

Directorate of State Transport, Haryana
30-Bays Building, 2nd Floor, Sector-17-B, Chandigarh
Website: www.hartrans.gov.in

TENDER NOTICE

e-Tenders are invited for purchase of below mentioned items in two bid system
i.e. Technical Bid and Financial Bid:-

| Sr. No. | Name of Group/Item | Approx. value (In ₹) | EMD to be deposited (In ₹) | Tender Number | Start Date & Time of downloading of Tender online | Last date to submission of pre-bid queries | Last Date & Time of submission of Tender online |
|---------|---|----------------------|----------------------------|------------------------------------|---|--|---|
| 1 | Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System on Build Own Operate and Transfer (BOOT) Model. | 40.00 Crore | 60.00 Lakh | 07/2020-21/SPO/HQ dated 22.12.2020 | 22.12.2020 at 15.00 hours | 30.12.2020 upto 17:00 hours. | 21.01.2021 at 17.00 hours |

Note:- For detailed information please visit website <http://www.hartrans.gov.in> & etenders.hry.nic.in.

Dated: 22.12.2020

-sd-
for Director, State Transport,
Haryana, Chandigarh.



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Disclaimer

This RFP is being issued by State Transport Department, Government of Haryana (hereunder called “Authority” or “Department” or “Purchaser”) for inviting tenders to shortlist Bidders for “Implementation of Open Loop Ticketing System and GPS System for a period of 5 years on Build Own Operate and Transfer (BOOT) Model”.

The bidder will be responsible for acquiring the fare collections including using NCMC cards as well as instant issuance of NCMC cards at service delivery points of Authority. It is hereby clarified that this RFP is not an agreement and is not an offer or invitation by Authority to any party hereunder.

The purpose of this RFP is to provide the bidder(s) with information to assist in the formulation of their proposal submission. This RFP document does not purport to contain all the information bidders may require. This RFP document may not be appropriate for all persons, and it is not possible for authority to consider particular needs of each bidder. Each bidder should conduct its own investigation and analysis, and should check the accuracy, reliability and completeness of information in this RFP document and obtain independent advice from appropriate sources. Authority and their advisors make no representation or warranty and shall incur no liability financial or otherwise under any law, statute, rules or regulations or otherwise as to the accuracy, reliability or completeness of the RFP document.

The parties to whom this invitation is extended are not mandated under any agreement, made here, to bid. Responding to this invitation will be their sole commercial decision. Such decision will entail risks, responsibilities and rewards as described in this RFP. It is deemed that a party /institution choosing to respond by way of a bid, in general, is accepting them. Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document. The Authority reserves the right not to proceed with the selection process at any stage or to change the process or procedure to be applied in a fair and transparent manner. It also reserves the right to decline to discuss the process further with any party submitting a proposal/Bid. No reimbursement of cost of any type shall be paid to persons, entities submitting a bid/proposal.

Authority shall not be responsible for any costs or expenses incurred by the Bidders in connection with the preparation and delivery of bids, including costs and expenses related to visits to the sites. Authority reserves the rights to cancel, terminate, change or modify this procurement process and/or requirements of bidding stated in the RFP, without assigning any reason or providing any notice and without accepting any liability for the same.

This RFP provides functional, physical and technical requirements of State Transport Department, Haryana for the implementation of the project. While these requirements are indicative and not exhaustive, it is to help bidders propose a technically fit solution meeting the department’s requirements, estimate the costs and offer a cost-effective solution.

The Bidders would be selected based on the criteria mentioned in this RFP.

Table of Contents

| Section | Content | Page No |
|----------------|---|----------------|
| Section I | Invitation to Bidders | 7 - 10 |
| Section II | Instructions to Bidders | 11 - 34 |
| Section III | General Conditions of Contract (GCC) | 35 - 89 |
| Section IV | Bid Submission Formats & Performa | 90 – 140 |
| Section V | Scope of Work | 141 – 184 |
| Section VI | Functional Requirement Specifications (FRS) | 185 – 200 |
| Section VII | Technical Specifications | 201 – 207 |

Glossary

| Abbreviation | Definition |
|--------------|--|
| ACL | Access Control List |
| AES | Advanced Encryption Standard |
| AFC | Automated Fare Collection System |
| AMC | Annual Maintenance Contract |
| API | Application Programming Interface |
| ATS | Annual Technical Support |
| BGP4 | Border Gateway Protocol version 4 |
| BOM | Bill of Material |
| BOOT | Build Own Operate and Transfer |
| CCC | Command Control Centre |
| CCN | Change Control Note |
| CCNA | Cisco Certified Network Associate |
| CCNP | Cisco Certified Network Professional |
| CD | Compact Disc |
| CEO | Chief Executive Officer |
| CMM/CMMi | Capability Maturity Model/ Capability Maturity Model Integration |
| CNG | Compressed Natural Gas |
| COTS | Commercial Off-The Shelf |
| CPU | Central Processing Unit |
| CV | Curriculum Vitae |
| DC | Data Centre |
| DCSP | Data Centre Service Provider |
| DNS | Domain Name System |
| DR | Data Recovery |
| DRC | Data Recovery Centre |
| DSC | Digital Signature Certificate |
| DVD | Digital Versatile Disc |
| EMD | Earnest Money Deposit |
| EMV | Euro Master Visa |
| EPKM | Earning per Kilometre |
| ETA | Estimated Time of Arrival |
| ETD | Estimated Time of Departure |
| ETIM | Electronic Ticket Issuing Machine |
| FI | Financial Institution |
| FRS | Functional Requirement Specifications |
| FTP | File Transfer Protocol |
| GCC | General Conditions of Contract |
| GPRS | General Packet Radio Service |
| GPS | Global Position System |
| GSM | Global System for Mobile Communication |
| GST | Goods & Service Tax |
| GUI | Graphical User Interface |
| HSTD | Haryana State Transport Department |
| HTML | Hypertext Mark-up Language |

| | |
|-------|---|
| HTTP | Hypertext Transfer Protocol |
| ICMP | Internet Control Message Protocol |
| IEEE | Institute of Electrical and Electronics Engineers |
| IGBT | Insulated Gate Bipolar Transistor |
| IGMP | Internet Group Management Protocol |
| INR | Indian National Rupees |
| IP | Internet Protocol |
| IPC | Inter-Process Communication |
| IPv4 | Internet Protocol Version 4 |
| IPv6 | Internet Protocol Version 6 |
| ISO | International Organization for Standardization |
| ITS | Intelligence Transport System |
| KPI | Key Performance Indicators |
| KYC | Know Your Customer |
| LAN | Local Area Network |
| LCD | Liquid Crystal Display |
| LDAP | Lightweight Directory Access Protocol |
| LED | Light Emitting Diode |
| LF | Load Factor |
| LLP | Limited Liability Partnership |
| MAC | Media Access Control |
| MBGP | Multicast Border Gateway Protocol |
| MD | Managing Director |
| MIMO | Multiple In Multiple Out |
| MIS | Management Information System |
| MoRTH | Ministry of Road Transport & Highways |
| MPLS | Multiprotocol Label Switching |
| MSDP | Multicast Source Discovery Protocol |
| NAT | Network Address Translation |
| NCMC | National Common Mobility Card |
| NCR | National Capital Region |
| NDA | Non-Disclosure Agreement |
| NEFT | National Electronic Funds Transfer |
| NIC | National Informatics Centre |
| NIT | Notice Inviting Tender |
| NMS | Network Management Station |
| NPCI | National Payment Corporation of India |
| O&M | Operation and Maintenance |
| OBD | On-Board Diagnostics |
| OEM | Original Equipment Manufacturer |
| ORS | Online Reservation System |
| OS | Operating System |
| OSPF | Open Shortest Path First |
| PAN | Permanent Account Number |
| PBG | Performance Bank Guarantee |
| PC | Personal Computer |

| | |
|----------|---|
| PDF | Portable Document Format |
| PIM-DM | Protocol Independent Multicast- Dense Mode |
| PIM-SM | Protocol Independent Multicast |
| PIM-SSM | Protocol Independent Multicast- Source Specific Multicast |
| POP3 | Post Office Protocol 3 |
| PWM | Pulse Width Modulation |
| QoS | Quality of Service |
| RBI | Reserve Bank of India |
| RDBMS | Relational Database Management System |
| RFP | Request for Proposal |
| RIP | Routing Information Protocol |
| RTGS | Real Time Gross Settlement |
| SAN | Storage Area Network |
| SD Micro | Secure Digital Micro |
| SDK | Software Development Kit |
| SI | System Integrator |
| SLA | Service Level Agreement |
| SMS | Short Message Service |
| SMTP | Simple Mail Transfer Protocol |
| SNMP | Simple Network Management Protocol |
| SRS | System Requirement Specification |
| SRTU | State Road Transport Undertaking |
| SSID | Service Set Identifier |
| STMS | Smart Ticketing Management System |
| SWAN | Statewide Area Network |
| TCP | Transmission Control Protocol |
| UAT | User Acceptance Test |
| UI | User Interface |
| UNIX | Universal Network Information Exchange |
| UPS | Uninterruptible Power Supply |
| USB | Universal Serial Bus |
| UTP | Unshielded Twisted Pair |
| VGA | Video Graphics Array |
| VLAN | Virtual Local Area Network |
| VRRP | Virtual Router Redundancy Protocol |
| VTS | Vehicle Tracking System |
| XML | Extensible Mark-up Language |



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

SECTION I: Invitation to Bidders

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section I - Invitation to Bidders

1. This invitation to Bidders is for “**Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System for State Transport Department, Government of Haryana on Build Own Operate and Transfer (BOOT) Model for a period of 5 years**”.
2. **Bidder(s) refer to Consortium Bid led by either Financial Institution (FI)/Bank or System Integrator (SI).**
3. Bidders can download the tender document from portal: <https://etenders.hry.nic.in>
4. Bidders are advised to study the RFP document carefully. Submission of RFP shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications. The required documents to be submitted through online tendering system at <https://etenders.hry.nic.in> in accordance with the procedures enumerated in Section II of this RFP. The RFP response should be submitted to the department not later than the date and time laid down as per clause 10 of the Section I: Invitation to Bidders.
5. Bidders are advised to visit the site locations for better understanding of the RFP. In case the Bidders wish to visit the site, they must inform and coordinate with department at least 3 days before the visit.
6. The Bidder shall have to pay tender fee of **INR 10,000 (Rupees Ten thousand only)** through online mode as per the clause 3 of section II: Instructions to Bidders
7. The bidder shall have to pay E-Service fees through online tendering system at <https://etenders.hry.nic.in>
8. All bids must be accompanied by an **Earnest Money Deposit (EMD) of INR 60,00,000 (Rupees Sixty Lakhs only) either online** (to be paid through RTGS/NEFT on e-procurement portal of Government of Haryana) **or in form Bank Guarantee issued by National/ Scheduled Bank** valid for the period of validity of bid. The Bank Guarantee should be prepared as per the format specified in **clause 12 of section IV** of the RFP.
 - 8.1. **Bids not accompanied by Cost / Payment Receipt of RFP document, E-Service fee and / or EMD shall be treated as non-responsive.**
9. **Schedule for Invitation of RFP**

| | | |
|----------|---|---|
| A | Name of the Purchaser | Directorate of State Transport, Government of Haryana |
| B | Addressee and Address for purchase of RFP, submission of RFP responses and bid opening | Director, State Transport Department, Haryana, 2 nd Floor, 30-Bays Building, Sector-17C, Chandigarh Phone no. 0172 2727263, 2710371, Fax: 0172-2710378 Email: transport.haryana@gmail.com |
| C | Details of the contact person for any clarification | Director, State Transport Department, Haryana, 2nd Floor, 30-Bays Building, Sector-17C, Chandigarh Phone no. 0172 2727263, 2710371 Fax: 0172-2710378 |

| | | |
|----------|--|--|
| | | Email: transport.haryana@gmail.com , dtestore22@gmail.com , dtepdhr@gmail.com |
| D | Date till which the response to the RFP should be valid | 180 (One hundred and eighty) days from the date of submission of bids |

10. Important dates:

The following table provides information regarding the important dates of the bid process for this RFP:

| Activity | Date & Time |
|---|--------------------------|
| Date of issue of RFP / Publication of RFP in e-Procurement Portal | 22.12.2020 at 15:00 Hrs. |
| Last date for submission of pre-bid queries | 30.12.2020 at 17:00 Hrs. |
| Date of publishing of corrigendum (if any) | 04.01.2021 |
| Last date for submission of RFP response | 21.01.2021 at 17:00 Hrs. |
| Date of opening of Pre-qualification bids | 22.01.2021 at 10:00 Hrs. |
| Date of opening of Technical Bids | 22.01.2021 at 10:00 Hrs. |
| Date of Technical Presentation | To be intimated later |
| Date of Financial Bid opening | To be intimated later |

11. The cost of RFP document is non-refundable, and the RFP document is non-transferable.
12. Within 15 days of the receipt of notification of award from the department, the successful Bidder shall furnish the performance bank guarantee issued by a Nationalized / Scheduled Bank amounting to **INR 2,00,00,000 (Rupees Two Crore only)** value **valid for six months beyond contract period** in accordance with the Conditions of Contract, in the Performance Bank Guarantee prescribed at Clause 18 of “Section IV: Bid Submission Formats and Proformas”.
13. The project includes implementation of Open Loop Ticketing System, Issuance of Personalised NCMC cards as Bus Pass for Free and concessional travellers, Non-personalised cards for general public, GPS System for State Transport Department, Haryana for a period of 5 years on BOOT Model. This project would be known as Smart Transport Management System (STMS)
14. **Guideline for Online Payments at e-Procurement Portal of Government of Haryana**

e-Tender (e-Bid) is invited in single stage two covers system i.e. Request for Pre-qualification/Technical Bid (online Bid under PQQ/Technical Envelope) and Request for Financial Bid (comprising of price bid Proposal under online available Commercial Envelope):

- a. Under this process, the Pre-qualification/ Technical online bid Application as well as online Price Bid shall be invited at single stage under two covers i.e. PQQ/Technical & Commercial Envelope. Eligibility and qualification of the Applicant will be first examined based on the details submitted online under first cover (PQQ or Technical) with respect to eligibility and qualification criteria prescribed in this Tender document. The Price Bid under the second cover shall be opened for only those Applicants whose PQQ/ Technical Applications are responsive to eligibility and qualifications requirements as per Tender document.
- b. The payment for Tender Document Fee shall be made by eligible bidders online directly through Internet Banking Accounts and e-Service Fee through Debit Cards & Internet Banking Accounts.
- c. The Bidders are required to submit their tender documents online along with hard copy of technical proposal only (to be submitted the following working day) in the department as per the dates mentioned in the important dates of clause 10 of section I: Invitation to Bidders.

- d. Tender fee, EMD, E-Service fees plus applicable service tax should be paid through online tendering system at <https://etenders.hry.nic.in>

Important Note:

- a. *The Applicants/bidders have to complete 'Application/Bid Preparation & Submission' stage on scheduled time as mentioned above. If any Applicant/bidder failed to complete his/her aforesaid stage in the stipulated online time schedule for this stage, his/her Application/bid status will be considered as 'Applications/bids not submitted'.*
- b. *Applicant/Bidder must confirm & check his/her Application/bid status after completion of his/her all activities for e-bidding.*
- c. *In the first instance, the online payment details of tender document fee + e-Service & PQQ/Technical Envelope shall be opened. Henceforth financial bid quoted against each of the item by the shortlisted bidder/ Agency wherever required shall be opened online in the presence of such bidders/ Agency who either themselves or through their representatives choose to be present. The bidder can submit online their bids as per the dates mentioned in the tender document.*
- d. *The bids received/uploaded online after due date and time shall be rejected and the Purchaser shall not be responsible for non-receipt of the RFP response documents due to any reason whatsoever.*
- e. *If the tender is cancelled or recalled on any grounds, the tender document fee & e-Service fee will not be refunded to the agency/firm.*

The bids shall be submitted online in two separate envelopes:

Envelope 1: Technical Bid

The bidders shall upload the required eligibility & technical documents online in the Technical Bid.

Envelope 2: Commercial Bid

The bidders shall quote the prices in price bid format under Commercial Bid.



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

SECTION II: Instructions to Bidders

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section II - Instructions to Bidders

Table of Contents

| | |
|---|----|
| 1. Contents of the RFP document..... | 14 |
| 2. Cost of Bidding Process..... | 14 |
| 3. Instructions to bidder for Online Tendering Process | 14 |
| 4. Clarification on RFP Document | 17 |
| 5. Amendment of RFP Document | 18 |
| 6. Language of Bids..... | 18 |
| 7. Documents Comprising the Bids..... | 18 |
| 8. Bid Prices | 19 |
| 9. Firm Prices | 19 |
| 10. Discount | 20 |
| 11. Authorized Signatory | 20 |
| 12. Earnest Money Deposit (EMD)..... | 20 |
| 13. Period of Validity of Bids | 21 |
| 14. Format and Signing of Bid..... | 21 |
| 15. Local Conditions..... | 22 |
| 16. Sealing and Marking of Bid | 22 |
| 17. Last Date for Receipt of Bids | 22 |
| 18. Late Bids | 23 |
| 19. Modification and Withdrawal of Bids..... | 23 |
| 20. Address for Correspondence | 23 |
| 21. Contacting the Purchaser..... | 23 |
| 22. Opening Technical Bids by Purchaser | 23 |
| 23. Consortium Related Conditions..... | 23 |
| 24. Sub-Contract..... | 24 |
| 25. Eligibility Criteria..... | 25 |
| 26. Evaluation Criteria..... | 27 |
| 27. Evaluation of Bids | 29 |
| 28. Post Qualification and Award Criteria..... | 30 |
| 29. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids | 31 |
| 30. Notification of Award | 31 |
| 31. Performance Bank Guarantee..... | 31 |
| 32. Rejection Criteria..... | 31 |
| 33. Court of Jurisdiction | 32 |
| 34. Rejection of Defective Equipment/Material..... | 32 |

| | | |
|-----|--|----|
| 35. | Transfer / Exit Management..... | 32 |
| 36. | Exit Management Plan..... | 32 |
| 37. | Other Negotiation and Concession terms as per Government of Haryana..... | 33 |

1. Contents of the RFP document

- 1.1 The Scope of Work, tender procedures and Contract terms prescribed in this RFP document. The RFP Document includes:

| SECTION | CONTENTS |
|-------------|---------------------------------------|
| Section I | Invitation to Bidders |
| Section II | Instruction to Bidders |
| Section III | General Conditions of Contract |
| Section IV | Bid Submission Formats & Proforma |
| Section V | Scope of Work |
| Section VI | Functional Requirement Specifications |
| Section VII | Technical Specifications |

- 1.2 The Bidder should examine all instructions, forms, terms & conditions, and scope of work in the RFP Document and furnish all information as stipulated therein.

2. Cost of Bidding Process

- 2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, including cost of site visits, presentations etc. for the purposes of clarification of the bid, if so desired by the Purchaser.

3. Instructions to bidder for Online Tendering Process

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

- 3.1 **Registration of bidders on e-Procurement Portal:** All the bidders intending to participate in the tender process online are required to get registered on the centralized e - Procurement Portal i.e. <https://etenders.hry.nic.in>. Please visit the website for more details.

3.2 Obtaining a Digital Certificate:

3.2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.

3.2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details please visit the website – <https://etenders.hry.nic.in>

3.2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from:

National Informatics Centre (NIC).
Mini Secretariat, Sector-17,
Chandigarh Phone: 0172-2707732, 2700275,
Email: etenders@hry.nic.in

- 3.2.4** The bidder must ensure that he/she complies with the online available important guidelines at the portal <https://etenders.hry.nic.in> for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.
- 3.2.5** Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised to keep a backup of the encryption certificate and also keep the copies at safe place under proper security (for its use in case of emergencies).
- 3.2.6** In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate /power of attorney / lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.
- 3.2.7** In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.
- 3.2.8** The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.
- 3.3 Opening of an Electronic Payment Account:** For purchasing the tender documents online, bidders are required to pay the tender documents fees online using the electronic payments gateway service shall be integrated with the system. For online payments guidelines, please refer to the Home page of the e-tendering Portal <https://etenders.hry.nic.in>
- 3.4 Pre-requisites for online bidding:** In order to bid online on the portal <https://etenders.hry.nic.in>, the user machine must be updated with the latest Java & DC setup. The link for downloading latest java applet & DC setup are available on the Home page of the e-tendering Portal.
- 3.5 Online Viewing of Detailed Notice Inviting Tenders:** The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal eProcurement system on the Home Page at <https://etenders.hry.nic.in>.
- 3.6 Download of Tender Documents:** The tender documents can be downloaded free of cost from the eProcurement portal <https://etenders.hry.nic.in>. However, the bidders are required to submit the non-refundable tender document fee as per RFP conditions.
- 3.7 Key Dates:** The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.
- 3.8 Online Payment of Tender Document Fee, eService fee & Bid Preparation & Submission (PQQ/Technical & Financial Bid)**

3.8.1 Online Payment of Tender Document Fee + e-Service fee: The online payment for Tender document fee, eService Fee and Processing Fee can be done using the secure electronic payment gateway. The payment for tender document fee shall be made by Bidders / Vendors online directly through Internet Banking Accounts and eService Fee through Debit Cards & Internet Banking Accounts. The Payment for EMD (in case of online) shall be made online directly through RTGS / NEFT & OTC. The secure electronic payments gateway is an online interface between contractors and Debit card / online payment authorization networks.

3.8.2 Preparation & Submission of Online Application/Bids:

1. Bidder should take into account any corrigendum published for the tender document before submitting their bids.
2. Detailed Tender documents may be downloaded from e-procurement website (<https://etender.hry.nic.in>) and tender mandatorily be submitted online.
3. Bidder is requested to go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
4. All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.
5. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document
6. The bidders shall upload their technical offer containing documents, qualifying criteria, technical specification, schedule of deliveries, and all other terms and conditions except the rates (price bid).
7. Financial or Price Bid Proposal shall be submitted mandatorily online under Commercial Envelope and original not to be submitted manually.

3.9 Important Note

3.9.1 If bidder fails to complete the Online Bid Preparation & Submission stage on the stipulated date and time, its bid will be considered as bid not submitted, and hence, not appear during tender opening stage.

3.9.2 Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal <https://etenders.hry.nic.in>

3.9.3 For help manual please refer to the 'Home Page' of the eProcurement website at <https://etenders.hry.nic.in> and click on the available link 'How to?' to download the file.

3.9.4 Bidder can rework on his/her bids even after completion of "Bid Preparation & submission stage" (Bidder Stage), subject to the condition that the rework must take place during the stipulated time frame of the Bidder Stage.

3.10 Procedure for Submission of Hard Copies of Bids

3.10.1 The bidder should submit one hard copy of **Technical Bid only** in sealed cover on next working day after the online bid submission date.

3.10.2 Please note that prices should not be indicated in the Technical Bid and should be indicated in the Financial Bid only. Any mention of the prices in Technical bid (online version and hard copy) shall make the technical bid non-responsive. The online version of the bid response shall be considered for evaluation.

- 3.10.3** All copies of Technical and Financial Bid should be duly signed by Authorised Signatory and stamped with exact name of the Bidder's company with whom the order is to be placed and contract entered into.
- 3.10.4** The covers containing copy of Technical Bid should be put in a single sealed envelope clearly marked "**Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System on Build Own Operate and Transfer (BOOT) Model Bidder**". This envelope is to be super-scribed with Tender Number, Due Date, and the wordings "DO NOT OPEN BEFORE < DATE & TIME as mentioned in Section I Clause 10>". (a) The cover thus prepared, encapsulating the bids as mentioned above, should also indicate clearly the name, address and telephone number of the Bidder. (b) The bids received after the due date and time shall be summarily rejected and returned unopened to the bidder declaring as "Late submission".
- 3.10.5** One copy of Technical proposal of good print quality, properly bound to be submitted by bidder. If not properly bound, Department shall in no way be responsible for loss of sheets due to inadvertent opening of the document at any stage and that affecting the prospects of the Bidder during the evaluation due to loss of these documents. The document should be page numbered and appropriately flagged and must contain the list of contents with page numbers. The technical proposal shall not include any financial information.
- 3.10.6** Wherever there is a reference provided, it should be accompanied with corresponding section and clause/annexure number and page number of the bid.
- 3.11** Bidder should submit RFP document (original printed copy) along with the corrigenda / amendments released by department duly signed by Authorized signatory and initialled and stamped on all pages along with their Technical Bid as a mark of acceptance of terms and conditions of department. This document should not contain any prices or related information whatsoever.

4. Clarification on RFP Document

- 4.1** A prospective Bidder requiring any clarification on the RFP Document may submit his queries, in writing, at the Purchaser's mailing address and as per schedule indicated in **Clause 10 of "Section I: Invitation to Bidders"**. The queries must be submitted in the following format:

| BIDDER'S REQUEST FOR CLARIFICATION | | | |
|--|---|---|--|
| Name and Address of the Organization submitting request | | Name and Position of Person submitting request | Contact Details of the Organization / Authorized Representative |
| | | | Tel: |
| | | | Fax: |
| | | | Email: |
| S. No | RFP Reference(s) (Section, Page) | Content of RFP requiring clarification | Points of clarification required |
| 1 | | | |
| 2 | | | |
| 3 | | | |

The department will respond, to any request for clarification to queries on the RFP Document, received not later than the date prescribed by the Purchaser in "**Section I: Invitation to Bidders**", **Clause 10** of this RFP document. Department's response (including the query but without identifying the source of query) shall also be communicated by e-mail to all prospective bidders who have purchased the

documents from the Department's office without disclosure of the source of the query. Clarifications shall also be posted on the department website (www.hartrans.gov.in.)

5. Amendment of RFP Document

- 5.1 At any time prior to the last date for receipt of bids, the Department, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by an amendment. It shall not be mandatory for the Department to disclose the reasons for this change.
- 5.2 The amendment will be notified through website of department and would be binding on all Bidders. The amendments would also be notified through e-mail to the Bidders who have purchased RFP document from the Department's office as mentioned in "**Section I: Invitation to Bidders**".
- 5.3 In order to provide prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the department may, at its discretion, extend the last date for the receipt of bids.
- 5.4 Department may at any time during the tendering process request the Bidder to submit revised Technical / Financial Bids and/or Supplementary Financial bids without thereby incurring any liability on the Department to the affected Bidder or Bidders before opening of financial bids.
- 5.5 Bidders should make note of any amendments and corrigendum issued at any time by the Department through the its official website and hard copy of the same must be submitted as enclosure of RFP document.

6. Language of Bids

- 6.1 The Bids prepared by the Bidder and all correspondence and documents relating to the bids exchanged by the Bidder and the Department, shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language so long the same is accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall prevail.

7. Documents Comprising the Bids

The bid prepared by the Bidder shall comprise of the following components:

- 7.1 **Technical Bid** - The Technical Bid shall comprise of the following:
 - 7.1.1 Copy of the tender cost deposit receipt.
 - 7.1.2 Earnest Money Deposit as in prescribed format as per Clause 12 of Section IV. In case of online copy of receipt.
 - 7.1.3 Notarized Power of Attorney executed by the Bidder in favour of the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this RFP in prescribed format as per Clause 14 of Section IV
 - 7.1.4 Checklist for RFP response in prescribed format as per Clause 24 of Section IV
 - 7.1.5 Technical Bid Submission letter in prescribed format as per Clause 9 of Section IV
 - 7.1.6 Bidder Profile as per Clause 1, 2 and 3 of Section IV
 - 7.1.7 Duly signed and stamped copy of RFP document with all amendments / corrigendum / addendum
 - 7.1.8 List of Sub-Contractors and OEMs in prescribed format as per Clause 10 of Section IV
 - 7.1.9 Details of Sub-Contractors and OEMs in prescribed format as per Clause 11 of Section IV

- 7.1.10 Manufacturer's Authorization Forms for all OEMs proposed by the Bidder in prescribed format as per Clause 13 of Section IV
- 7.1.11 Response to Eligibility and Evaluation Criteria in prescribed format as per Clause 4 of Section IV
 - Form 4.1 – Response to Eligibility Criteria
 - Form 4.2 – Response to Evaluation Criteria IV
- 7.1.12 Project Experience List in prescribed format as per Clause 5 of Section IV
- 7.1.13 Project Experience Details in prescribed format as per Clause 6 of Section IV
- 7.1.14 Details of Manpower for the Project in prescribed format as per Clause 7 of Section IV
- 7.1.15 Curriculum Vitae (CV) of the proposed manpower in prescribed format as per Clause 8 of Section IV
- 7.1.16 Overview of Proposed Solution in prescribed format as per Clause 15 of Section IV
- 7.1.17 Details of Product Offered – Solution Stack Template, Technical Specification Compliance, Functional Specification Compliance in prescribed format as per Clause 16 of Section IV
- 7.1.18 One sample equipment each of EMV based ETIM device offered in the bid. The same shall be returned to the bidders after completion of the bid evaluation.
- 7.1.19 Deleted
- 7.1.20 Network Map of the proposed GPRS service provider(s) showing coverage of GPRS services throughout the state and highlighting areas where the GPRS services of the GPRS service provider are not available.
- 7.1.21 An undertaking duly attested by the notary that
 - i. The bidder is currently not 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

7.2 **Financial Bid** - The Financial Bid shall comprise of the following:

- 7.2.1 Financial Bid Submission Letter in prescribed format as per Clause 23 of Section IV

8. Bid Prices

- 8.1 The Bidder shall quote in the proforma prescribed at **Clause 23** of “**Section IV: Bid Submission Formats and Proformas**”.
- 8.2 The Bidder shall prepare the bid based on details provided in the RFP documents. The Bidder shall carry out all the tasks in accordance with the requirement of the RFP documents and it shall be the responsibility of the Bidder to fully meet all the requirements of the RFP documents.
- 8.3 The Bidder as part of its Financial Bid should account for all out of pocket and other expenses that the Bidder shall incur during the contract period.

9. Firm Prices

- 9.1 Prices quoted and negotiated must be firm and final and shall remain constant throughout the period of the contract and shall not be subject to any upward modifications, on any account whatsoever. The Bid Prices shall be indicated in **Indian Rupees (INR) only**.

- 9.1.1** The purchaser reserves the right to validate the technical specifications supplied with respect to specifications as provided in RFP using competent technical committee/agency acting on behalf of the purchaser.
- 9.2** The Financial Bid should clearly indicate the price to be charged without any qualifications whatsoever and should include all taxes, duties, custom, excise, service tax, fees, levies, works contract tax 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 should be indicated separately in format provided in **Clause 23 of “Section IV: Bid Submission Formats and Proformas”**.
- 9.3** In case the taxes are not mentioned separately, the amount so mentioned would be deemed as inclusive of taxes.
- 9.4** A proposal submitted with an adjustable price quotation or conditional proposal shall be treated as non-responsive and the bid shall be rejected summarily.

10. Discount

- 10.1** Unconditional Discount, if any, should be merged with the quoted prices in the **financial bid**.
- 10.2** *The Bidders are advised not to indicate any separate* conditional discount. Conditional discount of any type, indicated separately, will not be taken into account for evaluation purpose. However, in the event of such an offer, without considering discount, is found to be the best, the Purchaser shall avail such discount at the time of award of contract.

11. Authorized Signatory

- 11.1** For the purpose of submission of the bid, the Bidder may be represented by either the **Principal Officer** (MD/CEO/Company Secretary) or his duly **Authorized Representative**, in which case he/she shall submit a certificate of authority (Power of Attorney or Board Resolution). All certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall, as far as possible, be furnished and signed by the authorized representative or the Principal Officer.
- 11.2** It is further clarified that the individual signing the RFP or other documents in connection with the RFP must certify whether he/she signs as:
- 11.2.1** Constituted attorney of the firm, if it is a company
- 11.3** Bidders must submit documentary evidence for power-of-attorney along with the technical bid. Bids not accompanied by the power of attorney shall be treated as non-responsive.

12. Earnest Money Deposit (EMD)

- 12.1** The Bidder shall furnish, as part of its bid, EMD of the amount mentioned in **Clause 8 of “Section I: Invitation to Bidders”**.
- 12.2** The EMD is required to protect the Purchaser against the risk of Bidder’s conduct which would warrant the EMD's forfeiture, pursuant to **Clause 12.6** of this section.
- 12.3** The EMD shall be denominated in Indian Rupees, and shall be submitted either online or in the form of bank guarantee issued by **Nationalized/ Scheduled Bank** and valid for period as stated in **“Section I: Invitation to Bidders”**
- 12.4** Unsuccessful Bidder’s EMD will be discharged / returned after signing of the contract with the successful Bidder. **No interest will be paid by the Purchaser on the EMD amount.**
- 12.5** The successful Bidder’s EMD shall be discharged upon the Bidder executing the Contract, pursuant to **Clause 30.3** and after furnishing the performance bank guarantee, pursuant to **Clause 31**.

12.6 The EMD may be forfeited:

- a. if a Bidder withdraws its bid during the period of bid validity specified in the RFP; or
- b. If the Bidder is found to have submitted false particulars / fake documents; or
- c. If the Bidder is found to have indulged in corrupt practices or manipulation of rates by cartelization; or
- d. in the case of a successful Bidder, if the Bidder fails;
 - i. to sign the Contract in accordance with **Clause 30.3**; or
 - ii. To furnish performance bank guarantee in accordance with **Clause 31**

12.7 Purchaser requires bidders to observe the highest standard of ethics during the procurement and execution of such contracts.

12.7.1 Purchaser will reject a proposal for the award of Contract if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract.

12.7.2 The Purchaser will declare a firm ineligible, either indefinitely or for a stated period of time, for awarding a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, this contract.

12.8 Grafts and commissions etc.

12.8.1 Any graft, commission, gift or advantage given, promised or offered by or on behalf of the contractor or his partner, agent, officers, director, employee or servant or any one on his or their behalf in relation to the obtaining or to the execution of this or any other contract with the owner, shall be, in addition to any criminal liability which it may incur, subject of any loss or damage to the owner resulting from any cancellation. The owner shall then be entitled to deduct the amount so payable from any moneys otherwise due to the contractor under the contract.

13. Period of Validity of Bids

13.1 Bids shall remain valid for period as stated in **Clause 9(d)** of “**Section I: Invitation to Bidders**”. **A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive and shall not be taken up for evaluation purposes.**

13.2 The Purchaser may request the Bidder(s) for an extension of the period of validity of the bids. The request and the responses thereto shall be made in writing (or by fax or by e-mail). The validity of EMD shall also be duly extended in accordance to **clause 12.3** above. **A bidder granting the request will not be permitted to modify its bid.**

14. Format and Signing of Bid

14.1 The Bidder shall prepare the Bid, in accordance with **Clause 7 this section**. In the event of any discrepancy between them, the original in online copy shall govern.

14.2 The bid shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract in accordance with **Clause 7 of this section**. All pages of the bid including the RFP along with issued corrigendum shall be signed and stamped by the person or persons signing the bid. Following should be take care of regarding the RFP document

14.2.1 The quality of print out must be good readable flow.

14.2.2 The original direct downloaded print copy is to be submitted. Photocopy or scanned/stored print copies are not acceptable.

14.2.3 Missing of any contents in direct original downloaded prints and / or any changes appearing including tampering / editing noted in the submitted RFP documents is not acceptable.

14.2.4 Department shall not be responsible for any delay or in failure of any of the Internet sites.

14.3 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the person or persons signing the bid.

14.4 Prices in any form or by any reason before opening the Financial Bid should not be revealed, failing which the offer shall be liable to be rejected. If price change is envisaged due to any clarification before the scheduled date and time of submission of the bid, revised Bid in a separate sealed cover may be submitted by the Bidder. However, no revision shall be accepted after this scheduled date and time is over.

15. Local Conditions

15.1 It will be incumbent upon each Bidder to fully acquaint himself with the local conditions and factors at the respective locations, sites and offices of State Transport, Haryana that would have any effect on the performance of the contract and / or the cost.

15.2 The Bidder is expected to obtain for himself on his own responsibility all information that may be necessary for preparing the bid and entering into contract. Obtaining such information shall be at Bidder's own cost. Purchaser shall, however, provide him necessary permissions if the details of the visit schedule are made available in advance.

15.3 Failure to obtain the information necessary for preparing the bid and/or failure to perform activities that may be necessary for project will in no way relieve the successful Bidder from performing any work in accordance with the contract entered into.

15.4 It will be imperative for each Bidder to fully inform themselves of all local and legal conditions and factors which may have any effect on the execution of the contract as described in the RFP documents.

15.5 It is the responsibility of the Bidder that such factors have properly been investigated and considered while submitting the bid proposals and that no claim whatsoever including those for financial adjustment to the contract awarded under the bidding documents will be entertained by the Purchaser and that neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the Purchaser on account of failure of the Bidder to appraise themselves of local laws and conditions.

16. Sealing and Marking of Bid

16.1 The bidder shall submit the Hard Copy of Technical Bid in one sealed cover clearly marked as "Duplicate Copy" only after the online submission

16.2 If the outer cover of the bid is not sealed and marked as required, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

17. Last Date for Receipt of Bids

17.1 Bids will be submitted online on the portal. Only one hard copy of Technical bid shall be received by the Purchaser at the address specified under **Clause 9(b)** of "**Section I: Invitation to Bidders**" not later than the time and date specified in **Clause 10 - Technical Bid opening** of "**Section I: Invitation to Bidders**". In the event of the specified date for the receipt of Bids being declared a holiday for the Purchaser, the Bids will be received up to the appointed time on the next working day. Technical bid shall not include any financial information

- 17.2 The Purchaser may, at its discretion, extend the last date for the receipt of bids by issuing a corrigendum and amending the dates provided in **Clause 10 of section I**, in which case all rights and obligations of the Purchaser and Bidders previously subject to the last date will thereafter be subject to the last date as extended.

18. Late Bids

- 18.1 Any bid received by the Purchaser after the last date and time for receipt of bids prescribed by the Purchaser, pursuant to **Clause 10 - Last Date and time for Submission of Bids of “Section I: Invitation to Bidders”**, will be rejected and shall not be considered for opening and/or returned unopened to the Bidder. Purchaser shall not be responsible for any postal delays, if any.

19. Modification and Withdrawal of Bids

- 19.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the last date and time prescribed for receipt of bids.
- 19.2 The Bidder's written modification notice by the authorized signatory and the modified bid shall be prepared, sealed, marked and dispatched in accordance to the procedure and with the provisions of **Clause 10 of this section I: Invitation to Bidders**.
- 19.3 The modified bid document should essentially mention that this is the modified bid. In case of withdrawal, a withdrawal notice may also be sent in writing by the authorized signatory on the letter head of the SI. In either case of the request for withdrawal or the modified bid, they should reach the Purchaser before the notified last date and time for submission of bids as per **clause 10 - Last Date and time for Submission of Bids of “Section I: Invitation to Bidders”**.
- 19.4 No bid may be altered / modified subsequent to the closing time and date for receipt of bids. Unsolicited correspondences from Bidders will not be considered.
- 19.5 No bid may be withdrawn or modified in the interval between the last date and time for receipt of bids and the expiry of the bid validity period specified in the RFP. Withdrawal of a bid during this interval shall result in forfeiture of the Bidder's EMD.

20. Address for Correspondence

- 20.1 The Bidder shall designate the official mailing/e-mail address, place and fax number to which all correspondence shall be sent by the Purchaser.

21. Contacting the Purchaser

- 21.1 No Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.
- 21.2 Any effort by a Bidder to influence the Purchaser's bid evaluation, bid comparison or contract award decisions shall result in the rejection of the Bidder's bid.

22. Opening Technical Bids by Purchaser

- 22.1 The Purchaser will open the **Technical Bid**, in the presence of the representatives of the Bidders who choose to attend, at the time, date and place, as mentioned in **Clause 10 - Technical Bid opening of “Section I: Invitation to Bidders”**.

23. Consortium Related Conditions

- 23.1 **Other than FI/Bank and SI, one consortium partner is allowed.** The Lead bidder can be either Financial Institution (FI)/Bank or the System Integrator (SI). The members of the Consortium shall enter into a Joint Bidding Agreement as per the format provided under **Clause 22 of Section IV**.

- 23.2** The consortium partner proposed by the Lead Bidder in its Bid/ proposal should be same (i.e., cannot be changed after the signing of the contract and initiation of the project) throughout the project duration. Consortium partner will perform tasks as proposed in this Tender Document.
- 23.3** A consortium partner can associate with more than one Lead Bidder for this Tender. However, the lead bidder/Single bidder would not be allowed to submit a second bid either individually or as a consortium partner. Non-compliance to this clause will lead to disqualification of bid and forfeiture of EMD.
- 23.4** Sole responsibility for the completion of work under this contract will be that of the Lead Bidder
- 23.5** Lead bidder's business relationships with the consortium partner will be its responsibility solely.
- 23.6** Any conflict or disagreement within the consortium, at any point of time during the currency of the Project, shall be resolved by Lead bidder in such a way that the Project work is not affected in any manner with respect to any deliverable, milestone, operations and SLA as per the provisions of the Contract. Any such conflict or disagreement shall not be invoked by the Lead Bidder to justify non-fulfilment of any of the obligations under the Contract
- 23.7** Notwithstanding anything contained in the Contract, the Consortium member, entrusted with the responsibilities of the Project, shall be jointly and severally responsible to the Purchaser in respect of meeting the financial liabilities of the Lead Bidder and rendering of Services arising out of the Contract.
- 23.8** The lead bidder should clearly specify the name, roles and responsibilities of each consortium partner so as to distinguish between FI/Bank, SI and other consortium partner (if any).

24. Sub-Contract

- 24.1** The Lead bidder and its consortium partner shall not, without the consent in writing of the Purchaser appoint any delegate/ subcontractor for the performance of Services under this contract. It is desirable that the number of sub-contractors engaged by the Lead Bidder and its consortium partner for this contract is kept to the minimum possible. However, no sub-contracting would be permitted for the following Services under the Contract (not limited to):
- Software Development
- 24.2** The support of OEMs only for certain tasks limited to installation/deployment, commissioning & maintenance support related to their respective product/equipment is permitted.
- 24.3** The Lead Bidder shall be responsible and shall ensure the proper performance of the sub-contractors and shall be liable for any non-performance or breach by such service providers. The Lead Bidder indemnifies and shall keep indemnified Purchaser against any losses, damages, claims or such other implications arising from or out of the acts and omissions of such providers. The Lead Bidder shall be responsible for making all payments to the sub-contractors as may be necessary, in respect of any services performed or task executed, and the Purchaser shall not be responsible for any part or full payment which is due to such service providers.
- 24.4** All rights of use of any process, product, service or facility developed or any other task performed by the sub-contractors for the Lead Bidder under this contract would lie exclusively with the Purchaser in perpetuity free from all liens, encumbrances and other third party rights and the Lead Bidder shall, wherever required, take all steps that may be necessary to ensure the transfer of such ownership in favour of the Purchaser.
- 24.5** Nothing in this Contract or any agreement hereunder shall relieve the Lead Bidder from its liabilities or obligations under this Contract to provide the services in accordance with this Contract. The Purchaser reserves the right to hold the Lead Bidder liable for any act/omission of sub-contractors.

- 24.6** The Lead Bidder shall ensure that the Sub-Contractor appointed is competent, professional and possesses the requisite qualifications and experience appropriate to the tasks they will perform.
- 24.7** The terms of Bidder's contract / agreement with the sub-contractor (excluding the commercial terms) for this particular assignment shall require the review and approval of the Purchaser and shall be in conformity with the terms of this Contract. Where the Purchaser deems necessary, it may refuse to consent to the delegation of services to the sub-contractor (s). The Lead Bidder shall not amend or modify the terms of contract/agreement with the sub-contractor (s) without the prior written consent of the Purchaser.
- 24.8** The Lead Bidder shall not terminate the contract/agreement with the sub-contractor (s) without prior written consent of the Purchaser. Further, in case the Lead Bidder terminates any contract/arrangement or agreement with a sub-contractor for any reason whatsoever, the Lead Bidder shall ensure the smooth continuation of services by providing forthwith, a suitable replacement which is acceptable to the Purchaser at no additional cost to the Purchaser.
- 24.9** All the conditions mentioned here shall belong to the company bidding and shall not include any aspects of affiliates/sister concern/subsidiary of the bidding company.

25. Eligibility Criteria

25.1 Eligibility Requirements for the Bidder and their consortium partners are as under:

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required |
|--------|-------------------|---|---|
| 1. | Legal Entity | <p><u>FI/ Bank:</u> The FI/Bank must be a Nationalized Bank or Scheduled Bank (included in the Second Schedule of Reserve Bank of India (RBI) Act, 1934)</p> <p><u>System Integrator (SI):</u></p> <ul style="list-style-type: none"> ➤ SI could be a Company incorporated in India under the companies Act 1956 or Companies Act 2013 (as amended till date) and subsequent amendments thereto <p>OR</p> <p>An Entity registered under LLP Act 2008 and subsequent amendments thereto</p> <ul style="list-style-type: none"> ➤ Should be in field of (IT) for at least for 5 years at the time of bid submission <p><u>Consortium Partner:</u> Consortium Partner could be a Company incorporated in India under the companies Act 1956 or Companies Act 2013 (as amended till date) and subsequent amendments thereto</p> <p>OR</p> <p>An entity registered under LLP Act 2008 and subsequent amendments thereto</p> | Copy of Certificate of Incorporation/Registration, GST Certificate, PAN Card |
| 2. | Annual Turnover | <p><u>Lead bidder:</u> Lead Bidder should have annual turnover of at least INR 50 Crore each during last three financial years ending on 31st March 2020</p> <p><u>Consortium Partner:</u> Consortium partner should have annual turnover of at least INR 8 Crore each during last three financial years ending on 31st March 2020</p> | <p>Audited financial statements for last three financial years ending on 31st March 2020</p> <p>Provisional certificate from Statutory Auditor for 2019-20 is acceptable, in</p> |

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required |
|--------|-------------------|---|---|
| | | | the case the audited financial statements are not available |
| 3. | Net Worth | <p><u>All Members of Consortium:</u> All members of consortium should have positive Net Worth during last three financial years ending on 31st March 2020 For the purpose of this criterion, net-worth of only the bidding entity will be considered. Net-Worth of any parent, subsidiary, associated or other related entity will not be considered.</p> | Certificate from Statutory Auditor |
| 4. | Blacklisting | <p><u>All Members of Consortium:</u> All members of consortium not be blacklisted by Government Agency in India or abroad or proved to have indulged in serious fraudulent practices by a Court of law or an independent Commission of Inquiry in India or abroad at the time of submission of the bid.</p> | An undertaking duly attested by Notary |
| 5. | Certifications | <p><u>FI/ Bank:</u> a) FI/Bank should have its financial switch certified for acquiring transactions of Debit/ Credit/ Prepaid Cards in India. The bank should also be certified for acquiring transactions of NCMC Cards (Debit/ Credit/ Prepaid) as per the defined specification. b) FI/Bank should have its issuer host certified for issuance of NCMC cards</p> <p><u>System Integrator (SI):</u> a) CMM/CMMi Level 3 or higher certified IT company and/ OR b) ISO 9001:2008 or later certified IT Company</p> | Copy of valid certificate which is self-attested by the authorised signatory |
| 6. | Experience | <p><u>FI/ Bank:</u> a) FI/Bank must have experience as an acquirer for acceptance, operations and management of transactions through Contactless Smart Card b) The FI/Bank must have experience as an issuer for issuance of EMV/ open loop cards</p> <p><u>System Integrator (SI):</u> a) SI should have the minimum experience of AFCS Project implementation during last five years (as on bid submission date) as below:</p> <ul style="list-style-type: none"> • One (1) project with contract value equal of INR 24 Crore; OR • Two (2) projects with contract value of INR 15 Crore each; OR | Copy of substantial proof like PO/WO/LOA/Copy of Contract Completion Certificate would be preferred |

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required |
|--------|----------------------|---|---|
| | | <ul style="list-style-type: none"> Three (3) projects with contract value of INR 12 Crore each For the purpose of evaluation, AFCS project will be defined as a project for a transport organization including Card/ cash-based transit Fare Collection System where system is integrated with ETIM machines | |
| 7. | ETIM Devices Offered | a) Lead bidder or its consortium partner(s) should have supplied 1000 or more EMV based ETIM/POS devices to Single or Multiple customers in India or abroad during last 5 years (from date of bid submission) b) The ETIM device proposed by bidder should be NPCI – qSPARC Certified at the time of bid submission | Installation Certificate/ Purchase Order/Copy of contract/Completion certificate issued by the purchaser clearly indicating the quantity of equipment supplied in the project. Copy of NPCI-qSPARC certification |

26. Evaluation Criteria

| S. No. | Evaluation Criteria | Parameter | Marks |
|-----------|---|---|-----------|
| 1 | Experience | | 60 |
| 1A | Experience in implementation of EMV/ Open loop ticketing system for transport sector in India in last 7 years from the last date of bid submission - Lead Bidder or its Consortium partner. (Completed/ongoing projects) | 2 Projects – 10 Marks each | 20 |
| | | Project Involving following as fare media | |
| | | a) EMV/ Open loop-based debit/credit/pre-paid cards or RuPay Pre-paid cards (NCCMC/q-Sparc Specs) | 2.5 |
| | | b) EMV/Open loop contactless debit or credit cards | 2.5 |
| | | Number of smart cards issued in project: | |
| | | a) More than 1 lakh – up to 2 lakh cards | 1 |
| | | b) More than 2 lakh – up to 3 lakh cards | 2 |
| | | c) More than 3 lakh – up to 4 lakh cards | 3 |
| | | d) More than 4 lakh | 5 |
| 1B | IT implementation projects in India or abroad in last 7 years of Lead bidder or its consortium partner– Completed Projects (Completed projects refers to projects where Go live/ Acceptance has occurred) | 2 Projects – 10 Marks each | 20 |
| | | Worth of Project | |
| | | a) More than 5 Crore to up to 8 Crore | 2 |
| | | b) More than 8 Crore to up to 12 Crore | 3 |
| | | c) More than 12 Crore to up to 16 Crore | 4 |
| | | d) More than 16 Crores | 5 |
| | | Projects Involving | |
| | | a) Software Implementation for transit system | 1 |
| | | b) Open Loop Ticketing System | 1 |
| | | c) GPS System | 1 |
| | | d) Issuance of Cards | 1 |

| S. No. | Evaluation Criteria | Parameter | Marks |
|-----------|---|---|-----------|
| | | e) WAN setup | 1 |
| 1C | IT implementation projects involving Ticketing Experience in transport sector in India or abroad in last 7 years of Lead bidder or its consortium Partner – Completed Projects <i>(Completed projects refers to projects where Go live/ Acceptance has occurred)</i> | 2 Projects –5 Marks Project Involving | 10 |
| | | Web based ticket reservation for public interface (Online reservation system) | 2 |
| | | Ticket issuance from ticket Counter | 1 |
| | | Ticket issuance from Handheld devices | 2 |
| 1D | Project Experience of EMV based ETIM/ POS devices – Lead bidder or its consortium partners | No. of EMV based ETIM/POS Devices supplied: <i>(The customers or client for this criterion can be one or different entities within India or abroad. The proof should be a work order or letter from the client which clearly mentions the number of ETIMs supplied)</i> | 10 |
| | | 1000 – 2000 Devices | 2 |
| | | 2001 – 3000 Devices | 4 |
| | | 3001 – 4000 Devices | 6 |
| | | 4001 – 5000 Devices | 8 |
| | | 5001 or more | 10 |
| 2 | Manpower | | 20 |
| 2A | Project Director B.E/B.Tech and MBA/PG with minimum 12 plus years of experience in Intelligent Transportation System (ITS) implementation projects with Government/ PSU in India | Total no. of years of experience: a) 15+ years b) 12+ years | 3 1 |
| | | Past experience in Intelligent Transportation System (ITS) implementation projects with Government / PSU in India: a) >=3 projects b) 1-2 projects | 2 1 |
| | | | |
| 2B | Project Manager MCA/MBA/B.Tech/BE or Master in any discipline having minimum 9 plus years of experience in Intelligent Transportation System (ITS) implementation projects with Government/PSU in India | Total no. of years of experience: a) 11+ years b) 9+ years | 3 1 |
| | | Past experience in Intelligent Transportation System (ITS) implementation projects with Government / PSU in India: a) >=3 projects b) 1-2 projects | 2 1 |
| | | | |
| 2C | Solution Architect | | 5 |

| S. No. | Evaluation Criteria | Parameter | Marks |
|---------------------------------|--|---|-----------|
| | B. Tech with M. Tech/MBA or Bachelors in IT/Computer Science with MCA having certification in Architecture and minimum 8 plus years of experience in solution design | Total no. of years of experience: | |
| | | a) 10+ years | 3 |
| | | b) 8+ years | 1 |
| | | Past experience implementing any of the proposed solutions: | |
| | | a) ≥ 2 projects | 2 |
| | | b) 1 project | 1 |
| 2D | AFC Expert | | 5 |
| | B. Tech with M. Tech/MBA or Bachelors in IT/Computer Science with MCA minimum 8 plus years of experience in AFC | Total no. of years of experience: | |
| | | a) 10+ years | 3 |
| | | b) 8+ years | 1 |
| | | Past experience implementing AFC solutions in Transport Sector: | |
| | | a) ≥ 4 projects | 2 |
| | | b) 2 projects | 1 |
| 3 | Solution Proposed | | 20 |
| 3A | Technical proposal (Paper based evaluation) | Max Marks | 10 |
| | | Compliance to Section VI & VII of RFP: | |
| | | a) 100% compliance | 4 |
| | | b) Non-Compliance | 0 |
| | | Solution proposed: | 4 |
| | | a) Open Loop Ticketing solution | |
| | | b) Issuance of NCMC Cards | |
| | | c) Online Reservation System Enhancement & integration (Portal & Mobile App) | |
| | | d) GPS | |
| | | e) Brevity, exhaustiveness, assumptions, clarity of thoughts etc. | |
| | | Work plan and manpower deployment plan | 2 |
| 3B | Presentation | Max Marks | 10 |
| | | Coverage of understanding of requirements, proposed solution, relevant experience and proposed team | 4 |
| | | Clarity of responses. | 4 |
| | | Participation from relevant personnel and senior management in the presentation | 2 |
| Minimum qualifying marks | | | 70 |

27. Evaluation of Bids

27.1 Evaluation Methodology

27.1.1 The Purchaser will examine the bids in three phases.

Phase 1 – Evaluation against Pre-Qualification Criteria

All bids will go through an evaluation against the Eligibility Criteria as mentioned in **clause 25 of this section**. Only those bidders who meet the Eligibility Criteria would be considered for Phase 2 of the evaluation process.

