will be borne by ASTC.

Below is the indicative list of hardware and infrastructure requirement for the project:

##### **a) At Vehicles**

- i. Vehicle tracking system (GPS) with basic features to display real time tracking of buses.
- ii. IP CCTV cameras which shall record the video and store it and display as and when required.
- iii. mNVR along with the storage device required.

##### **b) At Offices**

- i. Personal Laptops (4 Nos.)

##### **c) Cloud Infrastructure**



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Bidder shall provide the best possible cloud storage infrastructure for seamless user experience. Storage space should be enough to store the records for five years for 149 Busses.

d) At ASTC Headquarters:

- i. Command Centre: Wall-mount TV Screen (3 nos. of 55 inches) to view reports/dashboards and real time tracking of fleet position, viewing of CCTV camera footage, PCs, UPS, and Printers.  
The SP will have to install the infrastructure required at the command centre along with required manpower and develop the application for GPS tracking of vehicles and CCTV video recordings and display the same.

Final BoQ and sizing of cloud shall be finalized after site survey by the Service Provider.

At least the following activities will be carried out as part of procurement and installation of IT infrastructure:

#	Key Activities
1.	All the hardware shall be new and procured for this Project. The ownership of hardware shall be transferred to ASTC on commissioning of hardware. However, the Service Provider will be fully responsible for maintaining these Assets as per the Warranty and AMC Clauses and will be fully accountable for the same. The minimum specification of the equipment is mentioned in <b>Appendix VI</b> .
2.	All the software used for ASTC shall be licensed to ASTC and will be the property of ASTC. The licenses shall be perpetual.
3.	The Service Provider shall be responsible for end-to-end implementation and shall quote and provide/supply any items not included in the bill of material but required for commissioning of the application and meet the requirements of the RFP/Contract. ASTC shall not pay for any of the equipment not quoted in the bid but are required for successful completion of the project. However, the same has to be supplied by the System Integrator without any additional fees.
4.	The Service Provider shall procure all required transmission and connecting media as per the network design.
5.	The Service Provider will be responsible for delivering the equipment to the respective locations.
6.	The Service Provider may be asked to supply all the installation material/ accessories/ consumables (e.g. screws, clamps, fasteners, ties anchors, supports, grounding strips, wires etc.) necessary for the installation and operation of the systems.
7.	The Service Provider has to prepare and submit a delivery report including details of components supplied. The delivery report will be validated by the identified ASTC authorized person.
8.	All the data created/captured under this Project shall also be the property of the ASTC. The Acceptance testing requirements are detailed out in <b>Appendix V</b> of the RFP. The same may be further fine-tuned at the Project plan finalization stage.

It is assumed that the entire route of a vehicle is covered by GPS and leading mobile network. But there might be some parts of the route where there is



no network coverage. So the system must work in off-line mode too for these areas and will provide the data once the vehicle enters in the GPRS zone.

#### 5.2.4. User Support and Maintenance for 5 years

##### A. Application monitoring and Compliance to Service Level Agreements

It is the responsibility of the Service Provider to:

- Monitor the application on a day-to-day basis to ensure that it functions reliably.
- Monitor application to ensure that the application does not suspend, hang etc.
- Monitor components, including but not limited to, Application servers, Web Servers, Middleware and other Servers on an ongoing basis to ensure smooth functioning of the applications.
- The Service Provider shall ensure compliance to uptime and performance requirements as indicated in the SLA of this RFP and any major changes to the software shall be planned accordingly by the Service Provider for ensuring the SLA requirements.
- Ensure the accuracy and timeliness of data uploaded as received.
- Resolve and report the data discrepancies to the designated ASTC persons.
- The Service Provider shall submit a document on the performance of the application against the desired SLA on a Quarterly basis.

##### B. Application support including modifications and integration with future systems

The scope of Service Provider covers the following activities:

- Enhancement / modifications with respect to new / enhanced / enriched functionality
- Ensure the desired functioning of the Interface / integration
- Test scripts preparation and interim application testing
- Application installation and testing whenever required
- Modification / development of reports
- Provide technical support on system parameters and requirement for ASTC's Applications Software
- Manage the database administration according to the agreed standards.
- Present relevant information and training if applicable and necessary regarding the use and functions of new products and services to a defined number of relevant Users designated by ASTC.
- Provide handholding support to end users in carrying out the business process transactions.

##### C. Bugs / Fixes Management

Bugs or Fixes Management is an important activity and based on the severity level, it becomes highly critical. As the parties involved are Users / functional team members of ASTC, Application providers and Service Provider, SLAs may not be directly defined. Service Provider commits

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involvement in resolution on 'best of efforts' basis as per requirements. Following are the steps involved:

- Problem definition
- Context definition (through functional teams as per requirements)
- Request Analysis by System Integrator
- Priority Categorization
- Logging with OEM and tracking to resolution

The Service Provider shall address all the errors/bugs/gaps in the functionality offered by the solution (vis-à-vis the SRS/FRS) at no additional cost during the operations & maintenance period (i.e. 5 years from the date of final GO-Live). The Service Provider shall identify and resolve application problems like system malfunctions, performance problems, data corruption etc. due to which the solution is not able to give the desired performance

The Service Provider shall be responsible for the following:

- Updating all available patch/ updates to the solution.
- Providing handholding support to end users
- Ensuring proactive and timely support in identification and provision of solutions including OEM Support for resolution.
- Timely logging of Bugs/Problems
- Daily / Weekly / Monthly Status Reports to ASTC & other Project Stakeholders

### **D. Software Change and Version Control**

- The Service Provider shall define the Software Capacity Building & Version control process and obtain approval for the same from ASTC
- The Service Provider shall maintain version control and configuration information for any system documentation and application software.
- Any changes/customizations to the application performed/ identified within the period of six months post "final Go-Live" are not to be considered as separate Change Requests and hence are to be carried out by the Service Provider at no extra cost. However, total man months for such changes/customizations shall not exceed 6 (six). In case the total effort crosses 6 man-months, further changes/customizations shall be handled through change control process.
- All configuration changes or minor customizations to the application (even if identified after the stabilization period of six months post "Go-Live") which require less than 5 man days of development effort are not to be considered as separate Change Requests and hence are to be carried out by the Service Provider at no extra cost throughout the period of contract.
- Only those major functional customization changes (requiring more than 5 man days of development effort) in the solution which have neither been mentioned in the approved SRS, nor included in the To-be functional solution and have not been proposed within six (6) months from "Final Go Live", shall be carried out through a separate Change Control Note/Notice (CCN) prepared by the Service Provider (format has been provided as **Form 2 Appendix III**).
- However, any such requirement mentioned in the approved SRS or included in the To-be functional solution will be done at no extra cost.
- Changes in the application software which are mandatorily required for complying to any of the predefined SLA requirements, FRS or To-be

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Functional solution cannot be treated as a separate Change Request, and hence are to be completed by the Service Provider at no extra cost

- All Change Requests submitted by the Service Provider will contain an effort estimate, which would be discussed with and approved by ASTC. ASTC may ask the Service Provider to provide justification using standard methodology like Function Point Analysis or any similar method.
- All changes during the stabilization or support & maintenance phase shall be subjected to the comprehensive & integrated testing by the Service Provider to ensure that the changes implemented in the system meets the desired and specified requirements of ASTC and doesn't impact any other function of the system.
- For any changes to the software, Service Provider shall submit a document indicating proposed changes, impact to the system in terms of functional outcomes/additional features added to the system etc.
- The Service Provider is required to obtain approval from ASTC 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.
- The Service Provider is required to keep all such documentation up to date to reflect the latest enhancements/modifications made to the application. All documentation should be prepared as per latest industry standards and should incorporate necessary version control mechanism.

### **E. Maintenance of Configuration Information & System documentation**

The Service Provider will provide detailed final system documentation for reference to ASTC. Service Provider shall prepare the final User Manuals incorporating details of all menus and functionality provided by the System.

### **F. Operations and Maintenance of IT infrastructure**

Operations and Maintenance of IT infrastructure shall include a range of services related to the operation & maintenance of the IT infrastructure. The Services under this shall cover the new IT Infrastructure setup. Following services shall form a part of managed services:

- a) Basic Infrastructure Services setup &
- b) Monitoring and Management Services

The concerned SLAs have been provided in the RFP.

The Service Provider shall provide monitoring and management services for an agreed service window during the period of 5 years from the date of final acceptance test (Final Go live). The scope of the services for overall Physical and IT infrastructure management during this period shall include Monitoring, Administration and Management of the entire infrastructure together with other ASTC's offices. The entire stack of monitoring and management services shall include the following:

- a) Help Desk Services
- b) Monitoring, Administration & Management Services of IT assets
- c) Backup & restore and archival services
- d) Storage, Administration & Management Services
- e) User Administration and Security

f) Warranty and Annual Maintenance Contract

G. Warranty and Annual Maintenance Contract

Service Provider shall provide comprehensive warranty of all the tendered items supplied for the project. It shall be for 36 months from the date of supply. Comprehensive AMC should also be provided from the date of end of warranty till the end of 5 years from the final Go Live. Service Provider shall provide the comprehensive manufacturer's warranty in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered by this bidding document. Service Provider must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this bidding document against any manufacturing defects during the warranty period.

H. Annual Technical Service

- Service Provider shall maintain data regarding entitlement for software enhancements, refreshes, replacements and maintenance.
- If the Operating System or additional copies of Operating System are required to be installed / reinstalled / de-installed, the same should be done.
- Service Provider should carry out any requisite adjustments / changes in the configuration for implementing different versions of Application Software.
- Updates: The Service Provider shall provide and implement from time to time the Updates of the software and operating systems as required. The Service Provider should provide updates & patches of the IT software and tools to ASTC as and when released by OEM without any cost to ASTC. All the software shall have the latest updates at the end of Contract period.
- Service Provider shall provide patches to the licensed software including the IT software, operating system, databases and other applications.
- Software License Management: The Service Provider shall provide for software license management and control. Service Provider shall provide complete manufacturer's technical support for all the licensed software problems and/or questions, technical guidance, defect and non-defect related issues. Service Provider shall provide a single-point-of-contact for software support and provide licensed software support including but not limited to problem tracking, problem source identification, problem impact (severity) determination, bypass and recovery support, problem resolution, and management reporting.
- The manufacturer's technical support shall at a minimum include online technical support and telephone support during ASTC's business hours (Business hours in ASTC will be from 0930 hours to 1800 hours on weekdays (Mon-Sat)) with access for ASTC and Service Provider to the manufacturer's technical support staff to provide a maximum of 4 hour response turnaround time. There should not be any limits on the number of incidents reported to the manufacturer. ASTC shall have access to the online support and tools provided by

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the manufacturer. ASTC shall also have 24x7 accesses to a variety of technical resources including the manufacturer's knowledge base with complete collections of technical articles.

- Service Provider shall have to undertake Operational Support Services of the entire IT system during the complete Implementation phase till the commissioning free of cost and 5 years post that. The Service requirement and its associated SLA during the Operation phase are mentioned in separate section (Appendix IV of the RFP) in this bidding document.

Service Provider shall deploy adequate operational staff at project locations for Application Development, Operations and Maintenance, Training and Capacity Building.

