

Request for Proposal
for
Selection of Solution Provider
for
Development, Implementation, Operation &
Maintenance of a Web Based and Mobile based End to
End Customized Software Solution for Smart Permits,
time table generation, tax collection mapping, route
formulation and other linked Transport Services
for
Transport Department, Govt. of Punjab

RFP Document no.: 16976/2021

O/o State Transport Commissioner, Punjab cum
Member Secretary Punjab State Transport Society,
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DISCLAIMER

The information contained in this Request for Proposal document (the "RFP") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the Department of Transport, Punjab(DTPB)(State Transport Commissioner Punjab)/Punjab State Transport Society (PSTS) or any of their employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the DTPB to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in preparing their technical proposals and financial offers pursuant to this RFP (the Proposal").

This RFP includes statements, which reflect various assumptions and assessments arrived at by the DTPB in relation to the Assignment. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the DTPB, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources. Information provided in this RFP to the Bidder(s) is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. DTPB/PSTS accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein. DTPB/PSTS, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder or Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Bid Stage. DTPB/PSTS also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. DTPB/PSTS may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP. The issue of this RFP does not imply that DTPB/PSTS is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Assignment and DTPB/PSTS reserves the right to reject all or any of the Bidders or Proposals without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by DTPB/PSTS or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder.

DTPB/PSTS shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or for submission of the Proposal, regardless of the conduct or outcome of the Bidding Process.

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1 Definition and Acronyms

- 1) **Comprehensive Solution and Service Provider (SOLUTION PROVIDER)** means A party / agency for design, development, Implementation and Operation and Maintenance (O& M) of Solution with whom Department shall enter into Service Level Agreement (SLA) including its successors & permitted assigns.
- 2) **Transport Department** means Department of Transport (DTPB), Govt. of Punjab, State Transport Commissioner ,Punjab ,CEO and Member Secretary Punjab State Transport Society(PSTS)
- 3) **Completion** means the Automation of the entire Business Processes herein specified in the required standards and to the complete satisfaction of the Department.
- 4) **Financial Bid** means the commercial bid from prospective bidders for developing, implementing and operating customized IT solution for 1styear with skilled manpower and Operation & Maintenance support for a period of 5 years.
- 5) **Business Processes** means each activity related to issuance of vehicle permits in the state and the collection of all type of taxes, surcharge etc by Transport Department, which has data input and output in day - to - day working of the department.
- 6) **Evaluation Committee** means group of Transport Department officers along with other persons nominated by Transport Department, Govt. of Punjab, constituted for carrying out the evaluation of the proposal, short list the final SOLUTION PROVIDER and oversee the implementation with the help of project team.
- 7) **Project Team** means Transport Department, Punjab Officers constituted for coordinating with Solution Provider for carrying out the study of flow processes of issuing all kinds of vehicle permits across the state and design & Implement an IT solution using Industry Standard technologies for effective control of the vehicle permits. Team will also evaluate the working and software testing of SOLUTION PROVIDER to match the requirements of Transport Department and submit the same to Committee of Transport Department.
- 8) **RFP** means Request for Proposal from the bidders for providing suitable web based software solution for Smart Permit System and Other linked Transport Services for Transport Department, Govt. of Punjab.
- 9) **Execution Period** means the period of time specified in the contract within or at which, the SOLUTION PROVIDER is required to make the solution functional in the manner specified in the contract.
- 10) **Implementation Period** means the period of time specified in the contract within or at which, the SOLUTION PROVIDER is required to implement the solution in TRANSPORT DEPARTMENT, GOVT. OF PUNJAB in all ways.
- 11) **Operation& Maintenance Period** means the period of five years from date of Go Live of project at Transport Department, Govt. of Punjab.
- 12) **Project period** is the period from starting/kick-off of implementation to 5 years from the date of successful implementation/ Go-live of the project and extendable up to another two years after evaluation and mutual consent.
- 13) **“Successful implementation/GO Live”** means the certificate issued by the Authority upon successful installation and demonstration of all functionalities as specified in RFP .i.e. 1. Approval of FRS (tender specific) 2.Approval of SRS (Tender specific) 3. Development of Design document 4. Development and Implementation (pref. on stage server) 5. Training 6. User Acceptance testing 7. Security Audit & Certification. 8. Go live - Production server available for citizen.

- 14) **“Bid/Proposal”** means the proposal submitted by the Bidder(s) in response to this RFP in accordance with the provisions hereof including Technical Proposal and Financial Proposal along with all other documents forming part and in support thereof as specified in this RFP.
- 15) **“Bidder”** means Solution Provider responding to the RFP.
- 16) **“Earnest Money Deposit (EMD)”** means Security furnished by the Bidder.
- 17) Any other term(s), not defined herein above but defined elsewhere in this RFP shall have the meaning(s) ascribed to such term(s) therein and shall be deemed to have been included in this section.

2 Important Information

S. No.	Information	Details
1	Name of the Assignment	“RFP for Selection of Solution Provider for Development, Implementation ,Operation & Maintenance of a Web Based and mobile based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services”
2	Bid Inviting Authority	Department of Transport, (DTPB)State Transport Commissioner, Punjab cum Punjab State Transport Society (PSTS)
3	Start date & time of issue of tender	07-07-2021:11:00 Hrs
4	Last date and time for submission of proposals	28-07-2021:15:00 Hrs
5	Bid Document Fees (No exemption for any category)	Rs. 10,000/- will be paid online on https://eproc.punjab.gov.in In case of any processing fees, it has to be borne by the bidder.
7	Bid Security (Earnest Money Deposit)	Rs. 1,00,000/- will be paid online on https://eproc.punjab.gov.in
8	Performance Security Deposit	10% of the contract value
9	Date and Time to open the Technical bid on e tendering portal	28-07-2021 14:00 Hrs at 15:00 HRs.
10	Place of Opening of Bids/Proposals	O/o State Transport Commissioner, Punjab cum Punjab State Transport Society SCO 177-178,Sec 17 C ,Chandigarh-160017
11	Technical Presentation	29-07-2021 11:00 HRs
12	POC Demonstration	To be intimated later
13	Opening of Commercial/Financial Bids	To be intimated later
14	Declaration of Successful bidder	To be intimated later
15	Contact Details	Additional State Transport Commissioner, Punjab Department of Transport, (DTPB) O/o State Transport Commissioner, Punjab cum Punjab State Transport Society (PSTS) Email: rfppermit@gmail.com
16	Validity of tender	180 days
17	All bids must be submitted in online on	https://eproc.punjab.gov.in
18	RFP document	This RFP is intended for only those bidders who have submitted their Expression Of Interest against Notice no DPR/Pb/1281 dated 05-02-2021. “EOI for DEVELOPMENT & IMPLEMENTATION OF A WEB BASED END TO END CUSTOMIZEDSOFTWARE SOLUTION FOR SMART PERMIT AND OTHER LINKED TRANSPORT SERVICES”.

Note:-

- All above events will be held at Head Office State Transport Commissioner, Punjab cum Punjab State Transport Society , Chandigarh
- In the event of the date specified above being declared as a holiday for the Department the due date will be the following working day.
- All corrigendum /addendums /clarifications regarding this RFP shall be posted on the <https://eproc.punjab.gov.in> and www.punjabtransport.org websites only. No other communication or advertisement will be given. Authority will not be responsible in case any bidder fails to upload the bid in stipulated time for any reasons.

3 Project Profile

- Transport Department, Govt. of Punjab intends to select a Comprehensive Solution & Service Provider (SOLUTION PROVIDER) for IT enablement of Transport Department, Govt. of Punjab (herein referred to as Bidder(s)).
- Online Tenders are invited from reputed IT solution provider through e tenders for Supply, Installation, Design, Development, Implementation, Customization Support, including Installation, Commissioning, Training, Data Entry, Data digitization & Migration and other IT services for 1st year and Operation & Maintenance of Integrated IT Solution for a period of 5 years.
- SOLUTION PROVIDER as end-to-end service provider will be responsible for Development, Implementation, and Operation & Maintenance of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services of solution provided to Transport Department, Govt. of Punjab.”
- Transport Department, Govt. of Punjab wants to monitor all Transport Permits, timetable generation with use of Machine Learning/Artificial Intelligence, tax collection mapping, route formulation and other linked Transport Services across the state.
- In order to have real time watch on all the activities, Transport Department wants to use ICT Systems for end to end customized web application and Mobile application in Android and IOS for Transport Department Officers, Enforcement Officers, Permit holders and General Public as per requirement .
- At any time prior to last date of receipt of the bids, may, for any reason, whether as its own initiative or in response to a clarification raised by a prospective bidder, modify the Bidding Document through a ‘Corrigendum’. Any such corrigendum shall become part of this Tender Document. In order to provide prospective bidder reasonable time for taking the corrigendum into account while preparing the proposal, Department of Transport, may, as its discretion, extend the last date for submission of the Bid.
- Transport Department reserves the right to make variation in terms of Project and Scope of work by ± 25 %.

4 Introduction

4.1 About Transport Department, Govt. of Punjab

The Non-Commercial Wing of Transport Department, Punjab (hereinafter referred to as "Transport Department") functions under the provisions of section 213 of Motor Vehicles Act, 1988. The Transport Department is primarily established for enforcement of the provisions of Motor Vehicles Act, 1988, Punjab Motor Vehicles Taxation Act, 1924 (Amended 1993) and the rules framed under these two acts from time to time.

The Transport Department is headed by the State Transport Commissioner (STC). STC is assisted by two Additional State Transport Commissioner, one Joint State Transport Commissioner, Deputy Controller (F&A), Deputy State Transport Commissioner, Service Engineer, Automobile Engineer, Assistant Transport Commissioner (Tech) in the Head office.

The Transport department has 11 Secy RTAs (Regional Transport Authority), 1 Secy STA (State Transport Authority) 80 SDMs as Licensing & registering authorities and 32 ADTTs (Automated Driving Test Tracks) offices across the State of Punjab. The offices including the STC, RTA, ADTT and SDM offices are collectively referred to as the "Transport Department Offices".

Transport Department is pioneer in using Information Technology for providing citizen centric services. Computerization of department started with the implementation of VAHAN and SARATHI along with computerization of all the managerial functions of the Transport Department.

The list of Transport Department Office are provided under **Annexure - A**

4.2 Project Objective

- 4.2.1 The Department of Transport, Punjab is interested for Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permit and other linked Transport Services for the benefit of the public. The RFP is for Selection of Software Solution Provider (agency) who will develop and Implement a Web Based End to End Customized Software Solution for Smart Permit and other linked Transport Services in Punjab.
- 4.2.2 In this RFP, only those bidders can participate, who are participated through the Expression of Interest for Development, implementation of a web based end to end customized software solution for Smart Permit, Time Table generation, Tax Collection Mapping, Route formulation and other linked Transport services - Public Notice no DPR/Pb/1281 dated 05-02-2021.

4.3 Project benefits:

- ❖ Automation of the issue of Transport Permits on the basis of terms & conditions specified by the DEPARTMENT OF TRANSPORT, PUNJAB Department of Transport and other linked services will obviate the necessity of people coming to DEAPRTMENT OF TRANSPORT PUNJAB.
- ❖ Monitoring all kinds of permits, Route formulation, Route violation, Time table generation using Artificial Intelligence techniques and other linked services using customized application.
- ❖ Generation of dynamic real time alerts for enforcement team, permit holders and citizens of the State, it will help in better enforcement of law and order, facilitation for permit holders and citizens.
- ❖ Improve efficiency and enable revenue record reconciliation with help of Machine learning techniques on daily basis.
- ❖ Ease of tax rates or regulatory changes being put in force immediately and also providing transparency to department and its business with its Clients.

4.4 Types of Permits

S. No.	Licensee Type
1.	Goods Permit
2.	Passenger Permit

5 Scope of Work

Department of Transport, Punjab wants to develop a Web Based and Mobile application/s End to End Customized Software Solution for Smart Permits, time table generation, tax collection mapping, route formulation and other linked Transport Services

Submission of FRS Functional Requirement Specification and SRS (System Requirements Specifications) report to the Department:

- i. The Solution Provider shall study the requirements given in RFP and submit FRS(**Functional Requirement Specification**)document within 15 days of signing the Contract with the Department. The development will start only after approval of FRS report.
- ii. The Solution Provider shall develop and submit **System Requirements Specifications** (SRS) document within 30 days of signing the Contract with the Department.
- iii. Solution provider capture are requirements mentioned in RFP
- iv. Solution provider must maintain traceability matrix from SRS stage for the entire implementation.

The main objectives of the project are as under:

- 1. Issuance of Permits**
 - v. The Web based End to End Customized Software Solution should have feature to issue all kind of permits under the provisions of Central Motor Vehicle Act 1988 and Rules and its amendments from time to time.
 - vi. The software application should have feature to store the required information in Machine readable format, SCOSTA based Smart Card with encrypted QR code and/or NFC technology and Print as per requirement of the DEPARTMENT OF TRANSPORT PUNJAB.
 - vii. The software should have provision to migrate existing data of permits available in digital format (in VAHAN Data base) and manual data available in registers by Data Entry.
 - viii. The software/application should have provision to accept applications from the applicants as per Central Motor Vehicle Act 1988 and Rules, *Punjab Motor Vehicles Taxation Act, 1924* and Rules and their amendments from time to time defined by the DEPARTMENT OF TRANSPORT PUNJAB .

- ix. The software application should allow permit holders with minimum fleet of 10 buses to add one bus as spare with a provision of swapping with existing 10 buses, mapped with permit,
- x. The Permit holder with less than 10 buses and 10 permits will not get this provision.
- xi. The application/software should have such feature that PSU permit holders should have access to swap routes from drop down list of vehicles.
- xii. The application/software should be able to transfer permits with provision of joint application
- xiii. The application/software should allow the permit holder to temporary deposit permit to Authority as per provisions.
- xiv. The application/software should be able to issue new permit/ renewal of permit and other permit related services as per State requirement.

2. Route formulation:

The DEPARTMENT OF TRANSPORT,PUNJAB shall be able to formulate routes on map covering all the points to complete the journey .The web application/software shall allow to capture details about the route, stoppage points, arrival timings and departure timings from the stoppage/stages. A single route may have multiple routes by using Via's that can be defined by providing any unique name or number to that route. POI(Point of interest) should be allowed to add within 50 m range of that POI to remove duplication in POI generation. With Artificial Intelligence the application should be in position to suggest route formulation. Solution provider needs to integrate with external systems for Maps (Google / Open Street or any other Open source Maps).

3. Time Table generation:

The software/web application must have AI(Artificial Intelligence) based algorithm and capability of machine learning with ability to automatically change the timetable for the buses to equally share the profit for the same routes which will have the capability to monitor the all- bus routes on real-time. DEPARTMENT OF TRANSPORT,PUNJAB will be able to create time table with software/web application with dynamic features.

4. Tax Collection and Mapping with Permits

- i. The application/software should be able to create new tax rules, amend existing tax rules as per Punjab Motor Vehicle Act and its amendments from time to time.

- ii. Tax rules contains different information like Applicable Tax Amount, Annually, Monthly, Quarterly, Half yearly, rebate if any.
- iii. The application /software must have feature to accept payment through payment gateway and real time exchange of information with VAHAN web application vice versa.
- iv. The tax/fee details shall be mapped with permit of the vehicle with feature of automatic alerts on Mobile / Web application or SMS of Email alert of due tax to permit holder / Transport Department.

5. Exchange of information with VAHAN 4.0 web application

- i. The application/software will exchange real time information with VAHAN web application database
- ii. The information related to vehicle, permit, insurance, fitness, pollution, challans and any other as per requirement of the department will be exchanged vice a versa with VAHAN web application through REST (RESTful API) API.

6. Multi Login feature in Mobile Application/Web application/software:

- i. The application should allow N number of users to Log in a single time with their respective user credentials without any technical lag in application.
- ii. The application/software must have Multi login support to DEPARTMENT OF TRANSPORT,PUNJAB and its stakeholders all type of permit holders and for passengers (in case of PSV only) (but not limited to) any other user as per requirement.

7. Mobile application:

Mobile application must have multi log in feature for all kind of users mentioned below:

- i. Provision for applicant to apply for permit
- ii. Permit holder login with details of vehicle, permits, active/inactive vehicle, tax, fitness, insurance and pollution with advance automatic alerts.
- iii. Provision for Permit holder to manage his fleet, make payment of his taxes etc.
- iv. DEAPRTMENT OF TRANSPORT PUNJAB, Admin, Enforcement Officers log in with access to Dashboard having alerts of expired taxes, insurance, pollution, fitness etc.
- v. Mobile application must have feature to scan QR code on permit and RC
- vi. Mobile application for passengers to check estimate time arrival or time table of the buses.

- vii. The mobile application must support minimum iOS 11 and Android 9 version.
- viii. The solution provider shall be responsible for registration, coordination and resolving issues with respective mobile hosting stores.

8. Smart Dashboards and MIS reports :

- i. Development of state of the art Dashboards with drill down feature for DEPARTMENT OF TRANSPORT, PUNJAB Permit holders with the latest tools, technologies with Artificial Intelligence, Machine Learning and Data Science, Business Intelligence and Predictive Analytics.
- ii. Generation of various type of MIS reports based on the data of vehicle and permits.
 - Ñ Tax Collected, Report RTA wise (Category wise) Payment cycle (Quarterly, Monthly, Annually)
 - Ñ Tax Violations/Defaulters Report
 - Ñ User Activity Logs
 - Ñ RTA wise Application Request status reports
 - Ñ Transfer tax detailed Report and any other as per requirement
- iii. Format of MIS reports will be as per requirement shared by the department.
- iv. The Export option for reports shall be in PDF and Excel and any required format by department.