Phase 2 – Technical Evaluation

Bids, which meet the eligibility criteria (Phase 1 of evaluation), shall be considered for technical evaluation. The technical evaluation of all such bids will be done against the evaluation criteria mentioned in **clause 26 of this section**. Bids that score **minimum 70 marks out of 100** in the technical evaluation shall be considered for financial evaluation (phase 3 of evaluation).

Phase 3 – Financial Evaluation & Negotiation

- a) The financial bids of the bidders qualifying Phase 1 and Phase 2 of evaluation shall be opened in the presence of the representatives of the qualified bidders.
- b) The Purchaser will open the Financial Bids of only Technically Qualified Bidders after all deviation has been resolved and accepted by the bidder, in the presence of the representatives of the Bidder who choose to attend, at the time, date and place, as decided by the Purchaser and reviewed to determine whether the commercial bids are substantially responsive. Bids that are not substantially responsive are liable to be disqualified at Purchaser's discretion
- c) Financial evaluation would be undertaken irrespective of number of Bidders qualifying the Technical evaluation
- d) Financial Bids that are not as per the format provided in **clause 23 of Section IV** of tender document shall be liable for rejection.
- e) The Financial bids shall be evaluated by the Purchaser for completeness and accuracy. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail.
- f) The financial quote shall be evaluated and marked L1, L2, L3 etc. L1 being the lowest offer and then others in ascending order. In case of a tie, the bid that scored higher technical marks will be considered the best value bid.
- g) As per policy of the department of Industries & Commerce Department, Govt. of Haryana for procurement of stores & goods and turnkey contracts-negotiation regarding issued vide its circular No.2/2/2010-4/IB-II dated 16.6.2014, the negotiations could be held up to L3 bidder, if the difference between L1 quoted rate and those quoted by L2 & L3 is within 5% of the L1 quoted rate. In cases where the L1 bidder refuses to further reduce his offered price and the L2 or L3 bidders come forward to offer a price which is better than the price offered by L1 bidder, the bidder whose price is accepted becomes the L1 bidder. However, in such a situation, the original L1 bidder may be given one more opportunity to improve upon the discovered price. In case, the original L1 bidder further improves upon the price discovered during the negotiations, he would be treated as the L1 bidder.
- h) Lowest financially evaluated & technically responsive bidder shall be selected for award of contract.

28. Post Qualification and Award Criteria

- 28.1** This determination will take into account the Bidder's financial and technical strengths and capabilities. It will also include examination of the documentary evidence submitted by the Bidder as part of the bid as well as such other information as the Purchaser deems necessary and appropriate.

- 28.2** A negative determination will result in rejection of the Bidder's bid, in which event; the Purchaser will proceed to the next best evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.
- 28.3** The Purchaser is not bound to accept the best evaluated bid or any bid and reserves the right to reject any bid without assigning any reason thereof.

29. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids

- 29.1** The Purchaser reserves the right to accept any bid, and to annul the Tender 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 the Purchaser's action.

30. Notification of Award

- 30.1** Prior to the expiration of the period of bid validity, pursuant to **Clause 13 of this section**, the Purchaser will notify the successful Bidder in writing by registered letter/e-mail or by fax that its bid has been accepted. The Bidder shall provide his acceptance within a week of such notification.
- 30.2** The notification of award will constitute the formation of the Contract. Upon the successful Bidder's furnishing of performance bank guarantee pursuant to **Clause 31 of this section**, the Purchaser may notify each unsuccessful Bidder and will discharge their EMD, pursuant to **Clause 12.4 of this section**.

30.3 Signing of Contract

- 30.3.1** The successful bidder shall sign the contract within 30 days from date of notification of award.

31. Performance Bank Guarantee

- 31.1** Within **15 days** of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the performance bank guarantee of **INR 2,00,00,000 (Two Crore only)** valid in accordance with the Conditions of Contract, in the Performance Bank Guarantee prescribed at **Clause 18 of "Section IV: Bid Submission Formats and Proformas"**.

Failure of the successful Bidder to comply with the requirement of **Clause 30.3 or Clause 31.1** of this section shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Purchaser may award the Contract to the next best evaluated bidder or call for new bids at the sole discretion of the purchaser.

32. Rejection Criteria

- 32.1** Besides other terms and conditions highlighted in the RFP document, bids may be rejected under following circumstances:

32.2 General Rejection Criteria

- 32.2.1** Bids submitted without or improper EMD / cost of RFP document
- 32.2.2** Bids received through Telex / Telegraphic / Fax / e-Mail.
- 32.2.3** If the information provided by the Bidder is found to be incorrect / misleading at any stage / time during the Tendering Process
- 32.2.4** Any effort on the part of a Bidder to influence the Purchaser's bid evaluation, bid comparison or contract award decisions

- 32.2.5** Bids received by the Purchaser after the last date and time for receipt of bids prescribed by the Purchaser, pursuant to **Clause 10 - Last Date and time for Submission of Bids of “Section I: Invitation to Bidders”**,
- 32.2.6** Bids without signature of duly authorized person(s) on all pages of bid documents
- 32.2.7** Bids without seal of company on whose behalf the signatures have been appended on all pages of the bid document.
- 32.2.8** Bids without power of authorization and any other document consisting of adequate proof of the ability of the signatory to bind the Bidder

32.3 Technical Rejection Criteria

- 32.3.1** Technical Bid containing financial details.
- 32.3.2** Revelation of Prices in any form or by any reason before opening the Financial Bid
- 32.3.3** Failure to furnish all information required by the RFP Document or submission of a bid not substantially responsive to the RFP Document in every respect
- 32.3.4** Bidders not quoting for the complete scope of Work as indicated in the RFP documents, Amendment /addendum / Corrigendum (if any) and any subsequent information given to the Bidder
- 32.3.5** If the bid does not confirm to the overall timelines as per the implementation schedule as per **Clause 9 of Section V**

32.4 Financial Rejection Criteria

- 32.4.1** Incomplete or unsigned Financial Bid
- 32.4.2** Financial Bids that do not conform to the RFP’s financial bid format.

33. Court of Jurisdiction

All disputes pertaining both prior and subsequent to the Bidding process shall be subject to the jurisdiction of courts at Chandigarh only.

34. Rejection of Defective Equipment/Material

If the assets (including hardware and software), before it is transferred to purchaser, be found to be defective, or fails to fulfil the requirements of the Contract, Bidder shall have to replace/rectify the equipment/material/software at its own cost before executing the transfer of the complete system to the purchaser.

35. Transfer / Exit Management

The Bidder shall transfer all the assets (including hardware and software) and all related documentation, which will be developed, procured or customized during the project to the purchaser. Bidder shall have to transfer the whole setup in optimum performance conditions as per the contract. The Bidder shall provide all such information as may reasonably be necessary to effect as Seamless a handover as practicable in the circumstances to the Purchaser or its Replacement Bidder and which the Bidder has in its possession or control at any time during the transfer period. The Bidder shall commit adequate resources to comply with its obligations under this Exit Management Procedures. The Bidder should get exit management plan approved by the purchaser.

36. Exit Management Plan

- 36.1** An Exit Management plan shall be furnished by Bidder in writing to the Purchaser within 180 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.

- a) A detailed program of the transfer process that could be used in conjunction with a Replacement Bidder including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer.
- b) Plans for the communication with such of the Bidder's sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer
- c) Plans for provision of contingent support to Replacement Bidder for a reasonable period after transfer.

36.2 The Bidder shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.

36.3 Each Exit Management Plan shall be presented by the Bidder and approved by the Purchaser

36.4 In the event of termination or completion of the contract period, each Party shall comply with the exit Management Plan.

36.5 During the exit management period, the Bidder shall continue to deliver the Services

36.6 Payments during the Exit Management period shall be made in accordance with the Terms of Payment.

36.7 Appropriate Spares to carry out the operations will be handed over by Bidder to the Purchaser.

37. Other Negotiation and Concession terms as per Government of Haryana

37.1 As per policy of the department of Industries & Commerce Department, Govt. of Haryana for procurement of stores & goods vide order G.O. no. 2/2/2016-4IBII(I) dated 20.10.2016 –

37.1.1 Preference would be given to MSEs as 50% of the total tendered quantity provided quoting price within band of L-I+15% by bringing down their price to L-I and subject to condition that it agrees to fulfilment of other terms & conditions of the tender and further subject to fulfilment of conditions as per eligibility.

37.1.2 Preference would be given to Medium Enterprises as 10% of the total tendered quantity provided quoting price within band of L-I+15% by bringing down their price to L-I and subject to condition that it agrees to fulfilment of other terms & conditions of the tender and further subject to fulfilment of conditions as per eligibility.

37.1.3 Negotiations will be held only with L-I+5% firms/bidder. MSMEs within the price range of L-I+15% will be counter offered to match the finally arrived L-I rate. In case MSMEs within L-I+15% refuse to match the finally arrived L-I rate then the entire 60% (50% of MSEs & 10% for Medium Enterprises) of purchase preference will be transferred to L-I+5% category firms/bidder.

37.1.4 In case, no Micro and Small Enterprises (MSEs) and Medium Enterprises (MEs) as per the eligibility criteria specified in the above instruction are within L-I+15% range, the entire 100% tendered quantity will be distributed as per existing guidelines.

37.1.5 In case, there are no Micro & Small Enterprises (MEs) within L-I+15% range, the Purchase Preference quota of 50% of MSEs will stand transferred to open category making it from 40% to 90%.

- 37.1.6** In case there are no Medium Enterprises (MEs) within L1+15% range, the Purchase Preference quota of 10% of MSEs will stand transferred to open category making it from 40% to 50%.
- 37.1.7** In case, no MSMEs in within L1+5% range and there is one MSE & one ME in L1+15% range and further agree to match the arrived Li rate, the quantity distribution will be upto 40% for firm other than MSME, upto 50% for MSE and upto 10% for ME and so on.
- 37.1.8** In case, there are MSMEs (both or either MSEs and MEs) within L1+5% range and there are MSEs & MEs in L1+15% range. Negotiations will be carried out with all firms/bidder within L1+5% as per the existing guidelines to arrive at finally arrived L1 rate. The finally arrived firm can be any other firm/MSE/ME or any/more of these-other firm/MSE/ME matches the finally arrived price; in such a situation, appointment will be done as per the existing instructions of ration of 70:30 or 50:25:25 & so on. Thereafter, offer will be given to MSE and MEs within L+15% range to match the finally arrived L1 rate and if they agree to match the arrived L1 rate, the appointment of quantity will have many scenarios for the distribution of tendered quantities
- 37.2 Special Concessions for Haryana based Micro and Small Enterprises** - As per Govt. of Haryana, Industry and Commerce Department vide order no. 2/2/2010-4-IB-II dated 20.10.2016, Haryana based Micro and Small Enterprises are also allowed to participate in the Tender. However, the bidders wishing to participate in the Tender must fulfil the eligibility criteria as already detailed in the tender documents. Further Haryana based manufacturing Micro and Small Enterprises shall be entitled to 90% concession on deposit of the performance security amount which will be 0.2% of the value of the order.
- 37.3 Concessions / Benefits in Public Procurement for Start-ups / First Generation Entrepreneurs in Haryana.** – As per Govt. of Haryana, Industry and Commerce Department notification no. 2/2/2016-41B-II dated 03.01.2019, the entity/firm declared as a Start-up / First Generation Entrepreneurs as per provision contained in Haryana Govt., Notification no. 49/43/2015-4IB1 dated 17.04.2016 notifying the scheme of Start-ups / First Generation Entrepreneurs in the State or as amended time to time, are **exempted for submitting following payments:**
- a) Payment of tender fee.
 - b) Payment of Earnest Money Deposit (EMD)
 - c) 90% concession on performance security.
- Apart from above, the entity / firm are entitled for the following concessions / benefits:
- a) Concession of 80% on turnover conditions imposed in qualifying criteria (if applicable).
 - b) Exemption in respect of past performance and experience as part of qualifying requirement of the tender subject to fulfilment of condition as per eligibility criteria.
 - c) Up to 50% of the total tendered quantity provided quoting price within band of L-1 + 15% by bring in down their price to L-1 and subject to condition that it agrees to fulfilment of other terms & conditions of the tender and further subject to fulfilment of conditions as per eligibility. This ceiling of up to 50% purchase preference also includes the purchase preference available to Haryana State based MSEs as per the Govt. policy dated 20.10.2016 and amendments dated 23.04.2018.



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

**SECTION III: General Conditions of Contract & Contract
Agreement Format**

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section III - General Conditions of Contract (GCC) & Contract Agreement Format

| | | |
|------|---|----|
| 3.1 | Key terms and their definitions..... | 38 |
| 3.2 | Interpretation | 40 |
| 3.3 | Conditions Precedent | 41 |
| 3.4 | Scope of work / Contract..... | 41 |
| 3.5 | Key Performance Measurements | 41 |
| 3.6 | Commencement and progress..... | 41 |
| 3.7 | Constitution of Consortium..... | 42 |
| 3.8 | Sub – Contract | 42 |
| 3.9 | Project Manager of Bidder | 42 |
| 3.10 | Bidder’s obligations..... | 42 |
| 3.11 | Contract administration..... | 50 |
| 3.12 | Purchaser’s Obligations | 50 |
| 3.13 | Payments | 50 |
| 3.14 | Intellectual Property Rights..... | 52 |
| 3.15 | Ownership and Retention of Documents..... | 54 |
| 3.16 | Data and Hardware | 54 |
| 3.17 | Indemnity | 54 |
| 3.18 | Representations and Warranties | 54 |
| 3.19 | Confidentiality | 56 |
| 3.20 | Events of Default by the Bidder | 57 |
| 3.21 | Consequences of Event of Default..... | 58 |
| 3.22 | Stipulated Time Schedule..... | 59 |
| 3.23 | Term and Extension of the Contract | 59 |
| 3.24 | Termination | 60 |
| 3.25 | Consequences of Termination | 60 |
| 3.26 | Dispute Resolution..... | 61 |
| 3.27 | Time is of the essence | 62 |
| 3.28 | Conflict of interest | 62 |
| 3.29 | Publicity | 63 |
| 3.30 | Force Majeure..... | 63 |
| 3.31 | Governance Schedule..... | 64 |
| 3.32 | General | 64 |
| 3.33 | Application..... | 66 |
| 3.34 | Performance Security..... | 66 |
| 3.35 | Modification..... | 66 |

| | | |
|------|---|----|
| 3.36 | Currency of Payment | 66 |
| 3.37 | Change Orders/Alteration/Variation | 66 |
| 3.38 | Governing Language..... | 69 |
| 3.39 | “No Claim” Certificate..... | 69 |
| 3.40 | Warranty..... | 69 |
| 3.41 | Project Manager..... | 70 |
| 3.42 | Completion of Contract..... | 70 |
| 3.43 | Passing of Property | 70 |
| 3.44 | No Assignment | 70 |
| 3.45 | Insurance | 70 |
| 3.46 | Limitation of Bidder’s Liability towards the Purchaser | 71 |
| 3.47 | Payment Schedule..... | 71 |
| 3.48 | Severance | 74 |
| 3.49 | Liquidated Damages and Penalty | 74 |
| 3.50 | Suspension of Work..... | 75 |
| 3.51 | Exit Management..... | 76 |
| 3.52 | Change Control Note (CCN)..... | 77 |
| | CONTRACT AGREEMENT FORMAT..... | 79 |
| | <u>Appendix 1. Supplier’s Representative</u> | 82 |
| | <u>Appendix 2. List of Approved Subcontractors</u> | 83 |
| | <u>Appendix 3. Categories of Software</u> | 84 |
| | <u>Appendix 4. Custom Materials</u> | 85 |
| | <u>Appendix 5. Revised Price Schedules</u> | 86 |
| | <u>Appendix 6. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments</u> ... | 87 |
| | <u>Appendix 7. Change Control Note (CCN)</u> | 88 |

3.1 Key terms and their definitions

3.1.1 In this tender document, unless repugnant to the context in which these words and expressions appear the words and expressions defined below shall have the meanings assigned to them:

- I. **“Business Day”** means any day that is not a Sunday or a public holiday and starts at 9 AM.
- II. **“Bespoke Development”** means the software designed, customized, developed, tested and deployed by the bidder for the purposes of rendering the Services to the stakeholders of the Project and includes the source code along with associated documentation, which is the work product of the development efforts involved in the Project and the improvements and enhancements effected during the term of the Project, but does not include the third party software products, proprietary software components and tools deployed by the Implementation Agency
- III. **“Bid” or “Proposal”** means the documents in their entirety comprised in the proposal or bid submitted by the bidder (including the technical and commercial bid) in response to the tender document, and accepted by Purchaser
- IV. **“Bidder” or “Bidders”** means Lead Bidder and its Consortium Partner(s) who are responsible towards Purchaser for providing solution & systems and provide related services as per the requirements and terms and conditions specified in this tender / contract
- V. **“Bidder’s Representative”** means the person or the persons appointed by the Bidder from time to time to act on its behalf for overall co-ordination, supervision and project management.
- VI. **“Bidder’s Team”** means the successful Bidder who have to provide goods & services to the Purchaser under the scope of this Tender / Contract. This definition shall also include any and/or all of the employees of the Bidder, authorized service providers/partners/agents and representatives or other personnel employed or engaged either directly or indirectly by the Bidder for the purposes of this Tender / Contract.
- VII. **“Bidding Documents” or “Tender Documents”** refers to the collection of documents issued by the Purchaser to instruct and inform potential suppliers of the processes for bidding, selection of the winning bid, and Contract formation, as well as the contractual conditions governing the relationship between the Purchaser and the Supplier. The General Conditions of Contract, the Technical Requirements, and all other documents included in the Bidding Documents reflect the Procurement Guidelines that the Purchaser is obligated to follow during procurement and administration of this Contract
- VIII. **“Commercial Off-The-Shelf (COTS)”** refers to software products that are ready-made and available for sale, lease, or license to the general public.
- IX. **“Confidential Information”** means any information disclosed to or by any Party to this Contract and includes any information in relation to the Parties, a third party or any information including any such information that may come to the knowledge of the Parties hereto / Bidder’s Team by virtue of this Contract that:
 - a) is by its nature confidential or by the circumstances in which it is disclosed confidential; or
 - b) is designated by the disclosing Party as confidential or identified in terms connoting its confidentiality;but does not include information which is or becomes public knowledge other than by a breach of this Contract;
- X. **“Contract”** means the Agreement entered into between the Bidder together with the Purchaser as recorded in the Contract form signed by the Purchaser and the Bidder including all Annexes thereto, the Tender and all Annexes thereto and the agreed terms as

set out in the bid, all documents incorporated by reference therein and amendments and modifications to the above from time to time

- XI. “Contract Documents”** means the documents specified in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments to these Documents).
- XII. “Contract Value”** means the price payable to the Bidder under this Contract for the full and proper performance of its contractual obligations. The Contract Value shall be the value quoted by selected bidder in its commercial bid and accepted by State Transport Department, Haryana.
- XIII. “Change in Law”** shall mean occurrence of any of the following events after the execution of this Concession Agreement:
- a) enactment of any new Indian Law or Applicable Law;
 - b) the repeal in whole or in part (unless re-enactment with the same effect);
 - c) or modification of any existing Indian Law or Applicable Law;
 - d) the commencement of any Indian Law or Applicable Law which was not into force;
 - e) change in interpretation or application of any Indian Law or Applicable Law;
 - f) imposition or requirement of a new statutory or regulatory approval;
 - g) or modification in the terms and conditions on which a statutory or regulatory approval has already taken place;
 - h) a fresh imposition of a tax or duty that was not in existence on the Effective Date. It is clarified that a change in the rate of tax or duty that was in existence on the Effective Date shall not be considered a change in law for the purposes of this Article
- XIV. “Department/Purchaser”** means State Transport Department, Government of Haryana
- XV. “Data Centre (DC)” or “Disaster Recovery (DR)”** means Haryana State Data Centre (SDC) and DR on cloud provided by HARTRON. HARTRON will provide services as specified under the scope of work are to be carried out for the purpose of this Tender / Contract.
- XVI. “Document”** means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes or and databases or microfilm or computer-generated micro fiche.
- XVII. “Effective Date”** means the date on which this Contract comes into force. This Contract shall come into force and effect on the date (the “Effective Date”) of the Purchaser’s notice to the Bidder instructing the Bidder to begin carrying out the activities.
- XVIII. “ETIM”** means GPS enabled EMV based Electronic Ticket Issuing Machine.
- XIX. “Force Majeure”** means the occurrence of any act, event or cause (other than lack of funds), which is beyond the reasonable control of the affected Party including but not limited to:
- a) act of God, war, sabotage, terrorism, riot, civil disorder, revolution, national or state emergency, martial law, fire, lightning, flood, cyclone, earthquake, landslide, storm or other adverse or exceptionally severe weather conditions, explosion, power shortage, strike or boycotts for a continuous period of 20 days (not involving employees of the affected Party), epidemic, quarantine, radiation or radioactive contamination; or
 - b) Any act of government or other competent authority (including any Court of competent jurisdiction), such as expropriation, restraint, prohibition, intervention, requisition, requirement, direction or embargo by legislation, decree or other legally enforceable order.
- XX. “Goods”** means all of the equipment, sub-systems, hardware, software, products accessories and/or other material / items which the Bidder is required to supply, install and maintain under the contract.

- XXI. “Intellectual Property Rights”** means any patent, copyright, trademark, trade name, service marks, brands, propriety information, Application Software whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.
- XXII. “Notice”** means:
- a) A notice; or
 - b) Consent, approval or other communication required to be in writing under this Contract.
- XXIII. “OEM”** means the **Original Equipment Manufacturer of any equipment / system / software / product** which is providing such goods to the Purchaser under the scope of this Tender / Contract.
- XXIV. “Project”** or “System” means implementation of Open Loop Ticketing System and GPS System in State Transport Department, Haryana. The project also known as Smart Transport Management System (STMS).
- XXV. “Project value”** means the cost of the project or the business value generated by the bidder for its own firm during the duration of project
- XXVI. “Subcontractor”** means any firm to whom any of the obligations of the Supplier, including preparation of any design or supply of any Information Technologies or other Goods or Services, is sub-contracted directly or indirectly by the Supplier.
- XXVII. “Service Specification”** means and includes detailed description, statements to technical data, performance characteristics, and standards (Indian as well as International) as applicable and as specified in the Contract, as well as those specifications relating to Industry standards and codes applicable to the performance of the work, work performance quality and specifications affecting the work or any additional specification required to be produced by the Bidder to meet the design criteria
- XXVIII. “Services”** means all technical, logistical, management, and any other Services to be provided by the Supplier under the Contract to supply, install, customize, integrate, and make operational the System. Such Services may include, but are not restricted to, activity management and quality assurance, design, development, customization, documentation, transportation, insurance, inspection, expediting, site preparation, installation, integration, training, data migration, Pre-commissioning, Commissioning, maintenance, and technical support.

3.2 Interpretation

3.2.1 In this Contract unless a contrary intention is evident:

- a) the clause headings are for convenient reference only and do not form part of this Contract;
- b) unless otherwise specified a reference to a clause number is a reference to all of its sub-clauses;
- c) unless otherwise specified a reference to a clause, sub-clause or section is a reference to a clause, sub-clause or section of this Contract including any amendments or modifications to the same from time to time;
- d) a word in the singular includes the plural and a word in the plural includes the singular;
- e) a word importing a gender includes any other gender;
- f) a reference to a person includes a partnership and a body corporate;
- g) a reference to legislation includes legislation repealing, replacing or amending that legislation;
- h) where a word or phrase is given a particular meaning, it includes the appropriate grammatical forms of that word or phrase which have corresponding meanings.

- i) in the event of an inconsistency between the terms of this Contract and the Tender and the Bid, the terms hereof shall prevail.
- j) The damages payable by either Party to the other, as set forth in this Agreement, are mutually agreed genuine pre-estimated loss and damages likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the "Liquidated Damages").

3.3 Conditions Precedent

3.3.1 This Contract is subject to the fulfilment of the following conditions precedent by the Bidder.

- a) Submitting Performance Bank Guarantee as per **Clause 12 of Section I – Invitation to Bidders**
- b) Obtaining of all statutory and other approvals required for the performance of the Services under this Contract. This may include approvals/clearances, wherever applicable, that may be required for execution of this contract.
- c) Furnishing of such other documents as the Purchaser may specify.

Purchaser reserves the right to waive any or all of the conditions specified in **3.3.1** above in writing and no such waiver shall affect or impair any right, power or remedy that the Purchaser may otherwise have.

3.4 Scope of work / Contract

3.4.1 Scope of the Contract shall be as defined in **Section V** of this tender document.

3.4.2 Purchaser has proposed to engage the Bidder for setting up Open Loop Ticketing System using NCMC cards, Smart Card based Bus Pass System, GPS System and provides related services. The Bidder is required to provide such goods, services and support as the Purchaser may deem proper and necessary, during the term of this Contract, and includes all such processes and activities which are consistent with the proposals set forth in the Bid, the Tender and this Contract and are deemed necessary by the Purchaser, in order to meet its business requirements (hereinafter 'scope of work').

3.5 Key Performance Measurements

3.5.1 Unless specified by the Purchaser to the contrary, the Bidder shall deliver the goods, perform the Services and carry out the scope of work in accordance with the terms of this Contract, Scope of Work and the Service Specifications as per Section VI and Section VII.

3.5.2 If the Contract/Service Specification include more than one document, then unless the Purchaser specifies to the contrary, the later in time shall prevail over a document of earlier date to the extent of any inconsistency.

3.5.3 The Purchaser reserves the right to amend any of the terms and conditions in relation to the Contract / Service Specifications and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the scope of work. If the amendment has any commercial impact, the Change Request shall be discussed with project manager of the bidder. However, the Purchaser shall take the final decision.

3.6 Commencement and progress

3.6.1 The Bidder shall subject to the fulfilment of the condition's precedent set out in Clause 3.3 of this section, commence the performance of its obligations in a manner as specified in the Scope of Work.

3.6.2 The Bidder shall proceed to carry out the activities/services with diligence and expedition in accordance with any stipulation as to the time, manner, mode, and method of execution contained in this Contract.

- 3.6.3** The Bidder shall be responsible for and shall ensure that all activities/services are performed in accordance with the Contract, Scope of Work, SLA and that the Bidder's Team complies with such specifications and all other standards, terms and other stipulations/conditions set out hereunder.
- 3.6.4** The Bidder shall perform the activities/services and carry out its obligations under the Contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the industry, with professional engineering and consulting standards recognized by international professional bodies, and shall observe sound management, engineering and security practices. It shall employ appropriate advanced technology and engineering practices and safe and effective equipment, machinery, material and methods. The Bidder shall always act, in respect of any matter relating to this Contract, as faithful advisors to the Purchaser and shall, at all times, support and safeguard the Purchaser's legitimate interests in any dealings with third parties.
- 3.6.5** The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards, such standard shall be the latest issued by the concerned institution. Delivery of the Goods shall be made by the Bidder in accordance with the terms specified by the Purchaser in its Notification of Award / Purchase Order.

3.7 Constitution of Consortium

- 3.7.1** Bidder is allowed to form a consortium; however, the Lead Bidder should be specified. The Contract agreement for Implementation of project will be signed with the Lead bidder only and all the legal liabilities mentioned in this RFP as per clause 23 of Section II: Instructions to Bidders or otherwise rest with Lead bidder. The Lead bidder while submitting the technical bid shall also submit copy of the agreement between the Lead bidder & consortium firms as per clause 22 of Section IV: Bid Submission Formats and Proformas.

3.8 Sub – Contract

- 3.8.1** For the purpose of this tender a Sub Contract would mean “Any agreement, purchase order, or any such legal instrument issued by the bidder for this Tender / contract to a third party, the subcontractor, calling for the performance of a defined piece of work or production and/ or delivery of specified Goods or services as permitted herein.”
- 3.8.2** Sub-contracting will not be permitted. However, sub-contracting, with prior approval and consent of the Purchaser, for activities that are non-technical in nature, will be considered at the sole discretion of the Purchaser.
- 3.8.3** The bidder may be permitted by the Purchaser to appoint any delegate/ sub-contractor for the performance of certain obligations of the bidder. However, no sub-contracting would be permitted for the following Services under the Contract (not limited to):
- a) Software Development

3.9 Project Manager of Bidder

- 3.9.1** The bidder shall ensure that at all time during the currency of the Contract, a Project Manager acceptable to the Purchaser shall take charge of the performance of the Contract. The Project Manager/ bidder's Representative shall be assisted by his/ her team members. Minimum manpower resource requirement has been provided in Section V – Scope of Work.

3.10 Bidder's obligations

- 3.10.1** The Bidder's obligations shall include all the activities as specified by the Purchaser in the Scope of Work and other sections of the Tender and Contract and changes thereof to meet the Purchaser's objectives and operational requirements. It will be the Bidder's responsibility to ensure the proper and successful implementation, performance and continued operation of the proposed solution in accordance with and in strict adherence to the terms of his Bid, the Tender

and this Contract. Bidder is required to work closely in relation to these items to ensure the project success.

- 3.10.2** In addition to the aforementioned, the Bidder shall provide services to manage and maintain the said infrastructure along with Facilities Management Services at department office location for the entire duration of the contract period.
- 3.10.3** In case of incorporation of new services or termination of any existing services, any of the deployed hardware / network components/physical or IT equipment may have to be upgraded / discarded or to be replaced. It is the sole responsibility of bidder to ensure that all such components should be in full working condition throughout the contract period and should be able to meet the Service Level Agreements as per the RFP terms and conditions.
- 3.10.4** The bidder shall provide details of hardware/ physical or IT equipment deployed to meet the Service Level Agreements as per the RFP terms and conditions every quarter throughout the contract period.
- 3.10.5** Security and safety of data will be responsibility of the selected bidder and after completion of the project complete data for all the application software will be handed over to department and department reserves the right to validate the data and selected bidder will provide necessary assistance
- 3.10.6** The Lead Bidder shall be responsible to the Purchaser for meeting all obligations of the consortium partners for executing the 'Scope of Work' and meeting all obligations of this Contract. The Lead Bidder on behalf of the consortium shall also be the sole point of contact for all matters relating to this Tender and the Contract thereof. All notices &/ or reports shall be addressed to/ from the Lead Bidder only.
- 3.10.7** The Lead Bidder shall be responsible to the Purchaser for meeting all obligations of the sub-contractors for executing the 'Scope of Work' and meeting all obligations of this tender. The Bidder shall also be the sole point of contact for all matters relating to this Tender and Contract thereof.
- 3.10.8** Purchaser reserves the right to interview the personnel proposed that will be deployed as part of the project team. If found unsuitable, the Purchaser may reject the deployment of the personnel.
- 3.10.9** Purchaser reserves the right to require changes in personnel which shall be communicated to the Bidder. Bidder with the prior approval of the Purchaser may make additions to the project team. Bidder shall provide the Purchaser with the resume of Key Personnel and provide such other information as the Purchaser may reasonably require. The Purchaser also reserves the right to interview the personnel and reject, if found unsuitable. In case of change in its team members, for any reason whatsoever, Bidder shall also ensure that the exiting members are replaced with at least equally qualified and professionally competent members as per clause 14 of section V: Scope of Work.
- 3.10.10** In case of change in its team members, Bidder shall ensure a reasonable amount of time overlap in activities to ensure proper knowledge transfer and handover / takeover of documents and other relevant materials between the outgoing and the new member.
- 3.10.11** The Bidder shall ensure that the Bidder's Team is competent, professional and possesses the requisite qualifications and experience appropriate to the task they are required to perform under this Contract. The Bidder shall ensure that the Services are performed through the efforts of the Bidder's Team, in accordance with the terms hereof and to the satisfaction of the Purchaser. Nothing in this Contract relieves the Bidder from its liabilities or obligations under this Contract to provide the Services in accordance with the Purchaser's directions and requirements and as stated in this Contract and the Bid to the extent accepted by the Purchaser and the Bidder shall be liable for any non-performance, non-compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its Team.

- 3.10.12** The Bidder shall ensure that all the personnel identified for this project have high level of integrity. Bidder shall undertake necessary due diligence to ensure that the personnel have high standard of trustworthiness. Bidder shall obtain an undertaking from each of the personnel assigned and the same should be submitted to the Purchaser as and when demanded by the Purchaser. In addition, the Bidder would also get the background verification checks carried out for the personnel deployed. In addition, the Purchaser may also get the background verification carried out for Bidder's personnel. Any information needed for this activity by the Purchaser should be provided immediately by Bidder.
- 3.10.13** The Bidder shall maintain required hardware, software at all locations, at no extra cost to the Purchaser, that may be required by bidder's or Purchaser itself during the contract period for performance of Services under this contract.
- 3.10.14** The Bidder shall be fully responsible for deployment/ installation/ development and integration of all the software and hardware components and resolve any problems / issues that may arise due to integration of components.
- 3.10.15** The Bidder shall ensure that the OEMs supply equipment/components including associated accessories and software required and shall support the Bidder in the installation, commissioning, integration and maintenance of these components during the entire period of contract. The Bidder shall ensure that the COTS OEMs supply the software applications and shall support the Bidder in the installation / deployment, integration, roll-out and maintenance of these applications during the entire period of contract.
- 3.10.16** All the software and hardware licenses that the Bidder proposes should be perpetual software licenses. The software licenses shall not be restricted based on location and the Purchaser should have the flexibility to use the software licenses for other requirements if required.
- 3.10.17** The Bidder shall ensure that the Annual Maintenance support for the software and hardware components is provided for the period from date of deployment of the software and hardware component till the end of contract (Refer Clause 3.22 and 3.23 of this section). Annual Maintenance support shall include patches, updates and upgrades of the software and hardware components. Bidder shall ensure that there is a comprehensive onsite warranty / support arrangement for the aforementioned period with all the OEMs or transfer in favour of purchaser for the benefit of any warranties given by OEMs.
- 3.10.18** The Bidder shall ensure that none of the components and sub-components is declared end-of-sale or end-of-support by the respective OEM at the time of submission of bid. If, the OEM declares any of the products/solutions end-of-sale subsequently, the Bidder shall ensure that the same is supported by the respective OEM from its date of deployment till the one year plus of the end of contract to support transitioning (Refer Clause 3.22 and 3.23 of this section).
- 3.10.19** If a product is de-supported by the OEM for any reason whatsoever, from the effective date of Contract till the end of contract months (Refer Clause 3.22 and 3.23 of this section), the Bidder should replace the products/solutions with an alternate that is acceptable to the Purchaser at no additional cost to the Purchaser and without causing any performance degradation and/or project delays.
- 3.10.20** The Bidder shall ensure that the OEMs provide the support and assistance to the Bidder in case of any problems / issues arising due to integration of components supplied by him with any other component(s)/product(s) under the purview of the overall solution. If the same is not resolved for any reason whatsoever, Bidder shall replace the required component(s) with an equivalent or better substitute that is acceptable to Purchaser without any additional cost to the Purchaser and without impacting the performance of the solution in any manner whatsoever
- 3.10.21** The Bidder shall ensure that the OEMs for hardware servers/equipment supply and/or install all new releases, versions, any type of updates, upgrade patches and/or bug fixes for the firmware or software from time to time at no additional cost to the Purchaser.

- 3.10.22** The Bidder shall ensure that he conducts the preventive maintenance on a monthly basis and break-fix maintenance in accordance with the best practices followed in the industry.
- 3.10.23** The Bidder shall ensure that the documentation and training services associated with the components shall be provided by the OEMs without any additional cost to the Purchaser.
- 3.10.24** The Bidder shall provision the required critical spares/components at the designated Data Center Sites of the Purchaser for meeting the uptime commitment of the components supplied by him.
- 3.10.25** The Bidder's Representative(s)/Project Manager shall have all the powers requisite for the execution of scope of work and performance of services under this contract. The Bidder's Representative(s) shall liaise with the Purchaser's Representative for the proper coordination and timely completion of the works and on any other matters pertaining to the works. He will extend full co-operation to Purchaser's representative in the manner required by them for supervision/inspection/observation of the equipment/goods/material, procedures, performance, progress, reports and records pertaining to the works. He shall also have complete charge of the Bidder's personnel engaged in the performance of the works and to ensure compliance of rules, regulations and safety practice. He shall also cooperate with the other Service Providers/Vendors of the Purchaser working at the State Transport locations and Data Center Site. Such Bidder's representative(s) shall be available to the Purchaser's Representative at respective Data Center Sites during the execution of works.
- 3.10.26** The Bidder shall be responsible on an ongoing basis for coordination with other vendors and agencies of the Purchaser in order to resolve issues and oversee implementation of the same. The Bidder shall also be responsible for resolving conflicts between vendors in case of borderline integration issues.
- 3.10.27** The Bidder shall perform the Services in accordance with the Applicable Laws and shall take all practicable steps to ensure that all its Personnel and agents, comply with the Applicable Laws
- 3.10.28** All software and licenses shall be purchased by the Bidder in the name of department.
- 3.10.29** The Bidder shall be responsible for the operation and maintenance of all Project Assets including replacement thereof, as may be required from time to time during the term of the Contract at its own cost so as to keep the Project Assets in good operating condition at all times and in case any up-gradation in Goods/ equipment/ hardware/ software, etc. is required the same shall be carried out by the Bidder at its own cost.
- 3.10.30 Start of Installation**
- 3.10.30.1** The selected bidder will discuss in detail all the specifications of the infrastructure to be hosted at State Data Centre before procurement with department. It is also necessary that the bidder must also comply with the requirements of DC and DR, including policies and procedures involving DC and DR operators. Bidder is required to work closely in relation to these items to ensure the project success.
- 3.10.30.2** Before commencement of installation at respective Datacenter Sites, Bidder shall carry out proper planning and co-ordination with other vendors viz, State Data Centre Service Provider and Network / Bandwidth Provider in order to prepare the installation plan and detailed design documents.
- 3.10.30.3** The plan and design documents thus developed shall be submitted by the Bidder for approval by the Purchaser.
- 3.10.30.4** After obtaining the approval from the Purchaser, Bidder shall commence the installation.
- 3.10.30.5** Prior to taking up installation of any major component of work, the Bidder shall submit to Purchaser his proposed procedures and obtain Purchaser's approval in writing.

3.10.31 Reporting Progress

- 3.10.31.1** Bidder shall monitor progress of all the activities related to the execution of this contract and shall submit to the Purchaser, at no extra cost, progress reports with reference to all related work, milestones and their progress during the implementation phase on a fortnightly basis.
- 3.10.31.2** Post completion of each Phase (Refer Clause 3.22 and 3.23 of this section), the Bidder shall submit to the Purchaser, MIS reports as an ongoing basis. An indicative list of such reports along with their periodicity are mentioned in Section V - Scope of Work
- 3.10.31.3** Bidder should ensure MIS reporting as per defined service levels in Section III - Service Level Agreements of the RFP. The selected bidder shall establish and maintain a web-based project tracking system wherein all the project tasks / activities are tracked against the baseline plan in a prompt manner – so that any of the project stakeholders can monitor the project progress without having to request / wait for periodic project status reports. In order to meet this requirement, the project members from the vendor's team must all diligently update the status in this tool at least on a daily basis. This shall be operated throughout the project duration to ensure coverage of the operational activities
- 3.10.31.4** Formats for all above mentioned reports and their dissemination mechanism shall be discussed and finalized at the Kick-Off meeting. The Purchaser on mutual agreement between both parties may change the formats, periodicity and dissemination mechanism for such reports.
- 3.10.31.5** Periodic meetings shall be held between the representatives of the Purchaser and the Bidder once in every 15 days during the implementation phase to discuss the progress of implementation. After the implementation phase is over, the meeting shall be held as an ongoing basis, once in every 30 days to discuss the performance of the contract.
- 3.10.31.6** Bidder shall ensure that the respective solution teams involved in the execution of work are part of such meetings.
- 3.10.31.7** A high-level Steering Committee involving representatives of the Purchaser and senior officials of the Bidder shall be formed for the purpose of this contract. This committee shall meet at intervals, as decided by the Purchaser later, to oversee the progress of the project.
- 3.10.31.8** All the goods, services and manpower to be provided / deployed by the Bidder under the Contract and the manner and speed of execution and maintenance of the work and services are to be conducted in a manner to the satisfaction of Purchaser's representative in accordance with the Contract.
- 3.10.31.9** The Purchaser reserves the right to inspect and monitor/assess the progress/performance of the work / services at any time during the course of the Contract. The Purchaser may demand and upon such demand being made, the Bidder shall provide documents, data, material or any other information which the Purchaser may require, to enable it to assess the progress/performance of the work / service.
- 3.10.31.10** At any time during the course of the Contract, the Purchaser shall also have the right to conduct, either itself or through another agency as it may deem fit, an audit to monitor the performance by the Bidder of its obligations/functions in accordance with the standards committed to or required by the Purchaser and the Bidder undertakes to cooperate with and provide to the Purchaser/ any other agency appointed by the Purchaser, all Documents and other details as may be required by them for this purpose. Such audit shall not include Bidder's books of accounts.
- 3.10.31.11** Should the rate of progress of the works or any part of them at any time fall behind the stipulated time for completion or is found to be too slow to ensure completion of the works by the stipulated time, or is in deviation to Tender requirements/ standards, the Purchaser's representative shall so notify the Bidder in writing.

3.10.31.12 The Bidder shall reply to the written notice giving details of the measures he proposes to take to expedite the progress so as to complete the works by the prescribed time or to ensure compliance to Tender requirements. The Bidder shall not be entitled to any additional payment for taking such steps. If at any time it should appear to the Purchaser or Purchaser's representative that the actual progress of work does not conform to the approved Programme the Bidder shall produce at the request of the Purchaser's representative a revised Programme showing the modification to the approved Programme necessary to ensure completion of the works within the time for completion or steps initiated to ensure compliance to the stipulated requirements

3.10.31.13 The submission seeking approval by the Purchaser or Purchaser's representative of such Programme shall not relieve the Bidder of any of his duties or responsibilities under the Contract.

3.10.31.14 In case during execution of works, the progress falls behind schedule or does not meet the Tender requirements, Bidder shall deploy extra manpower/ resources to make up the progress or to meet the Tender requirements. Programme for deployment of extra manpower/ resources will be submitted to the Purchaser for its review and approval. All time and cost effect in this respect shall be borne, by the Bidder within the contract value.

3.10.32 Knowledge of Depot/Sub-depots, Head Quarter and Data Center Site conditions

3.10.32.1 Bidder shall be granted access to the Depot/Sub-depot, Head quarter and Data Center Sites for inspection by the Purchaser before commencement of installation. The plan shall be drawn mutually at a later stage.

3.10.32.2 The Bidder shall be deemed to have knowledge of the State Data Center Sites and its surroundings and information available in connection therewith and to have satisfied itself the form and nature thereof including, the data contained in the Bidding Documents, the physical and climatic conditions, the quantities and nature of the works and materials necessary for the completion of the works, the means of access, etc. and in general to have obtained itself all necessary information of all risks, contingencies and circumstances affecting his obligations and responsibilities therewith under the Contract and his ability to perform it. However, if during pre-installation survey / during delivery or installation, Bidder detects physical conditions and/or obstructions affecting the work, the Bidder shall take all measures to overcome them.

3.10.33 Project Charter

3.10.33.1 Within 15 calendar days of Effective date of the Contract (refer Clause 3.22 and 3.23 of this section.), the Bidder shall submit to the Purchaser for its approval a detailed Project Charter with details of the Programme showing the sequence, procedure and method in which he proposes to carry out the works as stipulated under Clause 3.22 and 3.23 of this section, whenever reasonably required by the Purchaser's Representative furnish in writing the arrangements and methods proposed to be made for carrying out the works. The Charter so submitted by the Bidder shall conform to the requirements and timelines specified in the Contract. The Purchaser and the Bidder shall discuss and agree upon the work procedures to be followed for effective execution of the works, which the Bidder intends to deploy and shall be clearly specified. The Project Charter shall include but not limited to project organization, communication structure, proposed staffing, roles and responsibilities, processes and tool sets to be used for quality assurance, security and confidentiality practices in accordance with industry best practices, project plan and delivery schedule in accordance with the Contract.

3.10.33.2 As a part of its Project Charter, the bidder shall submit to purchaser an exit management plan which will provide in detail how the operations of Services can be taken over by purchaser or its nominated agency in case of early termination or expiry of this Contract. The bidder shall keep up-dating the exit management plan on a yearly basis during the

Contract Period. Any non-submission of exit management plan within the stipulated time shall be seen as a material breach of Contract and may lead to termination of this Contract.