Qualified Personnel of varying skills shall be provided by the System Integrator. Service Provider shall have to propose an optimum (critical to the project) staffing plan so as to meet ASTC's requirements along with the bid. Detailed role and responsibility of operational staff shall have to be indicated by along with the bid, however, ASTC reserves the right to get the plans of Service Provider modified depending upon exact requirement. Team Composition as well as staff deployment is part of technical evaluation.

### **I. Application Development and Customization**

Contractor would submit man power deployment plan and would ensure deployment of sufficient specialized and experienced man power throughout the project to complete the implementation, stabilization of the IT system in time successfully. The manpower deployment shall ensure that implementation of all the module shall happen in parallel. The SP shall deploy adequate number of system analysts, programmers, server administrator, and database administrators etc. so as to meet the project requirements including SLAs.

### **J. Operations and Maintenance**

Service Provider shall provide the necessary Handholding support for the entirety of the Contract. However, in case more manpower is needed to meet the service level, the same shall be provided by the Service Provider.

<b>Key Obligation of SP during Operation &amp; Maintenance period</b>	
1.	Maintain the entire project during the contract period as per the requirement provided in scope of work and Technical Specification of this RFP.
2.	Ensure and guarantee smooth functioning of the project during all the time of Contract Period.
3.	Maintain all computer infrastructures including hardware, software and network infrastructure so as to maintain minimum service levels stipulated in Service Level Agreement set forth in this RFP.
4.	Maintain minimum service levels in relation to maintenance of project all times during the Contract Period as set forth in this RFP.
5.	Replace faulty equipment, hardware, software at its own cost so as to maintain minimum service levels stipulated in this RFP.
6.	Shall make necessary arrangements to prevent any damage to VTS equipment

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<b>Key Obligation of SP during Operation &amp; Maintenance period</b>	
7.	Replace the equipment or system at its own cost, well ahead of the time when the utility thereof is reasonably expected to expire.
8.	Operations Manual, Maintenance Manual and other manuals in consultation with ASTC or its supervision consultant specifying the detailed operation plan, methodology and time period of regular and preventive maintenance, comprehensive information of equipment, hardware, software used in Project, operation procedure of each sub system installed, the repair and maintenance procedures of each component and equipment of the Project, procedures for diagnosis, removal of bugs and replacement of any item of equipment, diagnosis procedures of faults and procedures for removing it and replacing. These manuals shall be detailed as part of scope of work and Technical Specification Document of RFP.
9.	Guarantee uptime as per the terms specified in technical specification set forth in this RFP during all times of contract period.
10.	Provide all MIS report specified in this RFP and any other reports required by ASTC.
11.	Take all precautions to ensure that the Project including all software and hardware involved remains safe and secure in general and free from attempted manipulation, fraud, break down, compromising of data security, malware and virus attacks, physical attacks or damage due to neglect or omission.
12.	Ensure that any premises provided by ASTC to the SI for the purpose of carrying out its obligations shall be used solely for the purpose of carrying out the functions intended and obligations placed under this agreement and not for any other purposes.
13.	Take prompt and reasonable action for redressal of each complaint received including complaints received by ASTC related to project.
14.	Obtain and keep valid all applicable permits required by it under applicable laws for carrying out its scope of work during the Contract Period.
15.	Abide by all obligations related to maintenance requirement specified in technical specification set forth in this RFP during all times of Contract Period.
<b>ASTC's Obligation</b>	
	Provide necessary access to the project locations for due and punctual performance of its obligations.
	Electricity expense at central control room shall be the responsibility of ASTC
	Make regular payment to SP in conformity with the payment terms specified in this Agreement.
	Grant or where appropriate provide necessary assistance to the SI in securing applicable permits;
	Attempt to grant in a timely manner all such approvals, permissions and authorizations which the SP may require or is obliged to seek from the ASTC in connection with implementation of the project and the performance of SI.

### 5.2.5. Training and Capacity Building

The SP shall provide training to the department staff on various sub-systems of the project. The training shall include end user training, train the trainer programs, Administrator trainings, refresher courses etc. Providing adequate

training to the various users is essential for the successful implementation of the project.

Training needs to be provided to people from the senior management, the Supervisory, Clerical Staff, Operational Staff, Conductors, drivers etc. Trainings need to be conducted based on a requisite mix of theory & practical/operational sessions. The trainings should be conducted in Hindi and Assamese languages. Trainings may be conducted in shifts over a period of time.

The SP shall also be responsible for retraining the staff concerned whenever changes are made in the software and it is the responsibility of the SI to ensure that the operators are familiar with new versions of Software and its allied services.

The SP shall also conduct refresher courses on periodic basis for some of the trainings. It is mandatory that during the training, at least two trainers (1 technical trainer and 1 process trainer) are available during the training.

#### 5.2.6. Project Documentation

The Service Provider will provide detailed final system documentation for reference to ASTC. Service Provider shall prepare the final User Manuals incorporating details of all menus and functionality provided by the System. ASTC expects the following (not limited to) in the form of product documents. In addition, the Service Provider will provide ongoing product information for reference purposes and to facilitate self-education for ASTC and other Personnel.

### 5.3. Project Deliverables and Timelines

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#	Activity/Task	Deliverables/ Milestone	Timelines (In weeks)
1	Letter of Award(LOA)	Copy of LOA	Project Start Date = T
2	Contract Signing	Copy of Contract	T + 1 week
3	<ul style="list-style-type: none"><li>Project Planning</li><li>Development Implementation and Maintenance approach</li></ul>	a) Finalized Project plan b) Finalized Inception Report	T + 1 weeks
4	<ul style="list-style-type: none"><li>Finalizing custom requirements</li><li>Requirement gathering(FRS) and preparation of SRS</li></ul>	a) Finalized Requirement report b) Approved System requirement specification	T + 2 weeks
5	<ul style="list-style-type: none"><li>System design – Detailed Test Plan</li></ul>	Approved Test plan	T + 3 weeks
6	<ul style="list-style-type: none"><li>System Development – Application development</li><li>System Testing</li></ul>	Unit and Integration testing reports	T + 6 weeks
7	Procurement and installation of IT Infrastructure	Acceptance Certificate	T + 6 weeks
8	Complete Cloud Infrastructure and Network Implementation	Acceptance of Cloud Infrastructure and Network Implementation	T + 4 weeks
10	UAT completion	Sign-off on successful	T+ 7 weeks
11	<ul style="list-style-type: none"><li>Training of relevant staff</li><li>Project Documentation</li></ul>		T + 7 weeks
12	Go Live		T + 8 weeks
13	Support and Maintenance		5 years from go-live

## 5.4. Functional Requirements

The functional requirements are listed below:

- Vehicle Tracking System
- Video Management System
- Command Center
- Mobile Application
- Web application
- Billing System

### A. Vehicle Tracking System

The vehicle tracking system features will include but not be limited to the following:



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#	Scope
a)	<u>Trip Tracking</u> : The system shall track each and every vehicle from Source to destination. The tracking shall be real time and web based. Entire set of applications and their features shall allow secure web based online access to obtain real time information. The secure access shall be provided through popular browser interfaces.
b)	<u>Tampering Alert</u> : In case of tampering of any equipment, component of vehicle tracking system etc., alert should be given through SMS/Email/ On-screen Pop Up Alert with Sound on relevant Mobile Nos. & email ids or as suggested by ASTC.
c)	In case of deviation of vehicle from pre-defined routes or excess stoppage of vehicle beyond a specified time duration, alert should be given through SMS/Email to relevant Mobile Nos. & email ids or as suggested by ASTC.
d)	Create route maps based on stop locations and stop sequences
e)	Procurement, installation and maintenance of GPS-based Vehicle Tracking Unit (VTU) devices on all public transport vehicles for the entire duration of the project
f)	Procurement, installation and maintenance of SIM cards (including data cost) for all VTU devices
g)	Deployment of VTU software platform that enables live tracking for all stakeholders
h)	Provide GIS-based road maps from available sources with proper licenses as may be required
i)	Training to all key stake holders

### 1. Functional Details

a)	Collecting and digitizing location details, both initially and subsequently as stop / depot locations change or when new stops / depots are added
b)	Mapping and creating each route, including sequencing all the stops for the route, both initially and subsequently as routes change or when new routes are added
c)	Digitize and store fleet schedules
d)	Maintaining master mapping of vehicle number and VTU number
e)	VTU to capture latitude-longitude and time stamp and send the data packets every 10 seconds
f)	VTU device to send alert upon detecting a tampering event
g)	In case of loss of data connection, the VTU must have adequate data storage to store all the vehicle locations with time stamps for at least 6 hours and transmit them upon re-connection of the data network
h)	Ensure adequate stock of spare units for repair and maintenance of the VTU hardware to ensure a TAT of 12 hours to reduce downtime
i)	Deploy software application to process the VTU data for GPS noise etc and ensure a maximum lag of 10 seconds
j)	Setup and maintain web portal for live tracking of vehicles on GIS-based route maps. Each entity shall get its own unique login to view their respective vehicles live.
k)	Display the expected time of arrival to reach all subsequent stops along the route.
l)	Setup and maintain required APIs / live data feeds to enable live tracking for Mobile App.

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m)	Ensure and build a mechanism to capture in real-time the vehicle route mapping i.e. the system should know which vehicle is running on which route all the time.
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### 2. Key Reports:

a)	Provide position of the vehicle at any given point of time
b)	Tracking the complete route taken by the vehicle on a given timescale
c)	Route-specific distance travelled by specific vehicle on a given date and time
d)	Time taken to complete a trip by specific vehicle, route based, at time slots in a day
e)	Route deviations by specific buses during the duty / trip, unscheduled stoppages, over-speeding, distance travelled between stops with-in specific time, etc.
f)	Over speeding alerts
g)	Export functionality for reports in screen-friendly, email-friendly and printer-friendly formats e.g. PDF, Excel, CSV, etc.

## B. Video Management System

#	Video Management System
1	This shall be a highly scalable enterprise level software solution. It shall offer a complete video surveillance solution that will be distributed network architecture, user-friendly interface, scalable to required numbers of cameras that can be added on a unit-by-unit basis.
2	The network video management software shall be licensed and shall operate on open architecture and shall require no proprietary IT hardware.
3	The network video management software shall allow for video to be streamed on workstation in Matrix or on a video wall.
4	The user with administrative rights shall create clients (users) and give access to the software client application based on predefined user access rights.
5	The system shall allow the recording, live monitoring, playback of archived video and data simultaneously.
6	The software shall display dual H.264/H.245 & H.265+ video streams in real time simultaneously at frame rates ranging from 1 fps to 25 fps and resolution ranging Full HD to other HD/SD resolution.
7	Each camera's bit rate, frame rate and resolution shall be set in- dependently from other cameras in the system, and altering these settings shall not affect the recording and display settings of other cameras.
8	The software shall provide automatic search and discovery of component of video surveillance system on the network, which can be network cameras and mNVRs.
9	The software shall provide drag & drop functions on the system and for set up of connection between cameras and monitors connected to one workstation.