9. Vehicle Location Tracking System :

The Vehicle Location Tracking (VLT) system will be part of Permit application and should be available in both Web based and Mobile application i.e. Android, IOS .It should fulfill minimum requirements of AIS 140 standards and any amendments made from time to time.

10. Integration with vehicle location tracking Device/Backend application

The web application /software will have feature to exchange real time data and integration through interexchange API with AIS 140 VLT application or any other application of the State .

11. Multi Language Support :

Application must support minimum 3 languages (English, Punjabi, Hindi)

12. Grievance redressal /Feedback module :

The software /application must have web based grievance redressal module for permit holders, DEPARTMENT OF TRANSPORT,PUNJAB enforcement officers and other stakeholders involved by ticket raising mechanism online and it should have feature to auto transfer voice calls to Transport Department Helpline and integration with Grievance Redressal System.

13. Other Linked Transport services :

The software /application will also have provision for other linked transport services i.e. appointment service, Fee/Tax payment, Commercial License, Fitness etc.

14. Online Artificial Intelligence driven training module :

An Artificial intelligence driven training module shall be developed for training purpose.

15. Server for storage & Payment Gateway Services during Design, Development and Testing Phase :

The solution provider will use its own server for storage and payment gateway services during application design, development and testing phase.

16. Stakeholders :

- a) Transport Department, Punjab, Enforcement officers
- b) Permit holders Private and Public Transport
- c) Information for Passengers Travelling
- d) AIS 140 enlisted vendors in AIS 140 application
- e) Any other stakeholder as decided by Transport Department

5.1 Development Approach, Methodology and Plan

Solution provider shall propose a latest Architecture solution for Developing Smart Permit Application.

5.1.1 Integrated Web /Mobile Application

5.1.2 All users of the DEPARTMENT OF TRANSPORT, PUNJAB, Permit holders, citizens will have single common Web Portal.

5.1.3 The Web Application must be customized for the solution which would follow all the Standards Protocols for like HTTP and SOAP for communication between stakeholders and Cloud storage.

5.1.4 The Government of India has launched "Guidelines for Indian Government Websites" in February 2009 & National Policy on Information technology, 2012. These guidelines are now part of the officer's manual for the Administrative Officers and it is advisable that all Indian Government websites are developed as per the guidelines defined in this document. Web application software /Mobile Apps should ensure compliance with the guidelines.

5.1.5 Accessibility of Web application/Mobile Apps Structure

The following main accessibility criteria:

- i. Develop user friendly web application/Mobile App on best platform
- ii. Structure overall content with proper tagging to make them screen reader friendly.

- iii. Ensure Compatibility with all platforms like windows, all browsers Mozilla, Chrome, Internet Explorer, Microsoft Edge for mobile app Android & Mac IOS etc.
 - iv. Develop Resolution independent design structure
 - v. Design should be coded Open Source Tools.
- 5.1.6 It must be ensured that the application software/Mobile Apps adjusts itself automatically as per the screen resolution of the screen i.e. 1024*768, 1200*800 etc. Resolution independent application will automatically expand/compress itself as per the screen resolution and hence there should not be any vertical scroll in the structure.
- 5.1.7 Platform Independent application Structure
 - i. It should be ensured that the web based application/Mobile Apps works flawlessly across different platforms.
 - ii. There should be minimum use flash contents so that home page should be loaded quickly. It should be easily opened on 10kbps bandwidth.
 - iii. It should not occupy excess client's device RAM.
- 5.1.8 All the service delivery components must comply with the National Policy on Information technology, 2012 for adoption of latest Open standards, latest open source and latest open technologies to process the service through web services to be exposed to the users.
- 5.1.9 The application /software should have dynamic content management features based on the page-tree as pages are added and subtracted, for making changes in the web application software and Mobile.
- 5.1.10 Any information should not be available at multiple pages.
- 5.1.11 General guidelines:
 - i. To provide information to citizens with minimum number of clicks.
 - ii. Development of consistent visual elements and Web application and Mobile Apps architecture that is scalable and expandable and W3 compliant.
 - iii. Enhance the presentation of the content so that they sync with the growth oriented approach of the Authority.
- 5.1.12 General requirements
 - i. A graphical user interface (GUI), shall be created before development of actual application.
 - ii. Should make use of data available in the existing Database and reduce duplicate data entry, and facilitate master data updates as and when required from Existing DEPARTMENT OF TRANSPORT PUNJAB applications so as to avoid duplicate data entry
 - iii. Incorporate analytics into Web application and mobile app, to track and identify users experience and actions.
 - iv. The solution architecture should be able to address the future scalability requirements, in terms of both application (to add new services) and infrastructure
 - v. Network level security, traffic to be encrypted using secured connectivity
 - vi. Continuity Measures, risk management plan for the continuity of services, data backup policy, business continuity plan.
 - vii. Functional Requirement Documentation, Web based application Design Documentation, Administration guide and User Operation document to be provided.
 - viii. Identify the web application limitations

- ix. Identify Risks if any post implementation along with mitigation plan.
- x. List out the assumptions related to load & infrastructure (such as device specifications, internet bandwidth etc.) so that response time is always < 30 seconds
- xi. Delivery should be in the form of a published web application and Mobile apps ,will be the property of the DEAPRTMENT OF TRANSPORT PUNJAB.
- xii. Integration of Ad Network
- xiii. Functional Requirement Study, Development of modules for application including data preparation, data migration, module testing.
- xiv. Performance Testing, Security Testing & Usability Testing certification from recognized authority.
- xv. Capacity Building
- xvi. Overall Integration, User acceptance testing & Go-Live
- xvii. Shall be responsible for all Hardware, software, resources (labour etc.,) required for implementing the solution.
- xviii. Real time information via GPS availability
- xix. Look for update application with permission to download
- xx. Handover and Capacity building to DEAPRTMENT OF TRANSPORT PUNJAB, so that they are capable enough to continue to Design, Build, Operate the proposed Solution

5.2 Smart Permit Application Software

- 5.2.1 Smart Permit Application should be developed for TRANSPORT DEPARTMENT, GOVT. OF PUNJAB linked with role based login for all stakeholders on a common Web Application.
- 5.2.2 The Smart Permit application software to be design & developed/Customized, deploy and implemented must consist of the following main modules covering all core departmental activities such as:

Sr. No.	Modules
1	Permit Application / Renewal Process
2	Tax Collection Module
3	QR Code Module
4	Route Formulation Module
5	SCOSTA Smart Card Print Module
6	Time Table Module
7	Vehicle Location Tracking System
8	Payment Gateway
9	SMS Gateway
10	MIS & Reporting
11	Real Time Dashboards
12	Training Module
13	Grievance Redressal /Feedback Module
12	Other Department Processes (Integration of Vahan, Sarathi Applications)

- 5.2.3 The Application software components/modules must be integrated and should utilize minimum architecture as under:
 - Presentation Layer
 - Business Logic Layer
 - Application Layer

- Database Layer
- 5.2.4 All the stake holders and its offices, RTAs, MVIs and Citizens would be having access to the application software as per their access right through a single portal.
- 5.2.5 The Application software should be built and deployed using Industry standard database technology with following features
- 5.2.5.1 Active-Active clustering at database layer for high availability and provision for seamless addition of computing node without any downtime during peak load
- 5.2.5.2 The DBA's and internal user's access to database need to be provisioned through Access control list as defined by TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.
- 5.2.5.3 The database should be provided with at least 256 bit encryption for data protection.
- 5.2.5.4 Industry standard database should not be limited by number of CPUs, total data size and scalability.
- 5.2.5.5 Various process documents related to the listed modules above would be generated in Real time from the System and would integrate with each other.
- 5.2.5.6 The application would have workflow integrated with the same and the users and processes would be linked through a work flow, as defined by TRANSPORT DEPARTMENT, GOVT. OF PUNJAB. It should have option to change the workflow from front end without revisions of codes, as per requirement of the Department.
- 5.2.5.7 Integrated On-line MIS reporting systems for above modules would be available to all the Users and Management of Transport Department as per Rights and Authorization available.
- 5.2.5.8 The Solution provider will be responsible for all the costs associated with development & maintenance of the application.
- 5.2.5.9 Application Development would be undertaken in following phases:
- System Study with respect to all the above modules and Submission System study report consisting of:
 - System Requirement Specifications
 - Entity relationship diagrams
 - Description of various processes
 - Process Flow Diagrams
 - Data Flow Diagram
 - Screen Interfaces
 - Formats of Screen and Print reports
 - Demonstration and approval of the Prototype
 - Development and Coding
 - Submission of Test Plan
 - Testing the Application as per Test Plan on Test Data

- 5.2.5.10 Transport Department would be deputing technical committee for testing & user acceptance (UAT) of the application from Dept.
- 5.2.5.11 The Approved SRS and the Prototype would be the basis of development for the Software Application
- 5.2.6 The Application has to have Security features/monitoring inbuilt into the same with following minimum features
- Definition of Roles and users including suspension and revocation of user
 - Define Add/edit/view/delete rights for each Entry Form/Report in all modules for each role.
 - Time and user Stamping of each transaction
 - On-line monitoring of the User activities
 - All deleted & edited records should be tracked with audit trail and copy of all editions/deletions should be available with MIS reporting of the same.
 - All permutation combination reports would be required from the system it can be year on year also.
- 5.2.7 SOLUTION PROVIDER is required to present detailed security Architecture and Implementation Strategy for execution of the project.
- 5.2.8 An On-line help module has to be developed which should provide detailed help for each process/report of the Application.
- 5.2.9 The application should also be integrated to SMS technology for sending alerts, registration and other intimations to stakeholders transacting with Transport Department. Additionally, there must also be provision for sending such alerts through an automated Telephone Call.
- 5.2.10 All recurring charges related with SMS/Call operations would be borne by the department
- 5.2.11 SOLUTION PROVIDER must also guide and prepare the communiqué to be done with TRAI in respect to compliance of TRAI guidelines for SMS.
- 5.2.12 SOLUTION PROVIDER is expected to study each of the above modules and processes in detail and design the application software as per the requirement of the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.
- 5.2.13 The system should be integrated with online payment gateway to make payments through Credit/debit cards and also through NEFT/RTGS from their bank to the account of TRANSPORT DEPARTMENT, GOVT. OF PUNJAB for facilitating e-payment by stakeholders.

Application software should be developed using n-tier architecture and should use Preferably Open source Database server as back end database system

5.3 SMART PERMIT Mobile Interfaces

- 5.3.1 The SMART PERMIT solution shall have following interfaces for the departmental users, non-department users and other external/public users.
- 5.3.1.1 *Secured Mobile app deployment for departmental users (Departmental functionalities including but not limited to for Permit management, Permit application, Payment of taxes, Time Table Management, SCOSTA Smart Card Management, Route Creation, MIS & reports, Fitness Test, permit Approvals, Inspections etc.)*

- 5.3.1.2 *Mobile app for external / public users (Functionalities including but not limited to for User Registration, Permit application, Permit request, Permit Renewal, Payment of taxes, Documents Upload, Slot Booking, Permit Download, Smart Permit Verification, Complaints & Public Grievances, Request for information under RTI Act etc.)/Estimated time arrival/departure of bus linked with time table*

5.4 SMART PERMIT Application Overview

5.5 Activity Descriptions of SMART PERMIT Modules

The detailed description of activities to be done by the different establishments involved in the flow of Smart Permit issuance is mentioned below.

5.5.1 Activity Description of Goods Permit Module

- 5.5.1.1 *The system shall allow the user for profile registration, Creation of username and password*
- 5.5.1.2 *The system shall provide provision to submit online Permit Application submission*
- 5.5.1.3 *The system shall send an auto-mailer, automated Call and SMS to the applicant, along with any accompanying comments, every time there is a status change*
- 5.5.1.4 *System shall allow the applicant to apply online for Permit Application for Renewal/Modification / Surrender the Permit.*
- 5.5.1.5 *System shall allow the applicant to enter the area details for the Permit.*
- 5.5.1.6 *System shall provide single form for all types of permits. Only the permit specific information shall form a separate part.*
- 5.5.1.7 *System shall have the provision to Suspension & Cancellation permit, in case of any breach cases detected*
- 5.5.1.8 *Applicant would be able to pay permit application fees through secure online payment gateway by 24/7 and track all transactions through online portal*
- 5.5.1.9 *System shall keep track of timestamps, change requestor etc. to maintain service levels*
- 5.5.1.10 *System shall allow applicant to update status of vehicle such as fitness test, etc.*
- 5.5.1.11 *System shall have ability to verify master data details with other databases such as VAHAN & SARATHI for Vehicle details.*
- 5.5.1.12 *System shall provide provision to fetch the fitness test status, inspection status through an API/secured mechanism, as applicable to grant of certain permit.*
- 5.5.1.13 *System shall allow inspecting authority to application data verification privileges.*
- 5.5.1.14 *System Shall allow the inspecting authority to verify the applicant data entered into the system is expected to be cross checked with the records on original papers submitted by the vehicle owner for Permit application.*
- 5.5.1.15 *System shall have the option to allow inspecting authority to Hold the Incomplete Application, if application is incomplete and missing some required documents and generate disapproval notice to be given to the vehicle owner which also contains remark of the inspecting authority.*
- 5.5.1.16 *System shall allow competent authority to accept / reject the application after completion of verification and forwarded by the inspecting authority.*

- 5.5.1.17 *After approval, system shall allow to the competent authority to allot the Smart Card for the Permit Issuance.*
- 5.5.1.18 *After allocation of Smart Card, system shall allow to print the Permit for the vehicle for which new permit is issued on the Smart Card.*

5.5.2 Activity Description of Passenger Permit Module

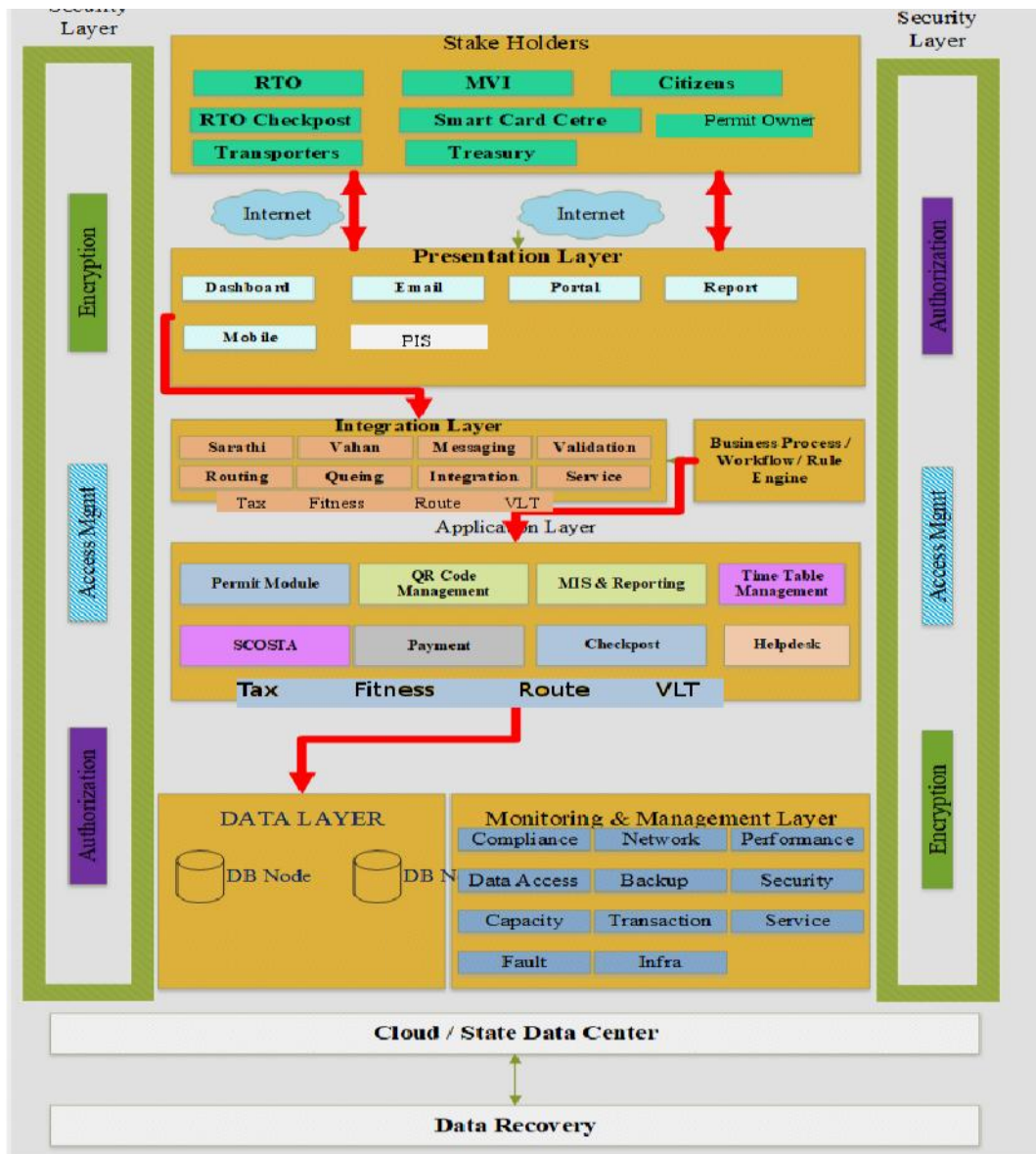
- 5.5.2.1 *The system shall allow the user for profile registration, Creation of username and password*
- 5.5.2.2 *The system shall provide provision to submit online Permit Application for Passenger vehicle permit.*
- 5.5.2.3 *The system shall send an auto-mailer, alerts on his dashboard application , automated Call and SMS to the applicant, along with any accompanying comments, every time there is a status change*
- 5.5.2.4 *System shall allow the applicant to apply online for Passenger Permit, Application for Renewal/ Modification / Surrender the Permit.*
- 5.5.2.5 *System shall allow the applicant to enter the area details and route details for the Permit.*
- 5.5.2.6 *System shall allow the applicant to enter the Permit Category, Permit Type i.e. Stage Carrier, Contract Carrier, etc., Service type, Permit Period, Seating Capacity, Owner Details, Vehicle Registration, insurance, pollution & Fitness Status for the Passenger Permit.*
- 5.5.2.7 *All type of Permits defined in Motor Vehicle Act/Rules*
- 5.5.2.8 *System shall provide single form for all types of passenger permits. Only the permit specific information shall form a separate part.*
- 5.5.2.9 *System shall have the provision to Suspension & Cancellation permit, in case of any breach cases detected*
- 5.5.2.10 *Applicant would be able to pay fees through secure online payment gateway by 24/7 and track all transactions through online portal*
- 5.5.2.11 *System shall keep track of timestamps, change requestor etc. to maintain service levels*
- 5.5.2.12 *System shall automatically update the status of vehicle through API i.e. fitness, pollution, insurance allow applicant to update status of vehicle such as fitness test, etc.*
- 5.5.2.13 *System shall have ability to verify master data details with other databases such as VAHAN & SARATHI for Vehicle details.*
- 5.5.2.14 *System shall provide provision to fetch the fitness test status, inspection status, pollution, insurance through an API/ secured mechanism, as applicable to grant of certain permit.*
- 5.5.2.15 *System shall allow inspecting authority to application data verification privileges.*
- 5.5.2.16 *System shall allow the inspecting authority to verify the applicant data entered into the system is expected to be cross checked with the records on original papers submitted by the vehicle owner for Permit application.*
- 5.5.2.17 *System shall have the option to allow inspecting authority to Hold the Incomplete Application, if application is incomplete and missing some required documents and generate disapproval notice to be given to the vehicle owner which also contains remark of the inspecting authority.*
- 5.5.2.18 *System shall allow competent authority to accept / reject the application after completion of verification and forwarded by the inspecting authority.*