3.10.33.3 The bidder shall get the Project Charter approved from purchaser and in the event of any modifications and suggestions proposed by purchaser, the same shall be incorporated by the bidder in the Project Charter.

3.10.33.4 If the Bidder's work plans necessitate a disruption/ shutdown in Purchaser's operation, the plan shall be mutually discussed and developed so as to keep such disruption/shutdown to the barest unavoidable minimum. Any time and cost arising on account of failure of the Bidder to bring its work plans to the notice of the Purchaser shall be to his account.

3.10.34 Bidder's Organization

3.10.34.1 The Bidder should provision for minimum manpower resources required for execution of work and provision of services under this contract.

3.10.34.2 The Bidder should to the best of his efforts, avoid any change in the organization structure proposed for execution of this contract or replacement of any manpower resource appointed. If the same is however unavoidable, Bidder shall promptly inform the Purchaser in writing, and the same shall require subsequent approval by the Purchaser.

3.10.34.3 In case of replacement of any manpower resource, the Bidder should ensure efficient knowledge transfer from the outgoing resource to the incoming resource and adequate hand-holding period and training for the incoming resource in order to maintain the continued level of service.

3.10.34.4 All manpower resources deployed by the Bidder for execution of this contract must strictly adhere to the attendance reporting procedures and make their services available as agreed upon for the entire reporting time period at Purchaser's location.

3.10.34.5 The Bidder shall provide at the Data Centre Sites and office location of State Transport Department, Haryana for necessary supervision during the execution of work and as long thereafter as the Purchaser may consider necessary for the proper fulfillment of the Bidder's obligations under the Contract. The Bidder or his competent and authorized representative(s) shall be constantly present at the respective Datacenter Sites during agreed time for supervision. The Bidder shall authorize his representative to receive directions and instructions from the Purchaser's Representative.

3.10.34.6 The Bidder shall be responsible for the deployment, transportation, accommodation and other requirements of all its employees required for the execution of the work and provision of services for all costs/charges in connection thereof.

3.10.34.7 The Bidder shall provide and deploy, at the Purchaser's locations for carrying out the work, only those manpower resources who are qualified/skilled and experienced in their respective trades and who are competent to deliver in a proper and timely manner the work they are required to perform or to manage/supervise the work.

3.10.34.8 The Purchaser's Representative may at any time object to and require the Bidder to remove forthwith from the Purchaser's location any authorized representative or employee of the Bidder or any person(s) of the Bidder's team, if, in the opinion of the Purchaser's Representative the person in question has mis-conducted or his / her deployment is otherwise considered undesirable by the Purchaser's Representative. The Bidder shall forthwith remove and shall not again deploy the person without the written consent of the Purchaser's Representative.

3.10.34.9 The Purchaser's Representative may at any time object to and request the Bidder to remove from the Purchaser's location any of Bidder's authorized representative including any employee of the Bidder or his team or any person(s) deployed by Bidder or his team for professional incompetence or negligence or for being deployed for work for which he is not suited. The Bidder shall consider the Purchaser's Representative request and may

accede to or disregard it. The Purchaser's Representative, having made a request, as aforesaid in the case of any person, which the Bidder has disregarded, may in the case of the same person at any time but on a different occasion, and for a different instance of one of the reasons referred to above in this Clause object to and require the Bidder to remove that person from deployment on the work, which the Bidder shall then forthwith do and shall not again deploy any person so objected to on the work or on the sort of work in question (as the case may be) without the written consent of the Purchaser's Representative.

3.10.34.10 The Purchaser's Representative shall state to the Bidder in writing his reasons for any request or requirement pursuant to this Clause.

3.10.34.11 The Bidder shall promptly replace every person removed, pursuant to this section, with a competent substitute, and at no extra cost to the Purchaser.

3.10.35 Adherence to safety procedures, rules regulations and restriction

3.10.35.1 Bidder's Team shall comply with the provision of all laws including labour laws, rules, regulations and notifications issued there under from time to time. All safety and labour laws enforced by statutory agencies and by Purchaser shall be applicable in the performance of this Contract and Bidder's Team shall abide by these laws.

3.10.35.2 Bidder shall be responsible for employing any and all manpower, personnel, labour, etc., as may be required to be deployed by it for implementation of the Project and as such the bidder on an exclusive basis shall be responsible for exercising supervision and control over such manpower, personnel, labour, etc. For all intents and purposes under this Contract, the bidder alone shall be the principal employer in terms of the provisions of the Factories Act, 1948 and the Contract Labour (Regulation and Abolition) Act, 1970 in respect of such manpower, personnel, labour, etc.; the Purchaser shall at no point of time be concerned in any manner whatsoever with any employee or labour related issues of such manpower, personnel, labour, etc. of the bidder and shall not have any liability or responsibility towards them. The bidder shall keep the Purchaser indemnified for all claims that may arise due to bidder's non-compliance with any provisions of the aforesaid Acts

3.10.35.3 Access to the Purchaser's locations shall be strictly restricted. No access to any person except the essential members of the Bidder's Team who are genuinely required for execution of work or for carrying out management/maintenance who have been explicitly authorized by the Purchaser shall be allowed entry to the Purchaser's locations. Even if allowed, access shall be restricted to the pertaining equipment of the Purchaser only. Bidder shall maintain a log of all activities carried out by each of its team personnel.

3.10.35.4 The Bidder shall take all measures necessary or proper to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. Bidder's Team shall adhere to all security requirement/regulations of the Purchaser during the execution of the work. Purchaser's employee also shall comply with safety procedures/policy.

3.10.35.5 The Bidder shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.

3.10.35.6 The Bidder shall ensure fire safety measures at all the sites including Depots/Sub-depots, Head Quarter, etc.

3.10.36 Statutory Requirements:

3.10.36.1 During the tenure of this Contract nothing shall be done by the Bidder or his team in contravention of any law, act and/ or rules/regulations, there under or any amendment thereof governing inter-alia customs, stowaways, foreign exchange etc. and shall keep Purchaser indemnified in this regard.

3.10.36.2 The Bidder shall be responsible for physical safety and security of all locations.

- 3.10.36.3** The Bidder shall ensure proper cleanliness and maintenance of all the sites during working hours.
- 3.10.36.4** The ownership of software and any system software proposed in solution (in the form of licenses) should be in favor of purchaser only.
- 3.10.36.5** The Bidder at the end of the term of the Contract or early termination thereof shall handover / transfer all the assets, hardware, software, licenses, infrastructure, etc. created/ established by the bidder for the implementation of the Project, to the Purchaser at INR 1.

3.11 Contract administration

- 3.11.1** No variation or modification of the terms of the contract shall be made except by written amendment signed by the parties.
- 3.11.2** Either party may appoint any individual/ organization as their authorized representative through a written notice to the other party. Each Representative shall have the authority to:
 - a) Exercise all of the powers and functions of his/her Party under this Contract other than the power to amend this Contract and ensure the proper administration and performance of the terms hereof; and
 - b) Bind his or her party in relation to any matter arising out of or in connection with this Contract.
- 3.11.3** The Bidder along with the members of consortium shall be bound by all undertakings and representations made by the authorized representative of the Bidder/Consortium and any covenants stipulated hereunder, with respect to this Contract, for and on behalf of the consortium.
- 3.11.4** For the purpose of execution or performance of the obligations under this Contract, the Purchaser's representative would act as an interface with the nominated representative of the Bidder. The Bidder shall comply with any instructions that are given by the Purchaser's representative during the course of this Contract in relation to the performance of its obligations under the terms of this Contract and the Tender.

3.12 Purchaser's Obligations

- 3.12.1** Director, State Transport Department, Haryana or his/her nominated representative shall act as the nodal point for implementation of the contract and for issuing necessary instructions, approvals, commissioning, acceptance certificates, payments etc. to the Bidder.
- 3.12.2** Purchaser shall ensure that timely approval is provided to the Bidder as and when required, which may include approval of hardware, implementation methodology, design documents, specifications, or any other document necessary in fulfilment of this contract.
- 3.12.3** The Purchaser's Representative shall interface with the Bidder, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. Purchaser shall provide adequate cooperation in providing details, coordinating and obtaining of approvals from various governmental agencies, in cases, where the intervention of the Purchaser is proper and necessary.
- 3.12.4** Purchaser may provide on Bidder's request, particulars/information/ or documentation that may be required by the Bidder for proper planning and execution of work and for providing services covered under this contract and for which the Bidder may have to coordinate with respective vendors.
- 3.12.5** Purchaser shall provide to the Bidder, sitting space and basic infrastructure not including, stationery and other consumables at the office locations under this project.

3.13 Payments

- 3.13.1** Purchaser shall make payments only to the Bidder at the times and in the manner set out in the Payment schedule as specified later in this contract (Refer Clause 3.47 of this section) subject always to the fulfilment by the Bidder of the obligations herein. Purchaser will make all efforts to make at least 80% payments to the Bidder within 15 days and remaining in 30 days of receipt of invoice(s) and all necessary supporting documents.
- 3.13.2** Purchaser shall make all payments under this Contract, as set out in the Payment clause to the Bidder only and shall not be liable to make any payments or for any other related obligation under this contract to any other party including but not limited to the Bidder's sub-contractors or any other member of Bidder's Team or any third party engaged by the Bidder in any way connected with the discharge of the Bidder's obligation under the Contract and in any manner whatsoever. The Bidder shall be fully liable and responsible for meeting all such obligations and all payments to be made to the aforesaid entities/parties.
- 3.13.3** All payments agreed to be made by Purchaser to the Bidder in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/applicable including costs of maintenance, if any and Purchaser shall not be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services.
- 3.13.4** Payment shall be paid at the times and in the manner set out in the Payment schedule as specified under to Clause 3.47 of this section, against value of contract. GST shall be charged on actuals as per the applicable rates.
- 3.13.5** In case of change in taxes under change in law, appropriate parties shall be passed the benefit of the same over and above the contract value. No invoice for extra work/change order on account of change order will be submitted by the Bidder unless the said extra work /change order has been approved by the Purchaser as per mutually agreed rates in writing in accordance with Clause on Change order.
- 3.13.6** In the event of Purchaser noticing at any point of time that any amount has been disbursed wrongly to the Bidder or any other amount is due from the Bidder to the Purchaser, the Purchaser shall, after notifying the Authorised Representative of the Bidder in writing and without prejudice to its rights, deduct such amount from any payment due to the Bidder or recover such amounts by other means. The details of such recovery, if any, will be intimated to the Bidder within a stipulated time frame as agreed to by both the parties.
- 3.13.7** In the event of the Bidder noticing at any point of time that there has been short payment by the Purchaser on any invoice, the Bidder shall bring it to the record of the Authorised Representative of the Purchaser. The amount due to the Bidder will be released through a fresh invoice or as mutually agreed to by both the parties.
- 3.13.8 Deductions:**
- 3.13.8.1** All payments to the Bidder shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under any law, rule or regulation. All costs, damages or expenses which Purchaser may have paid or incurred, for which under the provisions of the Contract, the Bidder is liable, the same shall be deducted by Purchaser from any dues to the Bidder. All payments to the Bidder shall be made after making necessary deductions as per terms of the Contract and recoveries towards facilities, if any, provided by the Purchaser to the Bidder on chargeable basis.
- 3.13.9 Duties, Taxes and Statutory levies**
- 3.13.9.1** The Bidder shall bear all personnel taxes levied or imposed on its personnel, sub-contractor(s), consultants, or any other member of Bidder's Team, etc. on account of payment received under this Contract. The Bidder shall bear all corporate taxes, levied or imposed on the Bidder on account of payments received by it from the Purchaser for the work done under this Contract.

- 3.13.9.2** Bidder shall bear all taxes and duties etc. levied or imposed on the Bidder under the Contract including but not limited to GST, Customs duty, Excise duty, Octroi, Service Tax, Works Contracts Tax and all Income Tax levied under Indian Income Tax Act – 1961 or any amendment thereof up to the date for submission of final price bid, i.e., on account of payments received by him from the Purchaser for work done under the Contract. It shall be the responsibility of the Bidder to submit to the concerned tax authorities the returns and all other connected documents required for this purpose. The Bidder shall also provide the Purchaser such information, as it may be required in regard to the Bidder's details of payment made by the Purchaser under the Contract for proper assessment of taxes and duties. The amount of tax withheld by the Purchaser shall at all times be in accordance with Indian Tax Law and the Purchaser shall promptly furnish to the Bidder original certificates (Challans) for tax deduction at source and paid to the Tax Authorities.
- 3.13.9.3** If there is any reduction in taxes / duties due to any reason whatsoever, after Notification of Award, the same shall be passed on to the Purchaser.
- 3.13.9.4** The Bidder shall be solely responsible for the payment /fulfilment of its tax liabilities and obligations under the Income Tax Act and other such laws in force and the Purchaser shall not bear responsibility for the same. Bidder shall indemnify Purchaser against any and all liabilities or claims arising out of this Contract for such taxes including interest and penalty any such Tax Authority may assess or levy against the Purchaser/Bidder.
- 3.13.9.5** The Purchaser shall if so, required by applicable laws in force, at the time of payment, deduct income tax payable by the Bidder at the rates in force, from the amount due to the Bidder and pay to the concerned tax authority directly.

3.14 Intellectual Property Rights

- 3.14.1 In case of Bespoke development of the application:** The Bidder undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the Purchaser and execute all such agreements/documents and file all relevant applications, effect transfers and obtain all permits and approvals as may be necessary as per the existing laws in India to effectively transfer such rights to the Purchaser. Once transferred, the Purchaser shall own and have a right to use all such Intellectual Property Rights which have been developed solely during execution of this Contract, including but not limited to all processes, products, specifications, reports, drawings and other documents which have been newly created and developed by the Bidder solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract
- 3.14.2 In case of deployment of COTS products:** Purchaser shall own and have a right in perpetuity to use all newly created Intellectual Property Rights which have been developed solely during execution of this Contract, including but not limited to all processes, products, specifications, reports and other documents which have been newly created and developed by the bidder solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract. All documentation and configuration items such as scripts, code, queries etc. developed by the bidder shall be property of the Purchaser. The Bidder should create a repository of such resources and provide access to Purchaser. The Bidder undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the Purchaser and execute all such agreements/documents and file all relevant applications, effect transfers and obtain all permits and approvals that may be necessary in this regard to effectively transfer and conserve the Intellectual Property Rights of the Purchaser
- 3.14.3** If Purchaser desires, the Bidder shall be obliged to ensure that all approvals, registrations, licenses, permits and rights etc. which are inter-alia necessary for use of the goods supplied/ installed by the Bidder, and which may be assigned by the Purchaser to the Bidder for the purpose of execution of any of its obligations under the terms of the Bid, Tender or this Contract, shall be acquired in the name of the Purchaser, prior to termination of this Contract.

However, subsequent to the term of this Contract, such approvals, registrations, licenses, permits and rights etc. shall endure to the exclusive benefit of the Purchaser.

3.14.4 The Bidder/Bidder's Team shall ensure that while it uses any software, hardware, processes, document or material in the course of performing the Services, it does not infringe the Intellectual Property Rights of any person and the Bidder shall keep the Purchaser indemnified against all costs, expenses and liabilities howsoever, arising out any illegal or unauthorized use (piracy) or in connection with any claim or proceedings relating to any breach or violation of any permission/license terms or infringement of any Intellectual Property Rights by the Bidder or the Bidder's Team during the course of performance of the Services. In case of any infringement by the Bidder / Bidder's Team, Bidder shall have sole control of the defense and all related settlement negotiations.

3.14.5 Information Security

3.14.5.1 The Bidder/Bidder's Team shall not carry any written/printed document, layout diagrams, floppy diskettes, hard disk, storage tapes, other storage devices or any other goods /material proprietary to Purchaser into/out of the Purchaser's locations without written permission from the Purchaser.

3.14.5.2 The Bidder/Bidder's Team shall not destroy any unwanted documents, defective tapes/media present at the Purchaser's locations on their own. All such documents, tapes/media shall be handed over to the Purchaser.

3.14.5.3 All documentation and media at the Purchaser's locations shall be properly identified, labeled and numbered by the Bidder. Bidder shall keep track of all such items and provide a summary report of these items to the Purchaser on a monthly basis.

3.14.5.4 The Bidder and Bidder's Team shall follow Purchaser's Information Security policy. Access to Purchaser's data and systems, Email and Internet facility by the Bidder / Bidder's team at the Purchaser's locations shall be in accordance with the security and access policies set by the Purchaser.

3.14.5.5 Bidder and Bidder's Team acknowledge that Purchaser's business data and other Purchaser proprietary information or materials, whether developed by the Purchaser or being used by the Purchaser pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to Purchaser; and Bidder along with its team agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than that used by Bidder to protect its own proprietary information. Bidder recognizes that the goodwill of Purchaser depends, among other things, upon Bidder keeping such proprietary information confidential and that unauthorized disclosure of the same by Bidder or its team could damage the goodwill of Purchaser, and that by reason of Bidder's duties hereunder. Bidder may come into possession of such proprietary information, even though Bidder does not take any direct part in or furnish the services performed for the creation of said proprietary information and shall limit access thereto to employees with a need to such access to perform the services required by this agreement. Bidder shall use such information only for the purpose of performing the said services.

3.14.5.6 Bidder shall, upon termination of this agreement for any reason, or upon demand by Purchaser, whichever is earliest, return any and all information provided to Bidder by Purchaser, including any copies or reproductions, both hardcopy and electronic.

3.14.6 Records of Contract Documents:

3.14.6.1 The Bidder shall at all time make and keep sufficient copies of the Contract documents, manuals, reference material, drawings, specifications and any other document required by him to fulfil his duties under the Contract.

- 3.14.6.2** The Bidder shall keep at the Purchaser's locations, adequate number of copies of all documents required to fulfil his duties under the Contract, in excess of his own requirement and those copies shall be available at all times for use by the Purchaser's Representative and/or by any other person authorized by the Purchaser's Representative.

3.15 Ownership and Retention of Documents

- 3.15.1** Forthwith upon expiry or earlier termination of this Contract and at any other time on demand by the Purchaser, the Bidder shall deliver to the Purchaser all documents provided by or originating from the Purchaser and all documents produced by or from or for the Bidder in the course of performing the Services, unless otherwise directed in writing by the Purchaser at no additional cost. The Bidder shall not, without the prior written consent of the Purchaser store, copy, distribute or retain any such Documents.

3.16 Data and Hardware

- 3.16.1** By virtue of this Contract, the Bidder/Bidder's Team may have access to personal information of the Purchaser and/or a third party. The Purchaser has the sole ownership of and the right to use, all such data in perpetuity including any data or other information pertaining to the subscriber that may be in the possession of the Bidder or Bidder's Team in the course of performing the Services under this Contract.
- 3.16.2** Delivery of the Information Technologies, Materials, and other Goods shall be made by the Bidder in accordance with the Technical Requirements.
- 3.16.3** Early or partial deliveries require the explicit written consent of the Purchaser, which consent shall not be unreasonably withheld.
- 3.16.4** The Bidder shall provide such packing of the Goods as is required to prevent their damage or deterioration during shipment. The packing, marking, and documentation within and outside the packages shall comply strictly with the Purchaser's instructions to the Bidder.
- 3.16.5** The Bidder will bear responsibility for and cost of transport to the Project Sites in accordance with the terms and conditions used in the specification of prices in the Price Schedules, including the terms.

3.17 Indemnity

- 3.17.1** The Bidder shall indemnify the Purchaser from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind howsoever suffered, arising or incurred inter alia during and after the Contract period out of:
- a) any negligence or wrongful act or omission by the Bidder or the Bidder's Team or any third party associated with Bidder in connection with or incidental to this Contract; or
 - b) Any breach of any of the terms of the Bidder's Bid as agreed, the Tender and this Contract by the Bidder, Bidder's Team or any third party.
 - c) Any infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied goods and related services or any part thereof.
- 3.17.2** The Bidder shall also indemnify the Purchaser against any privilege, claim or assertion made by a third party with respect to right or interest in, ownership, mortgage or disposal of any asset, property, and movable or immovable as mentioned in any Intellectual Property Rights, licenses and permits.

3.18 Representations and Warranties

- 3.18.1** In order to induce the Purchaser to enter into this Contract, the Bidder hereby represents and warrants as of the date hereof, which representations and warranties shall survive the term and termination hereof, the following:

- (a) That the Lead Bidder along with its consortium partners have the power and the authority that would be required to enter into this Contract and the requisite experience, the technical know-how and the financial wherewithal required to successfully execute the terms of this contract and to provide services sought by the Purchaser under this contract
- (b) That the Lead Bidder along with its consortium partners are not involved in any major litigation or legal proceedings, pending, existing, potential or threatened, that may have an impact of affecting or compromising the performance or delivery of Services under this Contract.
- (c) That the representations and warranties made by the Bidder in its Bid, Tender and Contract are and shall continue to remain true and correct throughout the term of this Contract and Bidder shall fulfil all the requirements as are necessary for executing the obligations and responsibilities as laid down in the Contract and the Tender and unless the Purchaser specifies to the contrary, the Bidder shall be bound by all the terms of the Bid.
- (d) That the Bidder and its team has the professional skills, personnel, infrastructure and resources/authorizations that are necessary for providing all such services as are necessary to fulfil the scope of work stipulated in the Tender and this Contract.
- (e) That the Bidder shall ensure that all assets/ components including but not limited to equipment, software, licenses, processes, documents, etc. installed, developed, procured, deployed and created during the term of this Contract are duly maintained and suitably updated, upgraded, replaced.
- (f) That the Bidder/Bidder's Team shall use such assets of the Purchaser as the Purchaser may permit for the sole purpose of execution of its obligations under the terms of the Bid, Tender or this Contract. The Bidder shall however, have no claim to any right, title, lien or other interest in any such property, and any possession of property for any duration whatsoever shall not create any right in equity or otherwise, merely by fact of such use or possession during or after the term hereof.
- (g) That the Bidder shall procure all the necessary permissions and adequate approvals and licenses for use of various software and any copyrighted process/product free from all claims, titles, interests and liens thereon and shall keep the Purchaser indemnified in relation thereto.
- (h) That the execution of the scope of work and the Services herein is and shall be in accordance and in compliance with all applicable laws.
- (i) That the Bidder has the corporate power to execute, deliver and perform the terms and provisions of this Contract and has taken all necessary corporate action to authorize the execution, delivery and performance by it of the Contract.
- (j) That all conditions precedent under the Contract has been satisfied.
- (k) That neither the execution and delivery by the Bidder /Bidder's Team of the Contract nor the Bidder's /Bidder Team's compliance with or performance of the terms and provisions of the Contract (i) will contravene any provision of any Applicable Law or any order, writ, injunction or decree of any court or Governmental Authority binding on the Bidder, (ii) will conflict or be inconsistent with or result in any breach of any or the terms, covenants, conditions or provisions of, or constitute a default under any agreement, contract or instrument to which the Bidder is a party or by which it or any of its property or assets is bound or to which it may be subject or (iii) will violate any provision of the Memorandum and Articles of Association of the Bidder.
- (l) That the Bidder certifies that all registrations, recordings, filings and notarizations of the Contract and all payments of any tax or duty, including but not limited to stamp duty, registration charges or similar amounts which are required to be affected or made by the

Bidder which is necessary to ensure the legality, validity, enforceability or admissibility in evidence of the Contract have been made.

- (m) That the Bidder confirms that there has not and shall not occur any execution, amendment or modification of any agreement/contract without the prior written consent of the Purchaser, which may directly or indirectly have a bearing on the Contract or the project.
- (n) That the Bidder owns or has good, legal or beneficial title, or other interest in, to the property, assets and revenues of the Bidder on which it grants or purports to grant or create any interest pursuant to the Contract, in each case free and clear of any encumbrance and further confirms that such interests created or expressed to be created are valid and enforceable.
- (o) That the Bidder owns, has license to use or otherwise has the right to use, free of any pending or threatened liens or other security or other interests all Intellectual Property Rights, which are required or desirable for the performance of the project under this contract and regarding the same the Bidder does not, so far as the Bidder is aware, in carrying on its business and operations, infringe any Intellectual Property Rights of any person. So far as the Bidder is aware, none of the Intellectual Property Rights owned or enjoyed by the Bidder or which the Bidder is licensed to use, which are material in the context of the Bidder's business and operations for the performance of this contract are being infringed nor, so far as the Bidder is aware, is there any infringement or threatened infringement of those Intellectual Property Rights licensed or provided to the Bidder by any person. All Intellectual Property Rights (owned by the Bidder or which the Bidder is licensed to use) required by the Bidder for the performance of the contract are valid and subsisting. All actions (including registration, payment of all registration and renewal fees) required to maintain the same in full force and effect have been taken thereon and shall keep the Purchaser indemnified in relation thereto. The remedy for any breach of this Clause shall be the indemnity set forth in Clause 3.14 of this section for Intellectual Property Rights.
- (p) That the Bidder agrees to incorporate, within the contract value, all hardware configuration, software changes, upgrades and patches to the system, announced by him from time to time keeping in view the advancement in technology, shortcomings of the system and any changes required for improving the overall efficiency of the system.
- (q) That the Bidder shall provide adequate and appropriate support and participation, on a continuing basis, in tuning all supplied hardware and software to meet the requirements of the applications.
- (r) If and when the system and/or components of the system are required to be relocated/shifted within the same Data centre Site or to a new Data centre Site, the Bidder shall undertake required work related for de-commissioning/re-commissioning and other associated work, at no additional cost to the Purchaser. Associated cost for transportation, insurance and packing shall however be borne by the Purchaser. For any such relocation/shifting efforts beyond two such occurrences during the contract period, extra charges shall be mutually agreed upon.

3.19 Confidentiality

3.19.1 The Bidder/Bidder's team shall not use Confidential Information, the name or the logo of the Purchaser except for the purposes of execution of this contract. Confidential information does not include information which:

- (i) The Bidder/Bidder's Team knew or had in its possession, prior to disclosure, without limitation on its confidentiality;
- (ii) Is independently developed by the Bidder/Bidder's Team without breach of conditions under this Contract;

- (iii) Information in the public domain as a matter of law;
- (iv) Is received from a third party not subject to the obligation of confidentiality with respect to such information;
- (v) is released from confidentiality with the written consent of Purchaser.
- (vi) Is required to be disclosed by Applicable Laws or judicial or administrative or arbitral process or by any governmental instrumentalities, provided that for any such disclosure, the Bidder shall give the Authority, prompt written notice, and use reasonable efforts to ensure that such disclosure is accorded confidential treatment;
- (vii) Any other information unless it is specified as confidential for the purposes of the execution this contract.

The Bidder/Bidder's team shall have the burden of proving hereinabove are applicable to the information in the possession of the Bidder Bidder's Team.

3.19.2 The Bidder / Bidder's Team shall not, either during the term or after expiration of this Contract, disclose any proprietary or confidential information relating to the Services/Contract and/or Purchaser's business/ operations, information, Application/software, hardware, business data, architecture schematics, designs, storage media and other information / documents without the prior written consent of the Purchaser.

3.19.3 The Bidder may only disclose Confidential Information in the following circumstances:

- (i) with the prior written consent of the Purchaser;
- (ii) to a member of the Bidder's Team if:
 - A. the member of the Bidder's Team needs the Confidential Information for the performance of obligations under this contract
 - B. the member of the Bidder's Team is aware of the confidentiality of the Confidential Information and is obliged to use it only for the performance of obligations under this contract

3.19.4 The Bidder shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidentiality agreement with the sub-contractors and other members of Bidder's Team to the satisfaction of the Purchaser.

3.19.5 The Bidder shall notify the Purchaser promptly if it is aware of any disclosure of the Confidential Information otherwise than as permitted by this Contract or with the authority of the Purchaser.

3.19.6 The Bidder shall be liable to fully compensate the Purchaser for any loss of revenue on account of breach of confidentiality by the Bidder. The Purchaser reserves the right to adopt legal proceedings, civil or criminal, against the Bidder / Bidder's Team in relation to a breach of obligation by the Bidder under this Clause. The Bidder shall not in any way be responsible for any breach of confidentiality arising out of any other cause/reason.

3.19.7 Bidder and sub-contractors shall be required to execute the **Non-Disclosure Agreement** in favour of the Purchaser at the time of contract signing.

3.20 Events of Default by the Bidder

3.20.1 The failure on the part of the Bidder to perform any of its obligations or comply with any of the terms of this Contract shall constitute an Event of Default on the part of the Bidder. The events of default as mentioned above may include inter-alia the following:

- a. the Bidder/ Bidder's Team has failed to perform any instructions or directives issued by the Purchaser which it deems proper and necessary to execute the scope of work or provide services under the Contract, or

- b. the Bidder/ Bidder's Team has failed to confirm / adhere to any of the key performance indicators as laid down in the Key Performance Measures / Service Level Agreements, or if the Bidder has fallen short of matching such standards / benchmarks / targets as the Purchaser may have designated with respect to the system or any goods, task or service, necessary for the execution of the scope of work and performance of services under this Contract. The above-mentioned failure on the part of the Bidder may be in terms of failure to adhere to performance, quality, timelines, specifications, requirements or any other criteria as defined by the Purchaser;
- c. the Bidder has failed to remedy a defect or failure to perform its obligations in accordance with the specifications issued by the Purchaser, despite being served with a default notice which laid down the specific deviance on the part of the Bidder/ Bidder's Team to comply with any stipulations or standards as laid down by the Purchaser; or
- d. the Bidder/ Bidder's Team has failed to adhere to any amended direction, instruction, modification or clarification as issued by the Purchaser during the term of this Contract and which the Purchaser deems proper and necessary for the execution of the scope of work under this Contract
- e. the Bidder/ Bidder's Team has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Bid, the Tender and this Contract
- f. There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the Bidder.
- g. The Bidder/Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws or provisions of the Contract, the Tender Document and the Bid submitted by the Implementation Agency
- h. The Bidder breaches any of its representation or warranties as specified in this Contract;
- i. The bidder fails to replenish the Performance Bank Guarantee in case of partial appropriation, to its original amount and in case of appropriation of entire amount of Performance Bank Guarantee to provide a fresh Performance Bank Guarantee within a Period of 30 (thirty) days from such partial or complete appropriation

3.20.2 Where there has been an occurrence of such defaults inter alia as stated above, the Purchaser shall issue a notice of default to the Bidder, setting out specific defaults / deviances / omissions / non-compliances / non-performances and providing a notice of Sixty (60) days to enable such defaulting party to remedy the default committed.

3.20.3 Where despite the issuance of a default notice to the Bidder by the Purchaser the Bidder fails to remedy the default to the satisfaction of the Bidder, the Purchaser may, where it deems fit, issue to the defaulting party another default notice or proceed to adopt such remedies as may be available to the Purchaser.

3.20.4 The failure on the part of the Bidder to submit the performance bank guarantee within 15 days of award of contract.

3.21 Consequences of Event of Default

Where an Event of Default subsists or remains uncured the Purchaser shall be entitled to:

3.21.1 Impose any such obligations and conditions and issue any clarifications as may be necessary to inter alia ensure smooth continuation of project and the services which the Bidder shall be obliged to comply with which may include re-determination of the consideration payable to the Bidder as agreed mutually by Purchaser and Bidder or through a third party acceptable to both parties. The Bidder shall in addition take all available steps to minimize loss resulting from such event of default.

- 3.21.2** Suspend all payments to the Bidder under the Contract by a written notice of suspension to the Bidder, provided that such notice of suspension:
- i. shall specify the nature of the failure; and
 - ii. shall request the Bidder to remedy such failure within a specified period from the date of receipt of such notice of suspension by the Bidder
- 3.21.3** Require replacement of any of the Bidder's Consortium partner(s) / Bidder's Team member(s) with another suitable member(s) where the Purchaser deems necessary. The Bidder shall in such case terminate forthwith all their agreements/ contracts/ other arrangements with such member(s) and find suitable replacement for such outgoing member(s) with another member(s) to the satisfaction of the Purchaser, who shall execute such Contracts with the Purchaser as the Purchaser may require. Failure on the part of the Bidder to find a suitable replacement and/or terminate all agreements/contracts with such member(s), shall amount to a breach of the terms hereof and the Purchaser in addition to all other rights, have the right to claim damages and recover from the Bidder all losses/ or other damages that may have resulted from such failure.
- 3.21.4** Terminate the Contract in part or in full
- 3.21.5** Retain such amounts from the payment due and payable by the Purchaser to the Bidder as may be required to offset any losses caused to the Purchaser as a result of such event of default and the Bidder shall compensate the Purchaser for any such loss, damages or other costs, incurred by the Purchaser in this regard. Nothing herein shall effect the continued obligation of the Bidder and Bidder's Team to perform all their obligations and responsibilities under this Contract in an identical manner as were being performed before the occurrence of the default.
- 3.21.6** Invoke the Performance Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity, recover such other costs/losses and other amounts from the Bidder as may have resulted from such default and pursue such other rights and/or remedies that may be available to the Purchaser under law.
- 3.21.7** As referred in event of default (refer clause 3.20.4), the purchaser may terminate the contract in full and the EMD shall be forfeited.

3.22 Stipulated Time Schedule

- 3.22.1** The Key Phases during project implementation along with the indicative milestones and timelines as anticipated by the Purchaser are provided in **SECTION V - SCOPE OF WORK**.
- 3.22.2** The Bidder shall perform the activities and comply in all respects with the critical dates and the parties hereby agree that failure on part of the Bidder to meet the critical dates without prejudice to any other rights that the Purchaser may have, may lead to the imposition of such obligations as are laid down in Liquidated damages and penalty (refer Clause 3.49 of this section) and/or termination of the Contract (refer clause 3.24) at the discretion of the Purchaser.

3.23 Term and Extension of the Contract

- 3.23.1** The term of this Contract would be 7 months of Implementation Phase followed by 5 Years O & M Phase more particularly described in section V- Scope of Work. In case of any delays in the closure of any phase activities for reasons attributable to the Bidder, besides the action detailed in clause 3.22, the contract shall get extended by a period equal to the period of delay at no extra cost to the Purchaser.
- 3.23.2** The Purchaser shall reserve the sole right to grant any extension to the term above mentioned and shall notify in writing to the Bidder, at least 6 months before the expiration of the Term hereof, whether it will grant the Bidder an extension of the Term. The decision to grant or refuse the extension shall be at the Purchaser's discretion and such extension of the contract, if any, shall be as per terms agreed mutually between the Purchaser and Bidder.
- 3.23.3** Where the Purchaser is of the view that no further extension of the term be granted to the Bidder, the Purchaser shall notify the Bidder of its decision at least 6 (six) months prior to the expiry of

the Term. Upon receipt of such notice, the Bidder shall continue to perform all its obligations hereunder, until such reasonable time beyond the Term of the Contract within which, the Purchaser shall either appoint an alternative agency/vendor or create its own infrastructure to operate such Services as are provided under this Contract.

3.24 Termination

3.24.1 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:

- (a) 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.
- (b) 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.
- (c) 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
- (d) **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.
- (e) **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.

3.24.2 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,

3.24.3 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 at least 3 months in advance indicating its intention to terminate the Contract or as mutually agreed to by both the parties.

3.25 Consequences of Termination

3.25.1 In the event of termination of this Contract pursuant to Clause 3.24 of this section, whether consequent to the stipulated Term of the Contract or otherwise the Purchaser shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the project which the Bidder shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/breach, and further allow and provide all such assistance to the Purchaser and/or the successor agency, as may be required, to take over the obligations of the erstwhile Bidder

in relation to the execution/continued execution of the scope of this Contract, for the remainder of the contract term.

- 3.25.2** Where the termination of the Contract is prior to its stipulated term on account of a Default on the part of the Bidder /Bidder's Team or due to the fact that the survival of the Bidder as an independent corporate entity is threatened/has ceased, or for any other reason, whatsoever, the Purchaser through re-determination of the consideration payable to the Bidder as agreed mutually by Purchaser and Bidder or through a third party acceptable to both parties may pay the Bidder for those goods that have been satisfactorily installed and commissioned and for that part of the Services which have been authorized by the Purchaser and satisfactorily performed by the Bidder up to the date of termination. Without prejudice any other rights, the Purchaser may retain such amounts from the payment due and payable by the Purchaser to the Bidder as may be required to offset any losses caused to the Purchaser as a result of the Termination or due to any act/omissions of the Bidder. In case of any loss or damage due to default on the part of the Bidder in performing any of its obligations with regard to executing the scope of work under this Contract, the Bidder shall compensate the Purchaser for any such loss, damages or other costs, incurred by the Purchaser. Additionally, the Bidder's Team and/or all third parties appointed by the Bidder shall continue to perform all their obligations and responsibilities as stipulated under this Contract, and as may be proper and necessary to execute the scope of work under the Contract in terms of the Bidder's Bid, the Tender and this Contract, in an identical manner as were being performed before the collapse of the Bidder as described above in order to execute an effective transition and to maintain business continuity.
- 3.25.3** Nothing herein shall restrict the right of the Purchaser to invoke the Bank Guarantee and other Guarantees furnished hereunder, enforce the Deed of Indemnity and pursue such other rights and/or remedies that may be available to the Purchaser under law.
- 3.25.4** The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of this Contract that are expressly or by implication intended to come into or continue in force on or after such termination.
- 3.25.5** All Project Assets comprising of all hardware, equipment, software, etc. shall be handed over by the bidder to the Purchaser.
- 3.25.6** If any amount/s is due to be recovered by the Purchaser from the bidder, the Purchaser shall be entitled to encash and appropriate the relevant amounts from the Performance Bank Guarantee of the bidder.
- 3.25.7** Upon termination under this Clause, the provisions of Clause 3.51 shall be invoked to have a smooth transition of Services from the bidder to the Purchaser or its nominated agency or any new bidder selected by the Purchaser.

3.26 Dispute Resolution

- 3.26.1** If during the subsistence of this Contract or thereafter, any dispute between the Parties hereto arising out of or in connection with the validity, interpretation, implementation, material breach or any alleged material breach of any provision of this Contract or regarding any question, including as to whether the termination of this Contract by one Party hereto has been legitimate, the Parties hereto shall endeavor to settle such dispute amicably under the chairmanship of **Director, State Transport, Haryana** or person nominated by him and/or by Conciliation to be governed by the Arbitration and Conciliation Act, 1996 or as may be agreed to between the Parties. The attempt to bring about an amicable settlement is considered to have failed as soon as one of the Parties hereto, after reasonable attempts; which attempt shall continue for not less than thirty (30) days, gives thirty (30) days' notice to refer the dispute to arbitration to the other Party in writing.
- 3.26.2** The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.
- 3.26.3** The Arbitration proceedings shall be held in Chandigarh, India.

- 3.26.4** The Arbitration proceeding shall be governed by the substantive laws of India.
- 3.26.5** The proceedings of Arbitration shall be in English language.
- 3.26.6** Except as otherwise provided elsewhere in the contract if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof the same shall be decided by an Arbitral Tribunal consisting of three Arbitrators. Each party shall appoint one Arbitrator and the Arbitrators so appointed shall appoint the third Arbitrator who will act as Presiding Arbitrator.
- 3.26.7** In case, a party fails to appoint an arbitrator within 30 days from the receipt of the request to do so by the other party or the two Arbitrators so appointed fail to agree on the appointment of third Arbitrator within 30 days from the date of their appointment upon request of a party, Ministry of Law & Justice shall appoint the arbitrator/Presiding Arbitrator upon request of one of the parties.
- 3.26.8** If any of the Arbitrators so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/ arbitrator to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same; otherwise, he shall proceed de novo.
- 3.26.9** It is a term of the contract that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.
- 3.26.10** It is also a term of the contract that neither party to the contract shall be entitled for any interest on the amount of the award.
- 3.26.11** The Arbitral Tribunal shall give reasoned award and the same shall be final, conclusive and binding on the parties.
- 3.26.12** The fees of the arbitrator shall be borne by the parties nominating them and the fee of the Presiding Arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the parties.
- 3.26.13** Subject to as aforesaid the provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment in lieu thereof shall apply to the arbitration proceedings under this Clause.
- 3.26.14** Continuance of the Contract:
- I. Notwithstanding the fact that settlement of dispute(s) (if any) under arbitration may be pending, the parties hereto shall continue to be governed by and perform the work in accordance with the provisions under this Contract.

3.27 Time is of the essence

- 3.27.1** Time shall be of the essence in respect of any date or period specified in this Contract or any notice, demand or other communication served under or pursuant to any provision of this Contract and in particular in respect of the completion of the activities by the Bidder by the specified completion date. Any delay in the completion of the work described shall constitute a material breach of this contract.

3.28 Conflict of interest

- 3.28.1** The Bidder shall disclose to the Purchaser in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Bidder or the Bidder's Team) in the course of performing the Services as soon as practical after it becomes aware of that conflict.
- 3.28.2** Neither the Lead Bidder nor its Consortium Partner(s) nor the Personnel of either of them shall engage, either directly or indirectly, in any of the following activities:

- 3.28.2.1 During the term of this Agreement, any business or professional activities which would conflict with the activities assigned to them under this Agreement;
- 3.28.2.2 after the termination of this Agreement, such other activities as may be specified in the Agreement; or
- 3.28.2.3 at any time, such other activities as have been specified in the RFP as Conflict

3.29 Publicity

- 3.29.1 The Bidder/Bidder's Team shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Purchaser first gives the Bidder its written consent.

3.30 Force Majeure

- 3.30.1 The Bidder or the Purchaser as the case may be, shall be entitled to suspend or excuse performance of its respective obligations under this Agreement to the extent that such performance is impeded by an event of force majeure ("Force Majeure"). "Force Majeure" shall mean any event beyond the reasonable control of Purchaser or the Bidder, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected.

- 3.30.2 A Force Majeure shall include, without limitation the following:

- a) War, hostilities, or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy, and civil war;
- b) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine, and plague;
- c) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves, or other natural or physical disaster;

- 3.30.3 If either party is prevented, hindered, or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fourteen (14) days after the occurrence of such event.

- 3.30.4 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered, or delayed. The time for achieving Final Acceptance shall be extended.

- 3.30.5 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upon its or their performance of the Contract and to fulfil its or their obligations under the Contract, but without prejudice to either party's right to terminate the Contract under Clause 3.30.

- 3.30.6 No delay or non-performance by either party to this Contract caused by the occurrence of any event of Force Majeure shall:

- a) constitute a default or breach of the Contract;
- b) give rise to any claim for damages or additional cost or expense occasioned by the delay or non-performance,

if, and to the extent that, such delay or non-performance is caused by the occurrence of an event of Force Majeure.

- 3.30.7 If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than sixty (60) days on account of one or more events of Force Majeure during the time period covered by the Contract, the parties will attempt to develop a mutually

satisfactory solution, failing which, either party may terminate the Contract by giving a notice to the other.

- 3.30.8** In the event of termination pursuant to clause 3.24, the rights and obligations of Purchaser and the Bidder shall be specified in clause title termination
- 3.30.9** Notwithstanding clause 3.30, Force Majeure shall not apply to any obligation of Purchaser to make payments to the Bidder under this contract
- 3.30.10** For the avoidance of doubt, it is expressly clarified that the failure on the part of the Bidder under this contract or the SLA to implement any disaster contingency planning and back-up and other data safeguards in accordance with the terms of this Agreement or the SLA against natural disaster, fire, sabotage or other similar occurrence shall not be deemed to be a Force Majeure event. For the avoidance of doubt, it is further clarified that any negligence in performance of Services which directly causes any breach of security like hacking aren't the forces of nature and hence wouldn't be qualified under the definition of "Force Majeure". In so far as applicable to the performance of Services, Bidder will be solely responsible to complete the risk assessment and ensure implementation of adequate security hygiene, Purchaser practices, processes and technology to prevent any breach of security and any resulting liability therefrom (wherever applicable).
- 3.30.11** In case of a Force Majeure, all Parties will endeavour to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure.
- 3.30.12** In case of Force Majeure, the bidder shall be paid on actual number of transactions.

3.31 Governance Schedule

- 3.31.1** The bidder shall document the agreed structures in a procedural manual under the guidance and supervision of the Nodal Officer of purchaser.
- 3.31.2** The agenda for each meeting of the High-Level Steering Committee (Refer clause: 3.10.31.7) shall be set to reflect the discussion items related to the scope of work and additional items may be added either with the agreement of the Parties or at the request of either Party.
- 3.31.3** Copies of the agenda for meetings of the High-Level Steering Committee, along with relevant pre-reading material, shall be distributed.
- 3.31.4** All meetings and proceedings will be documented; such documents to be distributed to both Parties and copies shall be kept as a record. All actions, responsibilities and accountabilities arising out of any meeting shall be tracked and managed.
- 3.31.5** The Parties shall ensure as far as reasonably practicable that the High-Level Steering Committee shall resolve the issues and resolve the objectives placed before them and members representing that Party are empowered to make relevant decisions or have easy access to empowered individuals for decisions to be made to achieve this.
- 3.31.6** The Parties will proceed in good faith so that the Steering Committee and Operations Committee shall resolve the issues and smoothen the performance of the Project.
- 3.31.7** The parties agree to attempt to resolve all disputes arising under the Agreement, equitably and in good faith. To this end, the parties agree to provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate discussions between them/their representatives or senior officers.

3.32 General

3.32.1 Relationship between the Parties

- a. Nothing in this Contract constitutes any fiduciary relationship between the Purchaser and Bidder/Bidder's Team or any relationship of Purchaser employee, principal and agent, or partnership, between the Purchaser and Bidder.

- b. No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms of this Contract.
- c. The Purchaser has no obligations to the Bidder's Team except as agreed under the terms of this Contract.

3.32.2 Survival

- a. The provisions of the clauses of this Contract in relation to documents, data, processes, property, Intellectual Property Rights, indemnity, publicity and confidentiality and ownership survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless the Purchaser notifies the Bidder of its release from those obligations.

3.32.3 Entire Contract

- a. The terms and conditions laid down in the Tender and all annexure, addendum thereto as also the Bid and any annexes thereto shall be read in consonance with and form an integral part of this Contract. This Contract supersedes any prior Contract, understanding or representation of the Parties on the subject matter.

3.32.4 Governing Law

- a. This Contract shall be governed in accordance with the laws of India.

3.32.5 Jurisdiction of Courts

- a. The courts of India at Chandigarh have exclusive jurisdiction to determine any proceeding in relation to this Contract.

3.32.6 Compliance with Laws

- a. The Bidder / Bidder's Team shall comply with the laws in force in India in the course of performing this Contract.

3.32.7 Notices

- a. All notices, requests or consents provided for or permitted to be given under this Contract shall be in writing and shall be deemed effectively given when personally delivered or mailed by pre-paid certified/registered mail, return receipt requested, addressed as follows and shall be deemed received two days after mailing or on the date of delivery if personally delivered:

To Purchaser at:

<<Attn:
[Phone:]
[Fax:]>>

To Bidder at:

Attn:
[Phone:]
[Fax:]

- b. Any Party may change the address to which notices are to be directed to it by notice to the other parties in the manner specified above.
- c. A notice served on a Representative is taken to be notice to that Representative's Party.

3.32.8 Waiver

- a. Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights.
- b. A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision.
- c. The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

3.33 Application

3.33.1 These General Conditions shall apply to the extent that provisions in other parts of the Contract do not supersede them.

3.34 Performance Security

3.34.1 The successful Bidder shall furnish Performance Security to the Purchaser at the time of signing the Contract which shall be **INR 2,00,00,000 (Two Crore only)** and shall be in the form of a Guarantee Bond from a Nationalized / Scheduled Bank in the Proforma given at Section IV which would be valid up to a period of six months after the contract period.

3.34.2 The Successful Bidder shall keep and maintain the Performance Bank Guarantee (PBG) valid and in full force and effect at all times during the term of this Contract (through periodic renewals, if any required, at least one month prior to the expiry of the subsisting PBG). In the event the successful Bidder fails to provide the renewed/extended. PBG at least 1 (one) month prior to the expiry of the subsisting bank guarantee, so as to maintain the PBG valid for the applicable periods, the Purchaser shall have the right to forfeit and appropriate the subsisting PBG. Failure of the successful Bidder to maintain the PBG in full force and effect throughout the term, in accordance with the provisions hereof, shall constitute Bidder's Event of default in terms hereof.

3.34.3 In the event of the successful Bidder being in default of the due, faithful and punctual performance of its obligations under the Contract, in the event of there being any claims or demands whatsoever whether liquidated or which may at any time be made or have been made on behalf of the Purchaser for or against the successful Bidder under this Contract or against the Purchaser in respect of this Contract which remain unpaid by the successful Bidder the Purchaser shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to call in, encash and appropriate the relevant amounts from the PBG as damages for such default, or loss suffered on account of failure to perform its obligations or non-payment of dues, any demands or claims

3.34.4 The decision of Purchaser as to any breach/ delay having been committed, liability accrued or loss or damage caused or suffered shall be conclusive, absolute and binding on the successful Bidder and successful Bidder specifically confirms and agrees that no proof of any amount of liability accrued or loss or damages caused or suffered by the Purchaser under this Contract is required to be provided in connection with any demand made by the Purchaser to recover such compensation through invoking and encashment of the PBG under this Contract.

3.34.5 In the event of encashment of the PBG by the Purchaser, in full or part, successful Bidder shall within 30 (thirty) days of receipt of the encashment notice from the Purchaser provide a fresh PBG or replenish (in case of partial appropriation) the existing PBG, as the case may be. The provisions of this Article shall apply mutatis mutandis to such fresh PBG. Successful Bidder's failure to comply with this provision shall constitute successful Bidder's Event of Default which shall entitle the Purchaser to terminate this Contract in accordance with the provisions of Clauses 3.21 of this Contract.