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10	<p>The software shall allow:</p> <ul style="list-style-type: none"><li>• Live display of cameras</li><li>• Live display of camera sequences</li><li>• Playback of archived video</li><li>• Retrieval of archived video</li><li>• Instant Replay of live video</li></ul>
11	<p>The software shall be able to do video recording on any of the following options - inbuilt hard disks on the server, direct attached storage boxes attached to servers, network attached storage, storage area network.</p>
12	<p>The software shall support SNMP trap and LDAP.</p>
13	<p>The software shall be able to select the required recording based on the time recording was activated, the duration of recording, operator activated recording, event activated recording, scheduled recording.</p>
14	<p>The software shall provide a reporting utility for tracking for the following minimum options. Video clips and image snapshots shall be stored with reports for documenting events.</p> <ul style="list-style-type: none"><li>• Alarms</li><li>• Incidents</li><li>• Operator logs</li></ul>
15	<p>The software shall have the facility to export the desired portion of clipping of video from a desired date/time to another desired date/time on DVD/ on any client/ network storage device. Viewing of this recording shall be possible on authorized player, which shall be provided by software manufacturer or in media player on computer utilizing a Window environment.</p>
16	<p>The Video Management servers shall not limit the number of network video recording servers which can be networked together to form video management and recording system.</p>
17	<p>The Video Management servers shall maintain a catalogue of settings for all the clients, servers, and IP cameras &amp; IP enabled cameras in the system. If a single server cannot manage the Video Management servers &amp; recording, in such cases, additional server shall be provided.</p>
18	<p>The software shall enable the client to dynamically create connections between cameras and clients and view live or recorded video on Monitors.</p>
19	<p>The software shall provide the client seamless operation of all cameras and clients available in the system regardless of the actual connection to different Network Video Recording servers.</p>
20	<p>It shall be possible to search for recordings in the software by camera, date and time. If a date and time is specified, playback shall commence from that date and time. It shall be possible to playback more than one camera simultaneously.</p>
21	<p>The VMS shall provide comprehensive health check of all the cameras, mNVR periodically and shall generate a log for the same.</p>
22	<p>The Video Management Software shall have the capability of creating camera sequences.</p>

The system should have the ability to integrate with any third-party vehicle tracking system in the future.

**C. Command Centre**

<b>Command Center</b>	
1.	Operations Control and Command Centre (CC) and Cloud will be established and maintained by the Service Provider with all communication requirements also being the responsibility of the Service Provider.
2.	The Control Centre will be housed in ASTC premises. Service Provider has to provide a separate BOM for components as per requirements stated for the cloud and in the commercial proposal.
3.	The Data Center will be hosted in a cloud environment.
4.	The CC shall have seating space for 4-5 persons who can work during the working hours.
5.	Electricity with Generator backup and CC space shall be provided by ASTC. The following to be provided by the SI: <ul style="list-style-type: none"> <li>I. Supply of min 3 wall mount TV Screen (min 55 inch)</li> <li>II. Supply of 4 Laptops: Latest processor machines with Windows 10 OS</li> <li>III. Supply of 1 Printer: Laser Printer with Scan/Copy/Fax option. Networking and network devices for the LAN connected devices.</li> <li>IV. All communication for the Data Centre and Control Center should be provided by the SI</li> <li>V. All necessary furniture and other consumables required for proper functioning of the CC</li> </ul>

**D. Mobile Application**

Selected Service Provider shall have to develop, deploy and maintain an Android/iOS mobile application and a Web Application to help the commuter to get various information of the journey.

The mobile application should have the following specifications:

1.	Live vehicle tracking: <ul style="list-style-type: none"> <li>a. Display the live position of the vehicle on a map</li> <li>b. Display the route, stops and live position of the vehicle along that route on a map simultaneously in a single screen</li> </ul>
2.	Estimated Time of Arrival (ETA): <ul style="list-style-type: none"> <li>a. Display the live arrival time of the next vehicle at all the stops along any chosen route.</li> </ul>
3.	Other consideration for SPs: <ul style="list-style-type: none"> <li>a. The Android mobile application must be compatible with all android smartphones available in the market that support Android OS 4.4 or higher.</li> <li>b. The web application must be compatible with all smart phones across all popular platforms – android, iOS, Windows Phone, Blackberry, Nokia smartphones, etc.</li> <li>c. Need for continuous evolution of the mobile application to suit the changing demands and needs of passengers, and as new technology becomes available to offer better services and user experience</li> <li>d. Ability to zoom in and out and pan the map inside the mobile application</li> </ul>

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	e. Map and entire interface to be automatically formatted to fit the size of the user's screen
	f. Ability to provide Over-The-Air (OTA) updates to the application
	g. The app shall be offered in both English and Assamese
	h. All features except live information should be available in offline mode

### E. Web Application

The web application should have the same features provided for Mobile Application. In addition to these features, it should have a report generating feature. The web application should include both GPS vehicle tracking and VMS of CCTV footage.

### F. Billing System

The billing system should have the following features but not limited to:

- Logging of distance travelled by each vehicle on a daily basis
- Record the charges applicable for each type of vehicle
- Generation of consolidated monthly bills based on the total distance travelled by all the vehicles and applying the charges applicable for each type of vehicle

## 6. Terms of Payment

### 6.1.1. Payment Schedule

Payments shall be made as per the below milestones.

#	Milestones	Amount
1	30 days after Final Go-live	40% of total project cost
<b>O &amp; M Period (5 Years)</b>		
Year 1	Q1	3% of total project cost
	Q2	3% of total project cost
	Q3	3% of total project cost
	Q4	3% of total project cost
Year 2	Q1	3% of total project cost
	Q2	3% of total project cost
	Q3	3% of total project cost
	Q4	3% of total project cost
Year 3	Q1	3% of total project cost
	Q2	3% of total project cost
	Q3	3% of total project cost

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#	Milestones	Amount
	Q4	3% of total project cost
Year 4	Q1	3% of total project cost
	Q2	3% of total project cost
	Q3	3% of total project cost
	Q4	3% of total project cost
Year 5	Q1	3% of total project cost
	Q2	3% of total project cost
	Q3	3% of total project cost
	Q4	3% of total project cost

For the O&M period, the payments will be made for each quarter after 30 days of ending of the particular quarter.

### 6.1.2. Payment Terms

1. In consideration of the Services and subject to the provisions of the Master Service Agreement (MSA) (to be signed later) and SLA, the SP shall be eligible to receive payments (RS, MG) from ASTC in accordance with Payment Schedule of the MSA (to be signed later).
2. ASTC will pay for the Services as stated in accordance with the Terms of Payment Schedule. In the event of failure of the SP to meet the service level defined in the Service Level Agreement, ASTC would calculate a financial sum and debit the same against the Terms of Payment as defined in the Payment Schedule. Such sum deducted will be determined in accordance with the terms of the Service Level Agreement.  
Except as otherwise provided for herein or as agreed between the parties in writing, ASTC shall not be required to make any payments in respect of the Services other than those covered by the Terms of Payment Schedule.
3. SP will have to submit proof of having completed all payment milestones to ASTC for its sign-off. ASTC shall make payments based on due diligence of submitted reports.

### 6.1.3. Invoicing and Settlement

1. The Service Provider will submit its invoices in accordance with the following principles:
  - a. Generally and unless otherwise agreed in writing between the parties or expressly set out in the MSA(to be signed later), the SP shall raise an invoice after getting sign-off from ASTC for agreed amount (including SLA & Penalty adjustments if any).
  - b. The invoice shall be submitted along with the necessary approval / signoff / acceptance / certification provided by the concerned parties for the

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respective Deliverables , failing which ASTC reserves the right to reject the invoices.

- c. Along with the invoice, the SP is required to submit the Deliverables linked with the payment in softcopy and hardcopy formats, as applicable failing which ASTC reserves the right to reject the invoices.
  - d. Any invoice presented in accordance with this Schedule shall be in a form agreed with ASTC.
2. Invoices shall be accurate and all adjustments (if any) to payments to be made to the SP shall be applied to the next payment invoice of the SP.
  3. Payment for invoices shall be made preferably within 60 days of the receipt of correct and valid invoice by ASTC, which has to be after completion of the said activities, and after obtaining the signoff from ASTC for the required Deliverables and is subject to penalties/ adjustments based on the SP's performance. The penalties are imposed on the SP as per the SLA criteria. In case penalties are incurred by the SP, the same shall be adjusted in the payment towards invoices.

### **6.1.4. Additional Costs**

1. ASTC shall make payments to the SP at the times and in the manner set out in the Terms of Payment Schedule subject always to the fulfillment by the SP of the obligations herein.
2. All payments shall be made after adjustments required for any SLA based penalties.
3. No invoice for extra work / charge order on account of change order will be submitted by the SP unless the said extra work / change order has been authorized / approved by ASTC in writing in accordance with Change Control Schedule as agreed MSA.
4. The prices should be mentioned without any qualifications whatsoever and should include all taxes, duties, fees, levies and other charges as may be applicable in relation to the activities proposed to be carried out. It is mandatory that such charges wherever applicable/ payable should be indicated separately. For the project bid, the SP is expected to take into account all taxes (except Service Tax).

### **6.1.5. Currency of Payment**

Payment shall be made in Indian Rupees only.

### **6.1.6. Taxes and Statutory Payments**

1. All relevant taxes would be considered for reimbursement on actuals as per ASTC's discretion and prevailing Government Laws.
2. The SP shall bear all personal / income taxes levied or imposed on its staff, vendor etc. on account of payment received under the contract. The SP shall



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bear all income/corporate taxes, levied or imposed on the SP on account of payments received by it from ASTC for the work done under the contract.

3. ASTC or its nominated agencies shall be responsible for withholding taxes from the amounts due and payable to the SP wherever applicable. The SP shall pay for all other taxes, duties or levies in connection with the MSA(to be signed later), SLAs, and any other Project Engagement Definition including, but not limited to, property, sales, use, excise duty, value-added, goods and services, consumption and other applicable taxes, duties or levies.
4. In the event of any increase or decrease of the rate of GST on Services, the consequential effect shall be to the account of ASTC.
5. In the event of any increase or decrease of any other tax, levies, currency exchange rates etc. due to any statutory notification(s) during the term of the MSA (to be signed later), the consequential effect shall be to the account of the SP.

### **6.1.7.Liquidated Damages**

1. In addition to the penalty as mentioned in the SLA, liquidated Damages will be levied on the SP, in the event of the SP:
  - a. Failing to meet the milestones provided for in the MSA,
  - b. Failing to perform the responsibilities and obligations as set out in MSA to the complete satisfaction of ASTC or any of its nominated agencies.
2. ASTC shall be entitled without prejudice to its other rights and remedies, to deduct from the price payable to the SP and also to encash the Performance Bank Guarantee, provided the total amount recovered does not exceed the Total Contract Value, whichever is higher.
3. In the event the bidder is unable to complete the assignment in defined time period, penalty of 1% of contract value will be charged for each week delay, with maximum limit being 10% of total contract amount. If the delay continues beyond 6 weeks, ASTC may terminate the Agreement and may take action as appropriate as per law.

## **7. Exit Management**

### **7.1. Exit Management Plan**

- a) An Exit Management plan shall be furnished by System Integrator in writing to the Purchaser within 120 days from the Effective Date of this Agreement, which shall deal with at least the following aspects of exit management in relation to the Agreement as a whole and in relation to the Project Implementation, and the Service Levels.
  - i. A detailed program of the transfer process that could be used in conjunction with a Replacement System Integrator including details of the means to be used to ensure continuing provision of the services

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throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer.