- 5.5.2.19 After approval, system shall allow to the competent authority to allot the Smart Card for the Permit Issuance.
- 5.5.2.20 After allocation of Smart Card, system shall allow to print the Permit for the vehicle for which new permit is issued on Smart Card.

5.6 Proposed SMART PERMIT Architecture

The overall Business Application Layout is presented as a schematic below:

The Presentation Layer linked with Business Logic layer and Business Logic layer linked with DB layer. For Integration with 3rd party systems a secure integration Bus shall be used. (Below Architecture is only for reference bidder need to submit the Architecture as per latest Application Layout)



SMART PERMIT Business Application Layout Diagram

- 5.6.1 In proposing SMART PERMIT Architecture for implementing this project of e-Governance in Transport Department, Govt. of Punjab -- various necessary aspects of extendibility, scalability, security, interoperability, performance and productivity improvements for the department has to be addressed while defining the overall architecture.
- 5.6.2 The suggested Architecture should also be in alignment with latest micro services and other relevant industry standards.
- 5.6.3 The proposed solution should be event-based tracking system and should facilitate audit of all events.
- 5.6.4 To meet the diversified requirements of the department and considering the growth of the department in near future, the Centralized Architecture has been proposed for this project along with a Data Recovery Plan to ensure business continuity and high availability.
- 5.6.5 In centralized architecture all the applications will be hosted at a central location i.e. Cloud / cloud as per the requirement of the Transport Department, Govt of Punjab.
- 5.6.6 All the users within the department will access the application through intranet and the external users will access the application through internet.
- 5.6.7 As the internet users cannot be quantified and the approximate number of Intranet users would be 1,000 at any given time, all system software including database licensing should be without any limitations.
- 5.6.8 The envisaged benefits of the proposed centralized deployment architecture are:
- Enables sharing of data across locations thus minimizing data redundancy;
 - Allows centralized control of data, access controls and systems thus leading to greater security and reliability;
 - Ease of deploying systems as the deployment only needs to be done at a central location. This is also beneficial when further upgrades or bug fixes etc. need to be deployed;
 - Easier to manage and control the deployed application and database. The database administrators, system administrators etc. can manage the systems from a single location for all the connected offices;
 - Lesser number of specialized staff is needed to manage the systems, hence ensures the faster implementation and lower cost of ownership.

5.7 Application Design Technology Standards

- 5.7.1 It has been proposed that the Applications designed and developed for the Department must follow the Best practices and Industry standards. In order to achieve the high level of stability and robustness of the application, the system development life cycle must be carried out using the industry standard best practices and adopting the security constraints for access and control rights. Key features of a standard Application development practices are as follows:
- Various modules / applications should have a common Exception Manager to handle any kind of exceptions arising due to internal / external factors. This will ease of application maintenance and enhancements.
 - All the modules / applications are to be supported by the Session and Transaction Manager for the completeness of the request and response of the

client request. It will bring better manageability and helps reducing over utilization of resources.

- The system should have an Audit module exclusively to record the activities happening within the system / application to avoid any kind of irregularities within the system by any User / Application

5.7.2 Various technology standards to be a part of the proposed solution have been elaborated below:

- **Service Fulfillment** - The objective of the proposed system is to perform the internal functions and deliver the services from initiation till completion through electronic channels (as far as possible).
- **Single-Sign On** - The Solution should enable single-sign-on so that any user once authenticated and authorized by system is not required to be re-authorized for completing any of the functions in the same session.
- **Support for PKI based Authentication and Authorization** - The solution shall support PKI based Authentication and Authorization, in accordance with IT Act 2000, using the Digital Certificates issued by the Registration Authorities (RA) that are approved by the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.
- **Open Standards** - Keeping in view the evolving needs of interoperability like inter departmental dependency / coordination for most of the functions of the Department etc., it has been proposed that the solution should be built on SOA(Service-oriented architecture).
- **Scalability** - The architecture should be proven to be scalable (cater to increasing load of internal and external users and their transactions) and capable of delivering high-performance for at-least eight years from the date of deployment. The system should be highly available, responsive and redundant.

5.7.3 The response time during peak office hours (11 AM to 4 PM) should be less than 15 seconds per form and less than 1 min per report (for short period selected for short duration i.e one month)

5.8 Instant Solution Builder for Web Applications

An interface shall be provided to create web applications instantly. The system should have the following features:

- The application should provide multiple options to design the application such as text boxes, numerical, labels and bar-coded stickers.
- Dynamic Data Mapping facility through either connecting to remote database or through web services
- The application should allow users to give validations to the fields created by them.
- Automatic data consolidation
- It should have a scheduling feature

5.9 Responsibility of SOLUTION PROVIDER with respect to Cloud IT Infrastructure at State Data Centre / Other facility for SMART PERMIT Application

5.9.1 The Application shall be hosted at the State Data Center /other facility provided by the Department along with DR.

SOLUTION PROVIDER would be responsible for all activities related to Cloud for seamless hosting which will include following during the contract period

- :
- Administration and Maintenance of Server Infrastructure at Cloud.
 - Uptime commitment of all the Servers.
 - Ensure that all the Servers are Virus Free and that virus definitions are always updated regularly.
 - Cloud would be equipped to operate 24x7 for 365 days and would be monitored continuously by adequate technical manpower physically/ remotely.
 - Implementation of PKI based Security authentication Solution for the SMART PERMIT Application.
 - Monitoring of all the Servers and the Bandwidth for targeted minimum 99% Uptime on monthly basis for a period of 5 years from date of Go-live.
 - Ensure logical security of the Cloud and the data related to TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.
 - Submit monthly uptime, latency and bandwidth report to the department.

5.10 Application Hosting, Administration and Maintenance at State Cloud

5.10.1 Application Hosting

- SOLUTION PROVIDER would be hosting the above application at State Cloud/SDC and would maintain the same for a period of 5 years from date of Go-live, however SOLUTION PROVIDER may also indicate cloud hosting charges for a period of 5 years from date of Go-live as optional requirement in FORM F5 ,in case it is required .These Charges will be considered only after determining L1 in Financial Evaluation (not be part of Financial Bid).
- SOLUTION PROVIDER would ensure compliance to Cloud Security ISO Standard ISO 27017:2015, Privacy Standard ISO 27018:2014.
- SOLUTION PROVIDER shall use his own hosting infra for app development, testing, training etc. before Go-Live.
- SOLUTION PROVIDER would be responsible for maintenance of the application for a period of 5 years from date of Go-live.
- SOLUTION PROVIDER would ensure 99% uptime of the Application. Average uptime calculation will be done on monthly basis.
- Application would be running for 24 X 7 and for 365 days.
- SOLUTION PROVIDER would also be managing all the Bugs reported in the Application Software through the Bug Management Software.
- Changes required in the Application Software to suit the requirement of the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB during the contract period would be responsibility of the SOLUTION PROVIDER. These changes would be however related to the existing modules only and would not include change of Software Architecture.
- Every Application user would have access to the bug/change management software. Any Bug or changes required by the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB with respect to the Web application would be reported by

the User on the Bug Management Software and SOLUTION PROVIDER would be responsible to update the status of same.

- Changes required by the users would be undertaken as per requirement of the Transport Department
- The SOLUTION PROVIDER shall ensure the confidentiality/privacy of the data and shall ensure that no copy of the data unless authorized by the department, is created/retained by the solution provider.
- Should adhere to the ever evolving guidelines as specified by CERT-In (<http://www.certin.org.in/>)

5.10.2 SOLUTION PROVIDER would be responsible for Database Administration activities related to the SMART PERMIT database

5.10.3 SOLUTION PROVIDER would deploy a dedicated DBA for SMART PERMIT project for complete project duration. The minimum qualification of the DBA would be as under:

- Should have formal training and 5-6 years' experience of managing and troubleshooting the problems in RDBMS/ Windows NT / 2008 Server & Red Hat Linux (ES/AS) LAN / WAN
- Backup and restoration using various tools. Certification in database administration is preferred
- Developed Application in web technology with Oracle/MS SQL/MySQL/DB2 Enterprise Edition as RDBMS.
- The database administrator should have at least 5-6 years of RDBMS administration experience and should be able to handle multiple servers and their transactions with other application servers. However, their numbers, profiles and qualifications should be indicated in the Technical Bid. He should have sound knowledge of database administration and should have RDBMS administration certifications.

5.10.4 The change in Technical Staff (Database Administrator & Network Administrator) shall only be changed with prior permission of the Department and proper handover between resources is the responsibility of SOLUTION PROVIDER.

5.11 Project Manpower and Operational Services

5.11.1 SOLUTION PROVIDER should deploy minimum 5 resources including 1 Project Manager and 3 Technical Support cum Data Entry resources.

5.11.2 The Project Manager, 3 Technical resources and Data entry operators should be deployed at Transport Department / Project site during the complete O&M period of the project

5.11.3 The minimum qualification of Project Manager should be B.tech (CSE)/MCA and MBA with 5 year experience in handling project of data management and supervision of Team of Experts, command over Data filtering, Data Analysis, Data variation and report making & presentation.

- 5.11.4 The minimum qualification of Technical resource will BCA/ B.tech (CSE)/BSc IT with 2 years experience of project
- 5.11.5 Resumes of all resources to be deployed in Project would be shared with the Department.
- 5.11.6 The Scope of Work for the resources deployed at TRANSPORT DEPARTMENT, GOVT. OF PUNJAB offices would be:
- To feed all data related to the Application System.
 - To generate the various documents defined in the approved SRS(Software Requirement Specifications) by TRANSPORT DEPARTMENT, GOVT. OF PUNJAB for these modules
 - Handle the issues of the all department/ users/stakeholders telephonically /electronically through e-mail/Chat.
 - The Support should be available to all the department/user/stakeholder on telephone/e-mail/chat.
 - To generate various reports required by the Department Staff.
 - To generate various checklists required for checking the data.
 - To generate daily registers for Permits and Other linked services, etc.
- 5.11.7 The Deployed resources would be responsible only for work related to Computer System and the Software. The resource would not be responsible for:
- Authenticating /Verifying any data or base documents
 - Any function other than that related to Computer and Application Software such as generation of Permit Verification, Permit Approval, Smart Card Allocation, Fitness Certification etc. or any other functions which does not fall under the scope of the SOLUTION PROVIDER.
 - The deployed resource must carry their own laptops/printers the Department shall only provide required space/internet connectivity and electricity.
- 5.11.8 The Support would be available to all the users during the working hours of the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB for 6 days a week during prime business hours for the entire period of the contract.

5.12 Customization Support for Web application/Mobile application

- 5.12.1 SOLUTION PROVIDER shall provide end to end customization Support for web/mobile application including Installation, Commissioning, Training, Data Entry, Data digitization & Migration and other IT services for period of 1 year from date of Go Live.
- 5.12.2 During this period Solution provider shall ensure that in case of any change in Software / application, the user manuals and Training documents shall also be updated accordingly.
- 5.12.3 SOLUTION PROVIDER shall also responsible for maintaining application SLA.
- 5.12.4 The SOLUTION PROVIDER shall provide customization support for Solution subject to maximum extent of 50 man hours per month at their own cost & expenses ,the department will not pay bear any additional cost.

- 5.12.5 Customization / Modifications in the Web application / Mobile application shall not be considered as Change request, only new requirement shall be considered as change request.
- 5.12.6 In case there is a change request in the Scope of Work, the Agency shall prepare the CNS ("change note on Scope of Work") and get it approved by the department for the additional cost, effort and implementation time.
- 5.12.7 The value of each CNS request should not be exceeding 5% (five percent) of the Contract value in any case and overall cost of CNSs, during the term of Project, shall not exceed 15% (fifteen percent) of the Contract Value.

5.13 Application maintenance

- 5.13.1 The SOLUTION PROVIDER would deploy an offsite team of minimum 5 resources for application maintenance for a complete period of 5years.
- 5.13.2 The Solution Provider shall ensure that at all times during the Contract Duration a Project Manager acceptable to the Purchaser shall take charge of the performance of the Contract. The Manager shall be assisted by Operations & Maintenance staff, Technical support staff and other members of the team.

The Application maintenance resources should be Qualified and experienced engineers/ developers to:

- Make any changes/modifications required in the Software Application/Portal/Mobile apps for performance improvement and general maintenance of existing code/application/mobile app.
- Ensure proper working of the Software/applications.
- The Support should be available to all the department on telephone/e-mail/chat.
- SOLUTION PROVIDER shall also responsible for maintaining application SLA.

5.14 Data Digitization & Data Migration

- 5.14.1 Data migration from the legacy system through validation with the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB and data porting to the new system shall be the responsibility of the SOLUTION PROVIDER. Collection & Mapping of all relevant data/records including Permit records of existing permit holders.

- Identification of the data gaps
- Providing templates/approach for collection of data/ records
- Extraction and loading of the data/records
- Listing of errors during the data migration & correction of data
- Final porting of the data/records into the solution database/storage

) The data count related to online issued permits is available at www.parivahan.gov.in VAHAN4 dashboard

) The manual data for Data Digitization is approximately 10,000 records

5.15 Security Audit of the Application

5.15.1 The SOLUTION PROVIDER shall be responsible for getting application audited by CERT-In Empaneled application security auditors before Go-Live complete system. The cost of the same and any consequent re-audit to validate closure of deficiencies detected in previous audit, if need be, to achieve successful completion of Application Security Audit will be borne by the SOLUTION PROVIDER.

If any inspected or tested software/web application fail to conform to the specifications, the department may reject the software and the SOLUTION PROVIDER shall either replace/redevelop the rejected software or make alterations necessary to meet specification requirements free of cost.

5.15.2 The auditor must submit the test results to the department and any deficiency found during the security audit shall be required to be removed to accept the implementation to be complete & as a prerequisite to start of Go-Live & subsequent Operations & Maintenance period.

5.15.3 The SOLUTION PROVIDER shall be responsible for engaging CERT-IN empanelled auditor & getting security certification of the system inclusive of all related cost and expenses. Hence SOLUTION PROVIDER shall factor in those expenses in their financial bid.

5.15.4 During the O&M Phase, the SI shall be responsible for getting security certification of the system from a CERT-IN empanelled auditor every 6 months. The cost of the same is to be borne by the SOLUTION PROVIDER.

5.16 Pilot Rollout & Full scale roll out

5.16.1 SMART PERMIT Project shall be rolled out with Pilot roll out at Head Office, Transport Department, Govt. of Punjab and one Secretary RTA under Transport Department, Govt. of Punjab.

5.16.2 Upon successful completion of pilot testing and closure of bugs & deficiencies observed during the Pilot roll out, the solution shall be rolled state-wide (full scale roll-out)

5.17 Training Services

5.17.1 SOLUTION PROVIDER would provide training support on SMART PERMIT application so that smooth implementation/operation of the software can take place at user level.

5.17.2 A centralized Training at HO would be conducted by SOLUTION PROVIDER for TRANSPORT DEPARTMENT, GOVT. OF PUNJAB Staff of concerned department.