3.35 Modification

3.35.1 Any modification of this Contract shall be in writing and signed by an authorized representative of each Party.

3.36 Currency of Payment

3.36.1 Payment shall be made in Indian Rupees only.

3.37 Change Orders/Alteration/Variation

3.37.1 The Bidder agrees that the requirements and Service requirements given in the Tender documents are minimum requirements and are in no way exhaustive and guaranteed by the Purchaser.

- 3.37.1.1** Any upward revision and/or additions consequent to errors, omissions, ambiguities, discrepancies in the quantities, specifications, drawings etc. of the Tender documents which the Bidder had not brought out to the Purchaser's notice till the time of award of work and not accounted for in his Bid shall not constitute a change order and such upward revisions and/or addition shall be carried out by Bidder without any time and cost effect to Purchaser.
- 3.37.1.2** It shall be the responsibility of the Bidder to meet all performance and other requirements of the Purchaser as stipulated in the Tender document / Contract. Any upward revisions / additions of quantities, specifications, technical manpower, service requirements to those specified by the Bidder in his Bid documents, that may be required to be made during installation / acceptance of the System or at any time during the currency of the contract in order to meet the conceptual design, objective and performance levels or other requirements as defined in the Tender documents shall not constitute a change order and shall be carried out by the Bidder without any change order and without any time and cost effect to the Purchaser whatsoever.
- 3.37.2** The Purchaser may at any time, by a written change order given to the Bidder, make changes within the general scope of the Contract. The Purchaser will have the option to increase or decrease (decrease only if communicated to Bidder prior to availing of services / dispatch of goods / equipment) the Quantities, Licenses and/or Specifications of the goods/equipment to be supplied and installed by the Bidder or service requirements, as mentioned in the Contract, at any time during the contract period. Due to such changes if required to modify implementation period/any additional cost would be decided by purchaser and decision will be final and binding upon both parties
- 3.37.3** The written advice to any change shall be issued by the Purchaser to the Bidder up to 4 (four) weeks prior to the due date of provisioning/supply of such goods/equipment or commencement of services.
- 3.37.4** In case of increase in Quantities/Licenses/Specifications or Service requirements or in case of additional requirement, the Bidder agrees to carry out/provision for such additional requirement at the rate and terms and conditions as provided in the Contract or as mutually agreed to by both the parties except for the appropriate extension of time to be allowed for delivery/installation of such extra goods/equipment or for commencement of such services. In case of decrease in Quantities or Specifications of goods/equipment or Service requirements, the Bidder shall give a reduction in price at the rate given in the Contract corresponding to the said decrease.
- 3.37.5** In case applicable rates for the increase/decrease in question are not available in the Contract then the rates as may be mutually agreed shall apply. The Bidder shall not be entitled to any claim by way of change of price, damages, losses, etc. The Bidder shall be compensated at actual for any cancellation charges provided the claim is duly supported by documentary evidence of having incurred cancellation charges, which results from Purchaser's action in reducing/cancelling Scope of work.
- 3.37.6 Conditions for Change Order**
- 3.37.6.1** The change order will be initiated only in case (i) the Purchaser directs in writing the Bidder to incorporate changes to the goods or design requirements already covered in the Contract. (ii) the Purchaser directs in writing to the Bidder to include any addition to the scope of work or services covered under this Contract or delete any part thereof, (iii) Bidder requests to delete any part of the work which will not adversely affect the operational capabilities and functioning of the system and if the deletions proposed are agreed to by the Purchaser and for which cost and time benefits shall be passed on to the Purchaser,
- 3.37.6.2** Any change order comprising an alteration which involves change in the cost of the goods and/or services (which sort of alteration is hereinafter called a "Variation") shall be the

Subject of an amendment to the Contract by way of an increase or decrease in the Contract Value and adjustment of the implementation schedule if any.

- 3.37.6.3** If the Contract provides applicable rates for the valuation of the variation in question the Contract Value shall subject to Clause 3.37.6.4 of this section be increased or decreased in accordance with those rates.
- 3.37.6.4** If parties agree that the Contract does not contain applicable rates or that the said rates are inappropriate, or the said rates are not precisely applicable to the variation in question, then the parties shall negotiate a revision of the Contract Value which shall represent the change in cost of the goods and/or works caused by the Variations. Any change order shall be duly approved by the Purchaser in writing.
- 3.37.6.5** If there is a difference of opinion between the Bidder and Purchaser's Representative on whether a particular item, work or part of the work constitutes a change order or not, the matter shall be handled in accordance with the procedures set forth in Clause 3.37.7.11 of this section.

3.37.7 Procedures for Change Order

- 3.37.7.1** Upon receiving any revised requirement/advice, in writing, from the Purchaser, the Bidder would verbally discuss the matter with Purchaser's Representative.
- 3.37.7.2** In case such requirement arises from the side of the Bidder, he would also verbally discuss the matter with Purchaser's Representative giving reasons thereof.
- 3.37.7.3** In either of the two cases as explained in Clause 3.37.7.1 and Clause 3.37.7.2 of this section, the representatives of both the parties will discuss on the revised requirement for better understanding and to mutually decide whether such requirement constitutes a change order or not.
- 3.37.7.4** If it is mutually agreed that such Requirement constitutes a "Change Order" then a joint memorandum will be prepared and signed by the Bidder and Purchaser to confirm a "Change Order" and basic ideas of necessary agreed arrangement.
- 3.37.7.5** Bidder will study the revised requirement in accordance with the joint memorandum under Clause 3.37.7.4 of this section and assess subsequent schedule and cost effect, if any.
- 3.37.7.6** Upon completion of the study referred to above under Clause 3.37.7.5 of this section, the results of this study along with all relevant details including the estimated time and cost effect thereof with supporting documents would be submitted to the Purchaser to enable the Purchaser to give a final decision whether Bidder should proceed with the change order or not in the best interest of the works.
- 3.37.7.7** The estimated cost and time impact indicated by Bidder shall be considered as a ceiling limit and shall be provisionally considered for taking a decision to implement change order.
- 3.37.7.8** The time impact applicable to the Contract shall be mutually agreed, subsequently, on the basis of the detailed calculations supported with all relevant back up documents.
- 3.37.7.9** In case Bidder fails to submit all necessary substantiation/calculations and back up documents, the decision of the Purchaser regarding time and cost impact shall be final and binding on the Bidder.
- 3.37.7.10** If Purchaser accepts the implementation of the change order under Clause 3.37.7.6 of this section in writing, which would be considered as change order, then Bidder shall commence to proceed with the enforcement of the change order pending final agreement between the parties with regard to adjustment of the Contract Value and the Schedule.
- 3.37.7.11** In case, mutual agreement under Clause 3.37.7.4 of this section, i.e. whether new requirement constitutes the change order or not, is not reached, then Bidder in the interest of the works, shall take up the enforcement of the change order, if advised in writing to do

so by Purchaser's Representative pending settlement between the two parties to the effect whether such requirement constitutes a change order or not as per the terms and conditions of Contract documents. The time and cost effects in such a case shall be mutually verified and recorded. Should it establish that the said work constitutes a change order, the same shall be compensated taking into account the records kept in accordance with the Contract.

3.37.7.12 The Bidder shall submit necessary back up documents for the change order showing the break-up of the various elements constituting the change order for the Purchaser's review. If no agreement is reached between the Purchaser and Bidder within 60 days after Purchaser's instruction in writing to carry out the change concerning the increase or decrease in the Contract Value and all other matters described above, either party may refer the dispute to arbitration.

3.37.8 Conditions for revised work/change order

3.37.8.1 The provisions of the Contract shall apply to revised work / change order as if the revised work / Change order has been included in the original Scope of work. However, the Contract Value shall increase / decrease and the schedule shall be adjusted on account of the revised work / Change orders as may be mutually agreed in terms of provisions set forth in Clause 3.37 of this section. The Bidder's obligations with respect to such revised work / change order shall remain in accordance with the Contract.

3.38 Governing Language

3.38.1 The Agreement shall be written in English only. All correspondence and other documents pertaining to the Contract that are exchanged by parties shall be written in English only.

3.39 "No Claim" Certificate

3.39.1 The Bidder shall not be entitled to make any claim, whatsoever against the Purchaser, under or by virtue of or arising out of, this contract, nor shall the Purchaser entertain or consider any such claim, if made by the Bidder after he shall have signed a "No claim" certificate in favour of the Purchaser in such forms as shall be required by the Purchaser after the works are finally accepted.

3.40 Warranty

3.40.1 A comprehensive warranty applicable on goods supplied under this contract shall be provided by the respective OEM for the period of contract from the date of acceptance of respective system by the Purchaser.

3.40.2 Technical Support for Software applications shall be provided by the respective OEMs for the period of contract. The Technical Support should include all upgrades, updates and patches to the respective Software applications.

3.40.3 The Bidder warrants that the Goods supplied under the Contract are new, non-refurbished, unused and recently manufactured; shall not be nearing End of sale/End of support; and shall be supported by the Bidder and respective OEM along with service and spares support to ensure its efficient and effective operation for the entire duration of the contract.

3.40.4 The Bidder warrants that the goods supplied under this contract shall be of the highest grade and quality and consisted with the established and generally accepted standards for materials of this type. The goods shall be in full conformity with the specifications and shall operate properly and safely. All recent design improvements in goods, unless provided otherwise in the Contract, shall also be made available.

3.40.5 The Bidder further warrants that the Goods supplied under this Contract shall be free from all encumbrances and defects/faults arising from design, material, manufacture or workmanship (except insofar as the design or material is required by the Purchaser's Specifications) or from any act or omission of the Bidder, that may develop under normal use of the supplied Goods in the conditions prevailing at the respective Purchaser's locations.

- 3.40.6** The Purchaser shall promptly notify the Bidder in writing of any claims arising under this warranty.
- 3.40.7** Upon receipt of such notice, the Bidder shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the Purchaser may have against the Bidder under the Contract.
- 3.40.8** If the Bidder, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Bidder's risk and expense and without prejudice to any other rights which the Purchaser may have against the Bidder under the Contract.
- 3.40.9** Any OEM specific warranty terms that do not conform to conditions under this Contract shall not be acceptable.

3.41 Project Manager

- 3.41.1** The Bidder shall ensure that at all time during the currency of the Contract, a Project Manager acceptable to the Purchaser shall take charge of the Performance of the Contract. The Project Manager shall be assisted by his/ her team members. Minimum manpower resource requirement has been provided in Section V of the Tender.

3.42 Completion of Contract

- 3.42.1** Unless terminated earlier, the Contract shall terminate on the completion of term as specified in the Contract and only after the obligations mentioned in Clause 3.24 of this section are fulfilled to the satisfaction of the Purchaser

3.43 Passing of Property

- 3.43.1** Any of the deployed hardware/Software/ /physical or IT equipment covered under contract and additional components or any hardware deployed during contract period to meet SLA's would be transferred to the department in fully functional condition after the contract period, at no financial implication to the Purchaser.

3.44 No Assignment

- 3.44.1** The Bidder shall not transfer any interest, right, benefit or obligation under this Contract without the prior written consent of the Purchaser which the Purchaser may at its discretion refuse without assigning any reason.

3.45 Insurance

- 3.45.1** The Goods supplied under this Contract shall be fully insured by the Bidder, against any loss or damage, till the Acceptance of the System, The Bidder shall submit to the Purchaser, documentary evidence issued by the insurance company, indicating that such insurance has been taken.
- 3.45.2** Except in case of Third Party liabilities, the insurance policies so procured shall mention the Authority as the beneficiary and the Bidder shall procure an undertaking from the insurance company to this effect; provided that in the event the Bidder has a general insurance policy that covers the risks specified in this Agreement and the amount of insurance cover is equivalent to 3 (three) times the cover required hereunder, such insurance policy may not mention the Authority as the sole beneficiary or require an undertaking to that effect.
- 3.45.3** The Bidder shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the goods during their shipment from respective manufacturing/shipment site of the OEM to the port of landing.
- 3.45.4** All charges like transportation charges, octroi, etc. that may be applicable till the goods are delivered at the respective site of installation shall also be borne by the Bidder.
- 3.45.5** The Bidder during the term of this contract:

- i. shall take out and maintain, at his own cost but on terms and conditions approved by the Purchaser, insurance with financially sound and reputable insurers against the risks, and for the coverage, as specified below:
- ii. shall pay all premia in relation thereto and shall ensure that nothing is done to make such insurance policies void or voidable
- iii. at the Purchaser's request, shall provide evidence to the Purchaser showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

3.45.6 Purchaser's liability and workers' compensation insurance in respect of the Personnel of the Bidder/ Bidder's Team, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and

3.45.7 Insurance against loss of or damage to (i) equipment or assets procured or developed in whole or in part for fulfilment of obligations under this Contract (ii) the Bidder's assets and property used in the performance of the Services, and (iii) any documents prepared by the Bidder in the performance of the Services.

3.46 Limitation of Bidder's Liability towards the Purchaser

3.46.1 Notwithstanding what has been stated elsewhere in this Agreement and the Schedules attached herein, Purchaser shall not be liable to bidder for any indirect or consequential damages.

3.46.2 Except in the case of Gross Negligence or Wilful Misconduct on the part of the Bidder/Bidder's Team or on the part of any person or firm acting on behalf of the Bidder executing the work or in carrying out the Services, the Bidder, with respect to damage caused by the Bidder including to property and/or assets of the Purchaser or of any of Purchaser's vendors shall regardless of anything contained herein, not be liable for any direct loss or damage that exceeds (A) the Contract Value or (B) the proceeds the Bidder may be entitled to receive from any insurance maintained by the Bidder to cover such a liability, whichever of (A) or (B) is higher.

For the purposes of this Clause 3.46.2 of this section, "Gross Negligence" means any act or failure to act by a Party which was in reckless disregard of or gross indifference to the obligations of the Party under the Contract and which causes harmful consequences to life, personal safety or real property of the other Party which such Party knew, or would have known if it was acting as a reasonable person, would result from such act or failure to act. Notwithstanding the foregoing, Gross Negligence shall not include any action taken in good faith for the safeguard of life or property.

"Wilful Misconduct" means an intentional disregard of any provision of this Contract which a Party knew or should have known if it was acting as a reasonable person, would result in harmful consequences to life, personal safety or real property of the other Party but shall not include any error of judgment or mistake made in good faith.

3.46.3 This limitation of liability slated in Clause 3.46 of this section, shall not affect the Bidder liability, if any, for direct damage by Bidder/Bidder's Team to a Third Party's real property, tangible personal property or bodily injury or death caused by the Bidder/Bidder's Team or any person or firm/company acting on behalf of the Bidder in executing the work or in carrying out the Services."

3.46.4 Title and Risk of Loss: Bidder shall bear the risk of loss on Assets up to the time they are transferred and handed over to Purchaser - after which it shall stand transferred to Purchaser. Bidder shall arrange and pay for insurance to cover such item until it is transferred and even after the transfer of the Assets till the insurance policies come up for a renewal.

3.47 Payment Schedule

3.47.1 The contract value is based on **Per Transactions Cost** quoted by the bidder.

3.47.2 All payments are subject to Clause 3.47 of this section. Payments will be released only on satisfactory acceptance of each task.

3.47.3 Payments Schedule Post Go-Live and UAT:

3.47.3.1 Payment terms and calculations for tickets issued:

Transaction definition: Transaction refers to tickets issued through ETIM and ORS. Cancelled tickets may be charged once. In case of partial cancellation / rescheduling of ORS tickets, this transaction can be charged twice, once for original booking and once for rescheduling / partial cancellation. More than one passenger can be booked on a single ticket, called “**Group ticket**”. Group ticket will be considered as single transaction.

Slab definition for Annual Basis:

Slab 1: 40 Crore tickets issued through ETIM and ORS in a year

Slab 2: Above 40 crores but till 70 crore tickets issued through ETIM and ORS in a year. This will result in reduction of 20% in the rate payable per ticket of slab 1 to the bidder. This reduced rate will be applicable only on the incremental tickets i.e. tickets over 40 Crores but till 70 Crores

Slab 3: Above 70 crore tickets issued through ETIM and ORS in a year. This will result in reduction of 30% in the rate payable per ticket of slab 1 to the bidder. This reduced rate will be applicable only on the incremental tickets i.e. tickets over 70 Crores. (ORS booking will be considered as one transaction).

The model has been depicted in the table below.

| Activity | Volume | Per Annum | | |
|--|----------------------|---|--|---|
| | | Slab 1 Tickets issued volume (A) | Slab 2 Tickets issued volume (B) | Slab 3 Tickets issued volume (C) |
| Per Ticket charges | Volume (V) | Till 40 Crore | Greater than 40 Crore but up to 70 Crore | Above 70 Crore |
| | Max Volume | Va=40 crore | Vb=70 Crore | |
| | Rate (in INR) (R) | Ra | Rb=0.8*Ra | Rc=0.7*Ra |
| Minimum guaranteed volume of tickets in a year | 30 Crore | | | |

The value of Ra, Rb and Rc will also be used for actual payments to be made.

The payment towards the tickets shall be made based on the following formula (for the complete state, and not at individual depots):

- a) If the actual ticket sale is less or equal to 30 crores, then the amount to be paid is $30,00,00,000 * Ra$. This minimum payment is subject to following conditions but not limited to following:
 - This minimum transaction is not to be considered during riot, commotion, disorder, strike, natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity etc. At that time amount will paid as per actual ticket sale* Ra
 - In case of any event of default by bidder as per clause 3.21 of this section, no payment will be paid
 - In case of force majeure, as mentioned in clause 3.30 of this section, the bidder shall be paid on actual number of transactions
- b) If the actual ticket sale is greater than 30 crore and less than or equal to the volume specified in slab 1, then the amount to be paid is (Ticket Volume) * Ra

- c) If the actual ticket sale is more than the volume specified in Slab 1, but less than or equal to the volume specified in Slab 2, then the amount to be paid is $(V_a) * (R_a) + (Ticket\ Volume - V_a) * \{R_b\}$
- d) If the actual ticket sale is more than the volume specified in Slab 1 & 2, then the amount to be paid is $\{(V_a) * (R_a)\} + \{(V_b - V_a) * (R_b)\} + \{(Ticket\ Volume - V_b) * \{R_c\}\}$
- e) Although the payment shall be made monthly, however the reconciliation with respect to the slabs shall be done in the last month of the corresponding financial year.

Note: The minimum amount of 30 crore tickets would be applicable and can be used for payment calculation only on completion of the project implementation across all the depots in Haryana. Before completion of the implementation, the bidder shall be paid based on actual ticket sale only.

Slab definition for Monthly Basis:

Slab 1: 3.33 Crore tickets issued through ETIM and ORS in a month

Slab 2: Above 3.33 crore but till 5.83 crore tickets issued through ETIM and ORS in a month. This will result in reduction of 20% in the rate payable per ticket of slab 1 to the bidder. This reduced rate will be applicable only on the incremental tickets i.e. tickets over 3.33 Crores but till 5.83 Crores

Slab 3: Above 5.83 crore tickets issued through ETIM and ORS in a month. This will result in reduction of 10% in the rate payable per ticket of slab 2 to the bidder. This reduced rate will be applicable only on the incremental tickets i.e. tickets over 5.83 Crores

The model has been depicted in the table below.

| Activity | Volume | Per Month | | |
|---|-------------------|---|--|---|
| | | Slab 1 Tickets issued volume (A) | Slab 2 Tickets issued volume (B) | Slab 3 Tickets issued volume (C) |
| Per Ticket charges | Volume (V) | Till 3.33 Crore | Greater than 3.33 Crore but up to 5.83 Crore | Above 5.83 Crore |
| | Max Volume | Va=3.33 crore | Vb=5.83 Crore | |
| | Rate (in INR) (R) | Ra | Rb=0.8*Ra | Rc=0.7*Ra |
| Minimum guaranteed volume of tickets in a month | 2.50 Crore | | | |

The payment towards the tickets shall be made based on the following formula (for the complete state, and not at individual depots):

- a) If the actual ticket sale is less or equal to 2.50 crores, then the amount to be paid is $2,50,00,000 * R_a$. This minimum payment is subject to following conditions but not limited to following:
- This minimum transaction is not to be considered during riot, commotion, disorder, strike, natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity etc. At that time amount will paid as per actual ticket sale* Ra
 - In case of any event of default by bidder as per clause 3.21 of this section, no payment will be paid
 - In case of force majeure, as mentioned in clause 3.30 of this section, the bidder shall be paid on actual number of transactions

- b) If the actual ticket sale is greater than 2.50 crore and less than or equal to the volume specified in slab 1, then the amount to be paid is (Ticket Volume) * Ra
- c) If the actual ticket sale is more than the volume specified in Slab 1, but less than or equal to the volume specified in Slab 2, then the amount to be paid is (Va) * (Ra) + (Ticket Volume – Va) * {Rb}
- d) If the actual ticket sale is more than the volume specified in Slab 1 & 2, then the amount to be paid is {(Va) * (Ra)} + {(Vb - Va) * (Rb)} + {(Ticket Volume – Vb) * {Rc}}

Note: *The minimum amount of 2.50 crore tickets would be applicable and can be used for payment calculation only on completion of the project implementation across all the depots in Haryana. Before completion of the implementation, the bidder shall be paid based on actual ticket sale only. The reconciliation for tickets for above mentioned slabs shall be done by the department.*

3.47.3.2 Payment terms and calculations for smart cards

Bidder shall be responsible for issuance of personalised and non-personalised NCMC cards. Personalised NCMC cards shall act as Bus Pass which will be issued to free and concessional travellers only as notified by Government of Haryana. Transactions through personalised NCMC cards (0 value ticket) will be counted as transaction. The cost of the personalised NCMC card shall be as per the decision taken by the department and department will collect and retain the cost of cards and will not transfer any amount to the bidder in lieu of issuance of cards.

Non-personalised NCMC cards will be issued to general public. The bidder/Bank will only charge the issuance fee to the customer. The bidder/Bank shall not charge any additional/annual fee either from the passenger or the department. Transactions through non-personalised NCMC cards (0 value ticket) will be counted as transaction.

3.47.3.3 Payment Terms

- a) Upon go-live and acceptance of the system, the bidder shall be paid as per the monthly invoice submitted against the tickets issued by system implemented by bidder
- b) Department shall make payments to the bidder after go-live and acceptance at regions as per the following schedule.
 - Payment for Pilot locations - On go live and acceptance of all the pilot locations.
 - Payment for rest of the locations - On go live and acceptance of all locations
- c) The payment will be made by department for all locations to the bidder on monthly basis. The monthly bill will be submitted by the bidder to the department who will in turn release the 80% of the payment within 15 days and rest of the payment i.e. 20% released within 1 month if there is no dispute and after verification/audit of the bills

3.47.4 Prices shall remain firm and shall not be subject to any upward revision on any account whatsoever throughout the period of contract.

3.48 Severance

3.48.1 If any provision of this contract is held unenforceable, then such provision will be modified to reflect the parties' intention. All the remaining provisions of this Contract shall remain in full force and effect.

3.49 Liquidated Damages and Penalty

3.49.1 Subject to Clause 3.30 of this section, if the Bidder fails to complete the entire works before the scheduled completion date or the extended date or if Bidder repudiates the Contract before completion of the Work, the Purchaser may without prejudice to any other right or remedy available to the Purchaser as under the Contract:

- i. Recover from the Bidder, as liquidated damages and not by way of penalty, a sum equivalent to 5% of the Performance Bank Guarantee value for each week (Seven calendar days) delay beyond the Scheduled completion date subject to a maximum of Rs 1.00 Crore. For the purpose of liquidated damages, the scheduled completion date will be taken as date of completion and acceptance of all the activities till Certifications of successful operations of the integrated solution completion given to Bidder by Purchaser.

AND / OR

- ii. Terminate the contract or a portion or part of the work thereof. The Purchaser shall give 30 days' notice to the Bidder of its intention to terminate the Contract and shall so terminate the Contract unless during the 30 days' notice period, the Bidder initiates remedial action acceptable to the Purchaser.
- 3.49.2** If the agreement is terminated pursuant to Clause 3.24 of this section, the Purchaser may levy liquidated damages of an amount limited to the total Contract Value or as may be determined by the Arbitrator at the time of termination.
- 3.49.3** The Purchaser may without prejudice to its right to effect recovery by any other method, deduct the amount of liquidated damages from any money belonging to the Bidder in its hands (which includes the Purchaser's right to claim such amount against Bidder's Bank Guarantee) or which may become due to the Bidder. Any such recovery or liquidated damages shall not in any way relieve the Bidder from any of its obligations to complete the Works or from any other obligations and liabilities under the Contract.
- 3.49.4** Delay not attributable to the Bidder will be considered for exclusion for the purpose of computing liquidated damages.
- 3.49.5** For the tasks to be performed till Certifications of successful operations of the integrated solution completion given to Bidder by Purchaser, the amount of liquidated damages shall not exceed the value of PBG Value. This upper limit is restricted only to activities till Certifications of successful operations of the integrated solution completion given to Bidder by Purchaser. The liquidated damages will be governed by SLAs for Post Implementation Phase.
- 3.49.6** In the event the activities required to be performed by the Bidder in order to execute the scope of work of this contract and on-going maintenance service along with service levels are not in line with the requirement of the Purchaser and not in accordance with the timelines and performance / service levels as stipulated in the tender, contract and SLAs, then the Bidder shall be liable for payment of liquidated damages or penalties as defined under Service Level Agreement. Subsequently Purchaser reserves the right to initiate termination of the contract/ legal action against the bidder. Subsequently Purchaser reserves the right to initiate termination of the contract/ legal action against the bidder.

3.50 Suspension of Work

- 3.50.1** The Bidder shall, if ordered in writing by the Purchaser's Representative, temporarily suspend the works or any part thereof for such a period and such a time as ordered. The Bidder shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the Works as aforesaid. The Purchaser may consider suitable compensation to the Bidder on case to case basis, to the extent of work completed, subject to fulfilment of other conditions of this contract. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid shall be granted to the Bidder, if request for same is made and that the suspension was not consequent to any default or failure on the part of the Bidder. In case the suspension of works, is not consequent to any default or failure on the part of the Bidder and lasts for a period of more than 2 months, the Bidder shall have the option to request the Purchaser to terminate the Contract with mutual consent.
- 3.50.2** In the event that the Purchaser suspends the progress of work for any reason not attributable to the Bidder for a period in excess of 30 days in aggregate, rendering the Bidder to extend his performance security then Purchaser shall bear only the cost of extension of such bank

guarantee for such extended period restricted to the normal bank rates as applicable in the banking procedures subject to the Bidder producing the requisite evidence from the bank concerned.

3.51 Exit Management

3.51.1 Exit Management Purpose

- 3.51.1.1** This clause sets out the provisions, which will apply on expiry and termination of the Contract, the Project implementation and operations so as to ensure continuity of operations and no disruption of services to the public.
- 3.51.1.2** Upon termination of the Contract due to default or otherwise, the Parties shall agree at that time whether, and if so during what period, the provisions of this clause shall apply.
- 3.51.1.3** The Parties shall ensure that they continue to co-operate with each other and carry out their respective obligations during the exit management period as set out in the Exit Management Plan formulated and updated from time to time by the Parties in consultation with each other, to facilitate and implement the seamless transition of Services from the bidder to either Purchaser or its nominated agency or new bidder selected and appointed by Purchaser.

3.51.2 Transfer of Assets

- 3.51.2.1** 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.
- 3.51.2.2** 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.
- 3.51.2.3** Bidder shall transfer all the Project Assets to the Purchaser on INR 1 cost claims pursuant to this article on the last day of the exit management period in good working condition to the satisfaction of Purchaser.
- 3.51.2.4** Bidder shall transfer the application/software, software code, databases, hardware, business data, architecture schematics, designs, storage media and other information/ documents within 30 (Thirty) days of notice period.

3.51.3 Cooperation and provision of information

- 3.51.3.1** The Bidder will allow the Purchaser or its nominated agency to access the information reasonably required to define the current mode of operation associated with the provision of the Services to enable the Purchaser to assess the existing Services being delivered.
- 3.51.3.2** Promptly on reasonable request by the Purchaser, the Bidder shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with this agreement relating to any material aspect of the services (whether provided by the Bidder or Consortium Partners of the Bidder). The Purchaser shall be entitled to copy of all such information. Such information shall also include details pertaining to the services rendered and other performance data.

3.51.4 Confidential Information and Data Security

- 3.51.4.1** The Bidder will promptly on the commencement of the exit management period supply to the Purchaser or its nominated agency or any replacement Bidder selected by it, the following:
 - i. Information relating to the current services rendered and customer and performance data relating to the performance of Consortium partners in relation to the services;

- ii. Documentation relating to Project's Intellectual Property Rights;
- iii. Documentation relating to vendors & original equipment manufacturer (OEM's);
- iv. All current and updated data as is reasonably required for purposes of the Purchaser or its nominated agencies transitioning the services to its Replacement Bidder in a readily available format nominated by the Purchaser, its nominated or replacement Bidder;
- v. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable the Purchaser or its nominated agency, or its replacement agency to carry out due diligence in order to transition the provision of the Services to Purchaser or its nominated agency, or its replacement agency (as the case may be).

3.51.4.2 Before the expiry of the exit management period, the Bidder shall deliver to the Purchaser or its nominated bidder or replacement bidder, as the case may be, all new or up-dated materials from the categories set out in the above point and shall not retain any copies thereof, except that the Bidder shall be permitted to retain one copy of such materials for archival purposes only.

3.51.4.3 Before the expiry of the exit management period, unless otherwise provided under the contract, the Purchaser or its nominated bidder or replacement bidder shall deliver to the Bidder all forms of Bidder's confidential information, which is in the possession or control of Purchaser or its users.

3.51.5 Employees

3.51.5.1 Promptly on reasonable request at any time during the exit management period, the Bidder shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to the Purchaser or its nominated agency or replacement implementing agency, a list of all employees (with job titles) of the outgoing bidder dedicated to providing the services at the commencement of the exit management period.

3.51.5.2 The Bidder shall ensure that its employees and personnel continue to render Services during the exit management period. The Purchaser or its nominated agency in consultation with the Bidder may retain those employees or may direct the Bidder to remove their employees after either the Purchaser or its nominated Bidder or replacement Bidder has arranged for its replacement and the new replacing employee/ personnel has successfully taken over the operations/ functions being carried out by the out-going employee of the Bidder.

3.51.6 Transfer of Certain Agreements

3.51.6.1 On request by the Purchaser or its nominated agency, the Bidder shall effect such assignments, transfers, licences and sub-licences as the Purchaser may require in favour of the Purchaser or its nominated agency or replacement bidder, in relation to any equipment lease, maintenance or service provision agreement between Bidder and third party lessors, vendors, and which are related to the services and reasonably necessary for the carrying out of replacement services by the Purchaser or its nominated agency or replacement bidder.

3.52 Change Control Note (CCN)

3.52.1 This applies to and describes the procedure to be followed in the event of any proposed change to contract, Implementation, and Service levels. Such change shall include, but shall not be limited to, changes in the scope of services provided by the Lead Bidder and changes to the terms of payment.

3.52.2 Change requests in respect of the contract, the implementation, or the Service levels will emanate from the Parties' representative who will be responsible for obtaining approval for the

change and who will act as its sponsor throughout the Change Control Process and will complete Part A of the CCN (Annex I, Section 3 of the RFP). CCNs will be presented to the other Party's representative who will acknowledge receipt by signature of the authorized representative of the Purchaser.

3.52.3 The Lead Bidder and the Purchaser while preparing the CCN, shall consider the change in the context of whether the change is beyond the scope of Services including ancillary and concomitant services required

3.52.4 The CCN shall be applicable for the items which are beyond the stated/implied scope of work as per the RFP document.

3.52.5 Quotation

3.52.5.1 The Bidder shall assess the CCN and complete Part B of the CCN. In completing Part B of the CCN the Lead Bidder shall provide as a minimum:

- a description of the change;
- a list of deliverables required for implementing the change;
- a timetable for implementation;
- an estimate of any proposed change;
- any relevant acceptance criteria;
- an assessment of the value of the proposed change;
- Material evidence to prove that the proposed change is not already covered within the scope of the project, Agreement and Service Levels.

3.52.5.2 Prior to submission of the completed CCN to the purchaser or its nominated agencies, the bidder will undertake its own internal review of the proposal and obtain all necessary internal approvals. As a part of this internal review process, the bidder shall consider the materiality of the proposed change in the context of the Agreement, the Implementation, Service levels affected by the change and the total effect that may arise from implementation of the change.

3.52.5.3 Each Party shall be responsible for its own costs incurred in the quotation, preparation of CCNs and in the completion of its obligations described in this process provided the bidder meets the obligations as set in the CCN. In the event, the bidder is unable to meet the obligations as defined in the CCN then the cost of getting it done by third party will be borne by the bidder. Change requests and CCNs will be reported monthly to each Party's representative who will prioritize and review progress.

CONTRACT AGREEMENT FORMAT

THIS CONTRACT AGREEMENT is made

the _____ day of _____, _____.

BETWEEN

- (1) **State Transport Department, Haryana** having its Head Quarters at **2nd Floor, 30-Bays Building, Sector-17, Chandigarh** (hereinafter called “the Purchaser”), and
- (2) _____, a _____ Bidder incorporated under the laws of **India** and having its principal place of business at _____

(hereinafter called “the Supplier”).

WHEREAS the Purchaser desires to engage the Supplier to supply, install, achieve Operational Acceptance of, and operate for a period of 60 Months from the date of Operational Acceptance of the following Information System: **Open Loop Ticketing System and GPS System** (“the System”) on a Build Own Operate and Transfer (‘BOOT’) basis, and the Supplier has agreed to such engagement upon and subject to the terms and conditions appearing below in this Contract Agreement.

NOW IT IS HEREBY AGREED as follows:

Article 1.

Contract Documents

1.1 Contract Documents (Reference GCC Clause 3.1 (XII))

The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement and the Appendices attached to the Contract Agreement
- (b) General Conditions of Contract
- (c) Technical Requirements (including Implementation Schedule)
- (d) The Supplier’s bid and original Price Schedules
- (e) RFP and its amendments

1.2 Order of Precedence

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above, provided that Appendix 6 shall prevail over all provisions of the Contract Agreement and the other Appendices attached to the Contract Agreement and all the other Contract Documents listed in Article 1.1 above.

1.3 Definitions (Reference GCC Clause 3.1)

Capitalized words and phrases used in this Contract Agreement shall have the same meanings as are ascribed to them in the General Conditions of Contract.

IN WITNESS WHEREOF the Purchaser and the Supplier have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

For and on behalf of the Purchaser

Signed:

in the capacity of *[title or other appropriate designation]*

in the presence of

For and on behalf of the Supplier

Signed:

in the capacity of *[title or other appropriate designation]*

in the presence of

CONTRACT AGREEMENT

dated the *[number]* day of *[month]*, [*year*]

BETWEEN

State Transport, Haryana, “the Purchaser”

and

[name of Supplier], “the Supplier”

Appendix 1. Supplier's Representative

In accordance with GCC Clause 3.9 the Supplier's Representative is:

Name: *[name and provide title and address further below]*

Title: *[if appropriate]*

In accordance with GCC Clause 3.10.25, the Supplier's addresses for notices under the Contract are:

Address of the Supplier's Representative: *[personal delivery, postal, cable, telegraph, telex, facsimile, electronic mail.]*

Fallback address of the Supplier: *[personal delivery, postal, cable, telegraph, telex, facsimile, electronic mail.]*

Appendix 2. List of Approved Subcontractors

The Purchaser has approved use of the following Subcontractors nominated by the Supplier for carrying out the item or component of the System indicated. Where more than one Subcontractor is listed, the Supplier is free to choose between them, but it must notify the Purchaser of its choice sufficiently in advance of the time when the subcontracted work needs to commence to give the Purchaser reasonable time for review. In accordance with GCC Clause 3.8, the Supplier is free to submit proposals for Subcontractors for additional items from time to time. No subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by the Purchaser and their names have been added to this list of Approved Subcontractors, subject to GCC Clause 3.8.

[specify: item, approved Subcontractors, and their place of registration that the Supplier proposed in the corresponding attachment to its bid and that the Purchaser approves that the Supplier engage during the performance of the Contract. Add additional pages as necessary.]

| Item | Approved Subcontractors | Place of Registration |
|------|-------------------------|-----------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Appendix 5. Revised Price Schedules

The attached Revised Price Schedules (if any) shall form part of this Contract Agreement and, where differences exist, shall supersede the Price Schedules contained in the Supplier's Bid. These Revised Price Schedules reflect any corrections or adjustments to the Supplier are bid price, pursuant to the ITB Clauses 8, 9, and 10.

Appendix 6. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

The attached Contract amendments (if any) shall form part of this Contract Agreement and, where differences exist, shall supersede the relevant clauses in the GCC, Technical Requirement

Appendix 7. Change Control Note (CCN)

| | | |
|--|--------------|--------------------|
| 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, A2, and A3 etc.) | | |
| | | |
| Authorized by Purchaser | Date: | |
| Name: | | |
| Signature: | | |
| Received by the Lead Bidder | Date: | |
| Name: | | |
| Signature: | | |
| Change Control Note | | CCN Number: |
| Part B : Evaluation | | |
| (Identify any attachments as B1, B2, and B3 etc.) | | |
| Changes to Services, payment terms, 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 Bidder | Date: | |
| Name: | | |

| | |
|---|-----------------------|
| Signature: | |
| Change Control Note | CCN Number : |
| Part C : Authority to Proceed | |
| Implementation of this CCN as submitted in Part A, in accordance with Part B is: (tick as appropriate) | |
| Approved Rejected Requires Further Information (as follows, or as Attachment 1 etc.) | |
| For Purchaser and its nominated agencies | For the Bidder |
| Signature | Signature |
| Name | Name |
| Title | Title |
| Date | Date |



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

SECTION IV: Bid Submission Formats & Proformas

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section IV – Bid Submission Formats and Proformas

Table of Contents

| | |
|---|-----|
| 1. Lead Bidder’s Profile..... | 92 |
| 2. Consortium Partner(s) Details | 94 |
| 3. Details of Co-members of Consortium | 95 |
| 4. Response to Eligibility and Evaluation Criteria | 99 |
| 5. Project Experience | 106 |
| 6. Project Details | 107 |
| 7. Manpower Details..... | 108 |
| 8. CV Format..... | 109 |
| 9. Technical Bid Submission Letter | 110 |
| 10. List of Sub-Contractors and OEMs..... | 112 |
| 11. Details of Sub-Contractors and OEMs..... | 113 |
| 12. Proforma for EMD Bank Guarantee | 114 |
| 13. Manufacturer’s Authorization Form | 116 |
| 14. Certificate as to Corporate Principal..... | 117 |
| 15. Overview of Proposed Solution..... | 118 |
| 16. Details of Product Offered | 120 |
| 17. Intentionally Left Blank | 120 |
| 18. Performance Bank Guarantee for Contract Performance | 121 |
| 19. Non-Disclosure Agreement..... | 123 |
| 20. Service Level Agreement | 125 |
| 21. Intentionally left blank | 132 |
| 22. Joint Bidding Agreement | 133 |
| 23. Financial Bid Submission Letter..... | 136 |
| 24. Checklist for RFP response | 139 |

1. Lead Bidder's Profile

Form 1 – Lead Bidder Profile (FI/Bank or SI)

| S. No. | Particulars | Description/ Details | Reference Documents | Page No. |
|--------|-------------------------------------|----------------------|---|----------|
| A. | Name of Bidder | | - | - |
| B. | Contact Details | | - | - |
| | Address | | | |
| | Telephone No. | | | |
| | Fax | | | |
| | Email | | | |
| | Website | | | |
| C. | Incorporation Details | | Certified copy of incorporation under Indian Companies Act, 1956/Companies Act, 2013/ LLP Or Certified copy of Incorporation under Reserve Bank of India under Act 1934 <i>(Provide whichever is applicable)</i> | |
| | Incorporation Number | | | |
| | Date of Incorporation | | | |
| | Authority | | | |
| D. | GST Registration Details | | Certified copy of valid GST Registration in India | |
| | GST No. | | | |
| | Date | | | |
| | Registration Authority | | | |
| E. | Legal Status of Company | | | |
| F. | Name of Authorized Signatory | | Special Power of Attorney, duly authorizing the person signing the bid documents to sign on behalf of the bidder and thereby binding the bidder | |
| | Position | | | |
| | Telephone | | | |
| | Fax | | | |
| | Mobile | | | |
| | Email | | | |
| G. | CMM / CMMi certification | | Copy of Certificate issued by respective agency <i>(Not applicable in case of FI/Bank)</i> | |
| | a) Issue Date | | | |
| | b) Valid Up to | | | |
| | c) Authority | | | |
| | d) Field / Area | | | |

| S. No. | Particulars | Description/ Details | Reference Documents | Page No. |
|---|--|----------------------|---|----------|
| H. | ISO certification | | Copy of Certificate issued by respective agency <i>(Not applicable in case of FI/Bank)</i> | |
| | a) Issue Date | | | |
| | b) Valid Up to | | | |
| | c) Authority | | | |
| | d) Field / Area | | | |
| J | Number & Address of Offices | | | |
| | a) In India | | | |
| | b) In Haryana | | | |
| Full Name and Signature of the Authorized Representative: | | | | |

2. Consortium Partner(s) Details

Bidder is to provide details of the Consortium Partner(s), if any. Details of any Sub-Contractors, if any should also be shared along with summary of services to be sub-contracted (if applicable), in the format mentioned below:

Form 2 – Lead Bidder and Consortium Details

| Sr. No. | | Name of the Firm | Component wise Scope of Work (in case of Consortium partner) | Memorandum of Understanding (MoU) Details (please attach supporting documents also) |
|---------|--------------------------------------|------------------|--|---|
| 1. | Lead Bidder (SI or FI/Bank) | | | |
| 2. | Consortium Partner 1 (SI or FI/Bank) | | | |
| 3 | Consortium Partner 2 | | | |

3. Details of Co-members of Consortium

Form 3.1 – Consortium Partner-1

| S. No. | Particulars | Description/ Details | Reference Documents | Page No. |
|--------|-------------------------------------|----------------------|---|----------|
| A. | Name of Bidder | | - | - |
| B. | Contact Details | | - | - |
| | Address | | | |
| | Telephone No. | | | |
| | Fax | | | |
| | Email | | | |
| | Website | | | |
| C. | Incorporation Details | | Certified copy of incorporation under Indian Companies Act, 1956/Companies Act, 2013/ LLP Or Certified copy of Incorporation under Reserve Bank of India under Act 1934 <i>(Provide whichever is applicable)</i> | |
| | Incorporation Number | | | |
| | Date of Incorporation | | | |
| | Authority | | | |
| D. | GST Registration Details | | Certified copy of valid GST Registration in India | |
| | GST No. | | | |
| | Date | | | |
| | Registration Authority | | | |
| E. | Legal Status of Company | | | |
| F. | Name of Authorized Signatory | | Special Power of Attorney, duly authorizing the person signing the bid documents to sign on behalf of the bidder and thereby binding the bidder | |
| | Position | | | |
| | Telephone | | | |
| | Fax | | | |
| | Mobile | | | |
| | Email | | | |
| G. | CMM / CMMi certification | | Copy of Certificate issued by respective agency <i>(Provide whichever is applicable)</i> | |
| | a) Issue Date | | | |
| | b) Valid Up to | | | |
| | c) Authority | | | |
| | d) Field / Area | | | |

| S. No. | Particulars | Description/ Details | Reference Documents | Page No. |
|---|--|----------------------|---|----------|
| H. | ISO certification | | Copy of Certificate issued by respective agency <i>(Provide whichever is applicable)</i> | |
| | a) Issue Date | | | |
| | b) Valid Up to | | | |
| | c) Authority | | | |
| | d) Field / Area | | | |
| J | Number & Address of Offices | | | |
| | a) In India | | | |
| | b) In Haryana | | | |
| Full Name and Signature of the Authorized Representative: | | | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

Form 3.2 – Consortium Partner – 2

| S. No. | Particulars | Description/ Details | Reference Documents | Page No. |
|--------|-------------------------------------|----------------------|---|----------|
| A. | Name of Bidder | | - | - |
| B. | Contact Details | | - | - |
| | Address | | | |
| | Telephone No. | | | |
| | Fax | | | |
| | Email | | | |
| | Website | | | |
| C. | Incorporation Details | | Certified copy of incorporation under Indian Companies Act, 1956/Companies Act, 2013/ LLP Or Certified copy of Incorporation under Reserve Bank of India under Act 1934 <i>(Provide whichever is applicable)</i> | |
| | Incorporation Number | | | |
| | Date of Incorporation | | | |
| | Authority | | | |
| D. | GST Registration Details | | Certified copy of valid GST Registration in India | |
| | GST No. | | | |
| | Date | | | |
| | Registration Authority | | | |
| E. | Legal Status of Company | | | |
| F. | Name of Authorized Signatory | | Special Power of Attorney, duly authorizing the person signing the bid documents to sign on behalf of the bidder and thereby binding the bidder | |
| | Position | | | |
| | Telephone | | | |
| | Fax | | | |
| | Mobile | | | |
| | Email | | | |
| G. | CMM / CMMi certification | | Copy of Certificate issued by respective agency <i>(Provide whichever is applicable)</i> | |
| | a) Issue Date | | | |
| | b) Valid Up to | | | |
| | c) Authority | | | |
| | d) Field / Area | | | |
| H. | ISO certification | | | |

| S. No. | Particulars | Description/ Details | Reference Documents | Page No. |
|---|--|----------------------|---|----------|
| | a) Issue Date | | Copy of Certificate issued by respective agency <i>(Provide whichever is applicable)</i> | |
| | b) Valid Up to | | | |
| | c) Authority | | | |
| | d) Field / Area | | | |
| J | Number & Address of Offices | | | |
| | a) In India | | | |
| | b) In Haryana | | | |
| Full Name and Signature of the Authorized Representative: | | | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

4. Response to Eligibility and Evaluation Criteria

Form 4.1 – Response to Eligibility Criteria

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required | Response | Reference in Bid |
|--------|-------------------|---|---|----------|------------------|
| 1. | Legal Entity | <p><u>FI/ Bank:</u> The FI/Bank must be a Nationalized Bank or Scheduled Bank (included in the Second Schedule of Reserve Bank of India (RBI) Act, 1934)</p> <p><u>System Integrator (SI):</u> SI could be a Company incorporated in India under the companies Act 1956 or Companies Act 2013 (as amended till date) and subsequent amendments thereto OR An Entity registered under LLP Act 2008 and subsequent amendments thereto</p> <p>Should be in field of (IT) for at least for 5 years at the time of bid submission</p> <p><u>Consortium Partner:</u> Consortium Partner could be a Company incorporated in India under the companies Act 1956 or Companies Act 2013 (as amended till date) and subsequent amendments thereto</p> <p>OR An entity registered under LLP Act 2008 and subsequent amendments thereto</p> | Copy of Certificate of Incorporation/ Registration, GST Certificate, PAN Card | | |
| 2. | Annual Turnover | <p><u>FI/Bank and SI:</u> Lead Bidder should have annual turnover of at least INR 50 Crore each during last three financial years ending on 31st March 2020</p> <p><u>Consortium Partner:</u> Consortium partner should have annual turnover of at least INR 8 Crore each during last three financial years ending on 31st March 2020</p> | <p>Audited financial statements for last three financial years ending on 31st March 2020</p> <p>Provisional certificate from Statutory Auditor for 2019-20 is acceptable, in the case the audited financial statements are not available</p> | | |

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required | Response | Reference in Bid |
|--------|-------------------|---|--|----------|------------------|
| 3. | Net Worth | <p>All Members of Consortium: All members of consortium should have positive Net Worth during last three financial years ending on 31st March 2020</p> <p>For the purpose of this criterion, net-worth of only the bidding entity will be considered. Net-Worth of any parent, subsidiary, associated or other related entity will not be considered.</p> | Certificate from Statutory Auditor | | |
| 4. | Blacklisting | <p>All Members of Consortium: All members of consortium is not blacklisted by Government Agency in India or abroad or proved to have indulged in serious fraudulent practices by a Court of law or an independent Commission of Inquiry in India or abroad at the time of submission of the bid.</p> | An undertaking duly attested by Notary | | |
| 5. | Certifications | <p>FI/ Bank:</p> <p>a) FI/Bank should have its financial switch certified for acquiring transactions of Debit/ Credit/ Prepaid Cards in India. The bank should also be certified for acquiring transactions of NCMC Cards (Debit/ Credit/ Prepaid) as per the defined specification.</p> <p>b) FI/Bank should have its issuer host certified for issuance of NCMC cards</p> <p>System Integrator (SI):</p> <p>a) CMM/CMMi Level 3 or higher certified IT company and/ OR</p> | Copy of valid certificate which is self-attested by the authorised signatory | | |