- ii. Plans for the communication with the System Integrator's sub-contractors, staff, suppliers, customers and any related third party as necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer.
  - iii. Plans for provision of contingent support to Replacement System Integrator for a reasonable period after transfer.
- b) The System Integrator shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
  - c) Each Exit Management Plan shall be presented by the System Integrator and approved by the Purchaser.
  - d) In the event of termination or completion of the contract period, each Party shall comply with the exit Management Plan.
  - e) During the exit management period, the System Integrator shall continue to deliver the Services.
  - f) Payments during the Exit Management period shall be made in accordance with the Terms of Payment.
  - g) Appropriate spares to carry out the operations shall be handed over by the SI to the Purchaser.

### **7.2. Transfer of Assets**

- a) The Purchaser shall be entitled to serve notice in writing to the Bidder at any time during the exit management period, requiring the Bidder and/ or its Consortium partners to provide the Purchaser with a complete and up to date list of the Project Assets within 30 (Thirty) days of such notice which are to be transferred/ handed over to the Purchaser.
- b) In the event, if the Project Assets to be transferred are mortgaged to any financial institutions by the Bidder, the Bidder shall ensure that all such liens and liabilities have been cleared beyond doubt, prior to such transfer. All documents regarding the discharge of such lien and liabilities shall be furnished to the Purchaser.

Bidder shall transfer the application/software, software code, databases, hardware, business data, architecture schematics, designs, storage media and other information/documents which will be developed, procured or customized during the project to the purchaser within 30 (Thirty) days of notice period.

- c) SI shall have to transfer the whole setup in optimum performance conditions as per the contract. The System Integrator shall provide all such information as necessary to have a seamless handover to the Purchaser or its Replacement System Integrator and which the System Integrator has in its possession or control at any time during the transfer period.

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- d) The System Integrator shall commit adequate resources to comply with its obligations under this Exit Management Procedures. The System Integrator shall get the exit management plan approved by the purchaser.

## 8. Appendix I: Technical Forms

### 8.1. Form 1: Particulars of the Service Provider

#	Information Sought	Details to be Furnished
1	Name and address of the bidding Company	
2	Incorporation status of the firm (public limited / private limited, etc.)	
3	Year of Establishment	
4	Date of registration	
5	ROC Reference No.	
6	Details of company registration	
7	Name, Address, email, Phone nos. and Mobile Number of Contact Person	

## 8.2. Form 3: Bank Guarantee for Earnest Money Deposit

To,

<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 Assam State Transport Corporation (ASTC)

Know all Men by these presents that we << >> having our office at <<Address>> (hereinafter called "the Bank") are bound unto the Assam State Transport Corporation (ASTC) (hereinafter called "the Purchaser") in the sum of INR <<Amount in figures>> (Rupees <<Amount in words>> only) for which payment well and truly to be made to the said Purchaser, 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 Purchaser 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 Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser 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.

NOTWITHSTANDING ANYTHING CONTAINED HEREIN:

- I. Our liability under this Bank Guarantee shall not exceed INR <<Amount in figures>> (Rupees <<Amount in words>> only)
- II. This Bank Guarantee shall be valid up to <<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:

### 8.3. Form 4: 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 the Installation and maintenance of Vehicle Tracking System to the Purchaser 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 sealed in a separate envelope.

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

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

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

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

Yours sincerely,

Authorized Signature [*In full and initials*]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Location: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

**8.4. Form 5: Project Citation Format**

Relevant IT project experience (provide no more than 5 projects in the last 5 years)	
<b>General Information</b>	
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	
Outcomes of the project 1. Live Vehicle Tracking Number Of Vehicles	
<b>Other Details</b>	
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	



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### 8.5. Form 6: Proposed Solution

Technical approach, methodology and work plan are key components of the Technical Proposal. At a minimum you are suggested to provide the sections:

1	Approach and Methodology to perform the work in this assignment which highlights Understanding of the objectives of the assignment: The extent to which the Systems Implementer's approach and work plan respond to the objectives indicated in the Statement/Scope of Work Completeness and responsiveness: The extent to which the proposal responds exhaustively to all the requirements of all the Terms of Reference
2	Solution Proposed : Qualitative assessment based on Demonstration of understanding of the Department's requirements through providing: <ul style="list-style-type: none"><li>– Solution proposed and its components,</li><li>– Technologies used,</li><li>– Scale of implementation,</li><li>– Challenges likely to be encountered</li><li>– Mitigation proposed</li></ul> Client references
3	Work plan and manpower deployment plan

Any other pertinent section which helps strengthen technical responsiveness can be added

#### Form 6 A: Bill of Material of entire solution

All components of scope of work including products, applications, system software, hardware, Warranty, AMC, training, Helpdesk etc. components needs to be specified in clear cut tabular format. Brevity, Precisions and completeness is expected in providing the solution. Bill of Material provided in Annexure needs to be provided mandatorily. Since this is key a part of technical evaluation, Bidders are advised to provide full details.

In addition to the above, indicative tabular format are enclosed below. Bidders are free to suitably modify the same.

#### Solution Proposed

#	Proposed Solution (Provide the Product Name or fill Custom Built, in case of a new development)	Version & Year of Release	OEM	Features & Functionalities	O&M Support (Warranty/ATS /: as required as per RFP)	Reference in the Submitted Proposal (Please provide page number/section number/volume)

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### System Software

#	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)	Number of Licenses (Training)

## 8.6. Form 7: Proposed Work Plan

[illegible]

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Purchaser approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in the form of a bar/ Gantt chart.

## 8.7. Form 9: Deployment of Personnel

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

- For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category. Months are counted from the start of the assignment.

**8.8. Form 10: Deviations**

To:

&lt;Location, Date&gt;

&lt;Name&gt;

&lt;Designation&gt;

&lt;Address&gt;

&lt;Phone Nos.&gt;

&lt;Fax Nos.&gt;

&lt;Email id&gt;

Dear Sir:

Subject: Deviations &lt;Provide Name of the Implementation Assignment&gt;

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.]*

<b>No .</b>	<b>Deviation</b>	<b>Material</b>	<b>Non-Material</b>	<b>Impacted Deliverable(s)</b>	<b>Impacted Timeline(s)</b>	<b>Financial Impact</b>
1.	<Deviation description>	<Yes / No>	<Yes / No>	<Name(s) of Deliverables to get affected by the Deviation>	<Effect on Timelines due to the Deviation>	<Value>
2.	<Deviation description>	<Yes / No>	<Yes / No>	<Name(s) of Deliverables to get affected by the Deviation>	<Effect on Timelines due to the Deviation>	<Value>

B – Any other areas

<b>No .</b>	<b>Deviation</b>	<b>Material</b>	<b>Non-Material</b>	<b>Impacted Deliverable(s)</b>	<b>Impacted Timeline(s)</b>	<b>Financial Impact</b>
1.	<Deviation description>	<Yes / No>	<Yes / No>	<Name(s) of Deliverables to get affected by the Deviation>	<Effect on Timelines due to the Deviation>	<Value>
2.	<Deviation description>	<Yes / No>	<Yes / No>	<Name(s) of Deliverables to get affected by the Deviation>	<Effect on Timelines due to the Deviation>	<Value>

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of Firm:

Address:

**8.9. Form 11: Illustrative Manufacturers'/Producers' Authorization Form**

*[This form has to be provided by the OEMs of the products proposed]*

No. Date:

To:

OEM Authorization Letter

Dear Sir:

Ref: Your RFP Ref: [\*] dated [\*]

We who are established and reputable manufacturers / producers of \_\_\_\_\_ having factories / development facilities at (*address of factory / facility*) do hereby authorize M/s \_\_\_\_\_ (*Name and address of Agent*) to submit a Bid, and sign the contract with you against the above Bid Invitation.

We hereby extend our full guarantee and warranty for the Solution, Products and services offered by the above firm against this Bid Invitation.

We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products manufactured or distributed by the Supplier:

- a. Such Products as the Purchaser may opt to purchase from the Supplier, provided, that this option shall not relieve the Supplier of any warranty obligations under the Contract; and
- b. in the event of termination of production of such Products:
  - i. advance notification to the Purchaser of the pending termination, in sufficient time to permit the Bank to procure needed requirements; and
  - ii. Following such termination, furnishing at no cost to the Purchaser, the blueprints, design documents, operations manuals, standards, source codes and specifications of the Products, if requested.

We duly authorize the said firm to act on our behalf in fulfilling all installations, Technical support and maintenance obligations required by the contract.

Yours faithfully,

(Name)

(Name of Producers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. The Bidder in its Bid should include it.

## 9. Appendix II: Financial Forms

### 9.1. Form 1: Covering Letter

To:

<Location, Date>

<Name>

<Designation>

<Address>

<Phone Nos.>

<Fax Nos.>

<Email id>

**Subject:** Submission of the financial breakup 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 Technical Proposals. Our Solution for developing, implementing and maintaining the subject line assignment 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 GST on Services 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. 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



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regard before evaluation of our Tender, we agree to furnish the same in time to your satisfaction.

### **4. 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 Costs 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:

~

\*Please note: GST on Services which will be paid extra by ASTC as per the prevailing rates. All other taxes, duties insurance (if any) will be borne by bidder.

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### 9.2. Form 2: Detailed Financial Breakup

Below is the format for the detailed cost break up to be provided by the Bidder. This is to be submitted online **ONLY**.

Detailed Breakup of individual components														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
#	Category	Component	Quan tity	Unit Price	Total Cost(e xclusiv e of taxes)	Tax	Total Cost(in cludin g taxes) 6+7	O&M Support Cost		Total O&M cost for 5 years (exclud ing taxes) 9+10	Tax on O&M for 5 years	Total O&M cost (including taxes) 11+12	Total tax Amount 7+12	Total Cost including taxes 8+13
								For 3 years	For 2 years after initial 3 years					
1.	Vehicle Tracking System													
1.1	Software (Development, Testing, Deployment, Maintenance)	Vehicle Tracking system application (web portal + mobile application + Reporting), VMS application, Billing system												
1.2	Hardware (Procurement, Installation, Commissionin g, Maintenance)	Vehicle Mounting Unit (GPS and other consumable s), CCTV IP Camera, mNVR, Storage (for recording												

## RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System

Detailed Breakup of individual components														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
#	Category	Component	Quantity	Unit Price	Total Cost(exclusive of taxes)	Tax	Total Cost(including taxes) 6+7	O&M Support Cost		Total O&M cost for 5 years (excluding taxes) 9+10	Tax on O&M for 5 years	Total O&M cost (including taxes) 11+12	Total tax Amount 7+12	Total Cost including taxes 8+13
								For 3 years	For 2 years after initial 3 years					
		onboard CCTV footage - mNVR)												
1.3	Communication	GPRS SIM (including recurring data cost)												
<b>2.</b>	<b>Command Control Centre</b>													
3.1.	Hardware (Procurement, Installation, Commissioning, Maintenance)	Display Monitor												
3.2.	Hardware (Procurement, Installation, Commissioning, Maintenance)	Video Wall Solution including controller, LAN wires, any other relevant consumables etc.as per RFP												
<b>3.</b>	<b>ASTC Office</b>													
4.1.	Hardware (Procurement,	Laptop												

## RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System

Detailed Breakup of individual components														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
#	Category	Component	Quan tity	Unit Price	Total Cost(e xclusiv e of taxes)	Tax	Total Cost(in cludin g taxes) 6+7	O&M Support Cost		Total O&M cost for 5 years (exclud ing taxes) 9+10	Tax on O&M for 5 years	Total O&M cost (including taxes) 11+12	Total tax Amount 7+12	Total Cost including taxes 8+13
								For 3 years	For 2 years after initial 3 years					
	Installation, Commissionin g, Maintenance)													
4.2.	Hardware (Procurement, Installation, Commissionin g, Maintenance)	Printer (including all printing related consumable s such as ink, papers etc.)												
4.	Cloud Infrastructure													
5.	Software License	License for Google Maps to show real time vehicle position												
6.	Training	As and when required in consultation with ASTC												(=8)
7.	Others	Bidders are free to add items which are deemed required for the execution of the project.												
Total Project Cost														

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

**Note:** Financial Quotation to be given only for 149 nos. of vehicles. No additional payment will be made by ASTC other than for the items listed above.