5.17.3 The Schedule of the above Training sessions would be mutually decided with the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.

5.17.4 All the Infrastructure including the Computers, except Training Hall with Screen, Internet Connectivity etc. required for Training Session would be provided by the SOLUTION PROVIDER. Training in batches of 15-20 people should be conducted.

5.17.5 SOLUTION PROVIDER should also provide an On-line Help and an On-line Interactive training module which can be downloaded by the users for using the application software.

5.17.6 TRANSPORT DEPARTMENT, GOVT. OF PUNJAB will provide requisite space for the training while all other materials such as projector, training material etc. will be on the account of SOLUTION PROVIDER.

5.18 Change Management

5.18.1 This SMART PERMIT project is positioned and treated as a transformation project by the Transport Department than as an IT project.

5.18.2 TRANSPORT DEPARTMENT, GOVT. OF PUNJAB recognizes that this system is likely to bring changes to the business processes, organization structures and current practices in the department.

5.18.3 These changes will have a direct impact on the staff and the other stakeholders.

5.18.4 The impact of these changes will need to be minimized through an effective change management and communications support for IT implementation.

5.18.5 It is required to provide change management and communications support for addressing the people related concerns and aspects in IT implementation to ensure successful adoption of the system.

5.18.6 It is important to understand the needs of various stakeholders so, as to plan capacity building and training plan appropriately.

6 Bidding Process

6.1 Bid Submission:

6.1.1 SOLUTION PROVIDER has to submit the bid online.

6.1.2 All pages of the bid, except for un-amended printed literature, shall have initials of the person or persons signing the Bid.

6.1.3 The last date for submission of bid as per section 2 Important Information of the RFP

6.1.4 Online bids can be submitted through <https://eproc.punjab.gov.in/>

6.1.5 Bids will be valid for 180 days from the date of submission.

6.2 Procedure for submission of Bid

6.2.1 ONLINE

6.2.2 The bidder must have the DSC/PKI and user id of the e-procurement website before participated in the e-tendering process. The bidder may use their DSC/PKI if they already have the DSC/PKI. They can also take it from any of the authorized agencies. For user id they can get registered themselves on e-procurement website <https://eproc.punjab.gov.in/> and submit their bids online on the same.

6.2.3 The Bidder has to upload scanned copy of Tender Fee and EMD online on <https://eproc.punjab.gov.in/> website along with Financial Bid in the requisite format. Other documents of the technical bids also should be uploaded as mentioned in this RFP.

6.2.4 Technical Bid will be submitted physically also along with the Original Tender Fee, EMD and Financial Bid documents in the prescribed formats.

6.3 Technical Bid

6.3.1 The Technical Proposal should be submitted as per the instructions given in RFP.

6.3.2 Prices must not be indicated in the technical bid and must be quoted ONLINE only in the prescribed formats on <https://eproc.punjab.gov.in/>

6.4 Financial Bid

6.4.1 Financial Bids in the prescribed formats must be quoted ONLINE only in the prescribed formats on <https://eproc.punjab.gov.in/>

6.4.2 The Financial Proposal should be submitted as per the instructions given in Form 2, Form 3, Form 4 of RFP.

6.5 Opening of Technical Bids

6.5.1 The Technical bids will be opened in the Conference hall, O/o. State Transport Commissioner, Govt. of Punjab, SCO 177-178 Sec 17 C Chandigarh.

6.5.2 The bids which are successfully submitted online on <https://eproc.punjab.gov.in/> will only be considered for further bid process.

6.5.3 The Bidder shall be solely responsible for the cost of preparing and submitting the Bid and all other related costs.

7 Eligibility Criteria

7.1 Pre-Qualification Criteria

Following are the essential qualifying criteria for the Agency to qualify for the next stage of evaluation of the assignment:

#	Eligibility Criteria	Document Proof
1.	The bidder must be a Company/Firm/MSME/ Start-Up Registered under the Indian Companies Act, 1956 or 2013 and have their registered offices with legal presence in India.	a) Certificate of Incorporation/ Registration under companies act, 1956 or 2013 or LLP Act of 2008 a) Memorandum and Articles of Association / b) Partnership deed.
2	The bidder must have valid PAN card and GST registration certificate	Self Certified copy of documents
2.	The Bidder should have average Annual Sales Turnover of minimum 50 Lacs on an average during the last three (3) financial years (FY 17-	a) Copy of audited financial statements b) Certificate from the statutory auditor/

	18, FY 18-19, FY 19-20). The Bidder should also have positive net worth as on 31 /03/ 2020	company secretary of the company regarding annual sales turnover c) Certificate from the statutory auditor/ company secretary on the Net Worth of the company as on 31/03/2020
3	The Bidder should have developed at least one Software application (Web / Mobile) with integrated payment gateway and multiple users' login feature for Reputed Company/State Govt. department /Govt. of India Department. The software application should be running/implemented successfully by the bidding entity . Note: The software application developed for bidder's own / in-house use shall not be considered	Work order and satisfaction Certificate from the client
4.	The Bidder or any of its sister concerns where directors or partners are same, should not have been blacklisted/debarred by Central Government / Any State Government in India/ PSU in last 03 years as on the date of bid submission	Self-declaration by the authorized signatory of the Bidder, in the format given in the RFP
5.	The Bidder must be an ISO 9001 Certified Organization.	Copies of the valid certificates from authorized agencies

Note: 1 Consortium / Joint Venture is not allowed.

2 The Relaxation Norms for Start-Ups based in Punjab will be applicable, as per Department of Industries & Commerce, Govt. Of Punjab Notification no COS/Start-Ups/2019 /11288 dated 16-08-2019. The Start-ups fulfilling the criteria as per Notification are eligible for technical bids Evaluation.

8 Bid Evaluation

8.1 Technical Bid Opening

- 8.1.1 Tendering Authority will open the Technical bids in the presence of bidder's representatives (not more than two representatives per bidder) who choose to attend the same as per clause 2 of RFP document.
- 8.1.2 The bidder's representatives who are present shall sign in a register evidencing their attendance.
- 8.1.3 The Tendering Authority will examine the Technical bids to determine whether they are complete, the documents have been properly signed, the required Tender fee and EMD paid, and the bids are in order and complete in all the respects. Any bid found to be non-responsive for any reason or not meeting the minimum levels of performance or other criteria specified in the bid document will be rejected by the Tendering Authority and will not be included for further evaluation.
- 8.1.4 The Tendering Authority will evaluate the Technical bids of the Bidders as per the Evaluation criteria mentioned in this bid document.
- 8.1.5 The Tendering Authority will take Technical presentation as a part of evaluation criteria. If considered necessary the Tendering Authority may like to visit projects being handled by the bidder.
- 8.1.6 Any effort by the bidder to influence the Tendering Authority during the process of evaluation of technical bids, bid comparison or the Tendering Authority's decisions on acceptance or rejection of bids may result in rejection of the bidder's bid.

8.2 Technical Evaluation Criteria

The bidder must secure minimum 70 marks in Technical Evaluation Criteria to qualify for next stage of evaluation of the assignment.

#	Evaluation Criteria	Description	Max Marks (TM1)								
Turnover & Company											
1	Average Annual Sales Turnover	<p>Average Annual Sales Turnover during the last three (3) financial years (FY 17-18, FY 18-19, FY 19-20).</p> <table border="1"> <tr> <td>More than 1 Cr</td> <td>10</td> </tr> <tr> <td>0.76 Cr - 1 Cr</td> <td>8</td> </tr> <tr> <td>0.50 Cr - 0.75</td> <td>5</td> </tr> <tr> <td>Less than 0.50 Cr</td> <td>0</td> </tr> </table>	More than 1 Cr	10	0.76 Cr - 1 Cr	8	0.50 Cr - 0.75	5	Less than 0.50 Cr	0	10
More than 1 Cr	10										
0.76 Cr - 1 Cr	8										
0.50 Cr - 0.75	5										
Less than 0.50 Cr	0										
1.2	Company Years of operation as on 31.05.2021	<p>1 year or more but less than 2 years - 1 marks 2 years or more but less than 3 years - 3 marks 3 years or more - 5 marks Less than 1 year -0 marks</p>	5								
Experience											
2	Experience in Software application and mobile application Development	Experience in implementing/development of software application	10								

	with multi user log-in feature, payment gateway integration for a reputed client	=> 2 Applications: 5 Marks 1 Application : 3 Marks 0 Application: 0 Marks	
2.1	Experience in any e Governance Software application development and implementation by the bidder in any State Government/ Govt. Of India Organization/ Department	=> 2 Applications: 5 Marks 1 Application : 3 Marks 0 Application: 0 Marks	
Quality Certifications			
3	Technical Criteria	To be evaluated on below certifications 1) ISO 9001:2015 certified - 5 Marks 2) CMMI Level & ISO 9001:2015 - 8 Marks 3) CMMI Level 3 , CMMI Level 5 ,ISO 9001: 2015 & ISO 27001:20013 - 10 Marks 4) No Certification : 0 Marks	10
Proposed Solution			
4	Approach & Methodology	To be evaluated from the technical proposal documentation and technical presentation to the TEC. TEC shall evaluate the Approach and Methodology for the Implementation & Post-Implementation proposed by bidder and evaluate the same on the following parameters: Completeness of Approach and Methodology to meet the requirements to be evaluated on below criteria 1) Application Development Architecture 2.5 Marks 2) O & M Plan 2.5 Marks 3) Proposed Technology 2.5 Marks 4) Application Security and Integration Plan 2.5 Marks	10
4.1	Approach Methodology for Scalability of proposed Application	To be evaluated from the technical proposal documentation and technical presentation to the TEC. Following parameters will be examined for evaluation: Proposed Methodology for the proposed application must have the capability to handle 25,000 concurrent users and scalable up to 40,000 concurrent users. 1.5 Marks Proposed Methodology adopted for capability to handle number of transactions around minimum 6Cr. Per day and scalable up to 9999 Cr Transactions. 1.5 Marks Methodology for proposed application	5

		capability to handle the data size of 20 TB. 1 Mark Methodology for proposed application with response time less than 2 Sec. 1 Mark	
5	Implementation Schedule	The bidder who proposes the lesser duration for implementation & Go-Live will secure higher marks and other bidders will secure the marks respectively based on their proposed duration (The bidder must submit an unconditional affidavit regarding their proposed implementation duration). Less than or equal to T + 60 days 10 Marks Between T + 61 to 70 Days 05 Marks Between T+ 71 days to 80 days 03 Marks Between T+ 81 days to 89 days 01 Marks	10

- Each eligible bidder would be given Technical Marks (TM1) based on above evaluation criteria.
- Minimum 70% marks are required for qualifying technical bids.
- All bidders technically qualified with more than 70% would be called, for proof of concept to check the understanding of the Goals of the project.
- Each bidder with minimum 70 % marks would require to demonstrate Proof of Concept based on the sample time table for a specific route is at **Annexure B**, as mentioned at Sr. No 8.2.1:-

8.2.1 Proof of Concept Demonstration:

#	Evaluation Criteria	Description	Max Marks (TM2)
1	Proof OF Concept	To be evaluated from the Demonstration of Proof Concept Application to the TEC based on understanding and demonstration of each point of POC covered. Following Points needs to be demonstrated: <ol style="list-style-type: none"> a) POI Creation on map with text search as well as tap on map b) Prevent creation of POI within 50 mtr Range c) Route Creation and Via Route creation d) Route Side Plan using already added POI e) Creation of Automatic Time table for all trips for a permit by providing start time only f) Station Counter Management and Assignment of Routes stations g) Single Day time table report for a station for administration as well as for General public. h) Tax calculation for any vehicle category for 1 year tax with dummy rules and data, (Monthly/Quarterly/Annually) with change in tax rule in any quarter 	40

- Total TM(Technical marks) = TM1 + TM2,where TM2 is the marks obtained by the bidder in POC
- All bidders would then be ranked T1, T2.....based on the TM scored by them against their Technical bid.
- A bidder whose TM score is more than 70% shall be classified as “Technical Qualified” bidder.
- The bidders who do not present any POC on the date specified by the Department, shall be disqualified.

8.3 Financial Bid Opening

- 8.3.1 The Financial Bid of the technically qualified bidders will be opened on a day; the time, date and location of which will be informed to the qualified bidders i.e. technically qualified Bidders.
- 8.3.2 The Tendering Authority will open the Financial Bids of only technically qualified bidders. The bidder's representatives who are present shall sign a register evidencing their attendance.
- 8.3.3 Price Bids determined to be substantially responsive will be checked by the Tendering Authority for any errors. If there is a discrepancy between the quoted rate in figures and the quoted rate in words, the rate in words will take precedence.

8.4 Financial Bid Evaluation

- 8.4.1 Financial proposal of only technically qualified bidders would be opened as per technical evaluation process described above.
- 8.4.2 The Financial bids of only those bids that meet each of the qualification criteria mentioned would be opened for Financial bid evaluation. The Financial bid evaluation will take into account the information supplied by the Bidders in the Commercial Proposal, and the same shall be evaluated in accordance with the evaluation criteria specified in this RFP. The financial bid evaluation would be based on L1, i.e. the Bidder with the least financial quote shall be eligible for award of contract.

Please note that the financial bid should not be conditional and **no technical information should be provided along with the commercial.**

Note:

A substantially responsive Bid is one, which conforms to the requirements, terms, conditions and specifications of the Request for Proposals without material deviation. A material deviation is one which affects in any substantial way the functionality, scope, quality, or performance of the Deliverables, or which limits in any substantial way, inconsistent with the Request for Proposals, department’s rights or the Bidder's obligations for, performance of the Project and the rectification of which deviation would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

8.5 Method for Evaluation of L1 Bidder

- 8.5.1 The methodology used for evaluating Bidders (who qualify in technical proposal) based on the rates quoted by them in their commercial bid, which is final and binding to all Bidders. Transport Department, Punjab (DTPB) shall not entertain any queries on its evaluation methodology for L1 Bidder.
- 8.5.2 Consideration of rates with the L1 Bidder could be done for finalizing the rates at which the contract would be awarded to the BIDDERS.
- a) The bid should be comprehensive and inclusive for all the services to be provided by the Bidder as per scope of his work. The work order would be issued to select Bidder on the basis of the following bid and further negotiations between the department and the Bidder only. No separate payment shall be made for services that are to be delivered by the vendor as part of his scope of work for this project.
 - b) The prices quoted shall be inclusive of all taxes, duties and statutory payments incident upon the Bidder and it shall be a fixed price bid. Once the prices have been tendered to the department, no change / modification will be entertained for any cause whatsoever (including changes in regulation, tax and duty structure etc.) The prices once provided by the Bidder will be valid for the entire period of validity of the bid as defined in the bid document.
 - c) Any revision (increase or decrease) in the rates of taxes, duties, charges and levies at a later date and during the tenure of the bid will be to the account of the Bidder.
 - d) The Bidder shall be responsible for the costs towards travel/stay, daily allowance or any other allowances with respect to their staff deployed with respect to the execution of this project before or after the award of the contract.
 - e) The Bidder having the lowest bid would be invited for consideration of rates for award of project by the Transport Department, Govt. Of Punjab. Bidder should quote as per format given in **Form F2**

9 General Terms and Conditions

9.1 Earnest Money Deposit

- 9.1.1 Each e-tender should be accompanied with earnest money as given in Section (page 2) which is to be paid through online mode. Other mode of payment will not be considered and tenders will be rejected straightway.
- 9.1.2 The validity of EMD deposited must be valid for a period of 1 year.
- 9.1.3 The startup/MSME with valid MSME/NSIC certificate will be exempted from EMD amount.
- 9.1.4 No interest amount payable on the EMD
- 9.1.5 The tenders without Earnest Money Deposit or Valid MSME/NSIC certificate for exemption of EMD will be summarily rejected.
- 9.1.6 Unsuccessful Bidder's EMD will be discharged / returned after signing of the contract with the successful Bidder. No interest will be paid by DTPB/PSTS on the EMD amount

9.1.7 EMD will be forfeited on account of one or more of the following reasons:

- If a bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any; or
- In the case of a successful bidder if the bidder fails to sign the contract for any reason not attributable to the Govt. of Punjab or to furnish Performance Bank Guarantee within specified time in accordance with the format given in the RFP.
- During the bid process, if a bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
- During the bid process, if any information is found to be wrong/ manipulated/ hidden in the bid.

9.2 Rejection of Bid

9.2.1 The Bids which does not fulfill any of the conditions or the notified requirements, directions & guidelines laid down by TRANSPORT DEPARTMENT, GOVT. OF PUNJAB shall be considered to be incomplete and are likely to be rejected without assigning any reason thereof.

9.3 Alternative proposals by Bidder

9.3.1 The Bidder shall submit Bid, which comply with the documents, including the basic TRANSPORT DEPARTMENT, GOVT. OF PUNJAB requirements as indicated in the bid documents. Alternative bid may not be considered. The Attention of bidders is drawn to the provisions that one bidder shall submit only one bid either individually or as partner in any of the organization failing which both or all such bids shall be rejected.

9.4 Disqualification

9.4.1 TRANSPORT DEPARTMENT, GOVT. OF PUNJAB in its sole discretion and at any time during the processing of Bids, may disqualify any bidder from the bid process, if the bidder has:

- Firms not meeting eligibility criteria.
- Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.