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required | Response | Reference in Bid |
|--------|----------------------|--|---|----------|------------------|
| | | b) ISO 9001:2008 or later certified IT Company | | | |
| 6. | Experience | <p><u>FI/ Bank:</u></p> <p>a) FI/Bank must have experience as an acquirer for acceptance, operations and management of transactions through Contactless Smart Card</p> <p>b) The FI/Bank must have experience as an issuer for issuance of EMV/ Open loop cards</p> <p><u>System Integrator (SI):</u></p> <p>a) SI should have the minimum experience of AFCS Project implementation during last five years (as on bid submission date) as below:</p> <ul style="list-style-type: none"> • One (1) project with contract value equal of INR 24 Crore; OR • Two (2) projects with contract value of INR 15 Crore each; OR • Three (3) projects with contract value of INR 12 Crore each <p>For the purpose of evaluation, AFCS project will be defined as a project for a transport organization including Card/ cash-based transit Fare Collection System where system is integrated with ETIM machines</p> | Copy of substantial proof like PO/WO/LOA/Copy of Contract Completion Certificate would be preferred | | |
| 7. | ETIM Devices Offered | a) Lead bidder or its consortium partner(s) should have supplied 1000 or more EMV based ETIM/POS devices to Single or | Installation Certificate/ Purchase Order/Copy of contract/Completion certificate issued by the | | |

| S. No. | Basic Requirement | Prequalification/ Eligibility Condition | Proof Document Required | Response | Reference in Bid |
|--------|-------------------|--|--|----------|------------------|
| | | Multiple customers in India or abroad during last 5 years (from date of bid submission) b) The ETIM device proposed by bidder should be NPCI – qSPARC Certified at the time of bid submission | purchaser clearly indicating the quantity of equipment supplied in the project. Copy of NPCI-qSPARC certification | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

Form 4.2 – Response to Evaluation Criteria

| S. No. | Evaluation Criteria | Parameter | Marks | Response | Reference in Bid |
|-----------|--|--|-----------|----------|------------------|
| 1 | Experience | | 60 | | |
| 1A | Experience in implementation of EMV/ Open loop ticketing system for transport sector in India in last 7 years from the last date of bid submission - Lead Bidder or its Consortium partner. (Completed/ongoing projects) | 2 Projects – 10 Marks each | 20 | | |
| | | Project Involving following as fare media | | | |
| | | a) EMV/ Open loop based debit/credit/ pre-paid cards or RuPay Pre-paid cards (NCCMC/q-Sparc Specs) | 2.5 | | |
| | | b) EMV/Open loop contactless debit or credit cards | 2.5 | | |
| | | Number of smart cards issued in project: | | | |
| | | a) More than 1 lakh to up to 2 lakh cards | 1 | | |
| | | b) More than 2 lakh to up to 3 lakh cards | 2 | | |
| | | c) More than 3 lakh to up to 4 lakh cards | 3 | | |
| | | d) More than 4 lakh | 5 | | |
| 1B | IT implementation projects in India or abroad in last 7 years of Lead bidder or its consortium partner– Completed Projects (Completed projects refers to projects where Go live/ Acceptance has occurred) | 2 Projects – 10 Marks each | 20 | | |
| | | Worth of Project | | | |
| | | a) More than 5 Crore to up to 8 Crore | 2 | | |
| | | b) More than 8 Crore to up to 12 Crore | 3 | | |
| | | c) More than 12 Crore to up to 16 Crore | 4 | | |
| | | d) More than 16 Crores | 5 | | |
| | Projects Involving | | | | |
| | a) Software Implementation for transit system | 1 | | | |
| | b) Open Loop Ticketing System | 1 | | | |
| | c) GPS System | 1 | | | |
| | d) Issuance of Cards | 1 | | | |
| | e) WAN setup | 1 | | | |
| 1C | IT implementation projects involving Ticketing Experience in transport sector in India or abroad in last 7 years of Lead bidder or its consortium | 2 Projects –5 Marks | 10 | | |
| | | Project Involving | | | |
| | | Web based ticket reservation for public interface (Online reservation system) | 2 | | |
| | Ticket issuance from ticket Counter | 1 | | | |

| S. No. | Evaluation Criteria | Parameter | Marks | Response | Reference in Bid |
|--|---|--|-----------|----------|------------------|
| | Partner – Completed Projects (Completed projects refers to projects where Go live/ Acceptance has occurred) | Ticket issuance from Handheld devices | 2 | | |
| 1D | Project Experience of EMV based ETIM/ POS devices – Lead bidder or its consortium partners | No. of EMV based ETIM/POS Devices supplied: (The customers or client for this criterion can be one or different entities within India or abroad. The proof should be a work order or letter from the client which clearly mentions the number of ETIMs supplied) | 10 | | |
| | | 1000 – 2000 Devices | 2 | | |
| | | 2001 – 3000 Devices | 4 | | |
| | | 3001 – 4000 Devices | 6 | | |
| | | 4001 – 5000 Devices | 8 | | |
| | | 5001 or more | 10 | | |
| 2 | Manpower | | 20 | | |
| 2A | Project Director | | 5 | | |
| | B.E/B.Tech and MBA/PG with minimum 12 plus years of experience in Intelligent Transportation System (ITS) implementation projects with Government/ PSU in India | Total no. of years of experience: a) 15+ years b) 12+ years | 3 1 | | |
| | | Past experience in Intelligent Transportation System (ITS) implementation projects with Government / PSU in India: a) >=3 projects b) 1-2 projects | 2 1 | | |
| | 2B | Project Manager | | 5 | |
| MCA/MBA/B.Tech/ BE or Master in any discipline having minimum 9 plus years of experience in Intelligent Transportation System (ITS) implementation projects with Government/PSU in India | | Total no. of years of experience: a) 11+ years b) 9+ years | 3 1 | | |
| | | Past experience in Intelligent Transportation System (ITS) implementation projects with Government / PSU in India: a) >=3 projects b) 1-2 projects | 2 1 | | |

| S. No. | Evaluation Criteria | Parameter | Marks | Response | Reference in Bid |
|---|--|---|-----------|-----------|------------------|
| 2C | Solution Architect | | 5 | | |
| | B. Tech with M. Tech/MBA or Bachelors in IT/Computer Science with MCA having certification in Architecture and minimum 8 plus years of experience in solution design | Total no. of years of experience: a) 10+ years b) 8+ years | 3 1 | | |
| | | Past experience implementing any of the proposed solutions: a) >=2 projects b) 1 project | 2 1 | | |
| | 2D | AFC Expert | | 5 | |
| B. Tech with M. Tech/MBA or Bachelors in IT/Computer Science with MCA minimum 8 plus years of experience in AFC | | Total no. of years of experience: a) 10+ years b) 8+ years | 3 1 | | |
| | | Past experience implementing AFC solutions in Transport Sector: a) >=4 projects b) 2 projects | 2 1 | | |
| 3 | | Solution Proposed | | 20 | |
| 3A | Technical proposal (Paper based evaluation) | Max Marks | 10 | | |
| | | Compliance to Section VI & VII of RFP: a) 100% compliance b) Non-Compliance | 4 0 | | |
| | | Solution proposed: a) Open Loop Ticketing solution b) Issuance of NCMC Cards c) Online Reservation System Enhancement & integration (Portal & Mobile App) d) GPS e) Brevity, exhaustiveness, assumptions, clarity of thoughts etc. | 4 | | |
| | | Work plan and manpower deployment plan | 2 | | |

Bidder: Signature -----

Name -----

Designation -----

Company -----

Date -----

5. Project Experience

Form 5.1 – Project Experience List

| S. No. | Name of project | Client name | Role of the Bidder | Cost of assignment | Date of commencement of the project | Date of Go – Live of the project |
|--------|-----------------|-------------|--------------------|--------------------|-------------------------------------|----------------------------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

For each of the project listed above the bidder needs to provide documentary evidence

Form 5.2 – ETIM Project List

| S. No. | Name of project | Client name | Number of Devices Supplied | Date of Purchase Order / Work Order | Date of Go – Live of the project |
|--------|-----------------|-------------|----------------------------|-------------------------------------|----------------------------------|
| | | | | | |
| | | | | | |
| | | | | | |

For each of the project listed above the bidder needs to provide documentary evidence

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

6. Project Details

Form 6 - Project Experience Details

| | |
|---|---------------------------------|
| For FI/Bank/ Consortium Partners (please specify) _____ | |
| Name of the project: | Location: |
| Size: - [No of Man months] [Duration] | Project Value: (in INR Crores): |
| Status: (Complete / Ongoing / Just started) | |
| Client Name: | Client Address: |
| Brief description of the project: | |
| Actual Services provided in the project: | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

7. Manpower Details

Form 7 – Details of Manpower for the Project

| S. No. | Name | Current Position in the Firm | Name of the Firm | Proposed Position | Age | Professional Years of experience in years | Qualifications |
|--------|------|------------------------------|------------------|--|-----|---|----------------|
| 1 | | | | Project Director | | | |
| 2 | | | | Project Manager | | | |
| 3 | | | | Solution Architect | | | |
| 4 | | | | AFC Expert | | | |
| 5 | | | | System Administrator | | | |
| 6 | | | | Network Specialist | | | |
| 7 | | | | Database Administrator | | | |
| 8 | | | | Storage Engineer | | | |
| 9 | | | | Security Engineer | | | |
| 10 | | | | Facilities Management & Helpdesk Coordinator | | | |
| 11 | | | | Technical Trainer | | | |
| 12 | | | | Process Trainer | | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

8. CV Format

Form 8: Curriculum Vitae (CV)

| | | | | |
|-----|--|---------------------------|------------------------|----------------------|
| 1. | Proposed Position: | | | |
| 2. | Name of Firm and Role | | | |
| 3. | Name of Staff: | | | |
| 4. | Position held in Firm | | | |
| 5. | Date of Birth: | | Nationality: | |
| 6. | Education: | | | |
| | Year | Degree/Examination | Institute/Board | |
| | | | | |
| | | | | |
| 7. | Membership of Professional Associations: | | | |
| 8. | Other Training: | | | |
| 9. | Countries of Work Experience: | | | |
| 10. | Languages: | | | |
| | Language | Speaking | Reading | Writing |
| | | | | |
| | | | | |
| | | | | |
| 11. | Employment Record: | | | |
| | From | To | Employer | Position Held |
| | | | | |
| | | | | |
| 12. | Detailed Tasks Assigned: | | | |
| 13. | Work Undertaken that best illustrates capability to handle the tasks assigned: | | | |
| | | | | |
| 14. | Certification: | | | |
| | I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, my experience and my committed man-months for this project. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged. | | | |
| | | | | |
| | Signature of the staff | Date: | | |
| | Full name of authorised representative: | | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

9. Technical Bid Submission Letter

Form 9 – Technical Bid Submission Letter

(To be submitted on the Letterhead of the responding firm)

To

**Director,
State Transport Department, Haryana
2nd Floor, 30-Bays Building,
Sector-17, Chandigarh, India**

Sir,

Sub: Response to the **Request for Proposal ('RFP') for Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System for State Transport Department, Government of Haryana on Build Own Operate and Transfer (BOOT) Model**

Ref: **RFP No. <<>> dated << 2020>>**

We, the undersigned Bidders, having read and examined in detail all the RFP/ bidding documents in respect of “Request for Proposal ('RFP') for Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System for State Transport Department, Government of Haryana on Build Own Operate and Transfer (BOOT) Model”, do hereby propose to provide our services as specified in the bidding proposal submitted by us.

1. NO DEVIATIONS

We declare that all the services shall be performed strictly in accordance with the RFP documents and we agree to all the terms and conditions in the RFP. We have not taken any deviations in the Scope of work, Terms and Conditions, Functional Requirement Specifications and Technical Specifications.

Further, we confirm that we have not mentioned any additional conditions, assumptions and if any, found in the Proposal documents shall not be given effect to.

2. QUALIFYING DATA

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

3. PERFORMANCE BANK GUARANTEE

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance bank guarantee in the form prescribed in Clause 18 of **Section IV of the RFP**

4. We hereby declare that our bid is made in good faith, without collusion or fraud. All the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification

5. We understand that our bid is binding on us and that you are not bound to accept any Bid you receive.

Thanking you,

Yours faithfully,

(Signature of the Lead Bidder)

Printed Name

Designation

Seal

Date:

Place:

Business Address:

10. List of Sub-Contractors and OEMs

Form 10.1 – List of Sub-Contractors

| Sr. No. | Role | Name of Sub-Contractor | Responsibility | Products/Services Offered |
|---------|------|------------------------|----------------|---------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Form 10.2 – List of OEMs

| Sr. No. | Role | Name of OEM | Responsibility | Products/Services Offered |
|---------|------|-------------|----------------|---------------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

11. Details of Sub-Contractors and OEMs

Form 11 – Details of Sub-Contractors and OEMs

The bidder must provide the following details for the sub-contractors and original manufacturers of all the products proposed to be provided:

| S. No. | Particulars | Description/Details | Reference Documents | Page No. |
|---|--|---------------------|--|----------|
| A. | Name of Organization | | - | - |
| B. | Contact Details | | - | - |
| | Address | | | |
| | Telephone No. | | | |
| | Fax | | | |
| | Email | | | |
| | Website | | | |
| C. | Incorporation Details | | Certified copy of incorporation under Indian Companies Act, 1956/Companies Act, 2013/LLP | |
| | Incorporation Number | | | |
| | Date of Incorporation | | | |
| | Authority | | | |
| D. | GST Registration Details | | Certified copy of valid GST Registration in India | |
| | GST No. | | | |
| | Date | | | |
| | Registration Authority | | | |
| E. | Legal Status of Company | | | |
| F. | Name of Authorized Signatory | | | |
| | Position | | | |
| | Telephone | | | |
| | Fax | | | |
| | Mobile | | | |
| | Email | | | |
| G. | Number & Address of Offices | | | |
| | a) In India | | | |
| | b) In Haryana | | | |
| Full Name and Signature of the Authorized Representative: | | | | |

Bidder:

Signature -----
Name -----
Designation -----
Company -----
Date -----

12. Proforma for EMD Bank Guarantee

Form 12 – Proforma for EMD Bank Guarantee

(To be stamped in accordance with Stamp Act)

(The non-judicial stamp paper should be in the name of issuing bank)

Ref.....

Bank Guarantee No.....

Date.....

To,

Director
State Transport Department, Haryana
2nd Floor, 30-Bays Building,
Sector-17, Chandigarh, India

Dear Sirs,

In accordance with your Invitation to Bid under your Specification No.....
M/shaving its Registered/Head Office at
.....(hereinafter called the “Bidder”) wish to
participate in the said Bid forand you, as a
special favour, have agreed to accept an irrevocable and unconditional Bank Guarantee for an amount
of **Rs. 60,00,000 (Rupees Sixty Lakhs only)** valid up toon behalf of the
Bidder, as a condition precedent for participation in the said Bid.

We..... Bank at Having our Head Office at
..... (Local
Address) guarantee and undertake to pay immediately on demand by **State Transport Department,
Haryana** the amount of Rs. 60,00,000 (Rupees Sixty Lakhs only) without any reservation, protest,
demur and recourse.

Any such demand made by said ‘Purchaser’ shall be conclusive and binding on us irrespective of any
dispute or difference raised by the Bidder.

This guarantee shall be irrevocable and shall remain valid up to if any
further extension of this guarantee is required, the same shall be extended to such required period (not
exceeding one year) on receiving instructions from M/s.
..... on whose behalf this guarantee is
issued. This date should be 90 days after the date for which the bid is valid.

Notwithstanding anything contained hereinabove:

- a) Our liability under this Bank Guarantee shall not exceed and is restricted to Rs. _____
(Rupees _____ only)
- b) This Guarantee shall remain in force up to and including _____ (including claim period of three
months)
- c) Unless the demand/claim under this guarantee is served upon us in writing before _____ all the
rights of Purchaser under this guarantee shall stand automatically forfeited and we shall be relieved and
discharged from all liabilities mentioned hereinabove.

In witness whereof the Bank, through its authorized Officer, has set its hand and stamp on this
.....day of20 At

WITNESS

Dated thisday of.....20 At

WITNESS

..... (Signature)
.....

(Signature)

..... (Bank's Rubber Stamp)
(Name)
..... (Name)

(Official Address)

Designation with Bank Stamp.....

Attorney as per Power of Attorney No.

Dated

13. Manufacturer's Authorization Form

Form 13 – Manufacturer's Authorization Form

Manufacturer's Authorization

(To be obtained from all OEMs on OEM letterhead)

RFP No.:

Date: _____

To

Director
State Transport Department, Haryana
2nd Floor, 30-Bays Building,
Sector-17, Chandigarh, India

WHEREAS _____ Who are official manufacturers of _____ having factories at _____ do hereby authorize _____ to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us _____ and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty for the complete project duration, with respect to the Goods offered by the above firm in reply to this Invitation for Bids. We also confirm that the Goods/Services supplied as a part of the RFP shall not be End of Sale / Life / Support for the entire contract period. Also the Goods / Services supplied as a part of RFP shall be supported for the entire contract period. The products offered by us are of equivalent or higher specifications as mentioned in the RFP.

Signature: _____

Full Name: _____

Address: _____

14. Certificate as to Corporate Principal

Form 14 - Certificate as to Corporate Principal

(To be signed by any of Board Directors or Company Secretary)

(To be accompanied along with requisite copy of the board resolution)

I _____ certify that I am _____ of the Company under the laws of _____ and that _____ who signed the above tender is authorized to bind the Company / Firm by authority of its governing body.

Signature: _____

Full Name: _____

Address: _____

15. Overview of Proposed Solution

Please provide relevant details on Solutions & Services specific to Bidder's proposal in the form of following write ups

Form 15: Proposed Solution

| |
|--|
| a. Overall Approach & Methodology |
| 1. Understanding of the State Transport, Haryana and its requirements |
| 2. Understanding of the project |
| 3. Overall approach towards the project |
| 4. Approach to implementation of Open Loop Ticketing System using NCMC cards, Bus Pass System and GPS System |
| 5. Data migration approach |
| 6. Implementation schedule proposed by the bidder |
| 7. Proposed Solution – Architecture, data flow, products, design etc |
| 8. Network Map of the proposed GPRS service provider(s) showing coverage of GPRS services throughout the state and highlighting areas where the GPRS services of the GPRS service provider are not available |
| 9. Detailed solution write ups on – Open Loop Ticketing through EMV based ETIM, NCMC Cards, Bus Pass System, Online Reservation System (ORS), Mobile App, GPS system, features and benefits of proposed solution |
| b. Training & operations |
| 1. Approach and plan for operations post go-live |
| 2. Approach and plan for handling department's temporary requirements |
| 3. Approach and Plan for Training delivery |
| 4. Training Course outlines |
| c. Facility Management Services |
| 1. Approach and Methodology for deployment, management of manpower for service delivery |
| 2. Strategy & plan for implementing and managing Help Desk |
| d. Data Centre, STMS and Other Applications |
| 1. Proposed Approach and Methodology towards implementation of Data Centre and its integration |
| 2. Proposed Approach and Methodology towards STMS its related applications implementation |

Methodology & Detailed Project Plan

1. Bidder should cover details of the methodology proposed to be adopted for providing services relating to STMS project implementation.
2. The Bidder is required to include his understanding of the requirements, Solution architecture, Deployment Strategy and Implementation Plan in his approach and methodology.
3. Bidder is expected to provide details of the organization structure proposed for the execution of this contract. This should cover the composition of the complete team including the Lead Bidder, Consortium Partner and sub-contractors/OEM, including their escalation matrix.
4. An Implementation Plan in the form of a **Detailed Project Plan** covering break-up of each phase into the key activities, along with the start and end dates must be provided as per format given below.

Form 15.1: Detailed Project Plan

| Activity-wise Timelines | | | | | | | |
|--------------------------------|------------------|--------------------|---|---|---|---|-----|
| S. No. | Item of Activity | Month wise Program | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | ... |
| | Project Plan | | | | | | |
| 1 | Activity 1 | | | | | | |
| 1.1 | Sub-Activity 1 | | | | | | |
| 1.2 | Sub-Activity 2 | | | | | | |
| 2 | | | | | | | |
| 2.1 | | | | | | | |
| 2.2 | | | | | | | |
| 3 | | | | | | | |
| 3.1 | | | | | | | |
| 4 | | | | | | | |

Note: The above activity chart is just for the purpose of illustration. Bidders are requested to provide detailed activity & phase wise timelines for executing the project with details of deliverables & milestones as per their proposal.

Bidder:

Signature -----
 Name -----
 Designation -----
 Company -----
 Date -----

16. Details of Product Offered

Form 16.1: Solution Stack Template

Provided as a separate Excel Sheet – State Transport Haryana_STMS_Solution_Stack_Template.xlsx.
Bidders should submit the filled Solution Stack Template with all required information.

17. Intentionally Left Blank

18. Performance Bank Guarantee for Contract Performance

Form 18 – Performance Bank Guarantee for Contract Performance

(To be stamped in accordance with Stamp Act)

(The non-judicial stamp paper should be in the name of issuing bank)

Ref..... Bank Guarantee No.....
Date.....

To,

Director
State Transport Department, Haryana
2nd Floor, 30-Bays Building,
Sector-17, Chandigarh, India

Dear Sirs,

In consideration of the **State Transport, Haryana** (hereinafter referred to as the ‘**Purchaser**’, ‘**Department**’, which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to M/s..... with its Registered/Head Office at (hereinafter referred to as the ‘**Bidder**’, which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a Contract by issue of Purchaser’s Letter of Intent No.dated and the same having been unequivocally accepted by the **Bidder** valued at **INR 2,00,00,000/- (Two Crore only)** for..... And the **Bidder** having agreed to provide a Contract Performance Guarantee for “**Request for Proposal (‘RFP’) for Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System for State Transport Department, Government of Haryana on Build Own Operate and Transfer (BOOT) Model**” (hereinafter called “**Proposed Services**”) detailed in the RFP for the entire Contract equivalent to*

We, having its Head Office (Name & Address) at (hereinafter referred to as the ‘**Bank**’, which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Purchaser, on demand any and all monies payable by the Bidder to the extent of as aforesaid at any time up to ** (days/ month/ year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Bidder.

Any such demand made by the Purchaser on the Bank shall be conclusive and binding notwithstanding any difference between the Purchaser and Bidder or any dispute pending before any court, tribunal or any other authority. The Bank undertakes not to revoke this guarantee during its currency without, previous consent of the Purchaser and further agrees that the guarantee herein contained shall continue to be enforceable till the Purchaser discharges this guarantee.

The Purchaser shall have the fullest liberty, without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the Contract by the Bidder. The Purchaser shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Bidder, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Purchaser and the Bidder or any other course of or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference to the

matters aforesaid or any of them or by reason of any other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser or by any other matters or thing whatsoever which under law, would, but for this provision, have the effect of relieving the Bank.

The Bank also agrees that the Purchaser at its option shall be entitled to enforce this guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Bidder and notwithstanding any security or other guarantee that the Purchaser may have relation to the Bidder's liabilities.

Notwithstanding anything contained hereinabove:

- a) Our liability under this Bank Guarantee shall not exceed and is restricted to Rs. _____ (Rupees _____ only)
- b) This Guarantee shall remain in force up to and including _____ (including claim period of three months)
- c) Unless the demand/claim under this guarantee is served upon us in writing before _____ all the rights of PURCHASER under this guarantee shall stand automatically forfeited and we shall be relieved and discharged from all liabilities mentioned hereinabove.

WITNESS

Dated this day of 20 At

WITNESS

..... (Signature)
.....

(Signature)

..... (Bank's Rubber Stamp)

(Name)

..... (Name)
.....

(Official Address)

Designation with Bank Stamp.....

Attorney as per Power of Attorney No.

Dated

Note:

* The date will be One eighty (180) days after the end of the Contract Period.

19. Non-Disclosure Agreement

Form 19 – Non-Disclosure Agreement

WHEREAS, we the undersigned Bidder, _____, having our principal place of business/ registered office at _____, are desirous of bidding for RFP No. **XX** dated MM-DD-YYYY covering “**Request for Proposal (‘RFP’) for Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System for State Transport Department, Government of Haryana on Build Own Operate and Transfer (BOOT) Model**” (hereinafter called the said 'RFP') to the **Director, State Transport Department, Government of Haryana, 2nd floor, 30-Bays Building, Sector-17, Chandigarh** hereinafter referred to as 'Purchaser' and,

WHEREAS, the Bidder is aware and confirms that the Purchaser’s business/ operations, information, Application/software, hardware, business data, architecture schematics, designs, storage media and other information / documents made available by the Purchaser in the RFP documents during the bidding process and thereafter, or otherwise (confidential information for short) is privileged and strictly confidential and/or proprietary to the Purchaser,

NOW THEREFORE, in consideration of disclosure of confidential information, and in order to ensure the Purchaser’s grant to the Bidder of specific access to Purchaser’s confidential information, property, information systems, network, databases and other data, the Bidder agrees to all of the following conditions.

It is hereby agreed as under:

1. The confidential information to be disclosed by the Purchaser under this Agreement (“Confidential Information”) shall include without limitation, any and all information in written, representational, electronic, verbal (“to be confirmed in writing within fifteen days of such verbal disclosure.) or other form relating directly or indirectly to processes, methodologies, algorithms, risk matrices, thresholds, parameters, reports, deliverables, work products, specifications, architecture, project information, money laundering typologies, related computer programs, systems, trend analysis, risk plans, strategies and information communicated or obtained through meetings, documents, correspondence or inspection of tangible items, facilities or inspection at any site to which access is permitted by the Purchaser.
2. Confidential Information does not include information which:
 - a. the Bidder knew or had in its possession, prior to disclosure, without limitation on its confidentiality;
 - b. information in the public domain as a matter of law;
 - c. is obtained by the Bidder from a third party without any obligation of confidentiality;
 - d. the Bidder is required to disclose by order of a competent court or regulatory authority;
 - e. is released from confidentiality with the written consent of the Purchaser.

The Bidder shall have the burden of proving hereinabove are applicable to the information in the possession of the Bidder.

3. The Bidder agrees to hold in trust any Confidential Information received by the Bidder, as part of the Bidding process or otherwise, and the Bidder shall maintain strict confidentiality in respect of such Confidential Information, and in no event a degree of confidentiality less than the Bidder uses to protect its own confidential and proprietary information. The Bidder also agrees:
 - a. to maintain and use the Confidential Information only for the purposes of bidding for this RFP and thereafter only as expressly permitted herein;
 - b. to only make copies as specifically authorized by the prior written consent of the Purchaser and with the same confidential or proprietary notices as may be printed or displayed on the original;
 - c. to restrict access and disclosure of Confidential Information to their employees, agents, and representatives strictly on a "need to know" basis, to maintain confidentiality of the Confidential Information disclosed to them in accordance with this clause; and

- d. to treat Confidential Information as confidential unless and until Purchaser expressly notifies the Bidder of release of its obligations in relation to the said Confidential Information.
4. Notwithstanding the foregoing, the Bidder acknowledges that the nature of activities to be performed as part of the Bidding process or thereafter may require the Bidder's personnel to be present on premises of the Purchaser or may require the Bidder's personnel to have access to software, hardware, computer networks, databases, documents and storage media of the Purchaser while on or off premises of the Purchaser. It is understood that it would be impractical for the Purchaser to monitor all information made available to the Bidder's personnel under such circumstances and to provide notice to the Bidder of the confidentiality of all such information.

Therefore, the Bidder shall disclose or allow access to the Confidential Information only to those personnel of the Bidder who need to know it for the proper performance of their duties in relation to this project, and then only to the extent reasonably necessary. The Bidder will take appropriate steps to ensure that all personnel to whom access to the Confidential Information is given are aware of the Bidder's confidentiality obligation. Further, the Bidder shall procure that all personnel of the Bidder are bound by confidentiality obligation in relation to all proprietary and Confidential Information received by them which is no less onerous than the confidentiality obligation under this agreement.

5. The Bidder shall establish and maintain appropriate security measures to provide for the safe custody of the Confidential Information and to prevent unauthorised access to it.
6. The Bidder agrees that upon termination/expiry of this Agreement or at any time during its currency, at the request of the Purchaser, the Bidder shall promptly deliver to the Purchaser the Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the Bidder or its Affiliates or directors, officers, employees or advisors based on the Confidential Information and promptly certify such destruction.
7. Confidential Information shall at all times remain the sole and exclusive property of the Purchaser. Upon completion of the Bidding process and/or termination of the contract or at any time during its currency, at the request of the Purchaser, the Bidder shall promptly deliver to the Purchaser the Confidential Information and copies thereof in its possession or under its direct or indirect control, and shall destroy all memoranda, notes and other writings prepared by the Bidder or its Affiliates or directors, officers, employees or advisors based on the Confidential Information within a period of sixty days from the date of receipt of notice, or destroyed, if incapable of return. The destruction shall be witnessed and so recorded, in writing, by an authorized representative of the Purchaser. Without prejudice to the above the Bidder shall promptly certify to the Purchaser, due and complete destruction and return. Nothing contained herein shall in any manner impair rights of the Purchaser in respect of the Confidential Information.
8. In the event that the Bidder hereto becomes legally compelled to disclose any Confidential Information, the Bidder shall give sufficient notice and render best effort assistance to the Purchaser to enable the Purchaser to prevent or minimize to the extent possible, such disclosure. Bidder shall not disclose to a third party any Confidential Information or the contents of this RFP without the prior written consent of the Purchaser. The obligations of this Clause shall be satisfied by handling Confidential Information with the same degree of care, which the Bidder applies to its own similar Confidential Information but in no event less than reasonable care.

For and on behalf of:

(BIDDER)

Authorised Signatory

Name:

Designation:

Office Seal:

Place:

Date :

Note: Bidder and shall execute a **Non Disclosure Agreement (NDA)** as per above format, in favour of the Purchaser before signing of the contract

20. Service Level Agreement

Form 20 - Service Level Agreement

1. Purpose of this Agreement

The purpose of this SLA is to clearly define the levels of service to be provided by Bidder to Purchaser ('State Transport Department, Haryana) for the duration of this contract or until this SLA has been amended. The benefits of this SLA are to:

- a) Trigger a process that applies Purchaser and Bidder management attention to some aspect of performance only when that aspect drops below an agreed upon threshold, or target.
- b) Makes explicit the performance related expectations on performance required by the Purchaser
- c) Assist the Purchaser to control levels and performance of services provided by Bidder
- d) This SLA is between Bidder and Purchaser.

2. Description of Services Provided

Bidder shall provide service as defined in Section V - Scope of Work, in accordance to the definitions and conditions as defined in the Section III - GCC.

3. Duration of SLA

This Service level agreement would be valid for entire period of contract. This SLA may be reviewed and revised according to the procedures detailed in para 14 - SLA Change Control of this agreement.

4. Service Level Agreements & Targets during Implementation

- a) During Implementation Phase:
 - (i) Penalty for delay in final Go-Live of the project at all locations = Rs 20,000/- per day per depot
 - (ii) Penalty for delay in Go-Live of ETIM in the pilot depot = Rs 10,000/- per day per depot
 - (iii) Penalty for delay in the remaining depot (non-pilot depots) compared to the project implementation schedule= Rs 1000/- per day per depot
 - (iv) The penalty shall be capped at INR 2.00 Crore
- b) During Operation & Maintenance Phase:
 - (i) The penalty in a month shall be capped at maximum of 25% of the monthly invoice.

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

This section is agreed to by Purchaser and Bidder as the key Bidder 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.

Table 1 - Service Level Chart

| S. No | Service | Parameter | Service Level | Validation | Penalty |
|-------|---------------------------------------|---|---------------|---|---|
| 1 | Project Management | Submission of Monthly Project Status reports & Conducting Status meetings | 100% | Minutes of Meetings, Approval of Status reports by Project Manager. Status Report to Include: Activity wise Status (planned vs actual), Risk & Mitigation, Issues & Concerns, Activities completed during the month, Activities planned, for the next month etc. Availability Management, Performance Management, Capacity management, Security Management, Security Management Reports Report to be submitted by 5 th day of every month. | 0.05% of monthly charges for every default |
| 2 | Helpdesk | Resolution of ticket logged as per the Severity definition chart | >=99% | Reports generated from Ticket logging system | 95% -99% calls resolved in specified time: 2% penalty on the monthly charges |
| | | | | | 90% - 95% calls resolved in specified time: 5% penalty on the monthly charges |
| 3 | Install, Moves, Add, Changes Services | Should be part of Monthly project status report | >=95% | Project Status Report Report (Report to be submitted by 5 th day of every month.) | 0.2% of monthly charges |
| 4 | Asset / Inventory Management | Provide monthly MIS of Asset Inventory | >=95% | | 0.2% of monthly charges |
| 5 | | Conduct Annual Physical Asset verification once a year and give a report within 2 months from the verification. | 100% | Management approval of Physical Asset Verification report | 0.5% of monthly charges |
| 6 | Antivirus Management | Updating of latest anti-virus definition file on workstations and Servers on being made | >=98% | Reports generated from Anti-Virus software console | 0.1% of monthly charges |

| S. No | Service | Parameter | Service Level | Validation | Penalty |
|-------|------------------------------------|---|---------------|--|---|
| | | available on Supplier's website | | | |
| 7 | | Virus incident occurred | 100% | Reports generated from Anti-Virus software console | 0.1% of monthly charges for each incident. |
| 8 | Server Administration / Management | Rollout of patches (OS, infra level) on workstations and Servers after patch being approved on test environment | $\geq 98\%$ | Patch update report | 0.1% of monthly charges |
| 9 | | Uptime of servers | $\geq 99.8\%$ | Report | 2% of monthly charges for less than 99.8% 3% of monthly charges for less than 98% 5% of monthly charges for less than 95% |
| 10 | Database Administration services | MIS report of database scheme, disk space, storage and user role | 100% | Report | 0.5% of monthly charges |
| | | Uptime of databases | $\geq 99.8\%$ | Report | 2% of monthly charges for less than 99.8% 3% of monthly charges for less than 98% 5% of monthly charges for less than 95% |
| 11 | Backup/Restore Management | The SI should take backup as per the backup | 100% | Report | If the negligence is found in |

| S. No | Service | Parameter | Service Level | Validation | Penalty |
|-------|---|---|---------------|--|---|
| | | schedule defined by department | | | monthly audit, the Bidder would be penalized a sum of Rs. 5,000/- per negligence. |
| 12 | | Department would periodically (once a quarter on a random day) request the Bidder to restore the backup data | 100% | Report | Rs 5000/- for every restore test failure |
| 13 | Management of EMS | Daily MIS of server and device health checkups (CPU, disk space, memory utilization, I/O utilization, Central Storage etc.) | 100% | Reports generated from EMS system (Report to be generated Daily, Fortnightly, Monthly, Quarterly & Yearly) | 0.5% of monthly charges |
| 14 | Online Reservation system availability of department portal | Availability of Online reservations system 24X7 | >=99.8 % | Monthly report on Application availability | 1% of monthly charges |
| 15 | ETIM Operations Log | Availability of daily report on ETIMs operated with user, duration of operations and tickets sold | 100% | Daily Report Generated from Central System | 0.5% of monthly charges |
| 16 | ETIM Availability | Availability of ETIMs | 100% | Daily Report Generated from Central System | Rs 150/- per ETIM per day |
| 17 | ETIM Ticket data transmitted over GPRS | Ticketing data pushed to central server directly and manual upload of data from depot not required | 98% | Daily Report Generated from Central System | 0.2% of monthly charges |

| S. No | Service | Parameter | Service Level | Validation | Penalty |
|--------|--|---|---------------|--|--|
| 18 | Process operations response times | Update transactions to commit transactions: 2 seconds Simple query: 3 seconds. Complex query: 4 to 8 seconds Batch Operations: 15 Mins | >=90% | Report | 0.5% of monthly charges |
| 19 | Training | Providing all the training as per the training schedule decided and signed off by department | 100% | Training Attendance Sheets and training completion report. | Rs 5000/- per batch per month for a training delayed by 1 month against the training schedule. |
| Sr. No | Service | Acceptable level | Low | Critical | Penalty |
| 1 | Card validators/readers not accepting cards | Less than 0.2% | 0.2% to 1% | More than 1% occurrences in a calendar month | Rs.500 per transections. |
| 2 | Incorrect/Failed personalization – Citizen Inconvenience | Less than 0.2% | 0.2% to 1% | More than 1% occurrences in a calendar month | Rs.500 per defect. |

6. Uptime Calculation for the month:

- a) { % Monthly Availability = [(Actual Uptime + Scheduled Downtime) / Total No. of Hours in a Month] x 100 }
- b) "Actual Uptime" means, of the Total Hours, the aggregate number of hours in any month during which each of the equipments is actually available for use.
- c) "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 Bidder's (or Service provider's) failure to exercise due care in performing Bidder's responsibilities.
- d) 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.
- e) 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.

- f) "Total Hours" means the total hours over the measurement period i.e. one month (24 * number of days in the month).
- g) Card validators/readers not accepting cards SLA will be based on customer complaints, this information should be fed into the SLA measurement system.
- h) Failure of transaction due to acquirer switch connectivity will get calculate on Failed transaction details based on MIS Report.
- i) Incorrect/Failed personalization – Citizen Inconvenience will get calculate If the wrong card is printed by FI, count of reprints need to be captured. Sum total of such reprints can be used to monitor incorrect personalization.

7. Cumulative Downtime Calculation:

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

8. Severity definition chart is tabulated below for reference.

Table 2: Severity Definition Chart

| Support Category | Criteria | Resolution | Maximum Response Time |
|------------------|---|------------|-----------------------|
| Critical | The system is unable to be used for normal business activities. There is certainty of financial loss to PURCHASER. | 90 Minutes | 15 Minutes |
| Urgent | There is a problem with part of the system, which impacts on Purchaser’s decision making. No viable workaround is available. There is a likelihood of financial loss. | 4 Hours | 1 Hour |
| High | The efficiency of users is being impacted but has a viable workaround. | 6 hours | 2 Hours |
| Medium | A low impact problem that affects the efficiency of users but has a simple workaround. | 12 Hours | 8 Hours |
| Low | A fault, which has no particular impact on processing of normal business activities. | One Week | 8 Hours |

Finalisation of classification of defaults would be done on mutual consent during requirement gathering stage and would be also updated during the contract period whenever required.

9. Breach of SLA

- a) In case the Bidder does not meet the service levels mentioned in para ‘5 - 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 Bidder.
- ii. Bidder 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 as described in clause 3.24 of Section III, GCC.

10. Exclusions

- a) The Bidder will be exempted from any delays or slippages on SLA parameters arising out of following reason:
 - i. Delay in execution due to delay (in approval, review etc) from Purchaser's side. Any such delays will be notified in written.

11. Monitoring and Auditing

- a) Purchaser will review the performance of Bidder against the SLA parameters each month, or at any periodicity defined in the contract document. The review / audit report will form basis of any action relating to imposing penalty or breach of contract. Any such review / audit can be scheduled or unscheduled. The results will be shared with the Bidder as soon as possible. Purchaser reserves the right to appoint a third-party auditor to validate the SLA.

12. Reporting Procedures

- a) The Bidder'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.

13. Issue Management Procedures

a) General

- i. This process provides an appropriate management structure for the orderly consideration and resolution of business and operational issues in the event that quick consensus is not reached between Purchaser and Bidder. It is expected that this pre-defined process will only be used on an exception basis if issues are not resolved at lower management levels.

b) Issue Management Process

- i. Either Purchaser or Bidder may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of disagreement with possible solutions.
- ii. Purchaser and the Bidder's representative will determine which committee or executive level should logically be involved in resolution.
- iii. A meeting or conference call will be conducted to resolve the issue in a timely manner. The documented issues will be distributed to the participants at least 24 hours prior to the discussion if the issue is not an emergency requiring immediate attention.
- iv. Management of Purchaser and Bidder will develop a temporary, if needed, and the permanent solution for the problem at hand. The Bidder will then communicate the resolution to all interested parties.
- v. In the event a significant business issue is still unresolved, the arbitration procedures described in the Contract will be used.

14. 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:

- A process for negotiating changes to the SLA.
- An issue management process for documenting and resolving particularly difficult issues.
- Purchaser and Bidder management escalation process to be used in the event that an issue is not being resolved in a timely manner.
- 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

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.

15. 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 Bidder 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 'Section III - General Conditions of Contract (GCC).

21. Intentionally left blank

Form 21 – Intentionally left Blank

22. Joint Bidding Agreement

(To be executed on Stamp paper of appropriate value)

THIS JOINT BIDDING AGREEMENT is entered into on this the day of 20...

AMONGST

1. { Bank, a nationalised bank registered under the Reserve Bank of India under Act 1934} and having its registered office at (hereinafter referred to as the “**First Part/Lead Bidder**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. { Limited, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the “**Second Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)
3. {, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the “**Third Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above-mentioned parties of the FIRST, SECOND and THIRD PART are collectively referred to as the “**Parties**” and each is individually referred to as a “**Party**”

WHEREAS,

- (A) The Purchaser and, represented by its </> and having its principal office at </>, Chandigarh, India (hereinafter referred to as the “**Purchaser**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has been appointed as Nodal Agency by Government of Haryana for undertaking Project activities on behalf of the State Government of Haryana for “/” (the “**Project**”). Purchaser has invited Bids (the “**Bids**”) by its Tender Document No. dated (the “**RFP**”) for “**Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System on BOOT model**”.
- (B) The Parties are interested in jointly bidding for the Project as members of a Consortium and in accordance with the terms and conditions of the Tender Document and other bid documents in respect of the Project, and
- (C) It is a necessary condition under the Tender Document that the member of the Consortium shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

2. Consortium

1.1 The Parties do hereby irrevocably constitute a consortium (the “**Consortium**”) for the purposes of jointly participating in the Bidding Process for the Project.

1.2 The Parties hereby undertake to participate in the Bidding Process only through this Consortium and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Associates.

3. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- a) Party of the First Part shall be the Lead member of the Consortium and shall have the power of attorney from other party for conducting all business for and on behalf of the Consortium during the Bidding process and until the Agreement Date under the Agreement;
- b) Party of the Second Part shall be _____ of the Consortium;}
- c) Party of the Third Part shall be _____ of the Consortium;}

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the Tender Document and the Agreement, till such time as the Financial Close for the Project is achieved under and in accordance with the Agreement.

6. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- a) Such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- b) The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - (i) require any consent or approval not already obtained;
 - (ii) violate any Applicable Law presently in effect and having applicability to it;
 - (iii) violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof;
 - (iv) violate any clearance, permit, Agreement, grant, license or other governmental authorisation, approval, judgement, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
 - (v) create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- c) this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- d) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Agreement.

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force for the entire duration of the contract, in case the Project is awarded to the Consortium. However, in case the Consortium is either not pre-qualified for the Project or does not get Selected for award

of the Project, the Agreement will stand terminated in case the Bidder is not pre-qualified or upon return of the Bid Security by Purchaser to the Bidder, as the case may be.

9. Miscellaneous

9.1 This Joint Bidding Agreement shall be governed by laws of India.

9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of Purchaser.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

SIGNED, SEALED AND DELIVERED

For and on behalf of

LEAD MEMBER by:

SECOND PART

(Signature)

(Signature)

(Name)

(Name)

(Designation)

(Designation)

(Address)

(Address)

In the presence of:

1.

2.

Notes:

- 1. The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, lay down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- 2. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member.*
- 3. For a Joint Bidding Agreement executed and issued overseas, the document shall be legalised by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.*

23. Financial Bid Submission Letter

Form 23.1 – Financial Bid

To

Director

State Transport Department, Haryana

2nd Floor, 30-Bays Building,

Sector-17, Chandigarh, India

Sir,

Sub: Request for Proposal ('RFP') for Selection of Bidder for Implementation of Open Loop Ticketing System and GPS System for State Transport Department, Government of Haryana on Build Own Operate and Transfer (BOOT) Model

Ref: RFP No. _____ dated _____

We, the undersigned Bidders, having read and examined in detail all the RFP/ bidding documents in respect of do hereby propose to provide services as specified in the RFP document number _____ dated _____.

1. PRICE AND VALIDITY

The price mentioned in our bid is in accordance with the terms as specified in the RFP documents. This bid is valid for a period of 180 calendar days from the date of opening of the technical bids.

2. We have studied the relevant clause(s) in Indian Tax Laws and hereby declare that any taxes, surcharge towards Professional and any other corporate Tax applicable under the laws, we shall pay the same.

3. BID PRICING

We further confirm that the price stated in our bid is in accordance with the RFP documents.

4. QUALIFYING DATA

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

5. BID PRICE

We declare that our bid price is for the entire scope of the work and contract period as specified in the RFP. This price is attached with our bid as part of the bid. The price quoted will remain firm during the contract period.

6. CONTRACT PERFORMANCE BANK GUARANTEE

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance Bank Guarantee in the form prescribed in the RFP within 15 days of issue of LOI.

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

8. We understand that our bid is binding on us DURING THE VALIDITY PERIOD OR THE EXTENSIONS THEREOF and that you are not bound to accept our Bid.

9. We confirm that no Technical deviations are attached here with this financial offer.

Thanking you,

Yours faithfully,

(Signature of the Bidder)

Printed Name

Designation

Seal:

Date:

Place:

Business Address:

Form 23.2 Financial Proposal Format

| S. No | Description | Price (in INR) | GST (%) | GST (in INR) | Other Applicable Taxes (please specify tax and %) | Other Applicable Taxes (in INR) | Total (inclusive of all taxes) |
|-------|------------------|----------------|---------|--------------|---|---------------------------------|--------------------------------|
| A. | Per ticket cost | | | | | | |
| | Price (in words) | | | | | | |

Note:

1. The Per ticket price quoted by the bidder in Form 23.2 Financial Proposal Format shall apply for all requirements as specified in the **Indicative Bill of Material** in Section V – Scope of Work of the RFP. This will also include the temporary requirements mentioned in the Indicative Bill of Material. The per ticket cost –A quoted by the bidder shall remain constant throughout the contract period.

24. Checklist for RFP response

Form 24 - Technical Response Checklist

| S. No. | Checklist | Included (Yes / No) | Reference in the bid (Section, Page) |
|--------|--|---------------------|--------------------------------------|
| 1 | Cost of RFP document in form of online | | |
| 2 | Earnest Money Deposit as in prescribed format as per Clause 12 of Section IV | | |
| 3 | Notarized Power of Attorney executed by the Lead Bidder in favour of the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this RFP in prescribed format as per Clause 14 of Section IV | | |
| 4 | Technical Bid Submission letter in prescribed format as per Clause 9 of Section IV | | |
| 5 | Lead Bidder and its consortium partner Bidder Profile as per Clause 1, 2 and 3 of Section IV | | |
| 6 | Duly signed and stamped copy of RFP document with all amendments / corrigendum / addendum | | |
| 7 | List of Sub-Contractors and OEMs in prescribed format as per Clause 10 of Section IV | | |
| 8 | Details of Sub-Contractors and OEMs in prescribed format as per Clause 11 of Section IV | | |
| 9 | Manufacturer 's Authorization Forms for all OEMs proposed by the Bidder in prescribed format as per Clause 13 of Section IV | | |
| 10 | Response to Eligibility and Evaluation Criteria in prescribed format as per Clause 4 of Section IV Form 4.1 – Response to Eligibility Criteria Form 4.2 – Response to Evaluation Criteria | | |
| 11 | Project Experience List in prescribed format as per Clause 5 of Section IV | | |
| 12 | Project Experience Details in prescribed format as per Clause 6 of Section IV | | |
| 13 | Details of Manpower for the Project in prescribed format as per Clause 7 of Section IV | | |
| 14 | Curriculum Vitae (CV) of the proposed manpower in prescribed format as per Clause 8 of Section IV | | |
| 15 | Overview of Proposed Solution in prescribed format as per Clause 15 of Section IV | | |
| 16 | Details of Product Offered – Solution Stack Template, Technical Specification Compliance, Functional Specification Compliance in prescribed format as per Clause 16 of Section IV | | |

| S. No. | Checklist | Included (Yes / No) | Reference in the bid (Section, Page) |
|--------|---|---------------------|--------------------------------------|
| 17 | Network Map of the proposed GPRS service provider(s) showing coverage of GPRS services throughout the state and highlighting areas where the GPRS services of the GPRS service provider are not available. | | |
| 18 | An undertaking duly attested by the notary that 1) The Lead Bidder and its consortium partner is currently not 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 2) The Lead Bidder and its consortium partners or any of its directors have not been convicted of a cognizable offence by any court of law with imprisonment for a term exceeding one year | | |



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

SECTION V: Scope of Work

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section V - Scope of Work

Table of Contents

| | |
|---|-----|
| 1. Introduction..... | 143 |
| 2. State Transport Department, Government of Haryana | 144 |
| 3. As-Is Situation Assessment..... | 147 |
| 4. To-Be Situation | 151 |
| 5. Project Implementation Methodology | 152 |
| 6. Scope of work for the Bidder | 152 |
| 7. Scope of Services be provided by State Transport Department, Haryana | 161 |
| 8. Project Overview | 162 |
| 9. Pilot Implementation..... | 166 |
| 10. Project Implementation | 166 |
| 11. Specific Exclusions/Inclusions from the scope of Bidder | 176 |
| 12. Project Implementation Schedule | 177 |
| 13. System Architecture..... | 179 |
| 14. Minimum Resource Requirement..... | 180 |
| 15. Indicative Bill of Material | 182 |
| 16. List of Free and Concessional Travelers in Haryana Roadways | 183 |

1. Introduction

1.1 About RFP Document

State Transport Department, Government of Haryana has floated this RFP to invite the proposals from eligible Bidders for the implementation of Open Loop Ticketing System, NCMC based Smart Bus Pass System and GPS System on BOOT model for a period of 5 years after complete acceptance of the project at all locations i.e. depots/sub-depots.