## 10. Appendix III: Template for PBG & CCN

### 10.1. Form 1: Performance Bank Guarantee

**PERFORMANCE SECURITY:**

<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 Purchaser (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 INR<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 INR <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 <<Insert Date>>)

Notwithstanding anything contained herein:

- I. Our liability under this bank guarantee shall not exceed INR <Insert Value> (Rupees <Insert Value in Words> only).
- II. This bank guarantee shall be valid up to <Insert Expiry Date>)

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

- 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.



## RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System

### 10.2. Form 2: Change Control Note/Notice (CCN) Format

Change Control Note	CCN Number:
Part A: Initiation	
Title:	
Originator:	
Sponsor:	
Date of Initiation:	
Details of Proposed Change	
(To include reason for change and appropriate details/specifications. Identify any attachments as A1,	
Authorized by :	Date:
Name:	
Signature:	Date:
Received by the IP	
Name:	
Signature:	
Change Control Note	CCN Number:
Part B : Evaluation	
(Identify any attachments as B1, B2, and B3 etc.)	
Changes to Services, charging structure, payment profile, documentation, training, service levels and component working arrangements and any other contractual issue.	
Brief Description of Solution:	
Impact:	
Deliverables:	
Timetable:	
Charges for Implementation: (including a schedule of payments)	
Other Relevant Information: (including value-added and acceptance criteria)	
Authorized by the Implementation Partner	Date:
Name:	
Signature:	

## 11. Appendix IV: Service Levels

### 1. Purpose of this Agreement

The purpose of this SLA is to clearly define the levels of service to be provided by SI ('System Integrator') to Purchaser (Assam State Transport Corporation) for the duration of this contract or until this SLA has been amended.

### 2. Description of Services Provided

SI shall provide service as defined in Detailed Scope of Work section.

### 3. Duration of SLA

This Service level agreement would be valid for entire period of contract.

### 4. Service Level Agreements & Targets during Operations, Support and Maintenance

This section is agreed to by Purchaser and SI as the key SI performance indicator for this engagement. The following section reflects the measurements to be used to track and report systems performance on a regular basis. The targets shown in the following tables are for the period of contract or its revision whichever is later.

#	Service	Minimum SLA/ Uptime required	Penalty
1	Entire VTS system implementation	Within the prescribed timeline.	Penalty of 1% of contract value for each week delay, with maximum limit being 10% of total contract amount
2	Application availability	>=99%	No deduction
		97% to 99%	2% penalty on the monthly charges
		95% to 97%	5% penalty on the monthly charges
		93% to 95%	8% penalty on the monthly charges
		91% to 93%	10% penalty on the monthly charges
		<91%	Not acceptable. ASTC may terminate the contract.
3	Hardware repair & replacement	Should be repaired or replaced within 24-48 hrs. from the time of logging the complaint	No deduction
		48 hrs. to 72 hrs.	0.5% penalty on the monthly charges
		72 hrs. to 96 hrs.	2% penalty on the monthly charges
		96 hrs. to 120 hrs.	4% penalty on the monthly charges

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		120 hrs. to 144 hrs.	6% penalty on the monthly charges
		144 hrs. to 168 hrs.	8% penalty on the monthly charges
		168 hrs. to 192 hrs.	10% penalty on the monthly charges
		192 hrs. to 216 hrs.	20% PBG deduction
		216 hrs. to 240 hrs.	50% PBG deduction
		>240 hrs.	Not acceptable. ASTC may terminate the contract.
4	Training	100%	Training to be provided to department as per finalized schedules. Non-completion of training within specified time frame will leads to a penalty of Rs.500/- per person/Week

*Note: Monthly Charges = (Quarterly payment amount/3)*

### Uptime Calculation for the month:

- $\{\% \text{ Monthly Availability} = [(\text{Actual Uptime} + \text{Scheduled Downtime}) / \text{Total No. of Hours in a Month}] \times 100\}$
- "Actual Uptime" means, of the Total Hours, the aggregate number of hours in any month during which each of the equipment is actually available for use.
- "Scheduled Downtime" means the aggregate number of hours in any month during which each equipment, is down during total Hours, due to preventive maintenance, scheduled maintenance, infrastructure problems or any other situation which is not attributable to SI's (or Service provider's) failure to exercise due care in performing SI's responsibilities.
- The Purchaser would provide a maximum of 04 hours of planned downtime for the preventive maintenance (as part of scheduled downtime) per month per equipment/service.
- The downtime for scheduled maintenance (patch application, upgrades – OS, Database, etc.) would need to be mutually agreed between Purchaser and the Bidder. To reduce this time, various maintenance activities can be clubbed together with proper planning.
- "Total Hours" means the total hours over the measurement period i.e. one month (24 \* number of days in the month).

### Cumulative Downtime Calculation:

- The recording of downtime shall commence at the time of registering the call with SI or Service Provider for any downtime situation for the equipment.
- Downtime shall end when the problem is rectified and the application/ service is available to the user.
- Down time will not be considered for following:

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

- i. Pre-scheduled preventive maintenance and health checks (Scheduled Downtime).
  - ii. Failover time (30 minutes) in case of cluster environment. Beyond which the service would be considered to be not available and appropriate penalty shall be imposed on the SI.
- d) If the department elects to continue the operation of the machine / equipment, when a part of the machine is giving problem and leading to downtime, the commencement of downtime shall be deferred until the purchaser releases the machine / equipment to the SI for remedial action.

### **5. Breach of SLA**

In case the SI does not meet the service levels mentioned in para '4 - Service Level Agreements & Targets during Operations, Support and Maintenance' of this section, for three (3) continuous time-periods in a quarter as specified in the relevant clause, the Purchaser will treat it as a case of breach of Service Level Agreement. The following steps will be taken in such a case:-

- i. Purchaser issues a show cause notice to the SI.
- ii. SI should reply to the notice within three working days.
- iii. If the Purchaser authorities are not satisfied with the reply, the Purchaser will initiate termination process.

### **6. Exclusions**

The SI will be exempted from any delays or slippages on SLA parameters arising out of following reason:-

- a. Delay in execution due to delay (in approval, review etc) from Purchaser's side. Any such delays will be notified in written.

### **7. Reporting Procedures**

The SI's representative will prepare and submit SLA performance reports in an agreed upon format by the 5th working day of subsequent month of the reporting period. The reports will include "actual versus target" SLA performance, a variance analysis and discussion of appropriate issues or significant events.

### **8. SLA Change Control**

#### **a) General**

It is acknowledged that this SLA may change as Purchaser's business needs evolve over the course of the contract period. As such, this document also defines the following management procedures:

- i. A process for negotiating changes to the SLA.
- ii. An issue management process for documenting and resolving particularly difficult issues.
- iii. Purchaser and SI management escalation process to be used in the event that an issue is not being resolved in a timely manner.
- iv. Any changes to the levels of service provided during the term of this agreement will be requested, documented and negotiated in good faith by both parties. Either party can request a change. Changes will be documented as an addendum to this document and consequently the contract.

#### **b) SLA Change Process**

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Both the parties may amend this SLA by mutual agreement in accordance. Changes can be proposed by either party. Normally the forum for negotiating SLA changes will be Purchaser's monthly review meetings.

### **c) Version Control**

All negotiated SLA changes will require changing the version control number. As appropriate, minor changes may be accumulated for periodic release (e.g. every quarter) or for release when a critical threshold of change has occurred.

## **9. Management Escalation Procedures**

The purpose of this escalation process is to provide a quick and orderly method of notifying both parties that an issue is not being successfully resolved at the lowest possible management level. Implementing this procedure ensures that purchaser and SI management are communicating at the appropriate levels. Escalation should take place on an exception basis and only if successful issue resolution cannot be achieved in a reasonable time frame.

- a) All issues would be raised to the project management team, which is completely responsible for the day to day aspects of the implementation. The project management team shall classify the issues based on their severity level and resolve them within appropriate timelines.
- b) If project management team is unable to resolve an issue, the issue would be escalated to the top management with options/ risks detailed for decision. Top management will make decisions based on the options/ risks presented.

In case one or both the parties are unsatisfied with the decision of the top management of the Purchaser, the dispute will be resolved as specified in this RFP

## 12. Appendix V: Acceptance Testing Requirements

### 1. Acceptance Testing

Acceptance testing is an essential part of any IT Solution implementation project. In this stage the Service Provider (SP) will test and demonstrate the various individual user specific functionalities as an entire system. The primary goal of Acceptance Testing is to ensure that the solution implemented (including all the systems, deliverables and services) meets the pre-defined requirements/ specifications for functionalities, performance and security. This is ensured by defining clear, quantifiable metrics for accountability for each of the following:

- IT Application (all the modules & sub-modules and integration with other IT systems/ legacy applications)
- IT Infrastructure including Network connectivity & hardware components
- Project Documentation

The Service Provider shall primarily be responsible for ensuring that the Acceptance testing is carried out. ASTC along with the project management team (PMU) will approve the completeness of such acceptance testing. Service Provider will have the fundamental responsibility of designing, developing, installing, testing & commissioning the various components of the project to deliver the services in complete conformity with the requirements stated in the RFP & the requisite SLAs. All the corrections/ modifications identified and agreed during the Acceptance Test Procedure (ATP) must be carried out by the System Integrator. The Service Provider will ensure that it provides the system/ test documents for Acceptance Test Procedure as per the Implementation Schedule and then with the facilitation of ASTC will demonstrate, handhold and complete the Acceptance testing expeditiously. If certain minor problems/ faults persist, the Service Provider may proceed with the Acceptance Testing & make mention of the same in the ATP proceedings. The faults can be pursued subsequently and a supplementary ATP limited to maximum of 2 supplementary tests in total can be carried out for the concerned areas.

The SP shall finalize an Acceptance Test schedule at least 7 days in advance of offer for acceptance testing in consultation with ASTC. SP shall also clearly indicate the specifications clause(s) verified by each test. The Acceptance Test schedule shall be exhaustive based on the specifications and will generally cover the following:

- Setting up of the test environment
- Functional test on individual equipment, network, software, Reporting etc. as per specifications
- System and/or Integration test on solution as a whole
- Hardware and network equipment testing before commissioning
- Capacity/ Load test
- 100% traffic trials on the network.
- Data updating at DR site with incremental update as well as flush update.
- Switch over from main site to DR site, Backup, High Availability and Fallback on N+ 1 server.
- Intrusion detection, prevention and security preparation test
- Operation of help desk

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

- User acceptance testing with parallel run

### **1.1 Site Preparation Acceptance**

Service Provider in the presence of ASTC or the Nodal Agency accompanied by the PMU team shall perform the site acceptance testing to ensure that the Cloud and other locations which includes installation of Hardware, quality and completeness of Solution, Environment control etc. is in compliance with the specifications/ requirements of the project. Any deviations/gaps identified in the site preparation acceptance will have impact on the payments to be made to the SI.