9.4.2 If found to have record of poor performance such as abandoning works, not properly completing the contract, inordinately delaying completion, being involved in litigation or financial failures,

9.5 Security Deposit (SD)/ Performance Bank Guarantee

9.5.1 Bidder shall carry out the services conformity with generally accepted professional and technically accepted norms relevant to such assignments that are required for the SMART PERMIT project and which are to the entire satisfaction of the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.

9.5.2 In the event of any deficiency in services, the Successful Bidder shall promptly take necessary action to resolve it, at no additional fees to TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.

- 9.5.3 Successful bidder will have to execute an agreement on a Non-Judicial Stamp of appropriate value within a period of 15 days of receipt of order and deposit security deposit which shall be 10% of the contract value, prior to signing of agreement.
- 9.5.4 The form of Security Deposit Money shall be as below:
- Performance Bank Guarantee of a nationalized bank in favor of State Transport Commissioner Punjab payable at Chandigarh
- 9.5.5 Performance Bank Guarantee shall be returned after expiry of contract period /extended period provided there is no breach of contract on the part of SOLUTION PROVIDER.
- 9.5.6 The Successful Bidder shall be required to execute Service level agreement and Non-Disclosure Agreement.
- 9.5.7 Failure of the Successful Bidder to comply with the requirements shall constitute sufficient grounds for the annulment of the award and forfeiture of the SD.
- 9.5.8 Any of the Financial Terms & Conditions not covered in this bid document shall be governed as per the provisions of General Finance & Accounts Rules prescribed by the Government of Punjab.

9.6 Termination for default:

The client may, without prejudice, to any other remedy for breach of contract, by written notice of default sent to the agency, terminate the contract in whole or in part if:

- 9.6.1 The agency fails to deliver any or all of the obligations within the time period(s) specified in the contract, or any extension thereof granted by the client.
- 9.6.2 The agency fails to performs any other obligation(s) under the contract

9.7 General Conditions

- 9.7.1 **The IPR (Intellectual Property Rights)** of the proposed software solution SMART PERMIT will be with The State Transport Commissioner, Govt. of Punjab, will be the sole owner of the customized application software solution of the Smart Permit System. This is not applicable for the system software supplied along with as per the requirements of the proposed application software. The Bidder shall indemnify the Department against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the supplied software solution or any part thereof in India. In the event of any claim asserted by a third party for software piracy, the Bidder shall act expeditiously to extinguish such claim. If the Bidder fails to comply and the Department is required to pay compensation to a third party resulting from such a claim, the Bidder shall be responsible for compensation including all expenses, court costs and lawyer fees. The Department will give notice to the Bidder of such claim if it is made, and the Bidder shall reimburse the same to the Department without delay. All Bidders have to provide **SELF DECLARATION CERTIFICATE OF GIVING INTELLECTUAL PROPERTY RIGHTS**.

9.7.1.1 services, or materials comprising commercially released, pre-release or beta products (whether licensed for a fee or no charge) and any derivatives of the foregoing which are made available to Purchaser for license which is published by product owner or its affiliates, or a third party. "Fixes" means product fixes that are either released generally (such as commercial product service packs) or that are provided to you when performing services (such as workarounds, patches, bug fixes, beta fixes and beta builds) and any derivatives of the foregoing.

9.7.1.2 Bespoke Development: The Intellectual Property Rights (IPR) rights for any bespoke development done during the implementation of the project must lie with the Purchaser. The "Policy on Collaborative Application Development by Opening the Source Code of Government Applications", notified by Ministry of Electronic and Information Technology, Government of India, in the Gazette of India on 6th May 2015, must be adhered.

9.7.2 It is stipulated that:

- Neither party shall be liable to the other for any special, indirect, incidental, consequential (including loss of profit and revenue), exemplary or punitive damages whether in contract, tort or other theories of law, even if such party has been advised of the possibility of such damages.
- The total cumulative liability of either party arising from or relating to this contract shall not exceed the total amount paid to SOLUTION PROVIDER by the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB under the contract provided; however, this limitation shall not apply to any liability for damages arising from a) willful misconduct or b) indemnification against third party claims for infringement.

9.7.3 GST Tax Registration and Income Tax Clearance

- No bidder shall participate in the bid process without Registration under the provisions of relevant Act and produces registration and clearance certificate with the Technical Bid Certificates from the competent authority shall have to be enclosed with the technical bid, failing which bid may be liable to be rejected.
- Tender form shall be filled in ink or typed. The bidder shall sign the tender form at each page and at the end, in token of acceptance of all the terms and conditions of the tender.
- Bidder shall quote firm prices against each of the item as detailed in the price bid. No conditional discounts shall be quoted in the bid e.g. discounts based on conditions linked with bid/Security Deposit/guarantees, advance payments, selection of combination of products or product options, number of personnel etc. Financial bids with such conditional discounts may be rejected.

9.7.4 Comparison of Rates

- Bids offered shall include All Taxes, Duties, Case or any other charges including Freights and the like excluding GST. The financial Bids of all the Technically Qualified Bidder shall be evaluated as per procedure given in the evaluation criteria of this bid document.
- Direct or indirect canvassing on the part of the bidder or his representative will be a disqualification.

- Any change in the constitution of the bidder, etc. shall be notified forthwith in writing to TRANSPORT DEPARTMENT, GOVT. OF PUNJAB. Such change shall not relieve any former member of the company, firm etc. from any liability under the contract.
- 9.7.5 If any dispute arises out of the contract with regard to the interpretation, meaning and breach of the terms of the contract, the matter shall be referred to by the bidder to the State Transport Commissioner, Govt. of Punjab, who will be the Sole Arbitrator and whose decision shall be final & binding.
- 9.7.6 **Loss of Revenue to Purchaser:** Bidder shall be vicariously liable to indemnify the Purchaser in case of any misuse of data/information by the bidder, deliberate or otherwise, which comes into the knowledge of the purchaser during the performance or currency of the contract and thereafter.
- 9.7.7 **Currency of Payment:** Payment shall be made in Indian Rupees only.
- 9.7.8 **Contract Amendments:** No variation in or modification of the terms of the Contract excepting as per Annual Transport Policy of Govt. of Punjab shall be made except by written amendment signed by between the parties i.e. the SOLUTION PROVIDER/ TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.
- 9.7.9 **Purchaser rights to accept/ reject any Bid:** 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 assigning reasons & without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds or the Purchasers action.
- 9.7.10 **Notification of Award:** Prior to the expiry of the period of the bid validity, the purchaser will notify the successful bidder in writing that its bid has been accepted. The notification of award will constitute the formation of contract.
- 9.7.11 Upon the successful bidder's furnishing of Security Deposit, TRANSPORT DEPARTMENT, GOVT. OF PUNJAB, will notify each unsuccessful bidder and will discharge their EMD.
- 9.7.12 **Period of Contract:** The period of the contract shall be five years renewable for next two years from the date of successful acceptance/ Go-live completion of the project on existing terms and conditions and mutual understanding
- 9.7.13 This RFP confirms to IT ACT 2000/2012 and any amendments made thereof

9.8 Force Majeure

- 9.8.1 Notwithstanding the provisions of contract, the bidder shall not be liable for forfeiture of its Security Deposit, or termination for default, if any to the extent that, its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.
- 9.8.2 For purposes of this clauses, —Force Majeure means an event beyond the control of the bidder and not involving the bidder's fault or negligence and not foreseeable. Such events may include but are not restricted to acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

9.8.3 If a Force Majeure situation arises, the bidder shall promptly notify the State Transport Commissioner, Govt. of Punjab in writing of such conditions and the cause thereof. Unless otherwise directed by the purchaser in writing the bidder shall continue to perform its obligations under the contract as far as is reasonably practical.

9.8.4 The purchaser may terminate this contract, by giving a written notice of minimum 30 days to the bidder being unable to perform a material portion of the services for a period of more than 60 days

9.9 Termination of Insolvency

9.9.1 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

9.10 Termination of Convenience

9.10.1 The purchaser may, by written notice to the bidder, may terminate the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which IT Services provided by Bidder under the contract is terminated and the date upon which such termination becomes effective.

9.10.2 If the contract is terminated by TRANSPORT DEPARTMENT, GOVT. OF PUNJAB due to change in its Government Plan's/ Policies without fault of SOLUTION PROVIDER, in that case TRANSPORT DEPARTMENT, GOVT. OF PUNJAB whom so ever responsible for payment, will reimburse the full cost of

- The IT Services till the period of services provided
- The Actual cost of the software application as per the payment milestones achieved in the project.

9.11 Subletting Contract:

9.11.1 The contractor shall not assign or sub-let his contract or any part thereof to any other agency without the written permission from the department.

9.12 Other Conditions:

9.12.1 The bidder shall pay the expenses of stamp duty for execution of agreement.

9.12.2 If a bidder imposes conditions, which are in addition to or in conflict with the conditions mentioned herein, his tender shall liable to be rejected. In any case, none of such conditions will be deemed to have been accepted unless specifically mentioned in the letter of acceptance of tender issued by the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB.

The Purchase Officer/Tendering Authority reserves the right to accept any tender not necessarily the lowest, reject any tender without assigning any reasons.

9.13 Use of Contract Documents and Information

- 9.13.1 The bidder shall not without TRANSPORT DEPARTMENT, GOVT. OF PUNJAB's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the bidder performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.
- 9.13.2 The bidder shall not, without TRANSPORT DEPARTMENT, GOVT. OF PUNJAB's prior written consent, make use of any document or information enumerated in this document except for purposes of performing the contract.

9.14 Penalty for Non Performance as per SLA

- 9.14.1 The Tendering Authority would deduct the penalty for non-performance of SLA. The detailed Performance parameters, the penalty structure and computation have been defined in SLA.

9.15 Payment Terms

S. No.	Key Milestones	Timelines (in Months)	% Payment
1	Issue of LOA to the Successful Bidder	T	Nil
2	Submission of Performance Bank Guarantee	T + 15Days	Nil
3	Approval of final FRS	T + 15 Days	Nil
4	Approval of final SRS	T + 30 Days	Nil
5	Successful completion of site preparation, application development, infrastructure deployment, installation & commissioning for Pilot Location	T+45 Days	10% of Total Contract Value
6	UAT acceptance of the complete solution for 100% of the envisaged service	T+60 Days	Nil
7	Acceptance of Pilot rollout	T+70 Days	10% of Total Contract Value
8	Third Party Security Audit	T+80 Days	10% of Total Contract Value
9	Successful completion of site preparation and infrastructure deployment, installation & commissioning for Full Scale roll	T+85 Days	20 % of Total Contract Value

	out		
10	Project Go-live and Acceptance of Full Scale roll out	T+90 Days	20% of Total Contract Value
11	Operations & Maintenance	T + 4 Month to T+ 64 Month	30% of Total Contract Value as equated quarterly installment for 20 quarters after Project Go-live.

9.16 Price Basis

9.16.1 All prices should be inclusive of all Taxes, Packing forwarding FOR TRANSPORT DEPARTMENT, GOVT. OF PUNJAB sites excluding GST. The format of the Commercial bid is enclosed and should be submitted duly filled in the same format.

9.17 Deliverables

9.17.1 General Obligations

- Payments to the Solution Provider (SOLUTION PROVIDER) shall be made as per the Schedule of Prices by TRANSPORT DEPARTMENT, GOVT. OF PUNJAB as per payment terms mentioned in RFP.

9.17.2 The bidder should sign each and every page of bid document. If the bidder fails to do so, his bid may not be considered.

10 Project Timelines

S. No.	Key Milestones	Timelines (in Months)
1	Issue of LOA to the Successful Bidder	T
2	Submission of Performance Bank Guarantee	T + 10 Days
3	Approval of final FRS	T + 15 Days
4	Approval of final SRS	T + 30 Days
5	Successful completion of site preparation, application development, infrastructure deployment, installation & commissioning for Pilot Location	T+45 Days
6	UAT acceptance of the complete solution for 100% of the envisaged service	T+60 Days
7	Acceptance of Pilot rollout	T+70 Days
8	Third Party Security Audit	T+80 Days
9	Successful completion of site preparation and infrastructure deployment, installation & commissioning for Full Scale roll out	T+85 Days
10	Project Go-live and Acceptance of Full Scale roll out	T+90 Days
11	Operations & Maintenance	T + 4 Month to T+ 64 Month

11 Service Level Agreement

Service Level Agreement (SLA) is the contract between the State Transport Commissioner, Govt. of Punjab and the successful bidder. SLA defines the terms of the successful bidder's responsibility in ensuring the timely delivery of the deliverables and the correctness of the same based on the agreed performance Indicators as detailed in the bidding documents. This section defines various service level indicators which will be considered by State Transport Commissioner, Govt. of Punjab in the SLA with successful bidder.

The successful bidder has to comply with service levels requirements to ensure adherence to project timelines, quality and availability of services.

11.1 Project Delivery Related SLA

S. No.	Key Milestones	Timelines (in Months)	Penalty
1	Issue of LOA to the Successful Bidder	T	N.A.
2	Submission of Performance Bank Guarantee	T + 10 Days	For any delay, penalty of INR 5,000 per week shall be applicable for up to 4 weeks and then termination of the Contract
3	Approval of final FRS	T + 15 Days	For any delay, penalty of INR 5,000 per week shall be applicable for up to 4 weeks and then termination of the Contract
4	Approval of final SRS	T + 30 Days	For any delay, penalty of INR 5,000 per week shall be applicable for up to 4 weeks and then termination of the Contract
5	Successful completion of site preparation, application development, infrastructure deployment, installation & commissioning for Pilot Location	T+45 Days	1% of the milestone payment value for every week of delay for first 4 weeks and 2% for every subsequent week of delay.
6	UAT acceptance of the complete solution for 100% of the envisaged service	T+60 Days	For any delay, penalty of INR 5,000 per week shall be applicable for up to 4 weeks and then termination of the Contract
7	Acceptance of Pilot rollout	T+70 Days	1% of the milestone payment value for every week of delay for first 4 weeks and 2% for every subsequent week of delay.
8	Third Party Security Audit	T+80 Days	1% of the milestone payment value for every week of delay

			for first 4 weeks and 2% for every subsequent week of delay.
9	Successful completion of site preparation and infrastructure deployment, installation & commissioning for Full Scale roll out	T+85 Days	1% of the milestone payment value for every week of delay for first 4 weeks and 2% for every subsequent week of delay.
10	Project Go-live and Acceptance of Full Scale roll out	T+90 Days	1% of the milestone payment value for every week of delay for first 4 weeks and 2% for every subsequent week of delay.
11	Operations & Maintenance	T + 4 Month to T+ 64 Month	As per section 11.2 Support Related SLA

Note: The Bidder must provide SLA Monitoring tool for the client

11.2 Support Related SLA

SLA	System Bug Resolution Time
Definition	Time in which a complaint/issue type related to application is resolved after it has been reported/escalated by the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB to the Solution Provider
Service Level Requirement	R1, R2, R3 - 100% within response and resolution times
Measurement of Service Level Parameter	<p>Support query should be classified in following three categories.</p> <ul style="list-style-type: none"> • Severity Level 1 (R1): System issues that have the greatest business impact wherein application users are not able to perform his/her regular work at a time. Or there is a downtime of Smart Permit Application, Servers, or Central equipment. <p>For example, unable to login to the system, Web Server, Database server not responding etc.</p> <ul style="list-style-type: none"> • Severity Level 2 (R2): System issues that have medium business impact wherein the user is partially able to perform his/her regular work. But the system not fully functional and has bugs, errors, faults etc. For example, user is able to login and perform most of his normal work, but some of the features or issues are troubling. <p>For Example Some supplement reports are not available, some misalignment in reports, some role access issues, privileges conflicts, slow fetching of data etc</p> <ul style="list-style-type: none"> • Severity Level 3 (R3): System issues which have the least/no business impact on working. <p>For example, change of profile settings, Screen resolution issues, Customer tracking, error popup, messages etc.</p> <p>Prime Business Hours are defined as 8AM - 8PM</p> <p>The selected vendor should provide service as per the following</p>

	requirements			
	Type of Support Call	No. of Instances Per Quarter	Resolution time from reporting the issue (Not more than)	Penalty payment from the Quarterly Payment
	R1	Exceeding 2	2 Hrs	0.5% X Per Instance X Every 2 Hrs
	R2	Exceeding 5	4 Hrs	0.25% X Per Instance X Every 4 Hrs
R3	Exceeding 10	2 Working Days	0.05% X Per Instance X Every 2 Working Days	

11.3 Liquidity damages (LD)

- 11.3.1 Project Plan Period is 90 days for the Development and Deployment of all the Software Modules listed in the RFP and other Infrastructure defined in RFP. However, the SOLUTION PROVIDER is expected to set up all other location infrastructure within a period of 90 days from the date of Purchase Order.
- 11.3.2 In the event of failure of the setup of the Core Infrastructure defined in RFP as per project timeline in chapter 10 from the date of issue of Order the TRANSPORT DEPARTMENT, GOVT. OF PUNJAB reserves the option to recover liquidated damages (LD) which is to be recovered from the contractor in the following manner:

S. No.	Delay Limit	LD to be recover ED
1.	Delay upto 25% of the Project Plan Period (i.e 25% of 90 days)	2% of the total Project cost.
2.	Delay more than 25% and upto 50% of the Project Plan period	5% of the total Project
3.	Beyond 50% of the Project Plan period	Up to a maximum of 10% of the total project

12 Exit Management

12.1 Exit Management

The bidder has to prepare and submit the detailed EXIT management plan as part of the technical proposal.