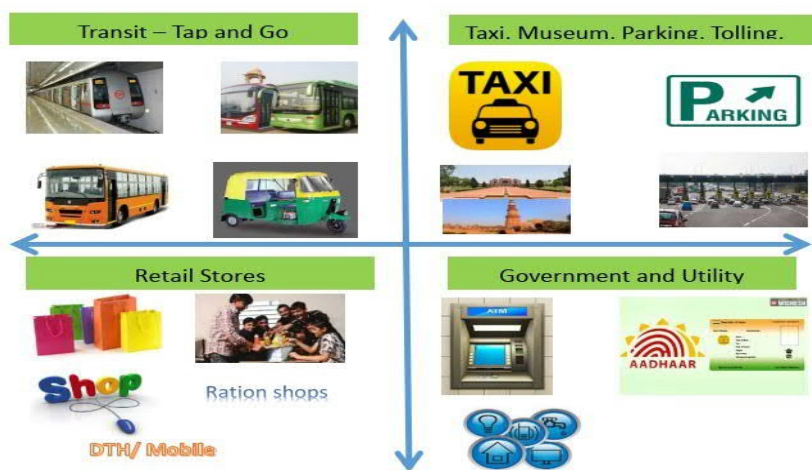
This RFP provides functional, physical and technical requirements of the department for implementation of the project. While these requirements are indicative and not exhaustive, it is to help Bidders propose a technically fit solution meeting the department’s requirements, estimate the costs and offer a cost-effective solution.

Bidders are advised to study this document carefully. Submission of RFP shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. This RFP document is not transferable. This document must be read in its entirety.

1.1 About National Common Mobility Card Program (NCMC)

National Common Mobility Card Program (NCMC) offers the ideal payment solution, based on Open-loop, Stored Value Dual interface EMV standards, for digitizing the transit payments. This card is based on ‘One Card for all Payments’ theme and can be used for carrying out cashless transactions at multiple participating transit operators (Metro/Cabs/Auto/Bus) in addition to making the payments at toll, parking, select retail outlets, ATM, e-commerce etc.

Thus, by using an Open loop EMV based Dual interface NCMC card, the commuter will experience increased convenience by using a single card to carry out their transactions that are secured using EMV standards, through contact as well as contactless mode and across a wide range of merchants and transit operators that provide Open-loop EMV based PoS/ETIM devices. This card achieves all the objectives laid down for a commuter-friendly and efficient fare collection system.



Key features of NCMC Specification:

| Key Feature | NCMC Proposition |
|-------------------------------|---|
| Payment Model | Card based payment model – stored value for offline payments and Credit/Debit/Prepaid cards for online payments |
| Transaction Type | Supports online (Contact & Contactless) & offline (Contactless) transactions |
| Serves multiple service areas | Multiple service areas (optional to use with mutual concurrence) to support limited duration tickets / Season Tickets / Smart City Specific application / Loyalty points etc. |

| Key Feature | NCMC Proposition |
|-----------------------------|--|
| Card Usage | Same card to be used for contactless payments at multiple retail outlets, online e-commerce payments & multiple transit use cases viz., Toll, parking etc. |
| Card Issuance | Can be issued by any member authorized by RBI to issue cards Can be a no-KYC or minimum-KYC card based on customer preference |
| Information Storage | Requisite information required by SRTUs & Banks can be stored on the card or the backend as per the preference and mutual concurrence of participating entities |
| Topping up the stored value | Provision of topping up the stored value through any mode of payment viz, online using card, Internet Banking, Cash at customer service point at the option of issuing entity |
| Transaction Risk | Since the transaction is permitted against available balance, there is no risk of any loss either to the bank or the SRTU |
| Security | Underlying technology i.e. EMV is best available globally and has been adopted to safeguard against frauds. RBI PPI guidelines shall govern the monetary limits for the Stored Value of this card |

NCMC specifies the storage mechanisms and bytes structure and keys for various use case applications. This structure can be written on any ISO 14443 card which can be read by ETIM devices conforming to given standards. Each application embedded within the NCMC card has its Service ID which is used by the PoS to identify the use case and accordingly process the transaction. NCMC specs has provision for storing information about a single ticket as well as a Pass within the same application on the card. However, the command that is used to process the transaction depends on the commands supported by the Card. NCMC provides a vendor-neutral, inter-operable and distributor agnostic model for implementing cashless transactions across SRTUs.

2. State Transport Department, Government of Haryana

State Transport Department, Govt. of Haryana is committed to make endeavors towards creating social value by providing efficient, reliable and eco-friendly modern transport services for the safe movement of people and goods with liberal use of modern-day Information Technology and involvement of private sector, which is considered necessary in this era of liberalization and globalization.

The vision of the department is to provide adequate, economical, reliable, comfortable, safe and environment friendly modern passenger transport services to the public of Haryana State. The main mission of the department is to improve and strengthen public transportation services, provide bus service at reasonable cost to citizen in rural and urban areas of Haryana.

Department is strongly dedicated to achieving the key objectives to provide best transport services to citizens at reasonable price with the use of modern Information Technology. The broad objectives cover the following:

- To create and improve infrastructure for modern Bus Terminals
- To introduce computerized Transport Management Systems
- To provide bus connectivity between rural and urban areas
- To provide affordable, safe and sustainable passenger transport services

The Haryana State Transport Department mainly responsible for the following functions:

- To provide strength and efficient bus services by replacing old ones and adding new
- To design and introduce eco- friendly buses
- Providing city bus services in big cities in order to discourage the use of personal vehicles
- Construction of modern bus terminals, bus queue shelters and modernization of workshops

2.1 Haryana Roadways

Haryana Roadways, a State Government undertaking, is the key service provider for passenger transport in the State of Haryana. It has a fleet of 3488 buses¹ being operated by 24 depots, each headed by a General Manager, and 13 sub-depots functioning under the depot concerned. These services are being provided to every part of the State as well as to important destinations in the neighboring States. Approx. 4.2 Lacs passes are issued in a year which comprises of approx. 3.56 lacs student passes (approx. 2.34 lacs girls student passes and approx. 1.22 lakh boy's student passes) and more than 35000 general/employee passes. Haryana Roadways also provide free/concessional travelling facilities to 39 other categories of citizens in the state.

Current Capacity:

The table below shows the current capacity of Haryana Roadways in terms of physical and financial data:

| S. No. | Capacity Component | 2014 | 2015 | 2016 | 2017 | 2018 | December 2019 |
|--------|--|-----------|-----------|-----------|-----------|-----------|---------------------------|
| 1. | Buses | 4025 | 4212 | 4208 | 4122 | 4142 | 3488 |
| 2. | Total Staff (including drivers & conductors) | 18634 | 18260 | 17646 | 16968 | 16004 | 20314 |
| | No. of Drivers | 5540 | 5750 | 5713 | 5556 | 5227 | 6522 |
| | No. of Conductors | 7028 | 6884 | 6781 | 6375 | 5962 | 6306 |
| 3. | Depots | 23 | 23 | 23 | 23 | 24 | 24 |
| 4. | Sub-Depots | 13 | 13 | 13 | 13 | 12 | 13 |
| 5. | Workshops | 36 | 36 | | | | |
| 6. | Bus Stations/Stands | 100 | 100 | 107 | 112 | 107 | 118 |
| 7. | Total passengers carried annually (in Lacs) | 4466.05 | 4683.42 | 4554.46 | 4458.81 | 3993.74 | 2689.20 (April-Dec-2019) |
| 8. | Total Traffic Receipt annually (in Lacs) | 100479.93 | 115434.91 | 115296.43 | 116028.77 | 115119.61 | 77051.06 (April-Dec-2019) |
| 9. | Average Load Factor | 71.86 | 74.21 | 75.29 | 68.76 | 67.87 | 71.21 (April-Dec-2019) |

The Bus Fleet Size of Haryana Roadways is expected to be augmented in next couple of months. Haryana Roadways is going to add approx. 1000 buses either under Km. Scheme or through outright purchase, the operation of which will increase the passenger counts. The current fleet size of Haryana Roadways comprising nearly 3500 buses is expected to increase to approx. 4500 buses in next couple of months.

Overview of Services

Haryana Roadways started a lot of new initiatives to provide better services to its customers such as introducing new AC Volvo buses on certain routes, commissioning 'Haryana Gaurav' buses providing latest facilities to passengers at ordinary bus fare and introducing 'Haryana Uday' CNG low floor buses in the NCR region. Passenger amenities at bus stand level have been significantly upgraded to make

¹ As on December 2019

travel experience more pleasant. Haryana Roadways provides free and concessional travel facility to a large number of categories. From security perspective, department has already installed OBD (On-board diagnostics) devices in ordinary buses and CCTV cameras on major bus stands. The table below shows the bus services offered by Haryana Roadways.

| S. No. | Type of Bus Service Offered | %age in Fleet Size |
|--------|-----------------------------|--------------------|
| 1 | Volvo Buses | 1.43% |
| 2 | Mercedes A.C Buses | 0.24% |
| 3 | A.C Buses | 0.08% |
| 4 | CNG Buses | 4.05% |
| 5 | Semi Low Floor | 2.44% |
| 6 | Ordinary Buses | 91.75% |

Presently Haryana Roadways is providing following services for the passengers:

- Enquiry Counter for giving essential information to the passengers. Public Address system has also been provided at important bus stands for making announcements for the information of traveling public
- Booking counters for booking of daily bus tickets
- Advance Booking Counters are provided at all bus stands. Different counters are provided for buses going on different directions
- Online booking for Volvo and ordinary buses can be done through <http://ors.hartrans.gov.in>
- Haryana Roadways also provides free / concessional bus passes to students and general public

Depots & Sub-depots under Haryana Roadways

Haryana Roadways has 24 depots, each headed by a General Manager and 13 sub-depots functioning under the depot concerned. The table below shows the depots and sub-depots working under the depots

| S. No | Depots | S. No | Sub-Depots |
|-------|--|-------|------------|
| 1 | Chandigarh | | |
| 2 | Panchkula | 1 | Kalka |
| 3 | Bhiwani | 2 | Tosham |
| 4 | Ambala | 3 | Naraingarh |
| 5 | Charkhi Dadri | 4 | Loharu |
| 6 | Delhi | | - |
| 7 | Faridabad including Faridabad City Bus Service | | - |
| 8 | Fatehabad | 5 | Tohana |
| 9 | Gurugram | | - |
| 10 | Hisar | 6 | Hansi |
| 11 | Jind | 7 | Narwana |
| | | 8 | Safidon |
| 12 | Jhajjar | 9 | Bhadurgarh |
| 13 | Kurukshetra | 10 | Pehowa |
| 14 | Karnal | 11 | Assandh |
| 15 | Kaithal | | - |
| 16 | Narnaul | | - |
| 17 | Panipat | | - |
| 18 | Palwal | | - |

| S. No | Depots | S. No | Sub-Depots |
|-------|--------------|-------|------------|
| 19 | Rohtak | | - |
| 20 | Rewari | | - |
| 21 | Sonipat | 12 | Gohana |
| 22 | Sirsa | 13 | Dabwali |
| 23 | Yamuna Nagar | | - |
| 24 | Nuh | | - |

3. As-Is Situation Assessment

3.1 Ticketing Process

Presently, paper-based tickets are issued to passengers manually. There are no Electronic Ticket Issuing Machines (ETIM) for the operations of ticketing. Tickets are issued in two ways-one is counter booking in which passenger can buy a ticket from ticket counter before the start of the journey for ensuring his/her seat throughout the journey and other way is to buy ticket in bus from conductor.

3.2 Pass Issuance Process

In present scenario, a paper based computerized pass with hologram and photograph is issued to user. All the passes are printed at depot level and type of passes are:

- General Bus Pass (1 months, 3 months and 6 months)
- Student Bus Pass
- Employee Bus Pass

3.3 IT System Overview

Over the years State Transport department, Haryana has been taking efforts to utilize the various IT systems to improve the operations and monitoring the performance

- Presently a Web server placed at Hisar for Depot Management System and all the depots / sub-depots are connected to it through State Wide Area Network (SWAN) and internet connectivity (as alternative connectivity)
- Online reservation facility has been provided for advance booking of tickets for Volvo and ordinary bus service

3.4 Details of existing IT Systems

3.4.1 Web Based Depot Management System:

Haryana State Transport department has a Web-Based Online Integrated Depot Management System for the effective administration and monitoring of various functioning of the depots and sub-depots like Route Planning, Deploying Crew/Bus Scheduling, Optimization of KMPL/Store Expenditure, Minimizing the bus breakdown/accidents etc. The centralized server for Web-based online-integrated depot management system is placed in Hisar depot. Interconnection and data sharing among depots and sub-depots are through SWAN connectivity and internal connectivity of various branches within depots and sub-depots are managed by Local Area Networking (LAN) switches.

| WEB BASED DEPOT MANAGEMENT SYSTEM | |
|-----------------------------------|--|
| Purpose | For the effective administration and monitoring of various functioning of the depots and sub-depots |
| Type of System | Centralized, Web-based |
| Key Modules | a. Traffic and Route Management System <ul style="list-style-type: none"> • Crew Scheduling (Duty Register) |

| WEB BASED DEPOT MANAGEMENT SYSTEM | |
|--|--|
| | <ul style="list-style-type: none"> • Route Waybill System • Advance Booking Waybill System • Conductor Logbook/Cash Detail Report • Conductor Earning per KM Report • Route Performance Report • Tickets Master Accounts Report • Vehicle Yard IN/OUT b. Store Inventory Control System <ul style="list-style-type: none"> • Store Item Indent Issuing by TRC • Store Item Issue Docket for other Depot • Store Item Receipt (SR Register) • Store Item Bin Card • Store Item Ledger • Sister Services Billing of Store Items c. Diesel/CNG Control System <ul style="list-style-type: none"> • Diesel Issued to Depot Buses • CNG Issued to Depot Buses • Diesel Issued to Depot Vehicles • Diesel Received from IOC • Diesel Received from other Depots • Vehicle/Driver-wise KMPL • Vehicle Type-wise KMPL d. Vehicle Maintenance System <ul style="list-style-type: none"> • Vehicle Servicing Record • Tyres Performance/History Sheets e. Personnel Information System <ul style="list-style-type: none"> • Centralized Database of all Employees with complete Bio data • Category-wise Seniority Lists of all Staff • Transfers Joining/Relieving f. Finance Management System <ul style="list-style-type: none"> • Accounts Control System • Salary Information System • Statistical Information System g. Employee ID card/Bus Pass System <ul style="list-style-type: none"> • Employee ID card • General Bus Passes (1, 3 & 6 Months) • Student Bus Passes • Employee Bus Passes |
| Key users | Internal staff of Haryana Roadways |
| Technology | <ul style="list-style-type: none"> • The system has been developed using Microsoft .Net technologies i.e. ASP.Net, AJAX, Visual C#.Net, Crystal Reports & SQL Server 2008 • Data Warehouse & Data Mining has used instead of RDBMS • System includes role-based information filtering facility • Form based security has been provided • Multi-Language support for some modules (English, Hindi) |
| Connectivity | <ul style="list-style-type: none"> • SWAN Connectivity <ul style="list-style-type: none"> ○ Available in all depots (24) & sub-depots (13) |

| WEB BASED DEPOT MANAGEMENT SYSTEM | |
|-----------------------------------|---|
| | <ul style="list-style-type: none"> • Internal Networking (LAN) <ul style="list-style-type: none"> ○ Available in all depots (24) and sub-depots (13) • Broadband (Internet) Connectivity <ul style="list-style-type: none"> ○ Available in all the Depots |
| Location(s) where deployed | Haryana State Data Centre |
| Operational since | Dec, 2009 |

3.4.2 Online Reservation System (ORS) for Volvo and Ordinary Bus Service

The online reservation system is a web-based application that allows visitors to check the availability of tickets, book tickets online and cancel booked ticket online. The URL link for the website is www.hartrans.gov.in. The web hosting service for this website is provided by State Data Centre, Haryana.

| ONLINE RESERVATION SYSTEM (ORS) FOR VOLVO & ORDINARY BUS SERVICE | |
|--|--|
| Purpose | Interface to enable reservation of bus seats for Volvo and Ordinary Buses through website - www.hartrans.gov.in . |
| Type of System | Web-based |
| Key Modules | Booking by Citizens: This is a web-based reservation portal for the passengers to access information and book tickets. The bookings through this module be available up to 5 hours before the schedule departure of the bus service and can be done 10 days in advance before the schedule departure of the bus service. |
| Key users | <ul style="list-style-type: none"> ➤ Office Staff ➤ Passengers |
| Technology | <ul style="list-style-type: none"> ➤ Server side: Microsoft Technologies ➤ Operating System: Window Server 2012 ➤ Database: SQL Server 2012 ➤ Security Audit Completed |
| Location(s) where deployed | Haryana State Data Centre |
| Payment Gateway | HDFC Bank |
| Operational since | 2011 |

3.5 Current IT Infrastructure Deployment Details

3.5.1 Desktops and Peripherals

To facilitate the end of day reconciliation of ticketing by each bus, all bus depots have been provided with desktops with required hardware and software to communicate with Web based depot management system. Also, Head Quarter is also provided with desktop and peripherals for their daily functioning. The approximate number of desktops and peripherals available with Haryana Roadways is around 740 approx. The table below gives a logical distribution of these assets throughout the organization:

| # | HARDWARE COMPONENTS | QUANTITY AT DEPOTS | QUANTITY AT SUB-DEPOTS | HEADQUARTER |
|---|---------------------|----------------------------|--------------------------------|-------------|
| 1 | Depot Server | 48 (2 at each depot level) | 13 (1 at each sub-depot level) | NA |

| # | HARDWARE COMPONENTS | QUANTITY AT DEPOTS | QUANTITY AT SUB-DEPOTS | HEADQUARTER |
|---|-----------------------|--|--|---|
| 2 | Desktop and UPS | 600-625 (approx. 25-26 at each depot) | 65-80 (approx. 5-6 at each sub-depot) | Approx. 40 |
| 3 | Printers and Scanners | Laser Printer 144 (approx. 6 at each depot) DMP Printer 192 (approx. 8 at each depot) Color Printer 24 (approx. 1 at each depot) Scanner 24 (approx. 1 at each depot) | Laser Printer 13 (approx. 1 at each sub-depot) DMP Printer 26 (approx. 2 at each sub-depot) | Laser Printers - Approx. 40 Color Printer - Approx. 7 Scanner - Approx. 5 |

3.5.2 Central Infrastructure

The Server for web-based depot management system is placed in Hisar depot. The table shows below the hardware deployed at Hisar depot for the system.

| S.NO | HARDWARE COMPONENT | QUANTITY |
|------|---|----------|
| 1 | Windows Server Enterprises 2008 R2 OLP | 2 |
| 2 | Windows Server Standard 2008 OLP | 3 |
| 3 | Windows Server CAL 2008 OLP | 50 |
| 4 | SQL Server Enterprises 2008 OLP 1 PROC | 2 |
| 5 | Visual Studio Professional 2008 English OLP | 1 |
| 6 | Media Kit | 4 |
| 7 | Database Server IBMX3850 | 1 |
| 8 | Application Server IBM X3650 | 1 |
| 9 | Domain and ISA Server IBM X 3250 M2 | 2 |
| 10 | Storage (12X146 GB SAS) NS 33600 | 1 |
| 11 | Backup Software for SQL Database | 1 |
| 12 | LTO Tape Drive GEN 4 | 1 |
| 13 | OEM Rack for main Site APW President Cyber Rack 42U | 1 |
| 14 | IBM X 3250 Rack Server | 1 |
| 15 | 5 KVA UPS Online APC | 1 |
| 16 | Quick Heal Security | 38 |
| 17 | Window 7 | 1 |
| 18 | Fore Front TMG Standard 2010 OLP | 1 |

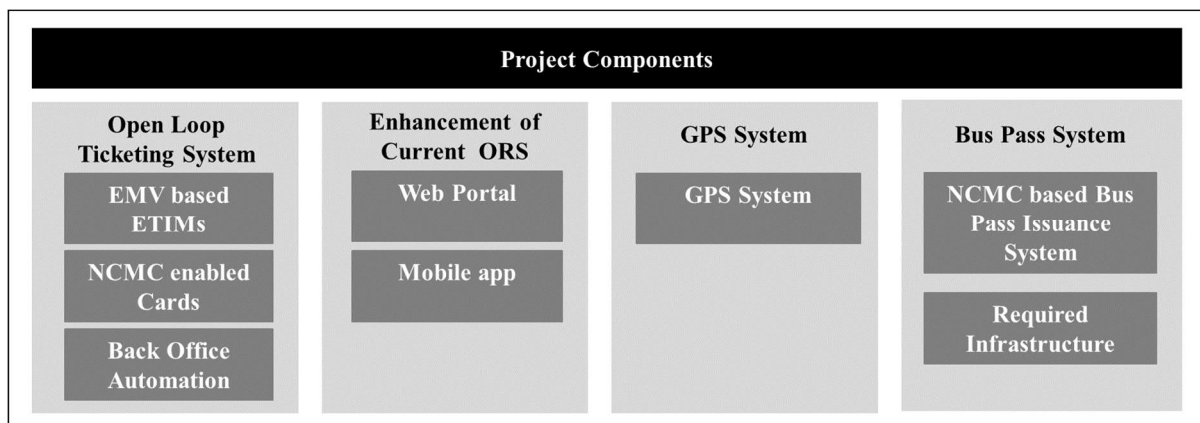
3.5.3 Network Connectivity

Currently all the depots and sub-depots are centrally connected to the Web based depot management system through SWAN and as well internet connectivity. The table below shows the connectivity status throughout depot and sub depot level.

| # | TYPE OF CONNECTIVITY | LOCATION |
|---|-----------------------------------|-----------------------------------|
| 1 | SWAN Connectivity | All depots (24) & Sub-depots (13) |
| 2 | Internal Networking (LAN) | All depots (24) & Sub-depots (13) |
| 3 | Broadband (Internet) Connectivity | All depots (24) & Sub-depots (13) |

4. To-Be Situation

This project will be the addition of information technology to transportation infrastructure and vehicles of Haryana Roadways. It aims at improving operational efficiency by better management of fleet, manpower, routes and passengers. The figure below shows the snapshot of the project:



The adoption of Open loop EMV standard, as per National Common Mobility Card specification (NCCM), for digital fare collection offers the most secure and interoperable solution aimed at higher digital adoption across the country. NCCM provides a vendor-neutral, inter-operable and distributor agnostic model for implementing cashless transactions across SRTUs. It will accelerate the speed to market for higher digital penetration based on standard platform through Banks. Commuters shall have freedom to opt for the Bank cards as per their own choice as well as be able to get instant issuance with minimum or no KYC as prepaid card through one partner bank. Also, this approach blends seamlessly into national level payment infrastructure.

NCCM would eventually provide seamless experience to passengers across all transit systems in the country bringing convenience and ease of payment for them. With this 'One Card Payment System' the customer will be able to use the same card for all payment applications including retail, ATM, e-commerce, POS, transit, toll, parking etc. These payment cards can be issued on debit/credit/prepaid card platform.

Overview of GPS System:

The GPS System will utilize the GPS enabled EMV based ETIM device to determine the position of every bus. The coordinates of bus location will be continuously transmitted through GPRS connectivity from the ETIM device, to the backend server. This data gathered from the GPS system will be an input that can be used for other analytics purposes and for providing API based input to other systems for additional functions as needed. The Head Office, Bus depots & bus stations will be able to monitor the bus location and activity through Control Centres.

Some of the key parameters than can be tracked using the GPS system are, location of the bus, speed of the bus, path followed by the bus, distance from the nearest bus-stop or bus-shelter etc. The data can be fed into the scheduling system etc. for optimizing the schedule to minimize crowding or to optimize the time-gap between the arrivals of buses of the same route in a stop, besides other analytics-based utilities. Speed tracking of the bus is an important feature that the GPS technology provides. Alerts for over-speeding and sudden deceleration or accidents can be generated. This will allow the management to

ensure safety of the on-board passengers and adopt necessary actions in the case of an emergency situation.

5. Project Implementation Methodology

1. The duration of the project shall be 5 years after complete go-live and acceptance of the system in all depots/sub-depots.
2. On completion of the project, the bidder shall transfer all the assets (including hardware and software) which will be developed, procured or customized during the project to State Transport Department, Haryana. Bidder shall have to transfer the whole setup in running condition and provide knowledge transfer to department's team at the end of contract.
3. The software licenses will be on the name of department and cost shall be funded by the Bidder. It will be the responsibility of the Bidder to provide department with latest source code in executable format for all custom applications. Bidder shall provide the updated source code biannually.
4. The implementation shall cover all buses of Haryana Roadways (current and future) throughout the project duration. The bidder should estimate its cost accordingly.
5. All depots and sub-depots shall be covered under the project. If there is an increase in the number of depots or sub-depots of Haryana Roadways during the contract period, the Bidder shall cover two depots and its sub-depots in the project implementation at no extra cost to department. If more than two then the cost shall mutually discuss between the department and the Bidder.
6. The Bidder shall implement the systems in all locations as indicated in the Clause 15 - Indicative Bill of Material.
7. Payments shall be made to the Bidder as per the payment terms mentioned in Section III of the RFP.

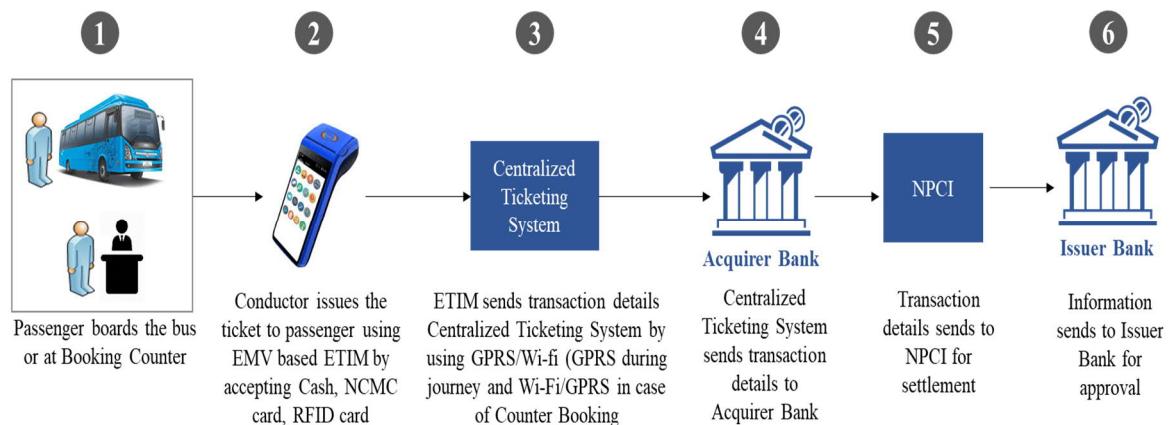
6. Scope of work for the Bidder

The roles and responsibilities of the Bidder will be inclusive but not limited to the following. The Bidder will be required to carry out all activities and perform roles and responsibility to meet the objective of the project. It is responsibility of bidder to abide by all RBI mandated guidelines apart from any other government guidelines if any, over and above RFP mentioned terms and conditions

6.1 ETIM Ticketing

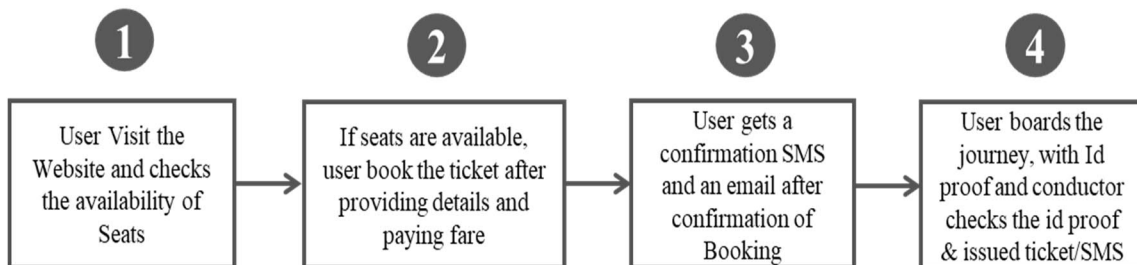
- 6.1.1** After implementation of project, the tickets will be issued to passengers through Electronic Ticket Issuing Machines (ETIM) inside the bus or at the booking counter. It will be done on a real-time basis through the GPRS-enabled EMV based ETIMs, as opposed to the current situation wherein manual printed tickets are issued to passengers and reconciliation done at the end of the journey or end of the day at depot.
- 6.1.2** Bidder shall have to design, develop, install and maintain centralised ticketing system as per standard specification mentioned for National common mobility cards
- 6.1.3** Bidder shall have to procure, install and maintain EMV based ETIMs and its related accessories. ETIM shall be EMV certified GPRS machine and will have capability to send ticketing data without data loss to the central system. These ETIM machines shall have capability read and validate EMV NCMC cards.
- 6.1.4** During travel in a bus, the passenger specifies the destination of travel to the conductor who then uses the ETIM machine to punch in the necessary details (destination code, passenger category, no. of tickets, etc.) and generate the e-ticket using the thermal printer. The conductor collects the fare in case the commuter wishes to pay in cash.

- 6.1.5 Passengers with NCMC Cards will show their card to the conductor for cashless payment of fare. Conductor will tap the contactless card on the ETIM machine, which will validate the card and deduct the fare amount for the route from the card. The final amount will be written back on the card by the ETIM machine.
- 6.1.6 The centralised ticketing system shall further send the transaction data to the Acquirer Bank. Clearing House settles the payment balances between the Issuing and Acquirer Banks/FI on a daily basis (in case of an Open Loop card implementation).
- 6.1.7 Provide EMV as well as PCI-DSS compliant hardware for acquiring related applications as per NCMC specifications
- 6.1.8 Provide NCMC Certified payment application for collection and settlement of fare against cash and NCMC card
- 6.1.9 This change enables the department to conduct an ongoing assessment of ticket sales, seat availability, as well as keeping tabs on pilferage on the bus when it is on the move. Data can also be synchronised on Wi-Fi if there is data loss on GPRS, when conductor reaches the depot.
- 6.1.10 The figure shows below describes the to-be process flow for ticketing process inside bus or at booking counter:



6.2 Online Reservation System

- 6.2.1 Bidder shall have to enhance the current online reservation system with suitable use of technology and integrate with the centralised ticketing system.
- 6.2.2 The figure below shows the online process flow:



6.3 Mobile Ticketing Solution (m-Ticket)

- 6.3.1 State Transport Department has already developed a mobile app for online ticket booking for Volvo and ordinary buses.

- 6.3.2** The selected Bidder shall have to enhance the mobile app and integrate with the centralised ticketing system.
- 6.3.3** Bidder shall be required to operate a 24x7 call centre services for the users of mobile ticketing system and technical support to resolve their queries.
- 6.3.4** The selected Bidder to integrate mobile ticket solution with ORS and AFC system and to provide necessary reconciliation mechanism.

6.4 Digital Fare collection

The following are the processes defined for the purpose of proposed digital fare collection system.

6.4.1 Card Issuance

- i.** FI/Bank shall be responsible for instant issuance of NCMC Cards at depot/sub-depot level and carry out related activities to meet the objective of open loop ticketing system. Besides, the NCMC Debit cards issued by any banks will be used by customers for fare payment.
- ii.** This includes both personalised as well as non- personalised cards. FI/Bank Shall provide the personalized cards for concession pass holders and employee/staffs based on department's requirements with required details of photo, name, Age printed on the card.
- iii.** Department will approve the card design before proceeding for printing by FI/Bank.
- iv.** Department facilitate issuance of FI's prepaid /Concessional NCMC Cards from depot counters through operators/ Department's personnel. However, the issuance from counters by department's personnel shall in general be limited to only instant issuance requiring minimum KYC. FI/Bank shall make its own arrangement for converting to Full KYC.
- v.** FI/Bank to take necessary measures to minimize the card issuance time and transaction time.
- vi.** FI/Bank shall have the option to issue the NCMC cards as per the payment scheme of their choice in mutual consent with the Department, but system should support acceptance of all the three payment scheme cards (MasterCard, Visa and RuPay)
- vii.** FI/Bank shall define the process and guideline for issuance of different NCMC card type such as pre-paid, credit and debit cards.
- viii.** FI/Bank shall provide an easy to use website and Mobile app service, which can be also their exiting net-banking and mobile banking application, to enable commuters for requesting the cards for State Transport Department, Haryana. Commuters should be able to fill the required minimum details including KYC and collect the smart card kit at the depot with ease by showing a code for the registration form confirmation. FI/Bank shall also provide the APIs for the same as per request from Department to enable this service through Department's Mobile app/website & other third-party apps as approved by Department for requesting the Department's NCMC cards.
- ix.** FI/Bank shall be responsible for all compliances and business-related aspects of the card and department shall not have any liability for the same.
- x.** FI/Bank to propose and set up process to enable conversion of min-KYC cardholders to full-KYC.
- xi.** Design, development and maintenance of an Interoperable NCMC Smart Card Application and Card data format
 - a)** FI/Bank shall define the interoperable data format and standards of smart cards and terminal interfaces as per NCMC specifications for KEY and SAM management etc.

- b) The smart card should be compliant with all EMV & NCMC regulations and should be a dual interface card (Contact & Contactless) capable of performing EMV and transit transactions on the relevant terminals.
 - c) The Smart Card to be used with the Back-Office System for Open shall be ISO 14443/ISO18092 compliant.
 - d) The Smart Card shall have an operating frequency of 13.56 MHz
 - e) The dimensions of the smart card shall comply with ISO 7810
 - f) The resistance of the Smart Card to mechanical stress and chemicals shall comply with ISO 10373
- xii.** FI/Bank shall maintain entire life cycle indicative activities of NCMC card such as:
- a) Issuance of Smart card
 - b) Activation of Smart card
 - c) Deactivation of Smart card
 - d) Blacklisting of Smart card
 - e) Re-loading/ Re-use of Smart card
 - f) Loss of Smart card and
 - g) Replacement of Smart card etc.

6.4.2 Transaction Acquiring

The customer will use the NCMC cards for digital fare payment. The selected bidder will be responsible for the acquiring of these transactions done using NCMC cards issued by any Bank certified as per NCMC specification.

6.4.3 Transaction Settlement

The bidder should support the transactions settlements across multiple Issuer Banks through Central Clearing House (NPCI). The key points to be noted are as follows:

- i.** The customer will be able to use the NCMC cards, issued by any Bank, for the fare payment.
- ii.** Partner Bank will integrate with the AFC System for seamless acceptance of payments on ETIMs through NCMC cards.
- iii.** Bank will be responsible for cash management, reconciliation and settlement activities.

6.4.4 Card Top-up

Bidder shall provide various payment channels for the Card Top-up on the web/mobile interface provided by the Authority/its vendor.

- i.** FI/Bank shall be responsible for setup process and enabling the Top-up of all NCMC Cards at department's service points issued by any Bank under any payment scheme, based on commuters' request. The FI/Bank shall not charge any additional fee for such services from the Customer and the Department unless otherwise specified in the agreement.
- ii.** FI/Bank shall provide acquiring interfaces for top-up channel of the NCMC cards.
- iii.** FI/Bank shall enable online top-up of NCMC cards through departmental mobile app and website (inter-operability for top-up of other bank cards to be enabled as and when permitted by RBI)
- iv.** FI/Bank should provide the required APIs and documentation for enabling such top-up through departmental mobile app/website & other third-party apps on approval from department.
- v.** Commuters shall be able to check balance/transaction statement of the FI/Bank issued NCMC cards via SMS, or web-based channels, mobile apps etc.

This should support standard Internet security including, but not limited to Digital Certificates, Various levels of encryption, Secure Socket Layers (SSL), Secure Hypertext Transfer Protocol (HTTPS). FI/Bank shall be responsible for the Top-up of NCMC Cards, issued by any Bank, based on customers' request. The Bidder shall not charge any additional amount from the Customer and the Authority unless otherwise agreed in the agreement.

6.4.5 Hardware Provisioning

- i. Provide necessary hardware for all required applications as per mentioned Scope of the Services to be provided by the bidder. Kindly refer Bill of material as per clause 15 of section V of the RFP document.
- ii. Certify Acquiring Host as per EMV, PCI-DSS and NCMC standards

6.4.6 Non-Payment Usage

- i. Bidder to ensure all non-payment use cases are met and necessary integration with Authority's domain systems are completed.
- ii. Authority may appoint 3rd party agency to certify the data formats and standards used by bidder for terminal interface.

6.4.7 Service Points Management

Bidder to provide support /services are their service point to NCMC cards commuters.

- i. Bidder to ensure that the Service Points display the NCMC Card Issuance activity prominently.
- ii. Bidder will facilitate following through Service Points:
 - a) Instant card issuance and card top-up as per given process (in case of general cards)
 - b) Bidder to maintain inventory of prepaid general cards
 - c) Help end users / customers about use of cards

6.4.8 Fraud and Risk Management

- i. Provide risk, fraud and dispute/chargeback capabilities including KEY management

6.4.9 Helpdesk and Dispute Management

- i. Provide central toll-free helpdesk/ IVRS to handle NCMC card transaction related issues
- ii. Provide NCMC Card dedicated support to Issuer Bank with reference to transaction dispute, refunds, chargeback and merchant account management as per RBI requirements

6.4.10 Certifications and Compliances

The bidder will be responsible for necessary certifications and compliances required for transactions acquiring of NCMC cards. The table below provides an overview of the certifications required for an Acquirer Bank, issuer bank, ETIM certification requirement

Issuer Bank Certification Requirements:

| S. No | Product/System | Role in Payment Eco-system | Certification Type | Followed Guidelines |
|-------|----------------|----------------------------|-----------------------------|---------------------|
| 1 | Card | Issuance | Physical Card | EMVCo |
| 2 | | | NCMC Application | NCMC |
| 3 | | | White Plastic Certification | NCMC |

| S. No | Product/System | Role in Payment Eco-system | Certification Type | Followed Guidelines |
|-------|--|---------------------------------------|--------------------------|---------------------|
| 4 | Issuer Host | Transaction processing by Issuer Bank | Issue Host Certification | NCCM |
| 5 | Central Clearing House Certification (CCH) | Clearing and Settlement | CCH Certification | NCCM |

Acquirer Bank Certification Requirements:

| S. No | Product/System | Role in Payment Eco-system | Certification Type | Followed Guidelines |
|-------|--|---|-----------------------------|---------------------|
| 1 | Acquirer Host | Transaction processing by Acquirer Bank | Acquirer Host Certification | NCCM |
| 2 | Central Clearing House Certification (CCH) | Clearing and Settlement | CCH Certification | NCCM |

ETIM Certification Requirements:

| S. No | Product/System | Role in Payment Eco-system | Certification Type | Followed Guidelines |
|-------|----------------|----------------------------|----------------------------------|---------------------|
| 1 | Terminal | Acceptance | Hardware Level Requirement (L1) | EMVCo |
| | | | Terminal Kernel-(Contact L2) | EMVCo |
| | | | Terminal Kernel-(Contactless L2) | NCCM |
| | | | Terminal Application (L3) | NCCM |

6.4.11 Admin Console for State Transport Department, Haryana

- i. To access MIS reports
- ii. Authority foresees the need for implementing changes during the contract period (e.g. generation of new MIS reports, provision to upload additional formats, modify reconciliation logic, etc.). This may also include incorporation of new modes of payment along with the current modes of payment. Bidder to provide the above with no additional cost to Authority.

6.4.12 Field Training, Hardware Maintenance and Spares

- i. Bidder should have a local technical team set-up in city for operations and support.
- ii. Bidder shall provide dedicated Relationship Manager to take care of all issues of commuters arising out of this contract.
- iii. Provide training to concerned persons/staffs/officials in Hindi/ English/ local language for citizen-friendly operations
- iv. Bidder should provide training material and user manuals
- v. Bidder should provide training on the FI related MIS report and fund reconciliation
- vi. Manage hardware on field including requests for adding new hardware
- vii. Manage spares in case of faults in the machine

6.4.13 SMS and e-mail Gateway

- i. Manage email/SMS for citizens and merchants

6.4.14 Integration with State Road Transport Undertaking Domain System

- i. Provide MIS integration points for Authority
- ii. Provide APIs for mobile apps and web applications for public
- iii. Facilitate integration between Authority and MIS dashboard requirements

6.4.15 Settlement & Reconciliation Procedure

- i. Selected Bidder shall undertake complete NCMC card-based transaction settlement and reconciliation responsibilities.
- ii. Settlement shall be automatically triggered at pre-defined cut-off time daily.
- iii. Post settlement, the bank shall process & reconcile all transactions performed via all delivery channels.
- iv. It shall be possible to generate settled and unsettled transaction summary alerts. For transactions where reconciliation has failed, they will be flagged for reversal/dispute resolution.
- v. Department may open a separate settlement account with FI/Bank, if required. Post settlement, FI/Bank shall transfer payment of settlement amount on next day (T+1) by 10:00 hours in Department's designated Account (in Bidder Bank or other Bank). For the transactions occurred on Saturday, Sunday or any holiday as declared under Negotiable Instruments Act 1988 or any bandh/bank strike etc., the transfer of payment will be conducted concurrently on the next working day. Bank shall make flexi deposit on the very same day of credit after leaving minimum balance i.e. mutually agreed for a minimum period of 365 days at Bank Bulk card rate and whenever fund is required to transfer flexi deposit shall reverse as per instruction of Authority.
- vi. For any delay in settlement of daily cash collection/card-based transaction to Department's accounts beyond T+1 day, the department reserves the right to deduct the Damages as amount by charging interest rates of 12% per annum for any additional period for which cash settlement is delayed.
- vii. Selected Bidder shall undertake reconciliation of cash collected and transaction reported.
- viii. Selected Bidder shall have to provide explanation for any discrepancy found.

6.4.16 Information and Data Security Measures

- i. The Bidder shall take all necessary steps to ensure strict confidentiality of the information provided by the Bidder, during the contract period, after the contract expires or is terminated for any reason. The Bidder shall isolate and clearly identify the Department's customer information, documents, records and assets to protect the confidentiality of the information and build strong safeguards so that there is no mingling of information/documents, records and assets, where the service is provided to multiple entities or Banks from the same Hardware/Location.
- ii. The Bidder shall not divulge any Data/information received from the Department to any other person/ entity without prior written permission of the Department and neither will he use the data himself for any other purpose without prior written permission from the Department.
- iii. The Bidder, upon the written request of the Department, shall allow the authorized representatives of the Department (including internal/ external auditors acting on its behalf), Reserve Bank of India or any other Statutory Authority for Inspection, Audit and IS Audit purposes at all reasonable times to have access to its records relating to its performance from

time to time and also obtain copies of any audit or inspection or review reports or findings made on the service provided to the Department.

- iv. The Bidder shall ensure that the Internet Payment Gateway provides extensive automatic checks that substantially reduce risk. These include but not limited to:
 - a) Valid Credit/Debit card number check
 - b) Duplicate order check
 - c) Frequency of card usage
 - d) Captures IP address of cardholder performing the transaction
- v. The Internet Payment Gateway shall employ 128-bit encryption or higher levels of security while communicating between the AFC server and FI/Bank to ensure the security of online transactions (As per RBI guidelines).
- vi. The Bidder shall employ both software and hardware encryption to ensure the highest level of security.
- vii. The Switch and Payment Gateway shall have PCI DSS and EMV compliance.

6.5 Bus Pass Issuance System

- 6.5.1** The selected bidder shall have to design, develop and maintain online pass issuance system for free and concessional travellers of State Transport Department, Haryana. The list of free and concessional travellers is provided at clause 16 of Section V – Scope of Work.
- 6.5.2** The process flow for pass issuance system would be changed after implementation of this project. NCMC based personalised smart cards would be issued to user instead of paper-based card. These passes shall be non-transferable and valid for a certain time period. Pass information shall be printed on the card including user details along with photo, type of pass, expiry date, etc.
- 6.5.3** Bidder shall also responsible for procurement and maintenance of following scope items at depot level during the entire contract period:
 - NCMC cards
 - Camera for taking the photograph of applicant
- 6.5.4** Bidder shall be responsible for printing of personalised smart cards after getting approval of design from department.
- 6.5.5** These cards shall be validated inside the bus using ETIM machines by conductor and real time information would be synchronised with centralised server. A zero-value ticket will be issued against this pass.
- 6.5.6** The cost of cards shall be as per the decision taken by the department and department will collect and retain the cost of cards and will not transfer any amount to the bidder in lieu of issuance of cards.
- 6.5.7** The bidder shall be responsible for issuance of only 10 lakh cards (Personalised Bus Pass only) during the 5 years contract period. If there is increase in quantity of cards, the cost shall be mutually decided between bidder and department.

6.6 GPS System

Typical requirement as follows, please refer the SECTION VI: Functional Requirement Specifications with this section.

- 6.6.1** Bidder shall be responsible for design, development and maintenance of GPS System for real time tracking of buses.

- 6.6.2** GPS enabled ETIM device would be used for real time tracking of buses. That device transfers the collected data to the central servers on real-time basis by using GPRS connectivity.
- 6.6.3** The system should provide tracking and reporting of the locations of buses/device with a positional accuracy of 2.5 meter, regardless of whether the vehicles are moving, on route, off-route, have no assigned route; or whether or not the vehicles are logged into the System.
- 6.6.4** All vehicle movement on GPS maps and displays shall be based upon actual vehicle location reports and shall not be simulated.
- 6.6.5** In the event of loss of GPS derived vehicle position information, vehicle location shall be determined with dead reckoning techniques utilizing the existing vehicle odometer or other means and technologies which provide position accuracy equivalent to GPS tracking. The event should be generated when dead reckoning is utilized.
- 6.6.6** The map shall be capable of supporting a variety of map attributes that shall include, but not be limited to, all streets, highways, prominent geographical features, routes, bus stops, time points, and transfer points. The provision for selective updates of the base map and to any selected overlays shall be possible without reimporting the entire map and all overlays and without loss of prior map.
- 6.6.7** The System should be capable of defining an unlimited number of bus stops, routes and nodes. The system should accurately align vehicle locations with the streets and routes on which the vehicles are operating. There shall be no visible offsetting of vehicle positions from the displayed streets and routes.
- 6.6.8** The GPS System shall also have the ability to import stop data from an external system.
- 6.6.9** The system should send the alerts in case of deviations from the authorized route and recorded in all cases for reporting and review. The system should send the alerts on all other pre-configured parameters such as non-stoppage at designated points, unauthorized stoppages, vehicles stopping for long duration, not meeting the ETA and ETD schedules etc., and logged into journey details of the bus for each trip.
- 6.6.10** The Device settings should be updated including software/firmware updates through transmission via the secured communication network set up by the bidder. For reasons of security, device settings should not be modifiable by field staff of the bidder/others.
- 6.6.11** The GPS device settings modifications including software/firmware updates as well as business rules such as fare settings, discounts etc. shall be done with prior authorization by department. A digital log of all changes of settings on each and every device shall be maintained and delivered to department.
- 6.6.12** Bus bunching alert shall be raised in case multiple buses that are moving on the same route in the same direction are within a user specified distance. Department shall be able to change threshold value of this distance at real time for each route as per the operational requirement.
- 6.6.13** In case some feeder routes bunching is unavoidable. Similarly, in case of festival, there can be bunching of buses to cater to heavy demand. To take care of such scenarios, System shall allow enabling disabling of the bunching alerts on specified routes based on operational requirements.
- 6.6.14** The bidder shall also responsible for integration of existing or new VTS devices fitted on existing or new buses

6.7 Command Control Centre

A Command Control Centre will set up by the department with required hardware and network connectivity. This will act as a live hub to manage and monitor service-related data which will be viewable through a centralized web application. The bidder will have to provide the software for the same and perform following activities (not limited to below):

- 6.7.1** Overall monitoring services and incident management with defined escalation procedures
- 6.7.2** The Estimated Time of Arrival (ETA), Estimated Time of Departure (ETD), Information of the buses and other GPS parameters for management decision making, AFC system parameters/data, Database, MIS dashboard/application can also be monitored from the CCC.
- 6.7.3** Department personnel's will be trained to oversee the Command Control Centre by the bidder.
- 6.7.4** The system should be able to monitor the bus location and activity.
- 6.7.5** Solution shall be used to manage inputs from the field devices.
- 6.7.6** Solution should monitor and maintain electronic & software systems
 - a) Process and organise data
 - b) Respond to incident
 - c) Prepare for operations
 - d) Monitor security activities
 - e) Maintain systems and information
- 6.7.7** Solution should provide configurable rules with tailored alerts, dashboard visualizations, intelligent role-based workflow, response tools and situation collaboration.
- 6.7.8** Provide configurable intelligent operator console based on the jurisdiction, critical area or sensors to monitor as per situation demands for focused surveillance.

7. Scope of Services be provided by State Transport Department, Haryana

7.1 Hardware

- 7.1.1** Following hardware at the level of depot, sub-depot, Headquarter and Command Control Centre shall be provided by department
 - Desktops along with required accessories
 - Laser Printers
 - Router
 - LAN Switch
 - UPS
 - Wireless Access Point
 - Wall Mountable Rack
 - Network Cabling.

7.2 Consumables

- 7.2.1** The project consumables like thermal paper roll, printer paper, printer cartridges shall be provided by department.

7.3 Manpower

- 7.3.1** For project operation, the required manpower shall be provided by State Transport Department, Haryana. This include manpower at depot, sub-depot, Headquarter and Command Control Centre.

7.4 DC and DR Services

7.4.1 Haryana State Electronics Development Corporation Limited (Hartron) will be the agency for providing DC-DR services on cloud basis to State Transport for implementation of this project.

7.5 Command Control Centre

7.5.1 Department will set up a command control centre and provide all the hardware required in the command control centre.