### **1.2 Integration testing**

After the entire development cycle is over, all the components have to be tested end to end; System Integrated Testing (SIT) would be done. Here SI has to demonstrate the system in a controlled production environment. The SP will carry out the Integration testing to ensure the integration of all the locations with the cloud server. The SP will submit the Test plan, Test cases & the Test Data prior to carrying out the Integration testing. The test plan will include the expected results. After the test, the SP will submit the Test Results which would be used to compare the actually observed results recorded during the test against the expected results. The Observations/ Shortfalls/ Errors detected will be rectified by the SP within the specified period of time. The integration testing shall include testing of Network connectivity at all the locations and integration with the cloud. This phase will include at least the following activities:

- Test Planning
- Test Data Preparation – while SP can state the test data requirement, ASTC will assist in defining the criteria for creation of dummy test data or actual data wherever possible.
- Integration Test Environment Setup in accordance with Technical Architecture Blueprint
- Integration testing (verification of features, inter-operability, application performance, conformance to Architecture Document, conformance to operations procedures & documentation). Architecture Document shall be prepared by SP and submitted to ASTC for approval.
- Mock User Acceptance Test
- Mock Parallel Runs
- Problem Resolution

### **1.3 Functional Requirements Review**

The IT solution developed by SP shall be reviewed and verified by SP in the presence of ASTC or its representatives so as to match the Functional Requirements/ To-be Solution blueprint signed-off between the ASTC and SP. Any gaps shall be addressed by SP immediately. One of the key inputs for this testing shall be the traceability matrix to be developed by the SP for the implementation of the project. Apart from Traceability Matrix, the ASTC Nodal Agency and PMU team appointed by ASTC may

## **RFP for Supply, Installation, Operation and Maintenance of Vehicle Tracking System**

develop its own testing plans for validation of the compliance of the system against the defined requirements.

For conducting the User Acceptance Testing, ASTC's domain experts team along with any other identified employees from respective divisions/units/verticals, who are responsible for day-to-day operations of the functions automated through this implementation, will validate the tests done by the SP. The system, during the functional requirements review, shall necessarily satisfy the user acceptance testing process.

### **1.4 User Acceptance Test**

For conducting the User Acceptance Testing, ASTC's IT Core Team along with any other identified employees from respective divisions/units/verticals, shall be responsible for validating and reviewing the day-to-day testing of the functions automated through the IT solution. The system should necessarily satisfy the user acceptance testing process. The IT solution Implemented by SP shall be reviewed and verified, against the Functional & Technical Requirements signed-off between ASTC and SP. Any gaps, identified as a severe or critical in nature, shall be addressed by SP I 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 SP for IT solution. The traceability Matrix is a useful tool to determine if a test has been designed for every requirement. It documents the relationship between requirements and acceptance tests. Apart from Traceability Matrix, SP may develop its own testing plans for validation of compliance of system against the defined requirements.

### **1.5 Final Acceptance Testing**

Pre- requisite of Final Acceptance shall have the following:

- Installation & commissioning of all hardware, software supplied under this RFP including customization & deployment of IT application, Helpdesk software, SMS Gateway etc.
- All documentation related to ASTC and relevant acceptance test document (including IT Components, Non IT components).
- Installation and commissioning shall include:
  - Installation and Commissioning of IT, Non – IT components
- For both IT & Non-IT equipment's software manuals / brochures / Data Sheets / CD / DVD / media are supplied to ASTC
- All hardware and software items must be installed and commissioned on cloud as per the specification.
- Availability of all the defined services shall be verified and mutually agreed between ASTC and the successful bidder
- The SP shall be required to demonstrate all the features / facilities / functionalities as mentioned in the RFP.

### **1.6 Performance Review**

Performance is another key requirement for the Project and ASTC or the Nodal Agency accompanied by the PMU team shall validate and review the performance of



the deployed solution. Performance Review will be a regular activity conducted quarterly for the first year after Go-Live during the stabilization and subsequently half yearly for the balance support periods.

Ongoing Performance Review is to be done after Go-Live at the above mentioned periodic interval of time during the contract period or as decided by ASTC. This review will be done against certain key parameters defined in SLA, to validate the compliance to all service conditions agreed. ASTC or its representatives may carry out all the tests detailed in the acceptance test schedule to confirm that the performance of the different modules, subsystems, and entire installation satisfies the specified requirement of specifications including service performance

For ASTC to validate the performance, the SP needs to demonstrate the tests and their results to ASTC during the testing phase. Such parameters include request-response time, work-flow processing time, concurrent sessions supported by the system etc.

The SP shall make available the software programs and testers required for carrying out the acceptance tests as per the schedule. Any additional test equipment deemed required during validation shall be arranged by the SP at no cost to ASTC, so as to complete the validation as per the specified time schedule in this document. The SP shall indicate whether the software package includes programs for testing under full load conditions and overload conditions by creation of artificial data in consultation with ASTC. Such test program shall be provided by the SP for the limited purpose of testing.

Any deficiency found during validation in performance of the system as per the requirement shall be rectified by the SP immediately at all the locations. Any components or modules failing during the acceptance tests or requiring alterations necessary to meet Specification requirements shall be replaced at no extra cost to the Purchaser at site by the SP. These shall be done within two weeks of the initial reports.

### **1.7 Acceptance of Project Documentation**

ASTC's Nodal Agency along with the PMU team appointed by ASTC, shall review the project documents developed by SP including requirements, design, installation, training and administration manuals, version control etc. Any issues/gaps identified in any of the above areas, shall be addressed to the complete satisfaction of ASTC.

## 13. Appendix VI: Minimum Specifications

This sections details out the minimum technical specification of the hardware and software to be used in the project. The bidder needs to size the hardware & software accordingly to meet the service requirements of the project and should ensure to meet the minimum technical specifications as mentioned below. The bidder is free to provide any additional features or capabilities.

### 1. Specification of Vehicle Mounted Unit of Vehicle Tracking System (GPS)

Service Provider has to provide a device compliant with AIS 140 performance standards.

### 2. Mobile Application

1.	Shall be developed in an open platform
2.	Should be scalable and technically adaptable to future enhancements
3.	Should be published and released in all the major platforms including iOS/Android/ windows etc.
4.	Should support Unicode and be multilingual in at least English, Hindi & Assamese
5.	Should be easy to update as some data will be updated daily. Ability to collect data with high volume, velocity, and variety.
6.	Should provide accurate mapping and navigation services.
7.	Shall be SSL (Secured Socket Layer) compliant.
8.	Should adhere the best practices for localization of mobile web applications in Indian Languages released by Ministry of Electronics & Information Technology

Mobile Platform Requirement:

- iOS (Version 6 and Above): Portrait or landscape both iPhone (480 x 320), iPhone Retina (960 x 640), iPhone 5(1136 x 640), iPad (1024 x 768), iPad Retina (2048 x 1536) or Latest Support Resolution and Pixel Density as per latest technology.
- Android 4.1 and Above: Small (426dp x 320dp) Normal (470dp x 320dp) Large (640dp x 480dp) XLarge(960dp x 720dp) or As per industry need

### 3. Specification for Cloud Infrastructure

Bidder shall provide the best possible cloud storage infrastructure for seamless user experience.

**4. Specification for Display Monitor**

#	Panel	Minimum Specifications
1	Screen Size	55 inch
2	Aspect Ratio	16:09
3	Native Resolution	1920 x 1080 (FHD)
4	Brightness	350 nit or Higher
5	Orientation	Landscape
<b>Connectivity</b>		
6	Input	HDMI (2 Nos.), USB port
7	Output	External Speaker Out
8	External Control	RJ45, IR Receiver
9	BIS Compliant	The screen should be BIS compliant from day one. Should have UL/CB, FCC.

**5. Specification for Personal Laptops**

#	Minimum Specifications
1	Intel® Core™ i5 Processor with 2.4 Ghz
2	Latest Windows OS 64 bit
3	8 GB RAM
4	15 inch Display with SVGA Port
5	500 GB HDD
6	1GB Network Interface Card
7	USB Port
8	HDMI Port
9	Option to add memory card
10	Sound and support multimedia with latest supported Wi-Fi card

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### 6. Specification for Printer

#	Features	Minimum Specifications
1	Type	Black and White LaserJet
2	Print quality	True 600 x 600 dots per inch (dpi) for text and graphics
3	Resolution technology	FastRes (1200 dpi)
4	Language	Host-based
5	Print speed	Letter size - P1566: Up to 23 pages per minute (ppm) P1606dn: Up to 26 ppm. 12 pages per minute for A4 and letter-size paper. First page out in as low as 10 seconds
6	Duty cycle	3,000 single-sided pages per month (maximum) 1,000 single-sided pages per month (average)
7	Dimensions	Weight-minimum 5 kg,, Height- minimum 200mm , Depth-Minimum 280mm, Width-minimum 350mm
8	Connectivity	Hi-Speed 2.0 USB port and Network with Gb port
9	Cartridge	Black with Input and Output Tray(Paper, Envelopes, Transparencies)
10	Others	Should support all types of paper sizes, Envelopes, Post cards, Transparency films etc.  Duplex printing (printing on both sides of paper) and Multiple pages printed on one page.

### 7. Specification for VMS

1.	Software shall support recording of H.264/H.265 and H.265+ video streams. It shall support recording of video and audio for all the channels.
2.	Software shall support triplex applications, recording, re-play and backup simultaneously. It shall be compatible with windows Server OS or Linux for highest performance and reliability.
3.	Software shall operate on open architecture and shall not require any proprietary hardware.
4.	Software shall be able to record minimum 64 different video streams or more simultaneously. It shall be accessible from any client PC connected to the network.
5.	Software shall provide network time server function to ensure the synchronization of the video servers and the recordings.

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6.	The servers shall be connected to the network so that these can be placed at any location which has network access.
7.	If software & server(s) operation are interrupted, like power disconnection and once the server(s) are restarted, these shall automatically resume recording of any cameras these were recording prior to the interruption.
8.	The software shall support network fault-tolerant recording such that if the network connection between a video management server and video recording server becomes unavailable, for example through cable breakage, network congestion or WLAN interruption, the system operation shall automatically recover when the connection is restored.
9.	It shall be possible to search for recordings in the software by camera, date and time. If a data and time is specified, playback shall commence from that date and time. It shall be possible to playback more than one camera simultaneously.
10.	The software shall be able to export sections of recordings to a separate Windows folder, which can then be written to CD-ROM, DVD-ROM or USB Flash Drives etc. to be played back at a location not connected to the network video management & recording network. The export process shall make available a player application, which can be provided with the exported video. Export shall be possible in Windows media player or any other media player compatible format. Simultaneous export of multiple cameras shall also be possible.
11.	No software limit on number of cameras supported in single recording server
12.	Should support multiple brand IP camera, encoders and DVRs. No restriction on camera hardware.
13.	Should record H.264, H265, MPEG4 or MJPEG in at minimum 25 fps at minimum Full HD (1080p) resolution.
14.	Should support multiple brand IP camera and encoders.
15.	Should support dual streaming and recording at different qualities of videos.
16.	Should have ability record audio along with video in same recording file.
17.	Pre-buffer and Post buffer recordings up to 10 minutes.
18.	Export recordings in mp4, avi and asf formats. Must be playable in any OS Windows, Linux/Unix or Apple Mac.
19.	Storage and Bandwidth calculation: Recoding size estimation for each hard disk attached to the server. Option to check disk size of individual camera.
20.	Image Enhancement on recorded videos. The image enhancement should be able enhance videos of fog, rain and low light conditions.
21.	The option of email and Video Pop up on Low disk space event. The system should alert user on low disk space event.
22.	Automatic archiving after set number of days and automatic recording deletion after disk full.
23.	Encryption (56 to 256 bit) of recordings while export for safe evidence.