13 Bill of Material

13.1 Bill of Material for SMART PERMIT Project

S. No.	Description	UOM	Qty
1	SMART PERMIT Solution	Lumpsum	1
	Customized Software Solution for Smart Permits, time table generation, tax collection mapping, route formulation and other linked Transport Services		

14 Bidding Formats

14.1 From P1: Bid Form

(Bidders are requested to furnish the Bid Form in the Format given in this form, filling the entire Blank and to be submitted on Letter Head)

To
The State Transport Commissioner, Punjab
SCO-177-178, Sec 17 C, Chandigarh-160017

Sub: Selection of Solution Provider for Development, Implementation, Operation & Maintenance of a Web Based and Mobile based End to End Customized Software Solution for Smart Permits, time table generation, tax collection mapping, route formulation and other linked Transport Services

Dear Sir,

1. We the undersigned bidder/(s), having read and examined in details the specifications and other documents of the subject tender no. Govt. of Punjab/ / dated do hereby propose to execute the job as per specifications as set forth in your Bid documents.

2. Earnest Money Deposit: We have deposited EMD online on e tendering website sum of Rs. _____ (Proof Attached)

3. We declare that items shall be executed strictly in accordance with the specifications and documents irrespective of whatever has been stated to the contrary anywhere else in our proposal. Further, we agree that additional conditions, deviations, if any, found in the proposal documents other than those stated in our deviation schedule, save that pertaining to any rebates offered shall not be given effect to.

4. If this proposal is accepted by you, we agree to provide services and complete the entire work, in accordance with schedule indicated in the proposal. We fully understand that the work completion schedule stipulated in the proposal is the essence of the job, if awarded.

5. We further agree that if our proposal is accepted, we shall provide a Performance Bank Guarantee of the value equivalent to three percent (3%) of the order value as will be stipulated in our Price Bid Document.

6. We agree that Govt. of Punjab reserves the right to accept in full/ part or reject any or all the bids without any explanations to bidder and his decision on the subject will be final and binding on Bidder.

Dated, this day of 2021
For and on behalf of
Signature
Name in full
Designation

14.2 Form P2: Covering Letter Format

(Bidders are requested to furnish the Covering Letter in the Format given in this form, filling the entire Blank and to be submitted on Letter Head)

To

The State Transport Commissioner, Punjab
SCO-177-178, Sec 17 C, Chandigarh-160017

Sub: Selection of Solution Provider for Development, Implementation, Operation & Maintenance of a Web Based and Mobile based End to End Customized Software Solution for Smart Permits, time table generation, tax collection mapping, route formulation and other linked Transport Services

Dear Sir,

Please find enclosed our Bid in respect for "*Selection of Solution Provider for Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services*", in response to the Request for Proposal (RFP) Document issued by Govt. of Punjab on behalf of Transport Department, Govt. of Punjab dated

We hereby confirm the following:

1. The Bid is being submitted by (Name of the Bidding Company), in accordance with the conditions stipulated in the RFP. Our Bid includes the Letter of Acceptance in the format specified in the RFP.
2. We have examined in detail and have understood the terms and conditions stipulated in the RFP Document issued by Transport Department, Govt. of Punjab. We agree and undertake to abide by all these terms and conditions. Our Bid is consistent with all the requirements of submission as stated in the RFP or in any of the subsequent communications from Govt. of Punjab
3. The Bidding Company meets all the eligibility criteria laid down in the RFP.
4. This bid is unconditional and we hereby undertake to abide by the terms and conditions of the RFP.
5. We, as the Bidding Company, designate Mr./Ms. (mention name, designation, contact address, phone no., fax no., etc.), as our Authorized Representative and Signatory who is authorized to perform all tasks including, but not limited to providing information, responding to enquiries, entering into contractual commitments etc. on behalf of the us in respect of the Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab. The Board Resolution authorizing the said person is enclosed.

For and on behalf of: (Company Seal)

Signature:

Name & Designation:

14.3 Form P3: Proforma for Performance Bank Guarantee

(To be executed on Non-Judicial Stamp Paper of appropriate value, as per Stamp Act prevailing in the State of Punjab, to be executed in the name of the executing Bank)

PROFORMA OF BANK GUARANTEE FOR SECURITY DEPOSIT -CUM-PERFORMANCE GUARANTEE

Ref..... Bank Guarantee no.....

Date.....

PROFORMA OF BG FOR SECURITY DEPOSIT

We (Name & detailed address of the branch) (hereinafter called "the Guarantor") do hereby undertake to indemnify and keep indemnified the Purchaser to the extent of Rs.

(Rupees) only against any loss or damage caused to or suffered by the Purchaser by reason of any breach by the Contractor of any of the terms and conditions contained in the said Work Order No. dated of which breach the opinion of the Purchaser shall be final and conclusive.

ANDWE, ___DO HEREBY Guarantee and undertake to pay forthwith on demand to the Purchaser such sum not exceeding the said sum of Rupees) only as may be specified in such demand, in the event of the Contractor failing or neglecting to execute fully efficiently and satisfactorily the order for Work Order no., dated

We further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said order as laid down in the said Work Order No. dated including the warranty obligations and that it shall continue to be enforceable till all the dues of the Purchaser under or by virtue of the said Work Order No. dated have been fully paid and its claims satisfied or is charged or till the Purchaser or its authorized representative certified that the terms and conditions of the said Work Order No. dated_ have been fully and properly carried out by the said contractor and accordingly discharged the guarantee.

We the Guarantor undertake to extend the validity of Bank Guarantee at the request of the contractor for further period of periods from time to time beyond its present validity period failing which we shall pay the Purchaser the amount of Guarantee.

(1) The liability under the Guarantee is restricted to Rs. _ (Rupees) only and will expire on _ and unless a claim in writing is presented to us or an action or suit to enforce the claim is filled against us all your rights will be forfeited and we shall be relieved of and discharged from all our liabilities (thereinafter)

(2) The Guarantee herein contained shall not be determined or affected by liquidation or winding up or insolvency or closer of the Contractor.

(3) The executants have the power to issue this guarantee on behalf of Guarantor and holds full and valid power of Attorney granted in his favour by the Guarantor authorizing him to execute the Guarantee.

(4) Notwithstanding anything contained herein above, our liability under this guarantee is restricted to Rs. (Rupees) only and our guarantee shall remain in force upto and unless a demand or claim under the guarantee is made on us in writing on or before all your rights under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We, ___ lastly undertake not to revoke this guarantee during the currency except with the previous consent of the Purchaser in writing. In witness whereof we _____ have set and subscribed our hand on this ___ day of _____.

SIGNED, SEALED AND DELIVERED

WITNESS

1) _____

(Stamp of the executants)

2) _____

(Name & address in full with Rubber Stamp)

INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

1. Bank Guarantee (B.G.) for Advance payment, Mobilization Advance, B.G. for security Deposit-cum- Performance Guarantee, should be executed on the Non-Judicial Stamp paper of the applicable value and to be purchased in the name of the Bank.
2. The Executor (Bank authorities) may mention the Power of Attorney No. and date of execution in his/her favor with authorization to sign the documents. The Power of Attorney is to be witnessed by two persons mentioning their full name and address.
3. The B.G. should be executed by a Nationalized Bank/ Scheduled Commercial Bank, BG from Co-operative Bank / Rural Banks is not acceptable.
4. A Confirmation Letter of the concerned Bank must be furnished as a proof of genuineness of the Guarantee issued by them.
5. Any B.G. if executed on Non-Judicial Stamp paper after 6 (six) months of the purchase of such stamp shall be treated as Non-valid.
6. Each page of the B.G. must bear signature and seal of the Bank and B.G. Number.
7. The content of the B.G. shall be strictly as Performa prescribed by Govt. of Punjab in line with Purchase Order LOI/ Work Order etc. and must contain all factual details.
8. Any correction, deletion etc. in the B.G. should be authenticated by the Bank

Officials signing the B.G.

9. In case of extension of a Contract the validity of the B.G. must be extended accordingly.
10. B.G. must be furnished within the stipulated period as mentioned in Purchase Order / LOI / Work Order etc.
11. Issuing Bank / The Vendor are requested to mention the Purchase Order / Contract / Work Order reference along with the B. G. No. for making any future queries to Govt. of Punjab

14.4 Form P4: Bidder Details

No.	Detail	Particulars
1.	Name of the Bidder	
2.	Registered Office of Bidder with Phone, Fax and E-mail address	
	Phone No.	
	Fax No.	
	E-mail address	
	Name & Designation of Contact Person at Office	
3.	Is the Bidder a registered company? If yes, submit documentary proof with Year and Place of establishment of the Bidder.	
	Total number of employees	
	Are you registered with any Government/ Department/ Public Sector Undertaking (if yes, give details)	
	Does your organization have ISO certification /CMMI level 3 certificates?	
	List the major clients with whom your organization has been / is currently associated.	
	Have you ever been denied tendering facilities by any Government Department/ Public Sector Undertaking? (Give details)	
	Have you in any capacity not completed any work awarded to you? (If so, give the name of project and reason for not completing the work)	
5.	Nature of Constitution of the Bidder (Enclose a Certificate, whether individual, Partnership Firm or company registered under the Companies Act)	
6.	Name of the Chief Executive Officer/Managing Director	
	Phone No.	
	Fax No.	
	E-mail address	

14.5 Form P5: Letter of Acceptance

(The Letter of Acceptance is to be submitted by the Bidding Company on their respective Letter Heads.)

To
The State Transport Commissioner, Punjab
SCO-177-178, Sec 17 C, Chandigarh-160017

Sub: Selection of Solution Provider for Development, Implementation, Operation & Maintenance of a Web Based and Mobile based End to End Customized Software Solution for Smart Permits, time table generation, tax collection mapping, route formulation and other linked Transport Services

Dear Sir,

Sub: Selection of "Bidder" for Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab.

This has reference to the Bid being submitted by _____ (mention the name of the Bidding Company), in respect of Selection of "Bidder" for Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab, in response to the Request for Proposal (RFP) Document issued by the Transport Department, Govt. of Punjab dated _____.

We hereby confirm the following:

1. We _____ (Name of the Bidding Company furnishing the Letter of Acceptance), have examined in detail and have understood and satisfied ourselves regarding the contents including in respect of the following:

The RFP Document issued by Govt. of Punjab on behalf of Transport Department, Govt. of Punjab;

All subsequent communications between Govt. of Punjab and the Bidder, represented by _____ (Mention name of the Bidding Company).

The Bid being submitted by _____ (name of the Bidding Company).

2. We have satisfied ourselves regarding our role as (here give a brief description of the role) in the Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab as specified in the Bid.
3. If the Bidding Company is awarded the Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab, we shall perform our role as outlined in the Bid to the best of our abilities. We have examined the Bid in detail and the commitments made in the same.

We agree and undertake to abide by the Bid and the commitments made therein.

4. We authorize (Name of the Bidder of the Bidding Company), as the Lead Member and authorize the same to perform all tasks including, but not limited to providing information, responding to enquiries, entering into contractual commitments etc., in respect of this Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab.

For and on behalf of : (Company Seal)

Signature :

Name :

Designation :

14.6 Form P6: Document Submission Checklist

Sl. No.	Document Name	Enclosed (Yes / No)	Page No.
1	Certificate of Incorporation		
2	Memorandum of Article of Association or Partnership Deed or Relevant Legal document		
3	Earnest Money Deposit as per RFP document (document enclosed)		
4	Bid Form as per the format		
5	Photocopy of GST Registration		
6	Photocopy of PAN Registration		
7	Photocopy of Audited balance sheet and P&L Statements for last three financial years:		
	FY 2018-19		
	FY 2017-18		
	FY 2019-20		
8	Chartered Accountant's certificate for Turnover and Networth		
9	Power of Attorney of Authorization for signing the bid in Rs.100.00 Non- Judicial Stamp Paper		
10	Original Tender document duly Stamped & Signed on all pages by the bidder		
11	Photocopy of Quality Certificate as per Eligibility Criteria		
12	Details of Past Experience along with Work Orders and Completion / Performance certificates.		
13	Technical Bid Documents		
14	Approach & Methodology		

14.7 Form F1: Financial Proposal

The Financial Proposal should be provided in the following format

Date:

Place:

To

The State Transport Commissioner, Punjab
SCO-177-178, Sec 17 C, Chandigarh-160017

Sub: Selection of Solution Provider for Development, Implementation, Operation & Maintenance of a Web Based and Mobile based End to End Customized Software Solution for Smart Permits, time table generation, tax collection mapping, route formulation and other linked Transport Services

Dear Sir,

I/We, the undersigned having read and examined in detail all the bidding documents in respect of "Selection of System Integrator for Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab", do hereby propose to provide Services as specified in the bidding documents. Our quoted amount is inclusive of all the taxes excluding GST.

Price and Validity

- All the prices mentioned in our Bid are in accordance with the terms as specified in the bidding documents.
- All the prices and other terms and conditions of this Bid are valid for a period of six months from the date of submission of the Bids.
- The prices we have offered, will remain fixed and not be subject to escalation for any reason whatsoever within the period of Contract. Any increase/ decrease in the rates of duties, charges and levies at a later date and during the tenure of the Bid/ Project will be to the account of the Bidder.

Unit Rates

- We have indicated in the relevant schedules enclosed, the unit rates for the purpose of payment as well as for price adjustment in case of increase or decrease in any component of the Scope of Work under the Contract.

Procurement in whole or in Part

- We understand that Transport Department, Govt. of Punjab reserves the right to procure the components/services listed in this RFP in whole or in part. In case of procurement in part, the value of the work order will be on pro rate basis.

Our Commercial Proposal shall be binding upon us, subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal i.e. 180 days from the due date of bid submission.

We agree to bind by this offer if we are the selected bidder.

For and on behalf of :

Signature :

Name:

Designation with Seal :

14.8 Form F2: Grand Summary Cost Table

Sr. No.	Items	Total Price (INR) Without Taxes.	Total Price (INR) (including Taxes)	Total Price (INR) - in Words (including Taxes)
1.	CAPEX: Supply and Installation Costs (from Supply and Installation Cost Summary Table)			
2.	OPEX: Operational Costs from Recurrent Cost Summary Table			
Grand Total(CAPEX + OPEX)				

The total price (CAPEX + OPEX) would be considered for commercial evaluation of the bids, Department reserves the right at the time of award of Contract to increase or decrease the quantity of goods and/or services from what was originally specified while floating the RFP without any change in unit price or any other terms and conditions.

14.9 Form F3: CAPEX Sub-Table

S.No	Component Description	Total Price (INR) Without Taxes	Total Price (INR) Including Taxes	Total Price (INR) - in Words (including Taxes)
1	Development & Implementation of a Web Based End to End Customized Software Solution for Smart Permits, timetable generation, tax collection mapping, route formulation and other linked Transport Services in Punjab including following modules: <ul style="list-style-type: none"> ➤ Permit Module ➤ Fee Collection Module ➤ QR Code Module ➤ Route Formulation Module ➤ SCOSTA Smart Card Permit Module ➤ Time Table Module ➤ Vehicle Tracking Module ➤ Payment Gateway ➤ SMS Gateway ➤ MIS & Reporting ➤ Artificial Intelligence based Dashboards 			
2	Data Digitization & Data Migration			
3	Training			
4	Installation, Testing and Commissioning			
5	Security Audit			
6	Others			
Total				

14.11 Form F5: Charges for hosting of Application on Cloud*

Sr. No.	Items	Total Price (INR) Without Taxes.	Total Price (INR) (including Taxes)	Total Price (INR) - in Words (including Taxes)
1.	Hosting charges on cloud for a period of 5 years from date of Go-live			
Total Cost				

**Note : The hosting charges on cloud for a period of 5 years from date of Go-live are optional requirement ,in case it is required .These Charges will be considered only after determining L1 in Financial Evaluation (not part of Financial Bid)*

14.12 ANNEXURE A- List of 11 RTAs and 80 SDMs

S.No	RTA Name	COD E	District	SDM/RT A
1	BATHINDA	PB-03	Bathinda	RTA
2	FARIDKOT	PB-04	Faridkot	RTA
3	FEROZPUR	PB-05	Ferozepur	RTA
4	PATIALA	PB-11	Patiala	RTA
5	SANGRUR	PB-13	Sangrur	RTA
6	GURDASPUR	PB-06	Gurdaspur	RTA
7	AMRITSAR	PB-02	Amritsar	RTA
8	LUDHIANA	PB-10	Ludhiana	RTA
9	MOHALI	PB-65	Mohali	RTA
10	JALANDHAR	PB-08	Jalandhar	RTA
11	HOSHIARPUR	PB-07	Hoshiarpur	RTA

S.No	SDM Name	COD E	District	SDM
1	RAMPURA	PB-40	Bathinda	SDM
2	TALWANDI	PB-45	Bathinda	SDM
3	MAUR	PB-80	Bathinda	SDM
4	SARDULGARH	PB-51	Mansa	SDM
5	MANSA	PB-31	Mansa	SDM
6	BUDHLADHA	PB-50	Mansa	SDM
7	KOTKAPURA	PB-79	Faridkot	SDM
8	JAITU	PB-62	Faridkot	SDM
9	MALOUT	PB-53	Shri Muktsar Shahib	SDM
10	MUKTSAR	PB-30	Shri Muktsar Shahib	SDM
11	GIDDERBAHA	PB-60	Shri Muktsar Shahib	SDM
12	WALA	PB-66	Moga	SDM
13	MOGA	PB-29	Moga	SDM
14	PURANA	PB-69	Moga	SDM
15	DHARAMKOT	PB-76	Moga	SDM
16	ZIRA	PB-47	Ferozepur	SDM
17	GURUHARSAHAI	PB-77	Ferozepur	SDM
18	JALALABAD	PB-61	Fazilka	SDM
19	FAZILKA	PB-22	Fazilka	SDM
20	ABOHAR	PB-15	Fazilka	SDM
21	SAMANA	PB-42	Patiala	SDM
22	DUDHNSADHAN	PB-83	Patiala	SDM
23	PATRAN	PB-72	Patiala	SDM
24	NABHA	PB-34	Patiala	SDM
25	RAJPURA	PB-39	Patiala	SDM
26	PATHANA	PB-52	Fatehgarh Sahib	SDM
27	FATEGARHSAHIB	PB-23	Fatehgarh Sahib	SDM