7.6 Bandwidth

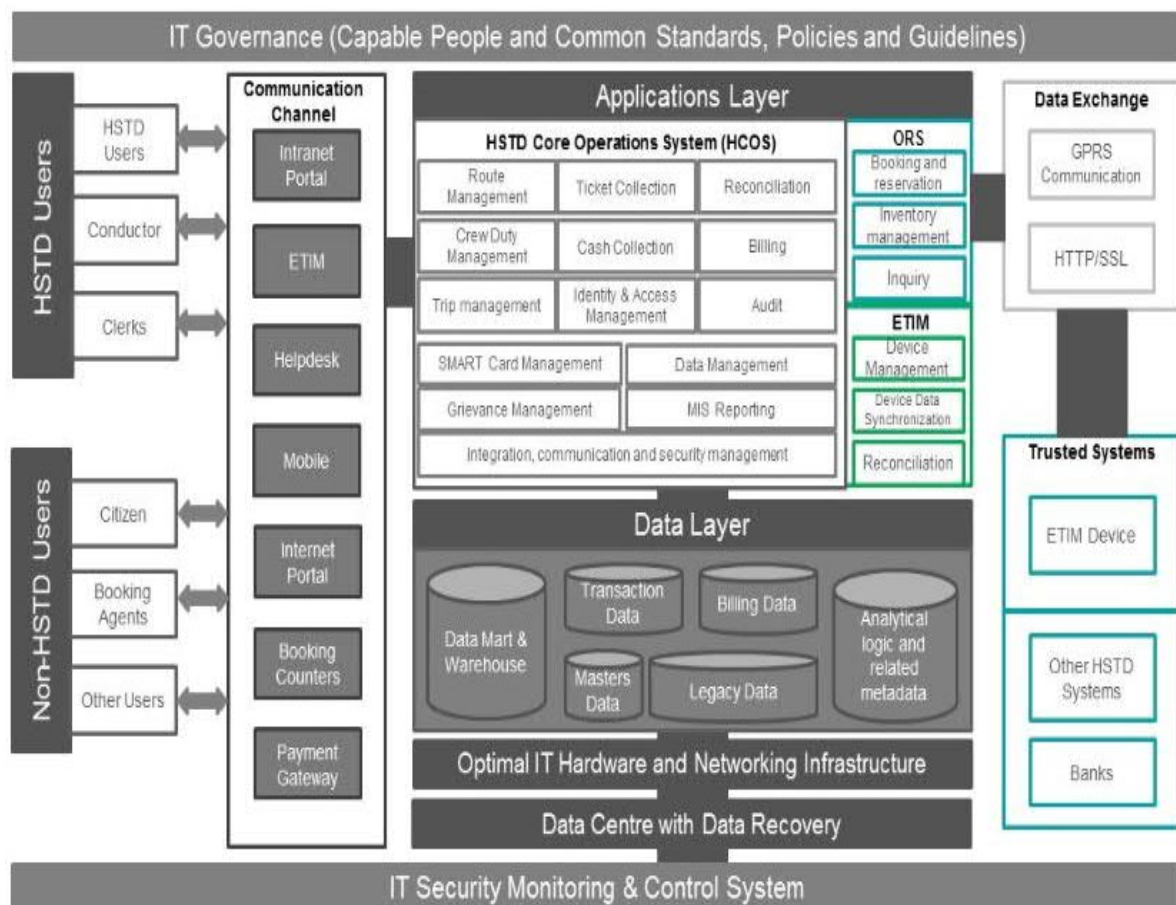
7.6.1 Department will provide the primary and secondary network connectivity along with necessary hardware (active and passive network devices) for depot, sub-depot, head quarter and command control centre.

8. Project Overview

Open Loop Ticketing and GPS System will be the addition of information technology to transportation infrastructure and vehicles. It aims at improving operational efficiency by better management of fleet, manpower, routes and passengers. The figure below shows a snapshot of project.

8.1 Solution Architecture

The Solution Architecture of the proposed system is as under:



The solution is anchored by a superior IT Governance system which focuses on having capable people at right locations, developing common standards, policies and guidelines to be followed across the department. It provides view of the various users and external systems expected to interact with the system. It also describes the various communication channels which may be used while interacting with

the various users and systems. The system rests upon a robust networking and hardware infrastructure, driven by a competent IT Security, Control and Monitoring system. The various components are described subsequently

8.1.1 Users

The table below provides the details about the users:

| S. No | User Group | User | Description |
|-------|---|--|---|
| 1 | Internal Staff of State Transport Department, Haryana | Departmental Management Users | Employees at head office and depots who will access the various reports, define routes, trips, duty allocation, and various functions |
| 2 | | Conductors | Users who will primarily operate EMV based ETIM machines |
| 3 | | Counter Booking Staff | Staff who will be issuing tickets at ticket counters using EMV based ETIM machines |
| 4 | | Depot Staff | Staff at depot for EMV based ETIM issuance, ticket reconciliation, cash handling, NCMC card issuance, etc. |
| 5 | External Users | Citizen (passengers) | Users who will access the reservation portal and mobile application for booking tickets, status updates and inquiry |
| 6 | | Booking Agents / Third party websites / mobile booking solutions | Agents who may carry out booking on behalf of department |
| 7 | | Other Users | Any other like schools / institutes, banks, various pass holders, authorized free travelers who use the website or other services |

8.1.2 Communication channels

The table below provides the details about the users:

| S. No | Channel | Description |
|-------|------------------|--|
| 1 | Intranet Portal | Internal portal accessed by a closed group including department employees at head office, booking office clerks. |
| 2 | ETIM | ETIM device operated by conductors and clerks at depot/sub-depot who update information in the device |
| 3 | Helpdesk | Support helpdesk to resolve technical issues related to portal, etc. being faced by internal users |
| 4 | Mobile | Mobile application & Web based application will be accessible over mobile and other portable devices. The web-interface developed will be compatible to work on latest mobile operating systems. |
| 5 | Internet Portal | Internet portal will be the primary web interface for passengers and booking agents to make reservations |
| 6 | Booking Counters | Passengers will have an option to book tickets through booking counters available at depot, sub-depot and bus stations |
| 7 | Payment Gateway | In order to facilitate online payment system will be integrated with payment gateway to accept payments through various modes such as credit cards, debit cards and net banking |
| 8 | SMS Gateway | To send the ticket details to the passenger through mobile after booking confirmation and the usage of paper can be decreased |

8.1.3 Application Architecture

Application architecture consists of three key subsystems

- (a) A central Haryana State Transport Department Core Operations System which combines the common functions being carried out in the current systems. This will provide for an interface with all users and devices. This system will maintain a single version of truth of all data generated. The system will be used for centralized reporting & MIS, auditing and billing while providing for core business functions including:
- Route Management
 - Crew Duty Management
 - Trip Management
 - Ticket Collection
 - Cash Collection
 - Billing
 - Audit
 - Smart Card Management
 - Grievance Management

In addition, it will be provide for modules supporting the business functions mentioned above including:

- Identity and Access Management
 - Data Management
 - MIS reporting
 - Integration Management
 - Patch Management
 - Communication Management
 - Security Management
- (b) Reservation Interface which will be part of the central system, providing functions specific to web-based reservations and reservations done by booking staff at depots. The major functionality of reservations process will be covered within Haryana State Transport Department Core Operations System (HCOS). Reservation specific modules may include:
- Bookings & Reservation workflows
 - Inventory Management at counters
 - Inquiry and status updates
- (c) ETIM Interface will follow a hybrid structure wherein data related to routes, trips and ticketing information will be fed directly into HCOS through GPRS enabled ETIM devices, At the end of the trip, summary will be pulled by central server which will reconcile and confirm that the information available at the central system is correct and updated. In places where there is no network connectivity, data from within ETIM will be pulled up by HCOS at this time. Routes, Trips, Ticketing and related information will be maintained centrally at HCOS. Again, major functionality of reservations will be covered within HCOS. ETIM specific modules may include:
- ETIM Device Management
 - Device data synchronization
 - Reconciliation

8.1.4 Data Architecture

The data architecture for the proposed solution to be deployed at State Transport Department, Haryana as a part of this project would consist on the following key data sets:

- a) **Legacy Data:** Data from the existing system which will be migrated on to the new system
- b) **Transactions Data:** Incremental data generated by operations by various systems on a daily basis. For instance, ticket data, routes plied data, data allocation details, and others

- c) **Masters Data:** Reference data required to carry out the various transactions such as depot master, conductor master, routes available, and others
- d) **Billing Data:** Data generated for the purpose of billing, this will be generated mostly from the transactions data,
- e) **Data Marts & Data Warehouse:** In order to have an efficient reporting system, the data needs to be collected in a structured way such that it captures its lifecycle. Data marts and data warehouse will assist in doing so
- f) **Analytical logic and related metadata:** In course of analysis being carried out and reports generated, new data about the analysis, various models created, and related metadata will be produced which will have to be stored by the system.

8.1.5 Security Architecture

Security defines the methods of protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide the three attributes of confidentiality, integrity and availability.

Security Architecture Principles

Following are the key guiding principles which are followed for the security architecture for State Transport Department, Haryana:

- (a) **Scale of effort:** Apply a level of security to resources commensurate to its value to the organization and sufficient to contain risk to an acceptable level. Security is a business enabler with associated costs. Security costs should be rationalized to the intended benefits. Requirements for security vary depending on the information system, connection to other systems, sensitivity of data, and probability of harm. An operation-driven risk assessment for all automated systems must be performed when designing or purchasing new applications. Security costs potentially increase beyond the value of the assets protected. Hence, typically more security measures should not be used than what is required.
- (b) **Security policy linkage:** All security-based technology deployments and practices must be driven by and in compliance with the written security policy of the organization as a whole. The key part of a secure system design is to identify the assets that need protection, the level of protection required, and the practices necessary to assure that protection.
- (c) **Open and industry standards:** Application security needs to be based on open standards as far as possible. Security services will be provided as infrastructure services. In order to take advantage of security services, application security must be designed for open standards. A clear migration path should be defined for products not yet capable of integrating with the infrastructure security services. Proprietary products from vendors are often implemented in ways that make it difficult to integrate these products into overall security architecture. Clear identification of integration issues should be part of the design process. If necessary, a migration path should be defined.

The various user groups and type of connectivity and authentication type has been detailed in the table below:

| # | User Group | Use | Type of Connectivity | Authentication type |
|---|--|---|----------------------|-----------------------------------|
| 1 | Internal department users comprising of employees at head office, depot office, booking counter, other staff, etc. | Trusted Closed User Group with more privileges on data access, carrying out updates on data | Intranet | Username / Password over HTTP/SSL |

| # | User Group | Use | Type of Connectivity | Authentication type |
|---|--|---|------------------------------------|--|
| 2 | Testing and Development users | Trusted Closed User Group with more privileges on data access, carrying out updates on data | Internal LAN | Username / Password Encrypted Intranet with Authentication, Authorization and Accounting (AAA) |
| 3 | Disaster Recovery System | Disaster recovery link with dedicated connection for backup of data | Dedicated MPLS Leased Circuit link | NA |
| 4 | Citizen, Passengers and booking agents | End users using the system for reservation, requesting information, etc. | Internet | Password based login using HTTP over SSL |
| 5 | General users | End users browsing public information on the website | Internet | Static unencrypted pages |
| 6 | Other external systems | Other systems interacting with HSTD system | Internet | Encrypted digitally signed data exchange using HTTP over SSL |

9. Pilot Implementation

The Bidder shall develop a pilot for testing and acceptance before rolling out to ensure that system meets the purpose effectively. The Bidder shall be free to provide own implementation plan/schedule as long as it meets all the milestones and implementation dates as stipulated. Successful pilot shall be measured upon implementation of the same in following:

| S NO. | PARAMETER | NO. OF PILOT TESTING |
|-------|-----------------------------------|---|
| 1. | Depot and its concerned sub-depot | 6 (Chandigarh, Karnal, Bhiwani, Faridabad, Sonipat and Sirsa) |

Based on the lessons learnt from pilot implementation, suitable changes will be made in the application and operational procedures for complete roll out.

10. Project Implementation

10.1 Requirement Gathering

10.1.1 The Bidder shall carry out requirement gathering study to understand and estimate the exact requirement of the project. This will include requirement gathering for DC/DR, Networking Requirements, Head Office requirement, Bus Depot/Sub-depot requirement, Bus Requirements, Command Control Centre requirements. This will also include studying existing infrastructure of department and their re-usability.

10.2 Solution Design and Signoff

10.2.1 After the requirement gathering study, the Bidder shall prepare a solution design of the complete system and take sign off from department on the same.

10.3 SRS Preparation and Signoff

10.3.1 Based on the approved solution design, the Bidder shall prepare the System Requirements Specification for the complete system and take signoff from department before starting the implementation.

10.4 Development and Customization of Software

10.4.1 Based on the approved Solution Design and SRS document, the Bidder shall develop and customize the software systems. The Bidder will have to supply and install software for DC-DR. All software installation, update and upgrade will be the responsibility of Bidder.

10.5 Supply and Installation of Hardware

10.5.1 The Bidder shall supply and install the hardware for the project. This will include setting up hardware infrastructure required mentioned in Bill of Material.

10.6 Email and SMS Service

10.6.1 For the implementation of alerts and messages from the system, department's managerial staff already has phone numbers, mailboxes and email Ids to access emails from the system. The Bidder is required to integrate the email and SMS service with the newly developed STMS system.

10.7 User Acceptance Test of complete system

10.7.1 User Acceptance Test (UAT) shall be carried out by department on the STMS system. The Bidder shall first train the department's testing team and then facilitate the UAT. Bidder would provide test scripts for conducting the UAT. The UAT will be carried out at the pilot depots first. On acceptance of system at the pilot depot, the Bidder shall rollout the same system to all other depots in a phased manner.

10.8 Documentation

10.8.1 The Bidder will prepare and submit for approval the documentation for the system. The documentation shall be provided in hard and soft copy to department. This shall include but not limited to:

- Requirement Gathering Report
- System Requirement Specifications (SRS)
- Data digitization and migration plan
- Software Design Document
- Trouble shooting document
- Installation Manual
- Operational Procedures Manual
- Acceptance Test Plan
- Acceptance Test Scripts
- Other relevant technical documentation etc.
- User Documentation including user guide and procedures manuals for hardware and software
- Software installation guide including the configuration of the database etc.
- ORS help in English and Hindi

10.9 Training

10.9.1 The Bidder 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.

10.9.2 Trainings need to be conducted based on a requisite mix of theory & practical/operational sessions. The trainings should be conducted in Hindi language. Trainings may be

conducted in shifts over a period of time. Some of the practical/operational training session for the conductors needs to be conducted in the buses when they are the depot. The trainings need to be conducted at the depots, sub-depots and Head Office.

10.9.3 The Bidder shall also be responsible for retraining the staff concerned whenever changes are made in the software and it is the responsibility of the bidder to ensure that the operators are familiar with new versions of Software and its allied services. The Bidder shall also conduct refresher courses on periodic basis for some of the trainings.

10.9.4 It is mandatory that during the training, at least two trainers (1 technical trainer and 1 process trainer) are available during the training. The qualifications of this trainer should equivalent or higher than as specified in clause 14 – Minimum Resource Requirement in this section.

Details of Training Required

| # | Training On | Type of Training | Number of Trainees | Min Duration of training (in Minutes) | Batch Size | Location | Frequency of Training |
|---|---|-------------------|--|---------------------------------------|------------|--------------------|---|
| 1 | ETIM Device | End User Training | All Conductor, drivers and counter booking staff | 120 | 30 | Depots/ Sub-depots | a) Once in the year of Implementation b) Once in every 12 months throughout the contract for new drivers and conductors |
| | | Train the trainer | 1 Staff per depot/sub-depot | 120 | 15 | Head Office | a) Once in the year of Implementation b) Once in every 12 months and on event of any change in functionality in the system |
| 2 | Single Window Operation (cash handling, ETIM management, Pass counter operations etc) | End User Training | 6 people per depot and 4 people per sub-depot | 120 | 30 | Depots/Su b-depots | a) Once in the year of Implementation |
| | | Train the trainer | 1 Staff per depot/sub-depot | 120 | 15 | Head Office | a) Once in the year of Implementation b) Once in every 12 months and on event of any change in functionality in the system |
| 3 | Local Network Administration | End User Training | 1 person per depot/sub-depot | 120 | 15 | Depots/Su b-depots | a) Once in the year of Implementation |
| | | Train the trainer | 1 Staff per depot/sub-depot | 120 | 10 | Head Quarter | a) Once in the year of Implementation b) Once in every 12 months and on event of any change in functionality in the system |

| # | Training On | Type of Training | Number of Trainees | Min Duration of training (in Minutes) | Batch Size | Location | Frequency of Training |
|---|--|------------------------|---|---------------------------------------|------------|-------------|---------------------------------------|
| 4 | Complete System Training for Management Staff | High level training | 50 users throughout depot, sub-depot and head quarter | 240 | 20 | Head Office | a) Once in the year of implementation |
| | | | | | | | b) Once every 12 months |
| 5 | Central Infrastructure and network administration training | Administrator Training | 10 Users | 240 | 10 | Head Office | a) Once in the year of implementation |
| | | | | | | | b) Once every 12 months |
| 6 | Service Level and operations monitoring training | Administrator Training | 40 users throughout depot, sub-depot and head quarter | 240 | 20 | Head Office | a) Once in the year of implementation |
| | | | | | | | b) Once every 12 months |

Trainings Matrix

| # | Training On | Type of Training | Bus Conductors | Bus Drivers | Counter Booking Staff | Single Window Operation Staff / Other Depot Staff | Head Office Staff |
|---|---|------------------------|----------------|-------------|-----------------------|---|-------------------|
| 1 | ETIM Device | End User Training | Yes | Yes | Yes | | |
| | | Train the trainer | | | Yes | | |
| 2 | Single Window Operation | End User Training | | | | Yes | |
| | | Train the trainer | | | | Yes | |
| 3 | Network Administration | End User Training | | | | Yes | |
| | | Train the trainer | | | | Yes | |
| 4 | Complete System Training for Management Staff | High level training | | | | | Yes |
| 5 | Central Infrastructure and network | Administrator Training | | | | Yes | Yes |

| # | Training On | Type of Training | Bus Conductors | Bus Drivers | Counter Booking Staff | Single Window Operation Staff / Other Depot Staff | Head Office Staff |
|---|--|------------------------|----------------|-------------|-----------------------|---|-------------------|
| | administration training | | | | | | |
| 6 | Service Level and operations monitoring training | Administrator Training | | | | Yes | Yes |

10.10 Operations, Support and Maintenance for 5 Years

10.10.1 Bidder shall Operate, Support and Maintain the system for a period of 5 years after the acceptance and go-live at all locations of State Transport department, Haryana covered under the project.

10.10.2 The following are the key requirements to be met by the Bidder during the 5 years of operations, support and maintenance.

(a) Technical Support

- The Bidder should provide comprehensive onsite support to department at the designated locations on a daily basis to meet up with service levels for the infrastructure to be measured on a monthly basis in accordance with the SLA mentioned as part of this RFP.
- The Bidder should ensure that the entire solution as a whole is operational and run according to stipulated performance standards.
- The Bidder Should commit to provide all necessary resources and expertise to resolve any issues and carry out required changes, optimizations and modification so that complete system as a whole works according to the specified requirements and satisfaction of department
- The Bidder Should provide comprehensive technical support services for all the software proposed for the entire period of the contract. The technical support should include all the upgrades, updates and patches that are released by the respective OEMs during the period of contract.
- The Bidder shall provide support and maintenance services to department which shall include the limited period warranty for hardware and software from the OEM followed by Annual Maintenance Contract ('AMC') for hardware items and Annual Technical Support ('ATS') for software systems after the expiry of the warranty period.
- The total period of support and maintenance including the Warranty and AMC / ATS shall be five (5) years from the date of acceptance of implementation at all the depots.

(b) System Maintenance, Management and Administration

- Bidder shall be responsible for server monitoring and management shall involve supporting the purchaser with managing the equipment hosted in the data centre.

The Bidder shall also provide helpdesk support to the purchaser and send periodic reports on the equipment performance.

- Port monitoring: Monitor HTTP/HTTPS, DNS, SMTP, POP3, FTP, TCP ports, etc. are continuously to ensure network and applications are up and running.
- Remote hands service: Execute instructions on hosted servers such as server restart, service restart, minor configuration changes in OS, executing a script on the server, installation of software etc. Activities shall include service restarts in Windows Servers / Killing and restarting of processes on Unix/Linux Servers, rebooting of servers and clearing of log files.
- Manage Operating System: This shall include support of Operating System, format and reinstallation of OS as requested by department, creation and maintenance of User Accounts, Start / Stop service, application of upgrades and patches provided by the OS vendor and approved by the customer, OS debugging and recovery, maintenance of server logs, management of server disk space, addition or removal of Hardware or Software.
- The Bidder shall be responsible for periodic health check of the systems, troubleshooting problems, analysing and implementing rectification measures.
- On an ongoing basis, the Bidder is responsible for troubleshooting issues in the infrastructure, network and application of department to determine the areas where fixes are required and ensuring resolution of the same.
- The Bidder shall be responsible for identification, diagnosis and resolution of problem areas pertaining to the central infrastructure and application and maintaining assured SLA levels.
- Manage database system: This shall include installation and configuration of database server, support of RDBMS, performance tuning and optimization, user access management by assigning access rights, start up and shutdown of database system as requested by the customer, backup & restore, access control, maintenance of server logs and trace files, monitoring of Critical Database parameters, performing Import/Export of data, management of database space and database fragmentation, addition or removal of Hardware or Software, configuration and maintenance of Client Connectivity like JDBC, SQL Net 8 etc., RDBMS version upgrades and migration. Ongoing support for the application vendors to deploy applications, application patches, trouble shooting, performance tuning etc.
- Application Performance Monitoring: This shall help in enhancing system performance and reliability of the system to ensure improvement in the overall operational efficiency.
- Manage load balancing: This shall include management of the load balancer hardware device, regular Health Check of the Servers using TCP or ICMP connections, limiting the number of connections per server for optimum performance, seamlessly adding servers as and when existing servers are over-utilized without disrupting services.
- Implement and maintain standard operating procedures for maintenance of the infrastructure based on the policies provided by the purchaser and based on the industry best practices / frameworks like ITIL. Create and maintain documentation / checklists for the same.
- The Bidder shall be responsible for managing the user names, roles and passwords of all the relevant subsystems, including, but not limited to servers, applications,

devices, etc. The Bidder shall be responsible for management of passwords for all relevant components and devices under his purview and implement a password change mechanism in accordance with the security policy of the purchaser.

- The system administrators should regularly monitor and maintain a log of the performance monitoring of servers including but not limited to monitoring CPU, disk space, memory utilization, I/O utilization, etc. The Bidder should also ensure that the bottlenecks in the infrastructure are identified and fine tuning is done for optimal performance
- The system administrators should undertake regular analysis of events and logs generated in all the sub systems including but not limited to servers, operating systems, databases, applications, security devices, messaging, etc. The administrators should undertake actions in accordance with the results of the log analysis. The system administrators should also ensure that the logs are backed up and truncated at regular intervals.
- The administrators should adopt a defined process for change and configuration management in the areas including, but not limited to, changes in parameter settings for application, servers, operating system, devices, etc., applying patches, etc.
- The system administrators are for managing the trouble tickets, diagnosis of the problems, reporting, managing escalation, and ensuring rectification of server problems as prescribed in SLA.

(c) Security Administration

- Provide services for management of security environment to maintain performance at optimum levels on a 24 x 7 basis.
- The Bidder should address ongoing needs of security management including, but not limited to, monitoring of various devices / tools such as firewall, intrusion detection, content filtering and blocking, virus protection, and vulnerability protection through implementation of proper patches and rules.
- Maintain an updated knowledge base of all the published security vulnerabilities and virus threats for related software and microcode, including, but not limited to, operating systems, application servers, web servers, databases, security solutions, messaging solutions, etc.
- Ensure that patches / workarounds for identified vulnerabilities should be patched / blocked immediately.
- Responding to security breaches or other security incidents and coordinate with respective OEM in case of a new threat is observed to ensure that workaround / patch is made available for the same.
- Undertake maintenance and management of security devices, including, but not limited to maintaining firewall services to restrict network protocols and traffic, detecting intrusions or unauthorized access to networks, systems, services, applications or data, protecting email gateways, firewalls, servers, Desktops/Laptops from viruses.
- The Bidder should ensure that the security policy is maintained on an ongoing maintenance and updates to the same are made regularly. Operating system hardening through appropriate configuration and patch updates should be undertaken on a regular basis.

- Monthly Vulnerability assessment: Assess server for vulnerabilities locally using automated scanning and manual assessment.
- Six monthly Penetration testing: The Bidder shall perform penetration testing to ensure the following:
 - Create a hacker's view of the server, in terms of the ways it can be hacked from outside.
 - Identify security vulnerabilities and fix holes discovered.
 - Implement emergency quick fix solutions and long-term solutions against successful exploits.
- Firewall management: Initial setup of the firewall, implementation of rule base on the firewall to enable customer specific applications and ports, implementation of security policies based on services (HTTP, FTP, Telnet), source address / name, destination address / name, online monitoring of firewall through a central console with 24x7 support, system administration for firewall, including updates & hot fixes that affect its performance, changes in firewall rule base with proper change management and backup of firewall configuration each time there is a configuration change.
- Intrusion detection and prevention: Initial installation and setup; applying appropriate levels of risk assessment for specific needs which allows security policies to be an integral part of scanning process; tracking of resource usage for anomalies and logging any suspicious packets from the outside; log maintenance and management; automated network based security assessment and policy compliance evaluation.
- Testing and application of patches: The Bidder shall carry out testing and application of periodic patches released by software and OS vendors to plug vulnerabilities in the system.

10.10.3 Network Monitoring

- a) Bidder is expected to closely liaison with bandwidth Service Provider(s) for the period of contract. The Bidder is expected to file the applications in the formats as required by the network service provider for bandwidth procurement.
- b) Bidder would be expected to liaise with the network service provider to ensure the links are commissioned within the timelines specified and agreed by department.
- c) Bidder will be expected to escalate any delays in the link commissioning to department on a proactive basis.
- d) Bidder will be expected to inform the department of the link readiness and commissioning.
- e) Bidder is expected to liaise with the network service provider in case of any link / line failure and ensure the same is restored within the agreed timelines.
- f) Bidder is expected to maintain all network and security equipment for department sites for the contract period.
- g) Provide services for management of network environment to maintain performance at optimum levels on a 24 x 7 basis.
- h) Bidder is responsible for monitoring and administering the network within all the locations up to the integration points with WAN.

10.10.4 Storage and Backup Management

- a) The Bidder shall perform Tape and disk backup as per the requirement of the department. This will include installation of backup software, managing the tape library, regular backup and restore operations and assuring security of the media through appropriate access control. In addition, the Bidder shall also manage scheduled data replication. The activities shall include:
- b) Backup of operating system, database and application should be performed as per stipulated policies of the purchaser. Bidder should provide required tools for undertaking these activities.
- c) Monitor and enhance the performance of scheduled backups, schedule regular testing of backups and ensure adherence to related retention policies.
- d) Ensure prompt execution of on-demand backups of volumes, files and database applications whenever required by the purchaser or in case of upgrades and configuration changes to the system.
- e) Real-time monitoring, log maintenance and reporting of backup status on a regular basis. The Bidder should ensure prompt problem resolution in case of failures in the backup processes.
- f) The Bidder should undertake media management tasks, including, but not limited to, tagging, cross-referencing, storing, logging, testing, and vaulting in fireproof cabinets (onsite and offsite).
- g) The Bidder should also ensure that a 24 x 7 support for file, database and volume restoration requests is available at the data centres.

10.10.5 Facility Management Services

- a) The Bidder should provide Facilities Management Services of IT infrastructure at all locations of State Transport Department, Haryana. The Facilities Management would, include following major areas of services:
 - Help Desk Services
 - Technical Support Services
 - Vendor Management Services
 - Asset Management services
 - AMC tracking
- b) Bidder should provide competent Engineers for supporting the above said services at the user locations. The Help Desk agents shall coordinate the assigning of user calls to Engineers.
- c) Bidder should provide adequate Engineers for supporting the above said services at the user locations.

10.10.6 Help Desk

- a) The Bidder should setup one help desk (Phone & Mail Support) at Head Office. The toll-free phone number for the same shall be obtained by the Bidder in the name of department. These help desk operations should be as per business hours of operations of department.
- b) The Help Desk should undertake the following activities:
 - Log service requests related to IT infrastructure of department under the scope of work and give them a service request number
 - Assign severity level to each service request
 - Track each service request to resolution

- Escalate the service requests related to usage of application software to Application support team.
 - Provide feedback to callers.
 - Analyse the statistics
 - Creation of knowledge base on frequently asked questions to aid users.
- c) The help desk coordinator should log all service requests and assign the service requests to engineers and ensure that service request is closed. It is the Help Desk Coordinator's responsibility to generate reports using the service requests logging and reporting tool as provisioned.
- d) Bidder shall also provide a 24X7 call center service for the ORS users. The number of seats required shall be based on the call traffic. The maximum wait time for any user should not be more than 30 seconds.
- e) The space for setting up the help desk and call center for ORS shall be provided by department.

10.10.7 Technical Support Services

- a) The scope would include Software and other supporting peripherals installed at the user locations.
- b) First level hardware support for the above equipment which will include diagnosing the problem and getting the same resolved through coordination with the respective vendors as per the severity level assigned to it to ensure uptime of all IT infrastructure of department as defined SLA
- c) Configuration of the printers, servers and resolving printing problems of the users

10.10.8 Antivirus

- a) Installation, upgrade, update and management of Antivirus solution
- b) Notification of new viruses found and issues with anti-virus definition updates.
- c) Clean of virus from facility in case of virus attack.

10.10.9 Asset Management Service

- a) This will cover all the infrastructure supplied by the Bidder under the STMS scope.
- b) Create hardware asset database for all locations of department by recording information like configuration details, serial number, asset code, warranty and AMC (Annual Maintenance Contract) details, IP address, etc. The proforma for this database should be prepared and submitted to department for its approval before commencing activity.
- c) Create Software asset database for all locations of department recording information like License, Version Numbers and Registration Details.
- d) Management of software keys and license numbers, software installation media, manuals and ensure their safe keep.
- e) The Bidder should ensure proper change management policy is defined for undertaking changes to infrastructure at all the locations. This policy should be submitted to department for approval. The Bidder should follow the policy to record changes including, but not limited to, installation of new machines, modifications in configuration, change of location, upgrade of machine, addition of new software, re-installation of operating system, etc. of equipments at all locations.
- f) Track the inventory of all spare parts and consumables.

- g) Conduct Yearly IT Asset Audits, quarterly during the currency of the contract.

10.10.10 Maintenance of Spares

- a) The Bidder shall provide all the required spares/components at all locations for meeting the uptime commitment of the components supplied by him.
- b) It is expected that the Bidder should maintain appropriate inventory of all critical spares at all times to ensure smooth operations.
- c) At the end of the contract period, Bidder should handover the inventory of spares to the Purchaser.

10.10.11 Support for DC and DR operations

- a) The Bidder should coordinate with Data Centre Service Provider (DCSP) to resolve as per SLA with DCSP any problems and issues related to the data centre
- b) The Bidder shall also be required to co-ordinate with the DCSP for implementing any changes that may be required towards the placement and layout of infrastructure within the data centre.
- c) The data centre operators shall also be required to act as the first level of support for any issues related to the network and communications equipment installed at the data centre.
- d) The Bidder should prepare a list of equipment, software and configuration installed in the data centres and the same should be approved by purchaser. The Bidder should maintain and modify the list in accordance to the modifications.
- e) Any breach of security or non-compliance on part of the DCSP and/or data centre facilities shall be immediately brought to the notice of the purchaser with suggestions for improvement.
- f) Manage an inventory critical components and spares that are provisioned onsite and co-ordinate with the OEM to ensure replenishment of the same whenever required.
- g) The purchaser may undertake all types of audits on a periodic basis and the same may be conducted by the department itself or by the third-party auditor which may be appointed by the department. The Bidder shall be required to provide necessary support for this and adequately address the audit findings in a timely manner.
- h) Physical Security of the Assets: Providing physical security for the devices and equipment shall be the responsibility of the Bidder.

10.11 Transfer of System:

- a) Asset (Hardware, Software and Licenses) Transfer: The Bidder, at the end of the contract period shall transfer all IT assets (hardware, software and licenses to department) in running condition.
- b) Knowledge Transfer: The FI/Ban will have to transfer knowledge to department or its appointed agency before completion of the contract period.

11. Specific Exclusions/Inclusions from the scope of Bidder

- (a) Training space at all locations will be provided by department; however, the equipment and computers required for training shall be arranged by Bidder.
- (b) All SIM cards, GPRS cost etc to be borne by the Bidder for the contract period
- (c) Bidder needs to provide real time access to the higher officials of State Transport Department through a technological platform, i.e. a Management Information System. The real time data feed should be integrated with the Hon'ble Chief Minister, Haryana Dashboard as well. The

Key Performance Indicators (KPIs) shall be captured by the bidder during the course of the project. Some indicative parameters are listed below:

- Manpower Utilisation at each depot
 - Concessionaire Identification
 - Route rationalisation with regard to passenger inflow
 - Elimination of fake passes
 - Growth in passengers travelling through buses
 - Paper savings for concessionaire travellers
- (d) During SRS preparation, Bidder Shall have to provide the options for integration of STMS with different payment modes like Government approved wallets or applications. And later on during development of STMS, Bidder shall integrate the STMS with the wallet/app selected by State Transport, Haryana.
- (e) The Bidder is encouraged to undertake any activity that shall enhance non-fare revenue. However, before taking any such activity the bidder shall take prior permission from department. The revenue shall be shared with the department. The revenue sharing shall be done with mutual understanding of the bidder and department. Any contracts with any third parties for enhancing the non-fare revenue shall be shared with department for transparency and accountability
- (f) The bidder shall have to supply and install ETIMs for the buses which shall be commissioned by the purchaser to the bidder. The buses where ETIMs are to be supplied will be either owned or controlled by the State Transport Department, Haryana.
- (g) The total number of ETIMs which are to be supplied by the bidder are 4500 with a variation of +25%. The additional ETIMs (25%) will be supplied and made operational after mutual agreement between the Bidder and the Purchaser.

12. Project Implementation Schedule

| # | Activity | Time Completion |
|----------|--|---------------------|
| I | Phase I: Development and Deployment | T + 4 months |
| 1 | Application Software | T + 4 months |
| | Submission of Software Requirement Specifications (SRS) | T + 1 month |
| | Development and testing of entire application | T + 3 months |
| | Deployment and configuration of application at all locations including depot required for pilot implementation | T + 4 months |
| | Submission of application ready for pilot implementation | T + 4 months |
| 2 | Data Centre and Disaster Recover Centre | T + 3 months |
| | Submission of specifications and BOM for software required at data center | T + 1 months |
| | Specifications for Data center and DRC | T + 1 months |
| | Deployment & installation of hardware & system software | T + 2.5 months |
| | Completion of Data Centre and DRC | T + 2.5 months |
| | Submission of Data Centre and DRC ready for pilot implementation | T + 3 months |
| 3 | ETIM | T + 4 months |
| | Submission of plan for ETIM procurement and deployment | T + 1 months |
| | Deployment of ETIM machines required for pilot | T + 3.5 months |
| | Submission of certification from respective depot officials ready for pilot implementation | T + 4 months |

| # | Activity | Time Completion |
|-----------|---|---------------------|
| 4 | Depot Infrastructure | T + 4 months |
| | Submission of specifications and BOM for hardware / software required at all depots | T + 1 months |
| | Deployment & installation of hardware & system software at locations required for pilot implementation | T + 3 months |
| | Submission of certification from respective depot officials ready for pilot implementation | T + 4 months |
| 5 | Change Management | T + 4 months |
| | Submission of training and change management plan | T + 1 months |
| | Training of required officials including conductors for pilot implementation | T + 3.5 months |
| | Submission of training certification from required locations | T + 4 months |
| 6 | Data Migration | T + 4 months |
| | Plan for data migration, requirements and specifications of data required for migration after discussion with depot officials | T + 1 months |
| | Verification and confirmation of completeness of data received from department | T + 3 months |
| | Data import and migration completion, ready for pilot implementation | T + 4 months |
| 7 | Network Infrastructure | T + 1 month |
| | Submission of Network specifications required for all sites including primary data center, DRC, depots, etc. | T + 1 month |
| 8 | Command Control Centre | T + 1 month |
| | Submission of specifications and BOM for hardware / software required at Command Control Centre | T + 1 month |
| II | Phase II: Testing and Tuning | T + 4 months |
| | Commencement of Pilot from the selected pilot locations | T + 4 months |
| | Submission of approval for Go-live for the system | T + 4 months |
| C | Phase III: System roll-out | T+7months |
| | Deployment and configuration of application at all remaining locations | T + 5 months |
| | Deployment of ETIM machines at all remaining locations | T + 5 months |
| | Deployment & installation of hardware & system software at all remaining locations | T + 5 months |
| | Training of required officials including conductors for complete system rollout and operations | T + 5 months |
| | Completion of migration of all data | T + 5 months |
| | Staff deployment at all remaining locations | T + 5 months |
| | Establishment of help desk and other components required for full scale operations | T + 5 months |
| | Third party certification for SLA monitoring system | T + 5 months |
| | Submission of certification from depot officials on deployment of ETIM, hardware, software, training, etc. | T + 5 months |
| | Submission of all components required for system go-live | T + 5 months |
| | Stabilized operations for a period of 2 months | T + 7 months |

Note: "T" shall be calculated from the date of signing of contract by bidder

13. System Architecture

Architectural Principles: It is important that the Bidder takes into account certain architectural principles while designing the solution, some of which are:

- a) Flexibility: The system will be adaptable to changing commercial practices thus reducing the total cost of ownership.
- b) Open Architecture: The system will be open to allow interoperability with general-purpose software and have facility to export/import data files from other applications and interact with other applications as mentioned earlier.
- c) Service-oriented: The system design will be based on Service – Oriented approach.
- d) Integrated: The system will be fully integrated across departments and functional area and also across geographical location of sites.
- e) Workflow-integration approach: The system would adapt workflow management techniques.
- f) Simplicity: The overall application will be developed keeping in mind simplicity as the key, so as to enable easy maintenance and operation of the application by the end user.
- g) Manageability: The System application would cater for easy manageability by the system administrator.
- h) Scalability: System will be deployed across all the locations (Head Quarter, Depot, and Sub-depot) of the State Transport Department, Haryana. As the locations vary in size and functionality it is a mandate requirement that the system would be scalable at modular level.
- i) Reliability: Solution would be implemented with clustering technology to ensure the system reliability. Portal server and Integration server are clustered at application level and database server is clustered at Operating System level.
- j) Availability: System behaviour in the failure of CPU, memory, applications. Availability is ensured by system level redundancy including the communication network.
- k) Stability & Robustness: System behaviour on high stress / over use, wrong use. Load balancers are used in the solution to share the load and thereby ensuring stable operation.
- l) User- friendliness: Intuitive portal design features of the Portal products will enhance the customer stickiness to the portal service. The portal content design will include advance graphic and plug & play modular display objects available with the Portal product.
- m) Interoperability: Customer demand for enterprise interoperability solutions continues to escalate, the need to maximize return on investments, and the need for standards-based solutions. System, interoperability software can help enterprises get maximum value from their current resources and applications investments by extending both existing skill and code bases, allowing for maximum application reuse in the fastest time possible. System supports Web Services and XML based data exchange, which would make ease to integrate with third party software, customer-created, or legacy security solutions. This way system assures the best approach for integration over discrete systems.
- n) Optimization: Server Load Balancing techniques will get the best possible performance from their Web servers. System chooses the right CPU, memory, storage, cache, load balancing, etc., and increases the performance of a Portal. This can help significantly increase efficiency of hardware, software and Internet service and improve reliability. In addition to the Hardware sizing and software tools to increase the system portal performance, the below-mentioned steps to optimize the web performance would be followed.
 - i. Stop unwanted content over network

- ii. Secure system network from web-based threats
 - iii. Restricts illegal file downloads and recreational internet surfing
 - iv. Manage Internet traffic to optimize network bandwidth
- o) Security: The security overlay for the access to the server must be provided centrally with suitable authentication and profiling engine. Suitable encryption mechanism must be used at the application layer. The functions shown in this document will be applicable to various users based on Role, which will be specified during Requirement analysis phase. Audit trail is must for all data updates/amendments and deletions for security audit. Encryption mechanism wherever required must be built in. Size of log file, number of entries, time sensitivity etc. will be discussed and finalized during SRS stage.
- p) Backup and Recovery: A rugged back up policy with detailed procedures will be formulated. The system should maintain a backup of all programs, data, documents, procedures, etc. on timely intervals. Verification procedures for backup taken should be in place. Appropriate Disaster Recovery tools should be provided for recovery of the system and database with minimum down time. The minimum downtime will be finalized during the system design state.
- q) Reporting & MIS: The system would be capable of generating various reports based on the user inputs and also would analyse the data received from various systems. The MIS would be capable of generating predefined and ad-hoc reports.
- r) Print and Online Help options: Proposed system must have the facility to have print options for the reports and other specified forms in general / pre- printed format agreed and approved by the user. Online help for all users and administrators should be part of software. For all the modules mentioned below, there must be adequate internationally accepted standard reporting features that enable high quality graphics and user interactivity. The reports must have facility to be ported in standard office automation suits like excel, word documents etc.

14. Minimum Resource Requirement

Bidder must propose a team consisting of experienced and skilled professionals with relevant experience in the proposed areas. The minimum desired qualification for the key personnel has been indicated below:

| S. No | Post | Deployment | Responsibilities | Desired Qualification |
|-------|------------------|-------------------------------------|--|---|
| 1. | Project Director | Part-time (50% of total deployment) | <ul style="list-style-type: none"> • Responsible for organizing, planning, directing, conflict management, issue & dispute resolution and coordinating the overall program effort • Responsible for compliance to the terms and conditions of the Contract | B.E/ B.Tech & MBA/PG with minimum 12 plus years of experience in Intelligent Transportation System (ITS) implementation projects with Government/PSU in India |
| 2. | Project Manager | Full time | Project Co-ordination. The Project Manager would be responsible for all the department Locations and would act as a one-point contact for the department | MCA / MBA / B.Tech / BE or Master in any discipline having minimum 9 plus years of experience in Intelligent Transportation System (ITS) implementation projects with |

| S. No | Post | Deployment | Responsibilities | Desired Qualification |
|-------|------------------------|--------------------------------------|---|--|
| | | | | Government/PSU in India |
| 3. | Solution Architect | Part-time (for implementation phase) | Responsible for Overall technical design of the system consisting of project standards, the functional design and the database design | B.Tech with M.Tech/MBA or Bachelors in IT/Computer Science with MCA having certification in Architecture and minimum 8 plus years of experience in solution design |
| 4. | AFC Expert | Full time | Responsible for implementation of AFC system | B. Tech with M. Tech/MBA or Bachelors in IT//Computer Science with MCA minimum 8 plus years of experience in AFC |
| 5. | System Administrator | Full time | System administrator shall be responsible for all the requisite System Administration & Facility Management work required for central servers, user configurations, account management, network management, management of software, security and network solutions on 24X7 basis | MCA / B.Tech / BE / MCSE / Unix certified professional with minimum of 2 years of experience as a system administrator |
| 6. | Network Specialist | Full time | Responsible for installation, commissioning and management of networking requirements | MCA / B.Tech / BE / CCNP / CCNA / Industry Equivalent certification with minimum of 2 years of experience as a network administrator |
| 7. | Database Administrator | Full time | Monitoring and maintenance of databases, installation of database software patches/ upgrades, monitoring of database backups, database replication techniques, standardization and implementation of databases to improve the management of production and test environments, support users by resolving problems with applications' databases. | BE / B.Tech / MCA with minimum experience of 5 years as database administrator |

| S. No | Post | Deployment | Responsibilities | Desired Qualification |
|-------|---|--------------------------------------|---|---|
| | | | Monitor and allocate volumes, analysis of utilization and resources, performance tuning, monitor db replication, coordination of system upgrades or fixes. | |
| 8. | Storage Engineer | Part-time (for implementation phase) | Monitoring and maintenance of storage and backup system at the data centre. | MCA / BE / B. Tech with minimum experience of 3 years as storage administrator |
| 9. | Security Engineer | Part-time (for implementation phase) | Data security and data protection, OS hardening, Analysis of logs pertaining to network, storage, server devices to identify potential threats and weakness | MCA / BE / B.Tech With minimum 5 years of experience in information technology or security |
| 10. | Facilities Management and Help Desk Coordinator | Full time | Responsible for coordinating helpdesk services at each location | B.Tech / BE / Diploma (IT or CS) with minimum of 2 years of experience as a Helpdesk Coordinator |
| 11. | Technical trainer | Full time | Provide training on technical subjects like hardware, software, devices etc | Graduate / postgraduate with minimum 4 years of experience in IT technical training. |
| 12. | Process Trainer | Full time | Provide training on processes, analytics and MIS etc | Graduate / postgraduate with minimum 4 years of experience transport domain or similar STMS implementation. |

15. Indicative Bill of Material

| Bus Infrastructure Bill of Material | | |
|--|--|--------------------|
| S No. | Equipment / Parts | Total Qty |
| 1 | GPS enabled EMV based ETIM with SAM Module | 4500 |
| Depot Bill of Material (24 Depots & 13 Sub-Depots) | | |
| S No. | Equipment / Parts | Total Qty |
| 1 | ETIM Charging Points | 4500 |
| 3 | Bus Passes for Free & Concessional Travelers (for 5 years) | 10,00,000 |
| 4 | NCCM cards | As per requirement |
| 5 | Camera – Required at pass counter for taking the photograph of pass holder | 37 |
| DC & DR Bill of Material (Software) | | |
| S. No | Software | Total Qty |
| 1 | Ticketing Solution | 1 |

| | | |
|---|--|----|
| 2 | Online Reservation System (Web Portal) | 1 |
| 3 | MIS & Analytics Reporting Solution | 1 |
| 4 | Server Operating System | 19 |
| 5 | RDBMS License | 1 |
| 6 | Backup & Archival Solution | 1 |
| 7 | GPS Software | 1 |
| 8 | SLA Monitoring Tool | 1 |

16. List of Free and Concessional Travelers in Haryana Roadways

List of Free Travelers

| List of Free Travelers | |
|------------------------|--|
| S. No | Category |
| 1 | MLA & Ex-MLA |
| 2 | MP & Ex-MP |
| 3 | Freedom Fighters |
| 4 | Widows of Freedom Fighters |
| 5 | Blind persons on the basis of Identity Certificate issued by the concerned Deputy Commissioner |
| 6 | Press Reporters/Accredited Journalists. The limit of Journey has been increased from 2500 Kms to 4000 Kms in a year w.e.f 19.07.2007. |
| 7 | 285 Desk Journalists and 30 Employees of the Press Branch upto the limit of 1500 Kms per year. The limit increased from 1500 kms to 2500 kms in a year w.e.f.19.07.2007 |
| 8 | All those Writers who have been given State Awards by the Haryana Urdu/Hindi, Sanskrit & Punjabi Academies |
| 9 | Folk Artists who have been given awards |
| 10 | Patients of Thalsamia along with one attendant |
| 11 | Outstanding Sports Persons i.e. 26 Arjuna Award Winners, 11 Olympians and 56 State Award Winners of the Haryana State in ordinary/Deluxe buses and State Sports Awardees in ordinary buses only |
| 12 | Candidates attending interviews in Haryana, Delhi and Chandigarh in connection with fresh employment from home town to place of interview and back |
| 13 | War Widows of Armed Forces of Haryana State (Army, Navy and Air Force) |
| 14 | National Youth Awardees of Haryana State for life time |
| 15 | 100% deaf and dumb within jurisdiction of Haryana |
| 16 | 100% physically handicapped persons of the State within jurisdiction of Haryana |
| 17 | One attendant along with 100% physically handicapped person |
| 18 | Women and children below 15 years on Raksha Bandhan |
| 19 | Mentally retarded persons with one attendant |
| 20 | One attendant along with 100% deaf and dumb within jurisdiction of Haryana |
| 21 | Paralympics sports persons |
| 22 | Haemophilia Patients in Haryana Roadways buses |
| 23 | Numberdars of Haryana State up to Distt / Tehsil HQs (Max. 10 Journeys up to Tehsil HQ and 2 Journeys up to Distt / HQ in a month) |
| 24 | Gallantry Award winners in the buses of Haryana Roadways within Haryana |
| 25 | 25% or above war-disabled Ex Servicemen in Haryana Roadways |
| 26 | Girls students of School/Colleges and Institutions which are recognized by the State Government/Affiliated or Associated with any university/Board of the State. The facility for free Girls students bus passes has been extended from 60 Kms to 150 Kms. |

| List of Free Travelers | |
|-------------------------------|---|
| S. No | Category |
| 27 | Cancer Patients in Haryana Roadways buses within two Stations mentioned in I-Card by the Health Department on the shortest route. |
| 28 | Press Reporters/Accredited Journalists in the two seats reserved in Volvo/A.C buses of Haryana Roadways within Haryana |
| 29 | Spouses suffered due to Emergency Period in ordinary buses in Haryana Roadways along with one attendant in case of widow or widower |
| 30 | Hindi Aandolan of 1957 on the pattern of Freedom Fighters in Haryana Roadways Buses. |

List of Concessional Travelers

| List of Concessional Travelers | | |
|---------------------------------------|---|---|
| S. No | Category | Concessional Travelling facility |
| 1 | Employees of Govt./Semi-Govt./Board and Corporation | 35 Singles fares per month |
| 2 | Boys Students of School/Colleges and other Institutions which are recognised by State Government/affiliated or Associated with any university of the State | 10 Single fares per month |
| 3 | Students of HARTRON Franchise courses (only full-time enrolled courses) recognized by the State Government | Similar on the pattern of students of school/colleges |
| 4 | Police Personnel up to rank of inspectors and class III and IV ministerial staff | @Rs 120 per person per month deducted from their monthly salary. |
| 5 | Participants in State Level Sports Meets a. State Level Sports Competition of various games of the students of schools of Haryana organized by the Education Department of Haryana. b. State Level Championship of various Games organized by the State Level Association which are affiliated to Haryana Olympic Association c. State level sports competitions conducted by Sports Department or Haryana Olympic Association including the following events: I. State level Sports Festival II. State level Women Sports Festival III. State level Panchayat Tournaments IV. State level Youth Festival d. All India Rural Sports Meet organized in Haryana e. National level sports competitions held in Haryana which are organized by the State Level Sports Associations affiliated with Haryana Olympic Association or the National level sports competitions organized by the Sports Department, Haryana | 75 % Concessional facility in bus fare is being provided |
| 6 | Passes for General Public | Monthly Pass- 40 Single Fares Quarterly Pass-110 Single Fares Half yearly Pass-200 Single Fares |
| 7 | Women above the age of 60 years | 50% concession in fare |
| 8 | NCC cadets going to Camps | 50% concession in fare |
| 9 | Men above the age of 65 years | 50% concession in fare |
| 10 | Spouses suffered due to Emergency Period in Volvo/A.C buses in Haryana Roadways in case of widow or widower | 75% concession in fare |



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

SECTION VI: Functional Requirement Specifications (FRS)

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section VI - Functional Requirement Specifications

Table of Contents

| | |
|---|-----|
| 1. GPS enabled EMV based Electronic Ticketing Issuing Machine | 187 |
| 2. Online Reservation System | 191 |
| 3. Pass Counter Software | 193 |
| 4. GPS | 195 |
| 5. MIS Reporting System..... | 197 |
| 6. SLA Monitoring Tool..... | 200 |

The Functional Requirement Specifications mentioned in this section are indicative and the functional specifications shall be finalized after the completion of the requirement gathering by the Bidder for the project.