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### 8. Specification for CCTV Camera

#	Parameter	Minimum Specifications
1	Product details-	
2	Please mention Make Model No. or Part Code	
3	Type	IP Camera
4	Lens	2.8mm - 4mm
5	Max. Aperture	F2.0 or better
6	Angle of View	H: 100° or Higher
7	Focus Control	Fixed
8	Camera Resolution	Minimum 2 megapixels, 1920 x 1080 pixels
9	Image Sensor	1/3" CCD or 1/2.7 to 1/3" progressive scan CMOS
10	Video Compression	H.265+ / H.265, H.264+ / H.264, MPEG-4, MJPEG
11	Audio Compression	G.711/ G.726/ AAC
12	Frame Rate	1 to 25 or 30 fps for all different resolution
13	Bit Rate Control	CBR/VBR
14	Minimum Illumination	Color: 0.07 Lux at F2.0 with IR Off B/W: 0.01 Lux at F1.2 with IR Off 0.0 Lux with IR On
15	S/N Ratio	More than 45dB
16	WDR	WDR 120 dB
17	IR Distance	Distance up to 10m or more
18	IR On/Off Control	Auto/ Manual
19	IR LEDs	Smart IR
20	Shutter Time	1/50 sec to 1/100,000 sec
21	Infrared Capability	Built-in Infrared LEDs with range of minimum 10 meters, Auto Day / Night
22	White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
23	Noise Reduction	3D DNR
24	Motion Detection	Automatic Motion Detection Off/On (Rectangle), Line crossing, intrusion detection
25	Digital Zoom	support (via recorder)
26	Mirror	Off / On
27	Privacy Masking	Off / On (4 Area, Rectangle)
28	Vandal Resistance	IK 8 or better

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#	Parameter	Minimum Specifications
29	IP Rating	IP66 / IP67
30	Operating Temperature	-10 to 60 degrees Celsius
31	Operating Humidity	0% to 90% RH
32	Audio	Built-in Microphone or separate microphone
33	Image Enhancement	Auto-tracking White Balance (ATW) Automatic Gain Control Wide Dynamic Range (WDR) and Automatic Backlight Compensation (BLC)
34	Ethernet	10/100Base T M12 D-Coding (aviation type)
35	Protocol	HTTP; HTTPs; TCP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; IPv4; NTP
36	Interoperability	ONVIF, PSIA, CGI
37	Streaming Method	Unicast / Multicast
38	Web Viewer	Internet explorer
39	Smart Phone	IOS, Android
40	Power Supply	DC12V, PoE (802.3af) (Class 0)
41	Certification	ISO, RoHS, FCC, CE

### 9. Specification for Mobile Network Video Recorder

#	Parameter	Minimum Specifications
3	Number of Video Inputs	4 channels
4	Number of Video Outputs	1
5	Number of Audio Inputs	4 channels
6	Number of Audio Outputs	1
7	Two-way Talk	1ch Mic in, 1ch Mic out
8	Privacy Masking	4 rectangular zones (each camera)
9	GPS support	Built-in or external
10	3G/4G Support	Support
11	Wi-Fi	Built-in or external
12	OSD	Camera title, Time, Video loss, Motion detection, Recording
13	Video Compression Standards Supported	H.265+ / H.265, H.264+ / H.264, M-JPEG, MPEG-4
14	Audio Compression Standards Supported	ADPCM

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#	Parameter	Minimum Specifications
15	Number of streams	Dual streams, both streams independently configurable for each camera resolution and frame rate
16	Recording Resolutions	Equivalent to 1080p/ 720p/ 4CIF/ 2CIF/ CIF/ QCIF (can be set independently for each channel, for both streams)
17	Video Frame Recording Rate	1 to 25 or 30 fps for all channels at 1080p/720p/4CIF equivalent resolution and frame rate can be set independently for each camera, for both streams
18	Trigger Events	Recording, PTZ, Tour, Alarm out, Email, FTP, Snapshot, Buzzer & Screen tips
19	Video Detection	Motion Detection, Video Loss & Camera Blank
20	Alarm Sensors	minimum 3 inputs (NO/NC) 2 outputs
21	Storage	1 TB, 2.5" SATA Solid State Drive with suitable ant-vibration mechanism Solid State Disk to be pluggable and easily removable, secure and protected by lock.
22	Recording Modes	Normal, Schedule based, Alarm triggered, Motion detection
23	Event Based Recording and Tagging	Pre-recording : 1 to 30 minutes (Secondary Stream)
		Post-recording : 1 to 30 minutes (Secondary Stream)
24	Shut Down Delay	Configurable shut down delay after ignition off – 5 min to 4 hours
25	Power Input	9 to 32 volts, spike/surge protection
26	Power-on-Ethernet	Integrated PoE switch supporting peak power requirement for 4 IP cameras with infrared on
27	Working Temperature	-10 to +55 degrees Celsius
28	Working Humidity	0% to 90% relative humidity non-condensing



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#	Parameter	Minimum Specifications
29	Network/Communication Interfaces	LAN – 1 RJ45 interface 4 ports PoE (IEEE802.3af/at)/M12 connector Wi-Fi – 802.11/b/g/n Built-in 3G/4G/ LTE module, supporting all 2G, 3G and 4G/ LTE (at least 900, 1800 and 2100 MHz frequency bands), Support for SMS, Voice, Data, GPRS, TCP/IP
30	ONVIF compliance	ONVIF 2.3 or above with suitable Profile
31	Network Functions	TCP/IP, UDP, DHCP, DNS, IP Filter, DDNS, FTP, Email, Alarm Server
32	External Interfaces	1 RS232 1 USB 2.0 1 SIM slot (Capable of using M2M Plastic or M2M Robust Plastic SIM and M2M Industrial SIM)
33	Image quality	1 to 5 (configurable)
34	Watermark Tamper-proof	Watermark
35	Configurable Video Overwriting	Video over-writing to be configurable to support: Cyclic overwriting (oldest recording to be overwritten) Alarm linked recording not overwritten
36	Connections	All input and output connections to be vibration/shock resistant and locking Desirable: Aviation Connectors
37	LED Indicators	Power, Recording, Network
38	Vibration resistance	EN 50155 or equivalent
39	Health Parameters over 3G/ 2G/ SMS	Capable of sending health parameters (cameras not functioning, cameras tamper, SSD error, HDD/SSD full) at specified frequency to the server Capable of detecting failure, error or tamper of cameras or any component (Network Disconnected, IP Address Conflict, Illegal Login) and sending alert to server
40	Over-the-air Update/ Upgrade	Over-the-air update of configuration parameters of mNVR and cameras. Over-the- air upgrade of firmware
41	Motion Detection	Configurable sensitivity levels Motion Detection zones to be configurable independently for each camera

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#	Parameter	Minimum Specifications
42	RTC	Built-in RTC, drift not more than 10
43	Data Download	mNVR should provide video and audio download facility for the desired date/time and duration. It should be possible to connect a laptop to mNVR through network cable on RJ45 port and open mNVR's user interface in a standard browser using a standard URL such as http://nvr (or any other text specified by MoRTH) without having to configure the laptop's network settings. After entering user-id and password (specified by MoRTH), it will be possible to search, view, select and download video clips of desired duration and date/time in standard formats such as .avi or .mpg. It will not be possible to delete any video or change configuration settings using this set of user-id and password.
44	Data Transfer on 4G/ LTE, 3G and 2G	In case the vehicle moves to an area where 3G coverage is not present, the mNVR will automatically shift to GPRS (2G) connectivity to send the health status data. Also, in such case, on press of an emergency button, the mNVR will automatically shift to a lower frame rate and resolution (both configurable) and send the video from cameras to the backend server over GPRS (2G).
45	Certification	CE, FCC, EN50155, BIS, ISO, RoHS
47	1 Location Module	Parallel GPS, GNSS, or both receiver module with 32 (minimum) acquisition channels & 18 minimum tracking
48	Hardware	The mobile NVR shall be equipped with inbuilt module for 3G/4G/LTE, & GPS. SIM card is considered in mNVR
49	Recording capacity & Compliance	The device should be able to store video recordings for 30 days. The device should be minimum RAID 1 compliant.

Note: — All required hardware (Server, Storage etc.) should be provide by the Bidder to create an Integrated command control center.

## 14. Appendix IX: Bill of Materials (Indicative)

The following list is minimum requirement, bidders are expected to propose the best possible BOM as part of overall solution for technical scoring.

<b>Indicative Bill of Materials</b>				
<b># No.</b>	<b>Category</b>	<b>Component</b>	<b>Units</b>	<b>Minimum Quantity</b>
<b>1.</b>	<b>Vehicle Tracking System</b>			
1.1	Software	Vehicle Tracking system application (web portal + mobile application)	Nos.	1
		VMS Application	Nos.	1
1.2	Hardware	Vehicle Mounting Unit (GPS and other consumables)	Nos.	149
		CCTV IP Camera	Nos.	60
		mNVR	Nos.	60
		Storage (for recording onboard CCTV footage - mNVR)	Nos.	60
1.3	Communication	GPRS SIM (including recurring data cost)	Nos.	149
<b>2.</b>	<b>Reporting / Dashboard</b>			
2.1.	Software	Report generation for various operations	Nos.	1
<b>3.</b>	<b>Billing System</b>			
3.1	Software	Generation of consolidated monthly Bills	Nos	1
<b>4.</b>	<b>Command Control Centre</b>			
4.1	Hardware	Display Monitor	Nos.	3
4.2	Hardware	Video Wall Solution including controller, LAN wires, any other relevant consumables etc.as per RFP	Nos.	1
<b>5.</b>	<b>ASTC Office</b>			
5.1	Hardware	Laptop	Nos.	4
5.2	Hardware	Printer (including all printing related consumables such as ink, papers etc.)	Nos.	1
<b>6.</b>	<b>Cloud Infrastructure</b>			
<b>7.</b>	<b>Software License</b>			
		License for Google Maps to show real time vehicle position		

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Indicative Bill of Materials				
# No.	Category	Component	Units	Minimum Quantity
8.	Training	As and when required in consultation with ASTC		
9.	Others	Bidders are free to add items which are deemed required for the execution of the project.		

These figures provided in Bill of Material are **indicative**. Bidder is expected to perform an independent assessment of the Infrastructure requirements for the proposed system and provide a detailed BOM for the proposed infrastructure in line with the requirements of the project and performance on service level agreements. Purchaser or authority designated by purchaser shall review and approve the BOM of the successful bidder at the time of implementation/deployment/commissioning.

The numbers specified may vary during the course of the project. Hence, supplier shall make his/her own independent assessment to meet the desired service levels as stated in the RFP.