S.No	SDM Name	CODE	District	SDM
28	KHAMMANO	PB-49	Fatehgarh Sahib	SDM
29	AMLOH	PB-48	Fatehgarh Sahib	SDM
30	MOONAK	PB-64	Sangrur	SDM
31	LEHRA	PB-75	Sangrur	SDM
32	SUNAM	PB-44	Sangrur	SDM
33	DIRBA	PB-86	Sangrur	SDM
34	BHAWANIGARH	PB-84	Sangrur	SDM
35	DHURI	PB-59	Sangrur	SDM
36	MALARKOTLA	PB-28	Sangrur	SDM
37	AHMEDGARH	PB-82	Sangrur	SDM
38	MANDI	PB-73	Barnala	SDM
39	BARNALA	PB-19	Barnala	SDM
40	DINANAGAR	PB-99	Gurdaspur	SDM
41	BATALA	PB-18	Gurdaspur	SDM
42	Dera Baba Nanak	PB-58	Gurdaspur	SDM
43	KALANOUR	PB-85	Gurdaspur	SDM
44	PATHANKOT	PB-35	Pathankot	SDM
45	DHARKALA	PB-68	Pathankot	SDM
46	ASR-1	PB-89	Amritsar	SDM
47	AJNALA	PB-14	Amritsar	SDM
48	BAKALA	PB-17	Amritsar	SDM
49	MAJITHA	PB-81	Amritsar	SDM
50	PATTI	PB-38	Tarantaran	SDM
51	TARANTARAN	PB-46	Tarantaran	SDM
52	BHIKHIWIND	PB-88	Tarantaran	SDM
53	SAHAB	PB-63	Tarantaran	SDM
54	KHANNA	PB-26	Ludhiana	SDM
55	JAGRAON	PB-25	Ludhiana	SDM
56	NORTH)	PB-91	Ludhiana	SDM
57	PAYAL	PB-55	Ludhiana	SDM
58	SAMRALA	PB-43	Ludhiana	SDM
59	RAIKOT	PB-56	Ludhiana	SDM
60	KHARAR	PB-27	Mohali	SDM
61	DERABASSI	PB-70	Mohali	SDM
62	MORINDA	PB-87	Ropar	SDM
63	ROPAR	PB-12	Ropar	SDM
64	SAHIB	PB-16	Ropar	SDM
65	SAHIB	PB-71	Ropar	SDM
66	NANGAL	PB-74	Ropar	SDM
67	PHILLIOUR	PB-37	Jalandhar	SDM
68	SHAHKOT	PB-67	Jalandhar	SDM
69	JALANDHAR 2	PB-90	Jalandhar	SDM
70	NAKODAR	PB-33	Jalandhar	SDM
71	PHAGWARA	PB-36	Kapurthala	SDM
72	KAPURTHALA	PB-09	Kapurthala	SDM

73	BHOLATH	PB-57	Kapurthala	SDM
S.No	SDM Name	CODE	District	SDM
74	LODHI	PB-41	Kapurthala	SDM
75	DASUYA	PB-21	Hoshiarpur	SDM
76	MUKERIAN	PB-54	Hoshiarpur	SDM
77	GHARSHANKAR	PB-24	Hoshiarpur	SDM
78	BANGA	PB-78	Nawan shahar	SDM
79	NAWANSHAHR	PB-32	Nawan shahar	SDM
80	BALACHOR	PB-20	Nawan shahar	SDM

List of 32 Automated Driving Test Tracks

List of 32 Automated Driving Test Tracks		
Sr. No	Track Name	Location
1	Abohor	New Grain Market
2	Amritsar	Near Vijay Chowk, Gobindgarh fort near Lohgarh
3	Barnala	PRTC Workshop
4	Batala	Near Judicial Court complex
5	Bathinda	Red Cross land near village Naruana
6	Dasuya	Village Khera kotli
7	Faridkot	Horticutlure Department land in Mini Sectt.
8	Fatehgarh Sahib	Vill. Mahadian
9	Fazilka	Village Rampura near Dera Bassi
10	Ferozpur	Old DM Roadways Office
11	Gurdaspur	Near Fist Park of Village Kotli Nangal
12	Hoshiarpur	Provincial Govt Land on Tanda road
13	Jagroan	Punjab Roadways workshop
14	Jalandhar	Punjab Roadways workshop, near bus stand
15	Kapurthala	Revenue Department Land in Ajitnagar Kapurthala
16	Khanna	Vill. Bullepur
17	Ludhiana I	SCD College
18	Ludhiana II	Sector 32, Ludhiana

19	Malerkotla	Vill. Tolewal
20	Mansa	Vill. Malakpur Khiala
21	Moga	Vill. Singhawala
22	Pathankot	Punjab Roadways workshop Near Bus stand
23	Patiala	Nabha Road back side CE Public Health, Patiala
24	Patran	BPEO Office, Patran
25	Phagwara	Vill. Bir Puad
26	Phillaur	Vill. Dosanjh Khurd
27	Ropar	Vill. Haveli Khurd
28	S.A.S Nagar (Mohali)	Sector 82
29	S.B.S Nagar (Nawan Shahr)	Bus Stand
30	Sangrur	Zila Parishad land near ADC office
31	Sri Muktsar Sahib	Near Girls Sen. Sec. School, Bathinda Road.
32	Tarn Taran	Roadways Workshop

The offices including the STC, RTA and SDM offices have been collectively been referred as the Transport Department Offices in this RFP.

14.13 ANNEXURE B- Sample Time Table Format

2017/22 3 m/23/22
 16-2-11 (80) (B)

JOINT TIME TABLE PATHANKOT TO AMRITSA
VIA : GURDASPUR-BATALA

	PTK	D.Nagar	GSP	DWL	BTL	Company	Permit No.	V
1	3.25	4.00	4.35	5.05	5.05	HRTC	179	3
2	---	---	---	---	5.25	PRB	12/PRB	1
3	---	---	---	---	5.35	RAJ	12-13/RS	1
4	---	---	5.00	5.20	5.50	PRB	46/PRB	9
5	---	---	---	---	5.53	GILL	167/R/S	3
6	4.35	5.10	5.35	5.50	6.10	PRP 1	44-64/PRP	2
7	---	---	---	---	6.13	SOHI	543/R/S	5
8	---	---	---	---	6.19	PRB	22/R/S	2
9	---	---	---	---	6.22	BAJWA	688 /R-S	2
10	---	---	5.38	6.00	---	PRB	1-2/PRB	1
11	4.45	5.25	5.42	6.05	6.30	PRP 2	44-64/R/S	2
12	---	---	---	---	6.32	UNITED	669/SC/68	2
13	---	---	5.45	6.08	---	SATLUJ	189-90/R/S	9
14	4.50	5.30	5.50	6.15	6.35	PRP 3	65-73/PRP	2
15	4.54	5.35	5.55	6.19	6.39	PRP 4	141/R/S	1
16	5.00	5.45	5.58	6.22	6.42	PRM	1/PRM	2
17	5.04	5.48	6.01	6.25	6.44	GILL	25/2	1
18	5.08	---	6.05	---	6.46	PRTC	37/1	1
19	5.11	5.51	6.08	6.28	6.48	ABROL	155/R/S	2
20	---	---	---	---	6.50	NISHAT	707/SC	2
21	---	---	---	---	6.53	PRTC	635-55	1
22	---	---	---	---	6.55	ROYAL	197/R/S	5
23	---	---	---	---	6.57	Rohtak	1000/SC	6
24	---	---	---	---	6.59	PRTC	761/R/S	8
25	---	---	---	---	7.01	RAJ	269/R/S	1
26	5.16	5.56	6.15	6.35	7.04	PRP 5	44-64/R/S	2
27	5.21	6.01	6.19	6.39	7.06 1/2	PRTT	138/PRT	2
28	5.26	6.06	6.23	---	7.09	PRA-I	437/R/S	2
29	5.29	6.10	6.26	6.46	7.11	Jagjeet	102/R/S	2
30	5.32	6.13	6.29	6.49	7.13	DALAM	102/R/S	2
31	---	---	---	---	7.15	DALAM	601/R/S	2
32	---	---	6.32	6.52	7.17	PRTC	79/PTK	1
33	---	---	---	---	7.19	RSPS	138/R-S	1
34	---	---	6.35	6.55	7.21	MALHI	25/24/RS	1
35	5.37	6.17	6.38	6.58	7.23 1/2	PRA-II	23/R/S	1
36	---	---	---	---	7.25 1/2	PRB	121/R.S	1
37	---	---	---	---	7.27 1/2	Bajwa	824/R-S	1
38	---	---	6.41	7.01	7.29 1/2	PRB	91/R/S	1
39	---	---	---	---	7.31 1/2	MIDH	41/11	1
40	---	---	---	---	7.34	VISHAL	721/R/S	1
41	5.43	6.23	6.44	7.04	---	PRB	50-52/R/S	1
42	5.45	6.28	6.47	7.07	7.36	PRP 1	183-85/R/S	1
43	5.50	6.33	6.50	7.10	7.38	PRA-II	169-70/R/S	1
44	---	---	6.52	7.13	7.40	KISSAN	75/R/S	1

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PTD ANN G. DUAL BTR

46	5.55	---	6.55	---	7.44	PRB	91/PRB	17
47	5.56	6.36	6.57	7.16	7.46	Kahlon(Gill)	13-14/RS	15
48	5.59	6.39	6.59	7.19	7.48	UNITED	68/2	25
49	---	---	---	---	7.50	Rohtak	20/12	6.
50	---	---	7.01	7.22	---	GSK	762/SC	25
51	---	---	---	---	7.52	SOHI	543/RS	15
52	---	---	7.04	---	7.54	PRTC	38/RS	16
53	---	---	7.06	7.25	7.56	J.S.	601/R.S.	2
54	---	---	7.08	7.27	---	BL	464/RS	1
55	---	---	---	---	7.58	Sandeep	775/RS	2
56	6.05	6.45	7.11	7.28	8.00 ½	PRP 7	44-64/RS	2
57	---	---	7.14	7.31	---	PRB	91/PRB	1
58	---	---	---	---	8.03	PRB	141-42/PRB	1
59	---	---	7.16	7.33	8.05	Sahiwal	821/R-S	1
60	---	---	---	---	8.07	N.P.	755/R-S	2
61	6.08	6.48	7.18	7.35	8.09	HPS	308/RS	8
62	---	---	---	---	8.11	Harmetkaur ½	723/RS	1
63	---	---	---	---	8.13	Deshmesh	378/SC	3
64	---	---	7.20	7.37	8.15	Harpreet ¹⁷²	373/R/S	3
65	---	---	7.22	7.39	8.17	H.S.Dhillon	604/RS	1
66	---	---	7.24	7.41	8.19	ROHTAK	999/S.C	6
67	---	---	---	---	8.21	ROHINI	138/R.S.	1
68	6.14	6.54	---	---	8.23 ½	PRB	107-08/R.S	2
69	---	---	7.26	7.44	8.26	PR PATTI	118-20/R.S	2
70	6.20	7.00	7.29	---	---	PRB	1-2/RS	1
71	6.26	7.06	7.32	7.52	8.29	PRP 8	183-85/RS	3
72	6.29	7.09	7.34	7.54	---	Rohtak	20-56/R/S	6
73	---	---	---	---	8.31	Rohtak	2031/SC	6
74	6.32	7.12	7.36	7.56	8.33	Rohtak	20/1-6/SC	6
75	6.35	7.15	7.38	7.58	8.35	Rohtak	20/1-6/SC	6
76	6.38	7.18	7.40	8.00	8.37	Rohtak	20/1-6/SC	6
77	---	---	7.42	8.02	8.39	Rohtak	1000/SC	6
78	6.41	7.21	7.44	8.04	8.41	United	24/12	6
79	---	---	7.46	8.06	8.43	ABTC	24/15	3
80	6.47	7.27	7.50	8.10	8.46	PRP 9	44-64/R/S	3
81	6.53	7.33	7.53	8.13	8.49	PR.Patti	50-52/R/S	7
82	6.59	7.39	7.57	8.17	8.52	PRP 10	172-78	7
83	---	---	7.59	8.19	8.54	ABTC	460/SC	3
84	7.02	7.42	8.01	8.21	8.56	Khehra	40/1-2	3
85	---	---	---	---	8.58	VISHAL	138/RS	3
86	---	---	8.03	8.23	9.00	Gill	292/R/S	3
87	7.05	7.45	8.05	8.25	9.02	Rohtak	20/1-6/SC	3
88	---	---	8.07	8.27	9.04	Rohtak	20/1-6/SC	3
89	7.08	7.48	8.09	8.29	9.05	Gulmarg	2283/SC	3
90	---	---	8.11	8.31	---	B.L.	464/R.S	3
91	---	---	---	---	9.08	N.P.	395/R/S	3
92	---	7.52	8.15	9.35	9.11	PRP	65-73/RS	3
93	7.17	7.57	8.20	8.40	9.14	PRP 11	172-78/RS	3
94	7.20	8.00	8.22	8.42	9.16	N.Deep	243/RS	3
95	7.22	8.03	8.24	8.44	9.18	United	24/8	3
96	---	---	---	---	9.21	RAJ	98/R/93	3

PFC Datta C.S.I. and B.T.C. (3)

97.	7.24	8.06	8.26	8.46	9.23	Janta	40/1/4	31
98.	7.26	8.09	8.28	8.48	9.25	Janta	40/1-4	31
99.	7.28	---	---	---	---	RS	164/RS	28
100.	7.31	8.12	8.32	8.52	9.28	HRTC	25-26/R/S	15
101.	7.33	8.14	8.34	8.54	9.30	Puneet	319/R/S	28
102.	7.36	8.17	8.38	8.58	9.33	HRTC	498-99	30
103.	7.38	8.19	8.40	9.00	9.35	ABTC	24/1-4	31
104.	---	---	---	---	9.37	NISHAT	707/RS	17
105.	---	---	---	---	9.39	NISHAT	199/RS	28
106.	7.40	8.21	8.42	9.02	9.41	Simarjeet	24/7-10	31
107.	7.42	8.23	8.44	9.04	9.43	Simarjeet	24/7-10	31
108.	---	---	---	---	9.45	Raj th	115-16	48
109.	7.45✓	8.27✓	8.48✓	9.08✓	9.48✓	PRB✓	32-33/R/S	4.9
110.	7.48✓	8.30✓	8.52✓	9.12✓	9.51✓	PRPL✓	198-201/R.S	15
111.	7.50	8.32	8.54	9.14	9.53	Vipun Kumar	695/RS	19
112.	7.52	8.34	8.56	9.16	9.55	Chhinna(NM B)	51/21-3	16
113.	7.54	8.38	8.58	9.18	9.57	ABTC✓	460/SC	31
114.	---	---	9.00	9.20	9.59	ABTC✓	40/1-4	31
115.	7.57✓	8.40✓	9.04✓	9.24✓	10.02✓	PRB✓	107-08	22
116.	8.00✓	8.43✓	9.08✓	9.27✓	10.05✓	PRP✓	44-64/R/S	21
117.	8.02	8.45	---	---	---	Dehati	2165/R/S	6.4
118.	8.04	8.47	9.10	9.29	---	SWBS	144/RS	31
119.	8.06	---	---	---	---	NAYYAR	674/SC	60
120.	8.08	8.49	9.12	9.31	10.07	Vishal	65-73	18
121.	8.11✓	8.51✓	9.15✓	9.34✓	---	PRB	11/R-S	22
122.	---	---	---	---	10.10	PRB	32-33/R.S	4.5
123.	8.14✓	8.54✓	9.19✓	9.37✓	10.14✓	PRP✓	44-64/RS	21
124.	8.16	8.56	9.21	9.39	---	N.K. Saini	12/R/S	31
125.	---	---	---	---	10.16	Sandeep	255/R	21
126.	8.18	8.58	9.23	9.41	---	Saini	427/R/S	31
127.	---	---	---	---	10.18	Jehlum	534/R.S	5
128.	---	---	---	---	10.20	Rohtak	262	6
129.	8.20	9.00	9.25	9.43	10.22	ABTC✓	24/5-6	31
130.	8.23✓	9.02✓	9.29✓	9.46✓	10.25✓	PRB✓	13/R-S	14
131.	8.26✓	9.05✓	9.33✓	9.49✓	10.29✓	PRP✓	44-64/R-S	21
132.	8.28	9.07	9.35	9.51	10.31	PBS	312/R/S	20
133.	8.30	9.19	9.37	9.52	10.33	Green	25/7-8	18
134.	---	---	---	---	10.35	BALJIT	111/RS	15
135.	8.32	9.12	9.39	9.55	10.37	RAMPAL	420/RTF	2
136.	8.34	9.14	9.41	9.57	10.39	K.K.	12-13/RS	1
137.	8.36 1/2✓	---	9.44✓	---	10.41✓	PRB	119/R.S.	1
138.	8.39✓	9.18✓	9.47✓	10.00✓	10.44✓	PRP,	198-201	31
139.	8.41	9.20	9.49	10.02	10.46	SKY	170/RS	21
140.	8.43	---	---	---	---	SKY	70/RS	1
141.	8.45	9.24	---	---	---	Sky	169/R/S	20
142.	8.47	9.26	9.51	10.06	---	Prasher	461/SC	13
143.	8.50	9.29	9.54	10.09	10.48	HRTC	161-62/S	2
144.	8.52	9.31	9.56	10.11	10.50	Apna	813/T	1
145.	8.54	9.33	9.58	10.13	10.53	Deol	388/R-98	1
146.	8.57✓	9.35✓	10.01✓	10.16✓	10.56✓	PRA-1	44-64	2