1. GPS enabled EMV based Electronic Ticketing Issuing Machine

| S. No. | Requirement |
|--------|--|
| 1 | These units shall be handheld devices which will be carried on buses by bus crew. ETIMs can also be used for sale of Tickets at bus counters. |
| 2 | The unit shall be designed and configured to cater to all types of operations including Interstate, intercity and special category buses operating on flat fare structure, etc. |
| 3 | Provision shall be available to download & store all Route details of State Transport Haryana consisting of all stages with alphanumeric name description and rate. |
| 4 | ETIM shall be capable of handling all routes as per duty planned for the day |
| 5 | ETIM shall be able to print the ticket as per the specified format. Every ticket shall have a unique ticket number generated. The ticket number shall be the combination of ETIM code, Bus Number, Date & the serial Number. Tickets issued by the ETIM(S) shall have a legible print by use of an adequate font size for the commuters to read the same easily. |
| 6 | ETIM shall be able to generate ticket with the minimum keystrokes for easy & effective operations. |
| 7 | ETIMs shall be able to issue a group ticket i.e. it shall be able to accept the number of persons, number of full tickets, number of half tickets in a group and compute the fare accordingly and issue a single ticket. |
| 8 | ETIMs shall be able to issue the luggage tickets and child tickets. Following information shall be captured while issuing these types of tickets |
| 8.1 | Type of ticket (Luggage, child tickets, etc.) |
| 8.2 | Route Number |
| 8.3 | Source/origin |
| 8.4 | Destination |
| 8.5 | Time stamp & date |
| 8.6 | ETIM Unit Code |
| 8.7 | Bus ID |
| 8.8 | Fare |
| 8.9 | The conductor shall be able to record the following information |
| 8.9.1 | Type of Ticket |
| 8.9.2 | Category ID (In case of child Ticket) |
| 8.9.3 | Destination (In case of child Ticket) |
| 8.9.4 | Fare |
| 9 | ETIMs shall have a facility to print the repeat tickets with press of only one button on the keypad. That is for the cases where two separate passengers' source & destination are same. Each ticket shall have a unique ticket number. |
| 10 | ETIMs shall be capable of issuing tickets on a nonstandard route/fallback route, in case of non-adherence to pre-fed routes due to any reasons. In this case, the ticket will only have the time stamp, ETIM unit code and the fare denomination on them based on the fare stages defined. |
| 11 | ETIMs shall provide a facility to compute the refund amount as per business rules of State Transport Department, Haryana operations. |

| S. No. | Requirement |
|--------|--|
| 12 | Business rules for fare stages, fare structures, various routes, etc. shall be configurable. ETIMs shall have facility to compute the fare as per the fare stages defined by the State Transport Department, Haryana. |
| 13 | At the end of every trip, ETIMs shall be able to print the trip report and log sheet of all transactions. |
| 14 | At the end of every trip, ETIMs shall be able to print the trip summary report with trip collections details, etc. |
| 15 | ETIM should be capable to ensure that all the ticketing data is encrypted and pushed to the central server with 0 data loss. There should be no need to manually download data at the bus depots. |
| 16 | ETIMs shall provide facility to enter the ticket Inspector employee ID and generate inspection report with Date & Time stamp. |
| 17 | ETIMs shall have an access control mechanism build in to facilitate authentication and authorization. |
| 18 | ETIM should be able to authenticate the NCMC based Bus Passes. |
| 18.1 | Ticket Classification (i.e. indicate that this is ETIM ticket). |
| 18.2 | Category ID (i.e. Student pass or Travel as you go) |
| 18.3 | Destination |
| 18.4 | If free traveler, then following information will be captured |
| 18.4.1 | Ticket Classification (i.e. indicate that this is a free traveler ticket). |
| 18.4.2 | Free traveler category ID (i.e. Police or Other) |
| 18.4.3 | Destination |
| 18.4.4 | The conductor shall record the above information with minimum keystrokes |
| 18.4.5 | The ETIM should be able to print a 0-value ticket against the pass. |
| 19 | Conductor should be able to record in the ETIM, the ticket number of the tickets sold from the ticket counters at the bus station. This functionality should be designed in such a way that minimum keystrokes shall be required by conductor to record the ticket number |
| 20 | The ETIM should be able to record the details of ticket sold through ORS system. |
| 21 | Department may engage the services of various booking agents for selling tickets on interstate routes. These agents would not be using ETIMs to generate tickets. Therefore, it is imperative that some data of the passengers traveling on agents tickets be captured by conductor through ETIMs. This data could be utilized to cross check the claims submitted by the Agents. There shall be a facility in the ETIMs for the conductor to capture the tickets data issued by Department's agents on Interstate buses. ETIMs shall capture the following information: |
| 21.1 | Agent Code |
| 21.2 | Source |
| 21.3 | Destination |
| 21.4 | Date & time stamp |
| 22 | All the ETIMs shall be docked at respective depots & sub-depots at the end of the day. The ETIMs shall be fed with unique code, to identify that the tickets are issued from valid ETIMs and thus controls the misuse of the ETIMs. This number will be randomly generated unique number and entered every day at depots & sub-depots, before issuing the ETIMs to conductors. All ETIMs shall also have an asset id / code on their body for identity. |
| 23 | Data exchange facility shall be provided between ETIM to PC / Desktop. |

| S. No. | Requirement |
|--------|---|
| 24 | The list of minimum inputs attributes to be captured through these ETIMs are |
| 24.1 | Category of Buses |
| 24.2 | Source |
| 24.3 | Destination |
| 24.4 | No of people for Group ticket. |
| 24.5 | No of Full tickets & No of Half tickets in a group. |
| 24.6 | Full ticket |
| 24.7 | Half Ticket |
| 24.8 | Number of Day passes sold. |
| 24.9 | Child ticket |
| 24.10 | Date & Time stamp |
| 24.11 | Fare |
| 24.12 | Fare stages |
| 24.13 | Route structures |
| 24.14 | Bus Number |
| 24.15 | Trip Code |
| 24.16 | Conductor Name / ID |
| 24.17 | Driver Name / ID |
| 24.18 | Ticket Inspector ID and Time stamp of checking |
| 24.19 | Luggage charges |
| 24.20 | Minor Repairs & maintenance during the trip |
| 24.21 | Terminal fee |
| 24.22 | Toll taxes |
| 24.23 | Refund |
| 25 | ETIMs shall be provided with the offboard charging facility in the depots. |
| 26 | ETIMs shall be designed keeping in view the mobility, usability and robust operations. The display should give clear view in night and day. |
| 27 | ETIMs shall be waterproof, dust proof, heat resistant and shock proof. |
| 28 | Proper casing with a strap, for ETIMs shall be provided. |
| 29 | The ticketing transaction data shall be loaded from ETIM machine to central server after issuing every ticket. This frequency of data upload shall be configurable parameter. The system should have capability to change this interval dynamically without causing any disruption to operations |
| 30 | Should have provision to extract transaction data from ETIM machines in offline mode or communication error due to fault in ETIM machines |
| 31 | Should have capability to transmit real time battery status, ETIM health, count of tickets issued to central back end system for real time reporting to management as per the agreed interval. The data elements to be transmitted and frequency shall be finalized after discussing with department during design phase. |
| 32 | Should have capability to conserve battery during idle time either by invoking auto shut down or sleep mode |
| 33 | Should have capability to raise alert on tampering of hardware or software |
| 34 | Should have capability to generate end of shift report for conductor. At minimum, the report shall contain number of tickets issued in the bus and total revenue collected at any point in time for end of day reconciliation |

| S. No. | Requirement |
|--------|--|
| 35 | Should have capability to change the conductor / route / direction etc. dynamically over the air as well as manually and same shall be reflected in the tickets issued |
| 36 | Should have capability to update fare rules, fare tables dynamically over the air and the same should be reflected in the tickets issued. The device should support over the air updating of master data, application, hotlist and other configurable parameters for seamless operations |
| 37 | ETIM to support read / write of Contactless Smart cards of both Type A and Type B, conforming to ISO 14443 specifications. |
| 38 | The ETIM shall support Open Loop AFC System |
| 39 | The operating system should meet the following functional specification: |
| 39.1 | Shall support multi-tasking and multi-threading |
| 39.2 | Seizing of a single resource by more than one competing process |
| 39.3 | Looking of resource (modem, file) to prevent seizing by another process in case one process is using it |
| 39.4 | Unlocking of resource to allow another process the usage of the resource |
| 39.5 | Scheduling to allow the usage of single resource by competing processes |
| 39.6 | Forced unlocking of resource if a process seized it and crashed without freeing it |
| 39.7 | Capability of upgrading application and configuration data over the air directly from the Backend server |
| 40 | Secure Access Module (SAM) |
| 40.1 | SAM is encrypted media that store critical keys such as credit/ debit keys which are required to perform contactless smart card / e-purse transactions. |
| 40.2 | Shall not be accessible by external systems |
| 40.3 | In order to ensure the security of the transactions being captured, the ETIM support the use of Security Access Modules (SAM) in slots for SIM Cards |
| 40.4 | SAM shall hold the security keys. Minimum one SAM per equipment/ machine/ device is required. However, the total quantity of the blank SAMs will vary depending upon number of equipment used by the solution. |
| 40.5 | All the SAMS (equipment wise) to be issued by bidder |
| 41 | ETIM should record the transaction before printing the ticket and ETIM data should be secured and be un-editable after each transaction |
| 42 | There should be provision to manually recover encrypted transaction data from ETIM using cable interface, in case the data is not communicated to central server due to problem in communication or ETIM device. |
| 43 | All the ETIMs should be GPS enabled for determining the position of buses |
| 43.1 | Real-time tracking with GPS/Glonass/IRNSS |
| 43.2 | Internal + External (Optional) GNSS + GPS +GSM antenna |
| 43.3 | Device Tampering Alert |
| 43.4 | IP 65 dustproof & waterproof |
| 43.5 | Large Battery Backup |
| 43.6 | Embedded Sim (Dual Sim Support) |
| 43.7 | ARAI certified and AIS 140 approved anti-theft device |
| 43.8 | 6 Axis Accelerometer + gyroscope |
| 43.9 | Load Dump Protection |

2. Online Reservation System

| S. No. | Requirement |
|--------|--|
| 1 | Web based Online Reservation Software (ORS) should be provided for passengers booking tickets online. |
| 2 | The system should allow one-way trip, round trip and multi city trip booking through the ORS. |
| 3 | The ORS should allow users to register on the system and their profile, past travel details etc should be maintained and be available to him/her whenever he/she wants to access the same after logging in to the system. |
| 4 | The ORS should have a feedback mechanism where the passengers can rate the services offered by department |
| 5 | Randomly selected passengers should be prompted to provide a feedback using a small questionnaire to improve department's services |
| 6 | The ORS system should identify a user on login and prompt / suggest user with latest fare and availability of the same trip. |
| 7 | For searching source and destination on the portal, text box with intelligent auto suggest feature. In case the user is searching for a location that is not covered by any service, the system should suggest him the nearest location where he can avail the service from. |
| 8 | The system should provide space and feature for advertisement content management on the portal. |
| 9 | The ORS system should have facility to renew passes by making online payments. |
| 10 | The web based online reservation software shall have integration with the payment gateway |
| 11 | The system should have facility to provide ORS booking details on ETIM before handing over ETIM to conductor. The ETIM should also be capable of downloading using GPRS/Wi-Fi connection, the list of the passengers who have done an advance reservation in the bus. |
| 12 | Online reservation booking facility should be accessible to authorized ticket booking agents and online travel agents with all security checks, access permissions and restricting agents to cross prescribed financial ceiling permissible for reservation booking. |
| 13 | System should be able to cater to Business rules regarding Reservation/cancellation |
| 14 | Web enquiry for seats availability, fare, routes, en-routes stops, Arrival and departure time etc. |
| 15 | Advance Booking, Full/Partial Cancellation of tickets, and advancement and postponement of journeys. |
| 16 | Interface to payment gateway for Internet booking using credit/debit card/Smart cards/virtual cards, internet banking etc. However, Bidder should take note that the service / transaction charges payable to the banks or any other authority will not be borne by department. The system should accept all visa and MasterCard. It should comply with all online transaction legislations / standards. All refunds for online transactions shall happen only online and cash refund should be restricted. In case of booking from counter with cash payment, the refund can be made from the same counter in cash. |
| 17 | Printing of tickets/cancellation voucher and other related reports. |
| 18 | Provision to print ticket details in Hindi as well as in English. |
| 19 | Enabling Blocking of seats or issuing ticket for reserved quota. |

| S. No. | Requirement |
|--------|--|
| 20 | Applying concessions applicable for ORS as per the rules of department. |
| 21 | System should provide waiting list facility and automatic confirmation of wait-listed passengers in case of cancellation of reserved seats. |
| 22 | Provide Tatkal reservation facility with special charges for specified period. |
| 23 | Centralized control of Stage & Fare tables, Fare revision, various concessions, ticket cancellation rules, fare charging rules, bus service type, bus stops, route master, user privileges etc. |
| 24 | Facility to capture Passenger data such as name, gender, age, pass / authority no. date etc. |
| 25 | System should provide seat layout view and allow user to select available seat by clicking the preferred seat. |
| 26 | The ticketing System will have view / print facility for Seat Vacancy Position (route wise, clockwise, starting place wise). |
| 27 | Depot wise/Authorized Booking Agent wise revenue collection, commissions, cancellations reports etc. |
| 28 | Reconciliation of revenue collection made by authorized booking agents and online travel agents and the remittance deposited by them. |
| 29 | Automatic locking of booking facility provided to authorized booking agents, online travel agents etc. if the limit is exceeding the permissible limit. |
| 30 | Providing accurate and user-friendly accounting system |
| 31 | The security for the access to the application must be provided centrally with suitable authentication/architecture. Audit trail must be maintained for all data updates/ amendments and deletions for security audit. |
| 32 | System shall facilitate booking of entire bus by passengers (group booking). The information required for such booking i.e. bus type, fare charges, no. of adults & child and other charges etc. shall be provided online and the system shall facilitate online booking of entire bus. |
| 33 | End day procedure for processing information and generating MIS in report formats. |
| 34 | Provision for getting information of various types of concessions given to traveling passengers. |
| 35 | All transactions should be processed by using keyboard and short keys are to be provided to carry the functions of mouse. |
| 36 | Multi-level user authorization and authentication with appropriate User Profiles, Rules and Roles. |
| 37 | Facility to provide information and alerts on route wise, bus station wise timetable, seat availability, fare, to Passengers on mobile phones, web notification etc. |
| 38 | Past data analysis capability for Dynamic and effective decision-making in the future. |
| 39 | Based on the above data the software will generate various types of reports — text and graphics on daily, weekly, fortnightly, monthly, yearly basis or as & when required for the use of various stakeholders such as the Corporation, agents, network, payment gateway, authentication, back office and other service providers. |
| 40 | All operational, MIS and Revenue reports for a specified period. (Booking centre wise, Service wise, Operator wise, depot wise, agent wise etc.) |
| 41 | System should provide the facility for editing or creating new reports for specified period as & when required and conversion of the same into text format or spread sheet. |

| S. No. | Requirement |
|--------|---|
| 42 | The system should support remote management. It shall be possible to monitor and tune the system remotely. |
| 43 | Comprehensive audit trail, logging and reporting. |
| 44 | The security solution must be capable of comprehensive logging of the traffic through the network and applications under its control. It should be capable of notifying unauthorized logging access attempts into the network and the System internal resources and attempts to login that fail. So also, be capable of notifying appropriate parties including the organization users/department users/System Security Administrators etc. of suspicious activity. |
| 45 | The system should support printing on any printer — dot matrix, laser, inkjet or pre-printed or plain paper who book tickets through net/web. |
| 46 | The system shall provide user management services and service enrolment features to enable the user to register with the portal. It should also provide secured mechanism for user identification, transaction integrity, security etc. |
| 47 | The ORS for agents should have secure login facility based upon their system's digital ID in order to prevent fraudulent practices. |
| 48 | The system should have the functionality to: |
| a. | Define user groups |
| b. | Define users |
| c. | Map users to groups |
| d. | Assign the users a role and privileges in the applications |
| e. | Assign the menus/forms/functionalities in the system to the users/groups |
| f. | Grant/impose data-based access/restrictions to the users. E.g. for specific operations etc. |
| g. | Define menus and attach such menus to users/ groups. |
| h. | Disable / re-enable users / groups from the system |
| i. | Disable / re-enable modules within application |
| 49 | System should send SMS alert to the passenger on successful reservation and bus details before starting the journey. |

3. Pass Counter Software

| S. No. | Requirement |
|--------|--|
| 1 | The pass counter system should have secure login facility based upon their system's digital ID in order to prevent fraudulent practices. |
| 2 | The pass counter system at the counter should be accessible only on authentications by the counter operator. |
| 3 | The system should be able to record the total hours of operations of the counter and the same should be recorded at the central server. |
| 4 | The system should have features to ensure that it cannot be accessed from any other machine other than the ones that are registered at the central server. |
| 5 | The counters should have ability to work in an offline mode in case of non-availability of connectivity. |
| 6 | The counter system should be able to record the attendance of the operators |
| 7 | System should be able to cater to Business rules regarding pass issuance |
| 8 | The system should be intelligent to predict load and number of active counters required at each depot and sub-depot during the hours of operations based on the past data. |

| S. No. | Requirement |
|--------|---|
| 9 | The counters shall have USB based smart card reader / writer for reading and writing the data on the smart card passes. |
| 10 | The details of the applicant should be entered into the system before issuing him the smart card-based pass. |
| 11 | A camera shall capture the photograph of the applicant. |
| 12 | The system should be able to track the trips carried out by the pass holder. |
| 13 | The form submitted by the applicant for the pass shall be scanned and uploaded in the system with his/her photograph before issuing the card. |
| 14 | The passenger should be able to renew his pass at any of the pass counters of HSTD. |
| 15 | System should send the pass holder an SMS alert when his card's validity is expiring. |
| 16 | The counter operator should give a system generated receipt to the passenger when issuing or renewing the pass. |
| 17 | Provision to print pass details in Hindi as well as in English. |
| 18 | Facility to capture Passenger data such as name, gender, age, pass / authority no. date etc. |
| 19 | Reconciliation of revenue collection made at the pass counter and the remittance deposited by them at the respective depot |
| 20 | Providing of accurate and user-friendly accounting system |
| 21 | The security for the access to the application must be provided centrally with suitable authentication/architecture. Audit trail must be maintained for all data updates/ amendments and deletions for security audit. |
| 22 | End day procedure for processing information and generating MIS in report formats. |
| 23 | All transactions should be processed by using keyboard and short keys are to be provided to carry the functions of mouse. |
| 24 | Multi-level user authorization and authentication with appropriate User Profiles, Rules and Roles. |
| 25 | Data Warehousing and Data Mining facility for Dynamic and effective decision-making in the future. |
| 26 | System should provide the facility for editing or creating new reports for specified period as & when required and conversion of the same into text format or spread sheet. |
| 27 | The system should support remote management. It shall be possible to monitor and tune the system remotely. |
| 28 | Comprehensive audit trail, logging and reporting. |
| 29 | The security solution must be capable of comprehensive logging of the traffic through the network and applications under its control. It should be capable of notifying unauthorized logging access attempts into the network and the System internal resources and attempts to login that fail. So also be capable of notifying appropriate parties including the organization users/department users/System Security Administrators etc of suspicious activity. |
| 30 | The system shall provide user management services and service enrolment features to enable the user to register with the portal. It should also provide secured mechanism for user identification, transaction integrity, security etc. |
| 31 | The system should have the functionality to: |
| a. | Define user groups |
| b. | Define users |
| c. | Map users to groups |

| S. No. | Requirement |
|--------|---|
| d. | Assign the users a role and privileges in the applications |
| e. | Assign the menus/forms/functionalities in the system to the users/groups |
| f. | Grant/impose data based access/restrictions to the users. E.g. for specific operations etc. |
| g. | Define menus and attach such menus to users/ groups. |
| h. | Disable / re-enable users / groups from the system |
| i. | Disable / re-enable modules within application |

4. GPS

| S. No. | Requirement (for GPS) |
|--------|---|
| 1 | Each bus, using the GPS enabled ETIM device, shall determine its precise location through GIS based GPS System and transmit the same to the Command Control Centre (through Data Centre) at defined intervals of time. The location will be displayed on GIS based route maps at Command Control Centre continuously. |
| 2 | The GPS system shall be able to compare the actual location of the bus, at any given time, with its scheduled location. |
| 3 | The GPS system at the control room shall be able to calculate the time for the bus to reach all subsequent stops along the route, factoring in the current bus and any deviations from the schedule and reported traffic congestion en-route. |
| 4 | The GPS should provide provision for the GIS based route maps which would be required for real-time vehicle tracking. Vehicle tracking, application software (including complete Haryana Map, All India Map, Map engine and APIs all should be licensed version) Important: 1) GIS based road maps for GPS would be required to be provided by the bidder from available sources with proper licenses, etc. as may be required. 2) Map resolution shall be at least 1:10,000 for major cities and 1:25,000 for other places 3) Bidder would be required to create GPS based route maps for HSTD on the procured road maps through route survey. These route base maps should contain all trafficable routes along with sufficient Points of Identification for easy identification of the exact location of buses. |
| 5 | The system will capture location of different buses at all the bus stands/ depots. The tracking and locating the buses will cover those buses in movement. |
| 6 | Information elements that need to be captured and transmitted to Data Center at the minimum include longitude, latitude, and physical location en-route with date and time stamps, bus number, route number, and Driver ID, speed etc. The data shall be archived after 3 months. |
| 7 | Vehicle tracking shall provide these data on real time basis at pre-determined and configurable intervals (10 seconds) over GPRS network. |
| 8 | The GPS device should send alerts in case there is an attempt to tamper with the device. |
| 9 | GPS enabled ETIM device unit shall not only operate outdoors but also be able transmit signals in an environment which may not have a clear view of the sky |
| 10 | This system should provide for the following features: |
| 10.1 | Facility for polling for current information location on demand |
| 10.2 | Tracking of buses that deviate from the scheduled route based on definition of permitted geographic regions of operation |
| 10.3 | Driver Scoring Card based on driver's driving habits |

| S. No. | Requirement (for GPS) |
|--------|--|
| 10.4 | Vehicle Fleet Summary Dashboard – Quick view on vehicle fleet performance |
| 10.5 | Register a bus on unscheduled route from backend on real time basis |
| 10.6 | Exception Recording/ Actions (Over-Speeding, Harsh Acceleration, Harsh Braking, Off-route Detection, unscheduled stoppage, Non-Stoppage at Bus stops, Trip Cancellation). |
| 10.7 | Real-time Running Trip Line diagram of buses on a particular route, for headway detection. |
| 10.8 | Auto headway detection and notification. |
| 11 | The Command Control Center software should have following functions: |
| 11.1 | Applications Software shall have a facility to define the Masters. |
| 11.2 | New routes shall be created in the application. |
| 11.3 | Business rules engine for fare stages, fare structures, various routes, etc. shall be configurable. |
| 11.4 | The facility shall be provided to collate the transactional data received from depots/sub-depots. The transaction data would be uploaded once every day for the previous day. |
| 11.5 | Department's officials shall be able to access the application as per the pre-defined roles and responsibilities |
| 11.6 | The application shall provide facility to query the data and generate the customized reports as per the requirements. |
| 12 | Department's officials shall be able to generate / download various reports specific to vehicles associated to specific depots/region such as the following: |
| 12.1 | Position of the particular vehicle at any given point of time mapped to the landmark location, area, bus stop, etc. |
| 12.2 | Tracking the complete route taken by a particular vehicle on timescale |
| 12.3 | Route specific distance traveled by specific bus on a given date & time |
| 12.4 | Time taken to complete a trip by specific bus, route based, at time slots in a day |
| 12.5 | Deviations taken by a specific bus during the duty / trip related to routes, stoppages at bus stops, over speeding, distance traveled between stops within specific time, etc. |
| 12.6 | The GPS system should display the contact details of the bus driver / conductor so that the control center staff can communicate with them directly. |
| 13 | The Control Room operator shall be able to drill down to the exact location of the event by clicking on the alert and see the position of event drawn over the map along with driver, vehicle and standard description of event details related to the business rule. |
| 14 | Alerts will need to be generated in case of deviations from the authorized route and recorded in all cases for reporting and review. |
| 15 | Alerts on exceptions for all other pre-configured parameters such as non-stoppage at designated points, unauthorized stoppages, vehicles stopping for long duration, not meeting the ETA and ETD schedules etc., and logged into journey details of the bus for each trip. |
| 16 | GPS system is required to be functional 24 X 7 X 365 days. Bidder shall provide adequate resources for system management, data management, etc. |
| 17 | The GPS Software should support AIS-140 standards and Ministry of Road Transport & Highways (MoRTH) guidelines |

5. MIS Reporting System

| S. No. | Requirement |
|----------|--|
| A | Reports from ETIM Device |
| 1 | Status Report at particular stage indicating trip title, service type, stage point, date & time of inspection, no. of passengers, no. of tickets sold, revenue collected by conductor as per ETIM, cash with conductor, no. of penalty tickets issued etc. |
| 2 | Ticket Details Report for all tickets (trip wise) or for selected trip |
| 3 | Trip wise/Ticket Type wise Revenue Collected through ETIM. |
| 4 | Day wise Revenue Collected through ETIM. |
| 5 | Stage wise Report of boarded / alighted passengers (Trip wise) |
| 6 | Toll Tax Payment Report (Trip wise) |
| 7 | Expenses Report |
| 8 | Enforcement Report |
| 9 | Trip-wise Traffic Receipt, Luggage charges receipts, toll tax receipts, Total no. of passengers (Adult & Child), Total no. of concession passengers, Total Earnings & EPKM (Trip-wise and Duty-wise). |
| 10 | Refund of fare Amount Report indicating reason, no. of passengers, ticket no. amount of refund etc. |
| 11 | Concession Report – Trip-wise/ Concession-wise revenue collected through various concessions; fare collected, & no. of passengers traveled on concession fare |
| 12 | Trip wise/ State wise breakup of revenue collection in case of interstate route. |
| 13 | Revenue deposited by the conductor details Report |
| 14 | Postal Mail Details Report indicating pickup point, handover point & no. of bags |
| 15 | SI should provide any other reports as and when required by department. Report Format will be approved by department. |
| B | Reports from Backend Software |
| 1 | Conductor Sign On/ Sign Off details as on required date & time with summary containing conductors not reported back as per schedule duty, imprest amount tally report. |
| 2 | Machine Detail Report indicating No. of Online ETIM, No. of ETIM in depot & unmoved / idle ETIM in depot on a particular date & time. |
| 3 | Conductor-wise & Rupee Denomination-wise revenue Report |
| 4 | Shift-wise/ Cashier-wise Cash Collection Report |
| 5 | Daily Cash Collection Report for Parent Depot, Other depot, and for Interstate Route (Conductor wise and Traffic Controller wise) |
| 6 | Daily Cash Collection Report for Parent Depot, Other depot, and for Interstate Route |
| 7 | Account head-wise report along with summary for Depot, Sub-Depot and for Interstate Route (Combined for traffic revenue generated manually and through ETIM) |
| 8 | Conductor-wise Shortage / Excess Report |
| 9 | Expenses Report |
| 10 | Toll Tax Payment Report |
| 11 | Revenue deposited by conductor at parent depot & other depot Report |
| 12 | Night out Deposit Receipt Report |
| 13 | Account Head-wise revenue split-up report i.e.:- |
| 13.1 | Interstate revenue & No. of passengers (State-wise) |
| 13.2 | Senior Citizen revenue & No. of passengers |
| 13.3 | Concession-wise revenue & No. of passengers |

| S. No. | Requirement |
|--------|--|
| 13.4 | Smart Card revenue & No. of passengers etc. |
| 14 | Crew change earning reports for crew duty performed for other depot (conductor-wise). |
| 15 | Trip-wise Incentive scheme amount paid by cashier report. |
| 16 | Trip-wise Passenger Revenue, Luggage Revenue, Toll Tax Revenue with EPKM, LF & No. of passengers for the selected trip or for all trips. |
| 17 | Analysis statement for the selected trip or for all trips |
| 18 | Other revenue report at depot |
| 19 | Cashier Wise Details of Night Out Deposit |
| 20 | A/C Head-wise and conductor-wise/controller-wise statement of Concessions |
| 21 | Trip-wise direct passengers traveled report for the selected trip or for all trips |
| 22 | Service type-wise earning report for the selected trip or for all trips |
| 23 | trip-wise earning report for the selected trip or for all trips |
| 24 | Conductor-wise earning report for selected conductor or for all conductors |
| 25 | Analysis statement for the selected trip or for all trips |
| 26 | Extra trip earning report |
| 27 | Cancellation trip/ KM report |
| 28 | Slab-wise trip report |
| 29 | Monthly/Quarterly/Yearly/For specified period |
| 29.1 | Conductor-wise Shortage / Excess cash Report |
| 29.2 | No. of Passengers traveled |
| 29.3 | Date wise Revenue Collection Report |
| 29.4 | Trip wise Revenue Collection Report |
| 29.5 | Date wise Refund Report |
| 29.6 | Concession Report indicating concession wise fare collected and amount of reimbursement. |
| 29.7 | Inter State Revenue Report |
| 29.8 | State wise Breakup of Interstate Earning |
| 29.9 | Date wise Inspector Report |
| 29.10 | Date wise Inspection Report |
| 29.11 | Date wise Toll Tax Report |
| 29.12 | Account head-wise /date-wise summary |
| 29.13 | Account Head-wise revenue split-up report |
| 29.14 | a. Interstate revenue & No. of passengers (State-wise) |
| 29.15 | b. Senior Citizen revenue & No. of passenger |
| 29.16 | c. Concession wise revenue & No. of passengers |
| 29.17 | d. Annual Smart Card revenue & No. of passengers etc. |
| 29.18 | Trip-wise Passenger Revenue, Luggage Revenue, Toll Tax |
| 29.19 | Revenue with EPKM, LF & No. of passengers for the selected trip or for all trips. |
| 29.20 | Trip-wise, stage-wise passengers traveled report for the selected trip or for all trips |
| 29.21 | Trip wise direct passengers traveled report for the selected trip or for all trips |
| 29.22 | Service type-wise earning report for the selected trip or for all trips |
| 29.23 | Trip-wise earning report for the selected trip or for all trips |
| 29.24 | Conductor-wise earning report (for selected conductor or for all conductors) |
| 29.25 | Detailed analysis statement for the selected trip or for all trips |
| 29.26 | Extra trip earning report |

| S. No. | Requirement |
|--------|--|
| 29.27 | Fair Operation earning report |
| 29.28 | Cancellation trip/ KM report |
| 29.29 | Slab-wise trip report |
| 29.30 | Other revenue report at depot |
| 29.31 | Account Head-wise Summary of Concessions |
| 30 | Exception Reports |
| 30.1 | Low paying trip report for the given period |
| 30.2 | High paying trip report for the given period |
| 30.3 | State Master |
| 30.4 | Depot Master |
| 30.5 | Sub-Depot Master |
| 30.6 | Passenger Master |
| 30.7 | Machine Master |
| 30.8 | Employee Master |
| 30.9 | Village/ Stop Master |
| 31.10 | Crew Duty Master |
| 31.11 | Trip Code Master |
| 31.12 | Bus Service Type Master |
| 31.13 | Concession Master |
| 31.14 | Parameter Master (Shift duty timing, service type wise sanctioned KM, Start ticket No., imprest cash, age for child, time setting, Avg. Seating capacity etc.) |
| 31.15 | Route Master |
| 31.16 | Fare Master for State Transport, Haryana buses |
| 31.17 | Route Details |
| 31.18 | Trip Details |
| 31.19 | Crew Duty Details |
| 31.20 | User role authorization |
| 31.21 | Change of password |
| 32 | Reports required at the Regional and Head Office Level |
| 32.1 | Depot-wise, trip-wise earnings with EPKM, LF, No. of passengers (Daily/Monthly) |
| 32.2 | Depot-wise analysis report |
| 32.3 | Detailed analysis report |
| 32.4 | Route-wise earning report (Monthly/ Yearly) |
| 32.5 | Depot-wise, conductor-wise earnings |
| 32.6 | Service Type-wise revenue report |
| 32.7 | Service Type-wise, trip-wise revenue report |
| 32.8 | LF Slab-wise trip detail report |
| 32.9 | Trip-wise, stage-wise passenger revenue report |
| 32.10 | Trip-wise direct passenger revenue report |
| 32.11 | Depot-wise concession reimbursement statement |
| 32.12 | Route statement (Route-wise/Clockwise Trips with Summary) |
| 32.13 | Concession-wise revenue report |
| 32.14 | Depot-wise/Concession-wise Revenue Report |
| 32.15 | Account Head-wise/ Depot-wise/date-wise Summary |
| 33 | Periodic reports on lost / damaged / late received / defective ETMs |

| S. No. | Requirement |
|----------|--|
| C | Other Reports |
| 1 | Average peak and lean demand in passenger load during various times of a typical day (non-seasonal). |
| 2 | Average peak and lean demand in passenger load during various times of a Special day seasonal). |
| 3 | Peak and lean revenue collections during various times of a typical day (non-seasonal). |
| 4 | Peak and lean revenue collections during various times of a special day (Seasonal). |
| 5 | Average peak and lean time from start to destination of a route during various times of the day. |
| 6 | Peak and lean bus-stop utilization rate – no. of passengers boarding at different bus stops enroute |
| 7 | Route planner / optimizer system shall incorporate: |
| 7.1 | Route planning, scheduling and analysis |
| 7.2 | Real time scheduling and routing of buses |
| 7.3 | Demographic analysis and route restructuring |
| 7.4 | Transportation planning & modeling |

6. SLA Monitoring Tool

| S. No. | Requirement |
|--------|---|
| 1. | Ability to track the SLAs as described in the RFP at a minimum |
| 2. | The monitoring tool shall have the ability to generate the necessary reports |
| 3. | Calculate the penalties if any |
| 4. | Should have the ability to export or import the necessary data |
| 5. | Integrated performance view of all the SLAs along with various threshold violations for each service level. |
| 6. | Indicate the baseline, breach, lower and high-performance scores against each of the service level metric in a graphical form. |
| 7. | Dashboard must show bidder action taken on each of the SLA breach/ timelines for resolution etc. |
| 8. | The proposed tool should enable users to generate Pre-defined, Standard and Ad-hoc reports |
| 9. | Allow users to generate report with pre-defined fields to get a real time view of the system from the portal |
| 10. | Pre-defined Reports will be generated at pre-defined frequencies and will be available for to the users |
| 11. | Standard reports would include reports where report generation criteria are fixed and options for the same are available to the User. The User can select a combination of options and submits a request for generation of a report. The system generated the report and the same would be made available on the User dashboard |
| 12. | Ad hoc Reports: These reports can be generated by the User by raising ad hoc queries. These would provide the ability to generate ad hoc reports as and when required by selecting any particular field, table or column (as per Database design) by drag and drop feature from the table. |



**STATE TRANSPORT DEPARTMENT,
GOVERNMENT OF HARYANA**

Request for Proposal (RFP)

for

**Selection of Bidder for Implementation of Open Loop Ticketing
System and GPS System on Build Own Operate and Transfer
(BOOT) Model**

December 2020

Tender No. 07/2020-21/SPO/HQ

SECTION VII: Technical Specifications

Issued By

**Directorate of State Transport, Government of Haryana,
2nd Floor, 30-Bays Building, Sector-17C, Chandigarh**

Section VII – Technical Specifications

Table of Contents

| | |
|---|-----|
| 1. GPS enabled EMV based Electronic Ticketing Issuing Machine (ETIM)..... | 203 |
| 2. Camera for Pass Counter..... | 205 |
| 3. Archival Software..... | 205 |
| 4. Backup Software | 206 |
| 5. Directory Services | 206 |
| 6. Antivirus for Desktops..... | 207 |

1. GPS enabled EMV based Electronic Ticketing Issuing Machine (ETIM)

| S. No | Parameter | Specifications |
|-------|--------------------------------------|--|
| 1 | Processor | Minimum 32-bit RISC based processor – 350 Mhz or higher. |
| 2 | Operating System | Linux/ Windows/ Android Based Operating System |
| 3 | RAM | 128 MB or Higher |
| 4 | FLASH Memory | 256 MB or higher |
| 5 | Extendable Memory | SD/Micro SD card interface (Minimum 16 GB or higher) |
| 6 | Display | Graphic LCD minimum 128 x 64 Pixels with LED Backlight |
| | | Capable of displaying graphic images |
| | | 8 lines x 20 characters or better |
| | | Clear display at night and day |
| 7 | Keypad | Minimum 16 keys with LED backing lights; OR Virtual Touch Keypad in case of Android OS platform. |
| 8 | Printer | 2” Thermal Printer with 50mm/sec. |
| | | Easy paper roll loading, should support minimum 12-meter length, 60 mm diameter, 57 mm paper width thermal paper roll |
| | | Transparent paper cover |
| | | Paper cover open sensor |
| | | Capability to print bar code |
| | | Capability to print ticket in English and Hindi |
| 9 | SAM Slots | Minimum 2 SAM slots (validate E-Purse NCMC Cards to connect with other modes) compliant to NCMC Standards |
| 10 | RTC | Inbuilt RTC with battery backup |
| 11 | GPRS Communication | In- Built Quad GPRS module / Modem |
| | | Should support SMS, Data, GPRS, TCP/IP |
| 12 | Battery | Li-ion/Li-polymer, minimum 2400 mA/Over-charge/ over-voltage/ over-current protection |
| | | Minimum 1000 ticket printing and minimum 14 hours operation in a single charge with real time data transfer and smart card read & write facility |
| | | Quick recharge |
| 13 | Weight | 500 g or less |
| 14 | Communication Ports | RS232C Serial Port for PC connectivity an 115K baud rate USB Port: Type A/Type Ethernet Port: 10/100/1000 Mbps |
| 15 | Security | Should support encryption standards including 3DES and AES for smart card reading/writing as well as communication with Central System |
| 16 | Operating temperature | 0°C to 50°C |
| 17 | Contactless Smart Card Reader/Writer | Inbuilt Contactless Smart Card reader/writer – ISO 14443 Type A & B, FeliCa, entire Mifare family |
| 18 | Indications on display | Battery charge status |
| | | GSM Signal strength |
| 19 | Audio | Beeps on keypress and transactions |

| S. No | Parameter | Specifications |
|-------|-------------------------------------|--|
| 20 | Others | Remote Administration |
| | | Over the air upgrade of firmware, application, configuration parameters, master data, etc. should be possible. |
| 21 | Accessories | Shoulder carry bag |
| | | AC charger (working from 100 V to 240 V) |
| | | Memory Device |
| 22 | ETIM Software Development Kit (SDK) | The Vendor shall provide Software Development Kit (SDK) for the ETIM firmware so that ETIM features can be developed by the SI in future as required. |
| | | The SDK shall provide functions / Programmes / APIs to support atleast the following: |
| | | a) Smart Cards functions |
| | | b) Communication Device (RS232, USB, GPRS modem, Wi-Fi etc) functions |
| | | c) Inter-process communication (IPC) functions |
| | | d) Multitasking functions |
| | | e) Multithreading functions |
| | | f) Power (Battery) Management functions |
| | | g) Internal Printer Management functions |
| | | h) File System Management functions |
| | | i) Clock/ Timer Management functions |
| | | j) Beeper/ LEDs/ Buzzer Management functions |
| | | k) Environment Variables related functions |
| | | l) User Interface (UI) Management Related functions |
| 23 | Wireless Communication | Wi-Fi with b/g/n supports |
| 24 | Warranty | For the complete contract period |
| 25 | Language | Support multi-language display and printing, including English and Hindi |
| 26 | Mandatory Certifications | EMV Level 1 & 2 and PCI-PED V-3.x certification (Kindly refer |
| | | CE/FCC or equivalent Certification |
| 27 | Payment Schemes | EMV and RuPay |
| 28 | Magnetic Card Readers | Triple Track (Tracks 1,2,3,), Bi-directional |
| 29 | Ingress | IP 54 |
| 30 | Transaction processing time | For MM Cards & Smart cards – less than 400 ms. For QR code transaction – less than 600 ms. For Contactless CC/DC Cards – Less than 1 second. |
| 31 | Kernels | EMV level-2 and qSparc |
| 32 | GPS | (a) Input Voltage: 8-70 VDC with surge protection (b) GPS Receiver (Quectel L89) <ul style="list-style-type: none"> • Support IRNSS, GPS, GLONASS • Support AGPS, SBAS ranging (WAAS, EGNOS, GAGAN, MSAS) • 66 acquisition channel |

| S. No | Parameter | Specifications |
|-------|-----------|--|
| | | <ul style="list-style-type: none"> • Maximum update rate: 10 Hz <p>(c) GPS tracking Sensitivity</p> <ul style="list-style-type: none"> • Tracking – 166 dBm • Reacquisition – 162 dBm • Cold Starts – 147 dBm <p>(d) GPS Accuracy – 2.5-meter CEP</p> <p>(e) Bluetooth – Compliant with 3.0 + EDR</p> <p>(f) GPRS Data</p> <ul style="list-style-type: none"> • GPRS Class 12: max 85.6 kbps (downlink/uplink) • PBCCH support <p>(g) Protocol – Embedded TCP/HTTP protocol</p> <p>(h) Jamming Detection – Yes</p> <p>(i) Antenna (Internal + External) – GPS & GSM high gain antenna</p> <p>(j) Device Working Mode</p> <ul style="list-style-type: none"> • Continuous tracking • Interval tracking • Sleep mode • Deep sleep mode <p>(k) Input/ Output</p> <ul style="list-style-type: none"> • 1 digital outputs • 2 analog output • 4 digital input • 1 RS232 (Serial Communication) <p>(l) Housing – IP 65</p> <p>(m) Accelerometer – 6 Axis</p> |

2. Camera for Pass Counter

| S. No | Parameter | Specifications |
|-------|----------------|--|
| 1 | Photos | Up to 3.0 megapixels (software enhanced) |
| 2 | Connectivity | Hi-Speed USB 2.0 certified |
| 3 | Camera Drivers | Microsoft Certified Windows Drivers |
| 4 | Cable Length | Minimum 4 Feet |
| 5 | Pan | 360 degrees |

3. Archival Software

| S. No. | Specifications |
|--------|---|
| 1 | The software shall support defined policies that are based on a variety of standard file attributes such as age of file / last access time. |
| 2 | The software shall set high and low watermark levels for purging data from high performance storage based upon a percentage of disk space in use. |
| 3 | The software shall keep active data on host arrays while inactive or compliance data is automatically moved to disk or tape. |
| 4 | The software shall support truncated stub files to point to migrated data, enabling seamless file access regardless of location of the data. |
| 5 | Shall enable archived data retrieval at disk speeds, while dramatically decreasing recovery times |

| S. No. | Specifications |
|--------|---|
| 6 | Shall offer a single logical view of both active and inactive data regardless of where it is physically located. |
| 7 | Shall eliminate repeated backups of the same data. |
| 8 | OS support: Microsoft® Windows Server 2003, Enterprise Edition / Red Hat® Enterprise Linux 5 & 4 AS / SUSE® Linux Enterprise Server 9 / Unix. |

4. Backup Software

| S. No. | Specifications |
|--------|--|
| 1 | The proposed Backup Solution should be available on various OS platforms such as Windows and UNIX platforms and be capable of supporting SAN based backup / restore from various platforms including UNIX, Linux, and Windows. |
| 2 | Proposed backup solution shall be offered with Cluster license of server. |
| 3 | Proposed backup solution shall have same GUI across heterogeneous platform to ensure easy administration. |
| 4 | The proposed backup solution should allow creating tape clone facility after the backup process. |
| 5 | The proposed Backup Solution has in-built frequency and calendar-based scheduling system and supports Clustering the Backup Server and Media Server on Windows and UNIX. |
| 6 | The proposed backup Solution supports the capability to write multiple data streams to a single tape device or multiple tape devices in parallel from multiple clients to leverage the throughput of the Drives using Multiplexing technology. |
| 7 | The proposed backup solution support de-multiplexing of data cartridge to another set of cartridges for selective set of data for faster restores operation to client/servers |
| 8 | The proposed backup solution should be capable of taking back up of SAN environment as well as LAN based backup. |
| 9 | The proposed backup solution shall be offered with 50 Client licenses for SAN based back up as well as LAN based backup. |
| 10 | The proposed solution also supports advanced Disk staging. |
| 11 | The proposed Backup Solution has in-built media management and supports cross platform Device & Media sharing in SAN environment. It provides a centralized scratched pool thus ensuring backups never fail for media. |
| 12 | Backup Software is able to rebuild the Backup Database/Catalog from tapes in the event of catalog loss/corruption. |
| 13 | The proposed Backup Software shall offer OPEN File Support for Windows based servers. |
| 14 | The proposed Backup Solution has online backup solution for different type of Databases such as Oracle, MS SQL, Sybase etc. on various OS. |
| 15 | The Proposed backup solution shall provide granularity of single file restore. |
| 16 | The Proposed backup solution shall be designed in such a fashion so that every client/server in a SAN can share the robotic tape library. |
| 17 | Backup Solution shall be able to copy data across firewall. |
| 18 | Backup solution should also provide report writer that allows designing of report templates which can be used to generate meaningful reports in CSV / HTML / XML / Text format / PDF. |

5. Directory Services

| S. No. | Specifications |
|--------|---|
| 1 | Should be compliant with LDAP v3 |
| 2 | Support for integrated LDAP compliant directory services to record information for users and system resources |
| 3 | Should provide integrated authentication mechanism across operating system, messaging services |
| 4 | Should provide directory services for ease of management and administration/replication |
| 5 | Should provide support for Group policies and software restriction policies |
| 6 | Should support security features, such as Kerberos, Smart Cards, Public Key Infrastructure (PKI), etc. |
| 7 | Should provide support for X.500 naming standards |
| 8 | Should support Kerberos for logon and authentication |
| 9 | Should support that password reset capabilities for a given group or groups of users can be delegated to any nominated user |
| 10 | Should support that user account creation/deletion rights within a group or groups can be delegated to any nominated user |
| 11 | Should support directory services integrated DNS zones for ease of management and administration/replication. |

6. Antivirus for Desktops

| S. No. | Specifications |
|--------|---|
| 1 | Antivirus software shall have a 3 – in – 1 protection of Antivirus, Anti spy ware and Firewall. This will continuously protect the PC from viruses, spy wares, and hackers. Antivirus software is protection for PC. Antivirus software shall be upgraded regularly |
| 2 | Detects and removes viruses, worms and Trojans automatically. Protects the files, scans and cleans spy wares and blocking their activities of identity theft automatically |
| 3 | Blocks spy wares before they get installed on the PC |
| 4 | Protects the privacy by detecting and cleaning spy wares and blocking their activities of identity theft automatically |
| 5 | Daily automatic updates |
| 6 | Detects and removes complex Spy wares and Trojans |
| 7 | Detects and removes latest ad wares, dialers, bots and risk wares |
| 8 | DNAS can technology takes care of new unknown malwares even before the signature update is available |
| 9 | Easy configuration of security level |
| 10 | Detects all types of hacker attacks |
| 11 | Protects all types of network connectivity |
| 12 | Monitors all incoming connections automatically |