### Notes:

1. In case of hardware components, 10% variation in actual quantities may be accepted. Unit rate quoted in the commercial proposal for the VTU devices shall be applicable for purchase of any quantity within a limit of 10% variation (beyond 149 Nos.). The same will apply for other components such as CCTV camera, mNVR, storage etc.
2. End user computing devices such as printers, scanners, etc. that are included in above table shall be finalized by bidder after site survey.
3. Bidder may add additional line items in above indicative table and make a comprehensive list of system inventory table by including the components, which bidder might think are relevant based on the Bidders design to meet all the bid requirements indicating the costs of the same in the financial bid.
4. Prices mentioned should include all consumables, spares, etc. for all components supplied during the contract period. Any item not quoted by the Bidder, shall be provided free of cost if it is found necessary to fulfil the bidding requirements during the currency of the contract.
5. Cost of licenses to be procured, if any is to be borne by the bidder.
6. ASTC reserves the right to procure the items from third party independent of this contract. In case the purchaser purchases these items independently then total price shall be adjusted accordingly. Bidder shall be responsible for seamless integration of those components in the system at no extra cost to ASTC.
7. All titles to the assets including licenses procured to be transferred to ASTC, at GO-LIVE.

## 15. Appendix X: Integrity Pact

### **General**

This pre-bid pre-contact Agreement (hereinafter called the Integrity Pact) is made on \_\_\_\_\_ day of the month of \_\_\_\_\_ 20....., between on one hand the XXXXXX acting through Shri \_\_\_\_\_, The Executive Engineer (hereinafter called the “Principal/Owner”, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s \_\_\_\_\_ represented by Shri \_\_\_\_\_ (hereinafter called the “Bidder(s)/Contractor(s) which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns ) of the Second Part.

**Whereas** the Principal/Owner proposes to procure goods and services pertaining to the tender titled “XXXXXX” through the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) is willing to offer / has offered the same.

**Whereas** the Bidder(s)/Contractor(s) is a private company/public company/ Government undertaking/ partnership/ registered export agency, constituted in accordance with the relevant law in the matter and the Principal/Owner is the XXXXX performing its functions on behalf of the XXXX

### **Now, therefore,**

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

Enabling the Principal/Owner to procure the desired said work/ Services/ Stores / Equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption during bidding, execution & public procurement,

### **And**

Enabling Bidder(s)/Contractor(s) to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Principal/Owner will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties here to hereby agree to enter into this Integrity Pact and agree as follows:

### **Commitments of the Principal/Owner**

1.1 The Principal/Owner undertakes that no official of the Principal/Owner, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Bidder(s)/Contractor(s), either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

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- 1.2 The Principal/Owner will, during the pre-contract stage, treat all Bidder(s)/Contractor(s) alike, and will provide to all Bidder(s)/Contractor(s) the same information and will not provide and such information to any particular Bidder(s)/Contractor(s) which could afford an advantage to that particular Bidder(s)/Contractor(s) in comparison to other Bidder(s)/Contractor(s).
- 1.3 All the officials of the Principal/Owner will report to the XXXXX any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
2. In case any such preceding misconduct on the part of such official(s) is reported by the Bidder(s)/Contractor(s) to the XXXXX with full and verifiable facts and the same is prima facie found to be correct by the XXXXX, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the XXXXX and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the XXXXX the proceedings under the contract would not be stalled.

### **Commitments of Bidder(s)/Contractor(s)**

3. The Bidder(s)/Contractor(s) commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:
  - 3.1 The Bidder(s)/Contractor(s) will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal/Owner, connected directly or indirectly with the bidding process, or to any person, organization or third part related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2 The Bidder(s)/Contractor(s) further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees brokerage or inducement to any official of the Principal/Owner or otherwise in executing the contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the XXXXX for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with the XXXXX.
  - 3.3 Bidder(s)/Contractor(s) shall disclose the name and address of agents/Brokers/representatives/ Intermediaries and Indian Bidder(s)/Contractor(s) shall disclose their foreign Principals or associates at the time of bidding.
  - 3.4 Bidder(s)/Contractor(s) shall disclose the payments to be made by them to such agents/brokers/representatives/ intermediaries, in connection with this bid/contract at the time of bidding.
  - 3.5 The Bidder(s)/Contractor(s), either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in Connection with the contract and the details of services agreed upon for such payments. A copy of contract so made with agents /brokers/intermediaries shall be submitted.

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- 3.6 The Bidder(s)/Contractor(s) will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract. Bidder shall remain responsible to maintain safety & confidentiality of his bid documents during bid process.
- 3.7 The Bidder(s)/Contractor(s) will not accept any advantage in exchange for any corrupt practice, unfair means, and illegal activities.
- 3.8 The Bidder(s)/Contractor(s) shall not use improperly, for purposed of competition or personal gain, or pass on to others, any information provided by the Principal/Owner as part business relationship regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The Bidder(s)/Contractor(s) also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.9 The Bidder(s)/Contractor(s) commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts, either to principal/owner or to IEMs so appointed by XXXXX.
- 3.10 The Bidder(s)/Contractor(s) shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.11 If the Bidder(s)/Contractor(s) or any employee of the Bidder(s)/Contractor(s) or any person acting on behalf of the Bidder(s)/Contractor(s), either directly or indirectly, is a relative of any of the officers of the Principal/Owner, or alternatively, if any relative of an officer of the Principal/Owner has financial interest/ stake in the Bidder(s)/Contractor(s) firm, the same shall be disclosed by the Bidder(s)/Contractor(s) at the time of filing of bid. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 3.12 The Bidder(s)/Contractor(s) shall not lend to or borrow any money form or enter into any monetary dealings or transaction, directly or indirectly, with any employee of the Principal/Owner.
- 3.13 XXXXX has adopted integrity pact for all its contract for 50 lacs and above. It is mandatory for the bidders/contractors to sign the I.P. The bid of bidder/contractor to do not sign the I.P. shall not be considered details of IEMs (Independent External Monitor) is as under:-

1. Mr. xxxxxx, IEM [email](#)
2. Mr. yyyyy IEM [email](#)

In case of any grievances about the bid the same may be sent to IEM/Vigilance of XXXXX with the name address of the sender.

### **4. Previous Transgression**

- 4.1 The Bidder(s)/Contractor(s) declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged here under or with any Public Sector Enterprise in India or XXXXX that could justify Bidder(s)/Contractor(s) exclusion from the bidding process.

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- 4.2 The Bidder(s)/Contractor(s) agrees that if it makes incorrect statement on this subject, Bidder(s)/Contractor(s) can be disqualified from the bidding process or the contract, if already awarded, can be terminated for such reason.

### **5. Sanctions for Violations**

- 5.1 Any breach of the aforesaid provisions by the Bidder(s)/Contractor(s) or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder(s)/Contractor(s) shall entitle the Principal/Owner to take all or any one of the following actions, wherever required:-
- (i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the Bidder(s)/Contractor(s). However, the proceedings with the other Bidder(s)/Contractor(s) would continue.
  - (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond / Gurantee (after the contract is signed) shall stand forfeited and the Principal/Owner shall not be required to assign any reason therefore.
  - (iii) To immediately cancel the contract, if already signed, without giving any compensation to the Bidder(s)/Contractor(s).
  - (iv) To recover all sums already paid by the Principal/Owner, and in case of an Indian Bidder(s)/Contractor(s) with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a bidder(s)/Contractor(s) form a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the Bidder(s)/Contractor(s) form the Principal/Owner in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
  - (v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the Bidder(s)/Contractor(s), in order to recover the payments, already made by the Principal/Owner, along with interest.
  - (vi) To cancel all or any other contracts with the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) shall be liable to pay compensation for any loss or damage to the Principal/Owner resulting from such cancellation/ rescission and the Principal/Owner shall be entitled to deduct the amount so payable form the money(s) due to the Bidder(s)/Contractor(s).
  - (vii) To debar the Bidder(s)/Contractor(s) from participation in future bidding processes of the XXXXX for a period ranging from six months to maximum three years. However if the bidder takes corrective measures against transgressions, subject to satisfaction of Principal/Owner & IEMs, the period of debar can be reviewed.
  - (viii) To recover all sums paid in violation of this Pact by Bidder(s)/Contractor(s) to any middleman or agent or broker with a view to securing the contract.
  - (ix) In case where irrevocable Letter of Credit have been received in respect of any contract signed by the Principal/Owner with the Bidder(s)/Contractor(s), the same shall not be opened.



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- (x) Forfeiture of Performance Bond/Guarantee in case of a decision by the Principal/Owner to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.2 The Principal/Owner will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the Bidder(s)/Contractor(s) or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder(s)/Contractor(s), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 5.3 The decision of the Principal/Owner to the effect that a breach of the provisions of this Pact has been committed by the Bidder(s)/Contractor(s) shall be final and conclusive on the Bidder(s)/Contractor(s). However, the Bidder(s)/Contractor(s) can approach the Independent Monitor(s) appointed for the purposes of this Pact. IEMs shall examine the transgression and its severity and submit the report to Chairman, XXXXX for further action after providing an opportunity and hearing to the affected parties.

### **6. Independent External Monitors**

- 6.1 The Principal/Owner has appointed Independent External Monitors (hereinafter referred to as IEMs) for this Pact in consultation with the Central Vigilance Commission whose names and email IDs have been given in the NIT.
- 6.2 The task of the IEMs shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.
- 6.3 The IEMs shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 6.4 Both the parties accept that the IEMs have the right to access all the documents relating to the project/procurement, including minutes of meetings
- 6.5 As soon as the IEMs notices, or have reasons to believe a violation of this Pact, they shall so inform to Chairman, XXXXX.
- 6.6 The Bidder(s)/Contractor(s) accepts that the IEMs have the right to access without restriction to all Project documentation of the Principal/Owner including that provided by the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) will also grant the IEMs, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors. The IEMs shall be under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) confidentiality.
- 6.7 The Principal/Owner will provide to the IEMs sufficient information about all meetings among the parties related to the Project provided such meeting could have an impact on the contractual relations between the parties. The parties will offer to the IEMs the option to participate in such meetings.
- 6.8 The IEMs will submit a written report to the Chairman, XXXXX within 8 to 10 weeks from the date of reference or intimation to him by the Principal/Owner/Bidder(s)/Contractor(s) and, should the occasion arise, submit proposals for correcting problematic situation.

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However an opportunity of hearing shall be provided by the IEMs to the buyers /bidders before submitting their written report.

### **7. Facilitation of Investigation**

In case of any allegation of violation of any provisions of this pact or payment of commission, the Principal/Owner or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

### **8. Law and Place of Jurisdiction**

This pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the Principal/Owner.

### **9. Other Legal Actions**

The action stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings and Jurisdiction in case of dispute between the parties if any shall be new Deficiency.

### **10. Validity**

10.1 The validity of this Integrity Pact shall be from date of its signing and extend up to 12 months beyond the defects liability period of the contracts. In case Bidder(s)/Contractor(s) is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract by the successful bidder.

10.2 Should one or several provision of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intention.

11 The parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_

Principal/Owner

Bidder(s)/Contractor(s) Name of the Officer,

Chief Executive Officer Designation

### **ASTC**

Witness

1. \_\_\_\_\_

2. \_\_\_\_\_

Witness

1. \_\_\_\_\_

2. \_\_\_\_\_

\* Provisions of these clauses would need to be amended / deleted in line with the policy of The Principal/Owner in regard to involvement of Indian agents of foreign suppliers.