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APR DASH L&S DASH BTL (4)

147.	9.00✓	9.38✓	10.05✓	10.19✓	10.59✓	PRP 12	65-73	21.5
148.	----	----	10.07	10.21	11.01	Jhehlum	821/Temp	24.8
149.	9.02	9.40	10.09	10.23	11.03	Khatra	09-10/RS	15.0
150.	9.04	9.42	10.11	10.25	11.05	J.S.Chhinna	667/SC	15.0
151.	9.06	----	----	----	----	Chanpreet	168/RS	28.4
152.	9.08	9.44	10.13	10.27	11.07	UBS	254/RS	9.2
153.	9.10	9.46	10.15	10.29	11.09	UBS	125/RS	6.4
154.	9.13✓	9.48✓	10.18✓	10.32✓	11.13✓	PRA-I	169-70/sc	18.0
155.	9.16✓	9.51✓	10.21✓	10.35✓	11.17✓	PRP 13	44-64/SC	21.0
156.	9.18	9.53	10.23	10.37	11.19	ABTC	24/1-4	7.1
157.	9.20	9.55	10.25	10.39	----	Ex-Man	287/RS	31.0
158.	----	----	10.27	10.41	11.31	Vishal	823/R-S	12.0
159.	----	----	10.30✓	10.43✓	11.24✓	PRB✓	57/RS	05.4
160.	9.22	9.57	10.33	10.45	11.27	HRTC	112-13/R-S	15.0
161.	----	----	10.35	10.47	11.29	Mohit	822/R-S	12.0
162.	9.24	10.59	10.37	10.49	----	Janta	2044/SC	11.0
163.	----	----	----	----	11.31	VISHAL	653/RS	14.0
164.	9.26	10.01	10.39	10.51	11.33	Royal	314/R/S	28.0
165.	9.29✓	10.03✓	10.41 ½✓	10.53✓	11.30	PRB✓	107-08	7.5
166.	9.31	10.06	10.44	10.56	11.39	PRTT✓	148-50/SC	21.0
167.	9.33	10.08	10.46	10.58	11.41	Dhillon	24/11	2.4
168.	9.35	10.10	10.48	11.00	11.43	Dhillon	24/12	2.4
169.	9.37	10.12	10.50	11.02	11.45	Rohtak	663/SC	31.0
170.	9.39	10.14	10.52	11.04	11.47	Guru Ram Dass	420/R/S	24.0
171.	----	----	----	----	11.50	PRTC	41/PKT	16.0
172.	----	----	----	----	11.52	Bajwa	824/R-S	29.0
173.	----	----	----	----	11.54	Dalam	437/R/S	5.1
174.	9.41✓	10.16✓	10.54 ½✓	11.07✓	11.50 ½✓	PRA-II✓	44/R-S	16.0
175.	9.44✓	10.19✓	10.57✓	11.09	11.59	PRP 14✓	44-64/	21.0
176.	9.46	10.21	10.59	11.11	----	Rohtak	1031/SC	21.0
177.	----	----	----	----	12.00 ½	Rohtak	761/SC	6.4
178.	9.48	10.23	11.01	11.13	12.02	Rohtak	761/SC	06.0
179.	----	----	----	----	12.04	Rohtak	2027/RS	13.0
180.	9.50	10.25	11.03	11.15	12.00 ½	UBS	254/RS	09.0
181.	9.53✓	10.28✓	11.05 ½✓	11.19✓	12.03✓	PRA-II✓	169-70/SC	28.0
182.	9.56✓	10.31✓	11.08✓	11.22✓	12.10✓	PRP 15✓	65-73	11.0
183.	9.58	10.33	11.10	11.24	12.11 ½	R.S	3377/SC	28.0
184.	10.00	10.35	11.12	11.26	12.13	R.S.	43/R/S	31.0
185.	10.02	----	----	----	----	R.S.	165/RS	28.0
186.	10.04	10.39	11.14	11.28	12.15	EVEREST	6-7/RS	15.0
187.	10.06	10.41	11.16	11.30	12.17	Zimidara	99/88	30.0
188.	----	----	----	----	12.19	United	679/SC	14.0
189.	10.08	10.43	11.18	11.32	12.20 ½	ABTC	24/1-4	31.0
190.	10.11✓	10.46✓	11.20 ½✓	11.34	12.22 ½	PRA-I✓	84/R/S	11.0
191.	10.14✓	10.49✓	11.23✓	11.37✓	12.24 ½✓	PRP 16✓	172-78/R/S	17.0
192.	----	----	11.25	11.38	----	Kahlon	465/RS	15.0
193.	----	----	----	----	12.26	Sandeep	755/R/S	16.0
194.	----	----	11.27	11.39	12.28	Jehlum	821/R-S	10.0
195.	----	----	----	----	12.29 ½	Nishat	707/SC	26.0
196.	10.16	10.51	11.29	11.41	----	ABTC	520/SC	11.0

PTK DAW G.S. Dwe BTR

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197.	----	----	----	----	12.31	Khehra	770/R.S
198.	----	----	----	----	12.33	Sohi.	543/SC
199.	-----	----	----	----	12.35	PRTC	199/RS
200.	----	----	----	----	12.37	BAJWA	688/R.S
201.	10.19✓	10.54✓	11.31 1/2✓	11.44	12.39 1/2	PRP 17✓	198-201/R.S
202.	10.22✓	10.57✓	11.34✓	11.46✓	12.42✓	PRB ✓	9-10/R.S
203.	10.24	10.59	11.36	11.48	----	Jhang 1/2	42/9
204.	10.26	11.01	11.38	11.50	12.43 1/2	Jhang	42/6-7
205.	10.28	11.03	11.40	11.52	12.45	Jhang	42/6-7
206.	10.30		11.42	----	12.47	Jhang	42/6-7
207.	10.33✓	11.08✓	11.44 1/2	11.56✓	12.49✓	PRB ✓	116-17/RS
208.	---	----	11.47	11.59	12.51 1/2	PR.Patti✓	50-52/RS
209.	10.35	11.10	11.49	12.01	12.53	Jatin	11-12/RS
210.	10.37	11.12	11.51	11.03	12.55	MIDH ⁰²	41/1-3
211.	10.39	11.14	11.53	11.05	12.57	Himalya	40/3
212.	10.41	11.16	11.55	11.07	12.59	MIDH	41/1-3
213.	10.44✓	11.19✓	11.57 1/2	11.09	13.01	PRP 18✓	183-85/R.S
214.	----	----	----	----	13.03	PRM	148-51/R.S
215.	----	----	12.00	11.12	13.05	PRB ✓	132/R.S
216.	10.47✓	11.22✓	12.02✓	11.14	----	PRB ✓	132-33
217.	10.49	11.24	12.04	12.16	13.07 1/2	Choudhary	140/RS
218.	----	----	----	----	13.09 1/2	Chaulasahib	245/RS
219.	10.51	11.26	12.06	12.18	13.11	Rohtak	20/1-6
220.	10.53	11.28	12.08	12.20	13.13	Rohtak	204/R
221.	----	----	----	----	13.15	Rohtak	761/RS
222.	10.56✓	11.31✓	12.10 1/2	----	13.17✓	PRB ✓	12-13/R-S
223.	10.59✓	11.34✓	12.13✓	12.25✓	13.19 1/2	PRP 19✓	44-64/R-S
224.	11.01	11.36	12.15	12.27	13.21 1/2	United	28/1
225.	11.03	11.38	12.17	12.29	13.23 1/2	United	28/2
226.	----	----	----	----	13.25 1/2	Rohtak	20/24
227.	11.05	11.40	12.19	12.31	13.27 1/2	MIDH	241/RS
228.	11.07	11.42	12.21	12.33	13.29 1/2	MIDH	40/1-3
229.	11.10✓	11.45✓	12.23 1/2	12.36	13.31 1/2	PRB ✓	107-08/
230.	11.12 1/2	11.47✓	12.26✓	12.38✓	13.34✓	PRB ✓	113/R.S
231.	---	----	----	----	13.36	Rohini	721/R/S
232.	11.15✓	11.50✓	12.28✓	12.41✓	13.39✓	PRP 20✓	44-64/R.S
233.	11.17	11.52	12.30	12.43	13.41	United	28/4
234.	11.19	11.54	12.32	12.45	13.43	United	28/5
235.	11.21	11.56	12.34	12.47	13.45	United	28/6
236.	11.23	11.58	12.36	12.54	13.47	Simarjeet	24/7-10
237.	11.25	12.00	12.38	12.56	13.49	Simarjeet	24/7-10
238.	----	----	----	----	13.51	ROYAL	12-13/RS
239.	11.28✓	12.07✓	12.40 1/2	12.58✓	----	PRB ✓	9-110/PRB
240.	11.31✓	12.10✓	12.43✓	13.01✓	13.55✓	PRP 21✓	44-64/R/S
241.	11.33	12.12	----	----	----	N. Batala	139/R/S
242.			12.45	13.03	13.57	Khehra	40/1-2
243.	----	----	12.47	13.05	13.59	ABTC	460/SC
244.	11.35 1/2	12.14✓	12.49 1/2	----	14.01 1/2	PRB ✓	57/PRB
245.	11.38✓	12.17✓	12.52	13.09✓	14.04✓	PRF ✓	65/73-RS
246.	11.40	12.19	12.54	13.11	14.06	RAJ	811/R-10
247.	----	----	----	----	14.08	Sahildeep	103/R/S

PTK own GSP own BTK (6)

248	11.42	12.21	12.56	13.13	----	SWBS	286/
249	11.45	12.23	12.58	----	----	HRTC	39/RS
250	11.47	12.23	13.00	13.17	----	Jashir	144/RS
251	11.50 ✓	12.28 ✓	13.02 ½	13.19 ✓	14.10 ½	PR.Pattil ✓	50-52RS
252	11.53	12.30	13.05	13.22	14.13	PRA-II ✓	172-78/RS
253	11.55	12.32	13.07	----	----	Sohi	221/RS
254	11.57	12.34	13.09	13.24	14.15	BAJWA	717/RS
255	12.00	12.36	13.11	13.26	14.18	HRTC	120/21-RS
256	12.02	12.39	13.13	13.28	14.20	NMB	51/21-2
257	12.04	12.40	13.15	13.29	14.22	NMB	51/21-2
258	12.06	12.38	13.17	13.28	14.24	Gulmarg	2283/SC
259	----	----	----	----	14.26	Gill	167/R/S
260	----	----	13.19	13.30	14.28	Gil	292/R/S
261	12.08	12.40	13.21	13.32	----	N.K. Saini	12/R/S
262	----	----	13.23	----	14.36	Sandeep	255/RS
263	----	----	----	----	14.32	Jehlam	534/R/S
264	----	----	13.25	13.34	----	PRTC	37/PRP
265	----	----	13.28	13.36	14.34 ½	PRB	11-21/R/S
266	----	----	13.30	13.38	14.36 ½	MSS	635/R/S
267	12.10	12.42	----	----	----	Saini	427/R.S
268	12.13 ✓	12.45 ✓	13.33 ✓	13.40 ✓	14.39	PRM ✓	2-3/RS
269	12.16 ✓	12.47	13.36	----	14.42	PRA-II ✓	151-52/RS
270	12.19 ✓	12.50 ✓	13.39 ✓	13.44	14.45	PRP ✓	44-64/R/S
271	12.21	12.52	13.41	13.46	14.47	ABTC	24/5-6
272	12.23	12.54	13.43	13.48	14.49	ABTC	24/15
273	12.25	12.55	13.45	13.51	14.51	Jagjeet	224/R.S
274	12.27	12.56	13.47	13.52	----	United	986/5/71
275	----	----	13.49	----	14.52 ½	ROHTAK	761/SC
276	12.29	12.57	13.51	13.53	14.54	Rohtak	20/1-6
277	----	----	13.53	13.54	14.56	PRTC	1031/PRT
278	----	----	13.55	13.56	----	RAUNI	763/RS
279	12.31 ½	13.00	13.57	13.58	----	G. Amardass	652/T.4
280	----	----	----	----	14.58	RSPS	770/SC
281	----	----	----	----	14.59 ½	United	382/SC
282	----	----	----	----	15.01	Nishat	707/SC
283	----	----	----	----	15.03 ½	N.P.	395/RS
284	12.33 ½	13.01	13.59	14.00	15.05	KATRA	8-9/RS
285	12.36 ✓	13.02 ✓	14.01 ✓	----	15.07 ½	PRB ✓	32-33/R.S
286	12.38 ✓	13.05 ✓	14.03 ✓	----	----	PRB ✓	34-35/R.S
287	12.40 ½	13.07 ✓	14.05 ✓	14.07	15.10	PRP ✓	65-73/PRP
288	12.42	13.09	----	----	----	SKY	169/R.S
289	12.44	13.11	----	----	----	Suraj	209/R.S
290	----	----	14.07	14.09	15.12	Sahiwal	820/T
291	12.46	13.13	14.09	14.11	15.13 ½	Green	25/7-8
292	12.48	----	14.11	----	15.15	R.S.P.S.	802/R.S
293	12.50 ½	13.21 ½	14.13 ½	14.20	15.17 ½	PRP ✓	12/PRB
294	12.53	13.24	14.16	14.22	15.20	PRP ✓	198-201/R.S
295	12.55	13.26	14.18	14.24	15.21 ½	Abrol	153/RS
296	12.57	----	----	----	----	Chanpreet	168/RS
297	12.59	13.30	14.20	14.26	15.23	Janta	40/1-4
298	13.01	13.32	14.22	14.28	15.24 ½	Janta	40/1-4

PRC dan Red Price BT ①

299	-----	-----	-----	-----	15.26	Vishal	820/T	10.12.20
300	-----	-----	14.24	14.30	-----	Param	765/RS	24.5.20
301	13.04 ✓	13.35 ✓	14.26 ½	14.33 ✓	15.28 ½	PRP 15 ✓	44-64	21.6.20
302	13.07	13.37	14.29	14.35	15.31	PRB	50/PRB	31.5.20
303	13.09	13.39	14.31	14.37	15.32 ½	New Deep	243/R.S	16.5.20
304	13.11	13.41	14.33	14.39	15.34	NMB	52/21-4	8.1.201
305	13.13	13.43	14.35	14.41	15.35 ½	NMB	52/21-4	8.1.201
306	13.15	13.44	14.37	14.42	15.37	NMB	21/5	15-03-2
307	-----	-----	14.39	14.43	15.38 ½	New Deep	605/R.S	14.1.20
308	-----	-----	14.41 ½	14.45	-----	PRTC	665/PRTC	17.5.20
309	13.17	13.45	14.43 ½	14.47	15.40	Harpal Singh	285/R	16.3.20
310	13.19	13.47	14.45 ½	-----	-----	Paul	676/R	29.8.20
311	13.22	13.49	14.47 ½	-----	-----	PRB ✓	103-4/PRB	19.1.20
312	-----	-----	14.49 ½	14.49	15.42	PRB ✓	1-2/PRB	14.1.20
313	13.26 ✓	13.52 ✓	14.52 ✓	14.52 ✓	15.44 ½	PRP 26 ✓	44-64/R.S	21.6.20
314	13.28	13.54	14.54	-----	-----	N.K.Saini	427/R.S	1.3.201
315	-----	-----	-----	-----	15.46	Sandeep	755/R-S	26.4.20
316	-----	-----	14.56	-----	15.47 ½	Sahiwai	821/RS	10-11-4
317	13.30	13.56	-----	-----	-----	Kirti	162/R.S	28.4.20
318	13.32	13.58	14.58	14.56	15.49	United	28/11	24.4.20
319	13.34 ½	14.01 ✓	15.00	14.58	15.51 ½	PR.Patti	141/	25.4.20
320	13.37 ✓	14.04 ✓	15.02 ✓	15.01	15.54	PRP 27 ✓	183-85	20.6.20
321	13.39 ½	-----	-----	-----	-----	PRB	55-56	18.4.20
322	13.41 ½	14.09	15.04	15.03	15.56	HPS	308/RS	28.2.20
323	13.43 ½	14.11	15.06	15.07	15.58	Dalam	437/R.S	18.11.20
324	-----	-----	-----	-----	16.00	Dalam	102/R.S	24.5.20
325	-----	-----	15.07 ½	-----	16.02	Gill	653/RS	22.3.20
326	13.45 ½	14.13	15.09	15.09	-----	Rohtak	2056/S.C	10.10.20
327	-----	-----	-----	-----	16.04	Rohtak	2031/S.C	6.4.20
328	13.47 ½	14.15	15.10 ½	15.11	-----	HOLYCITY	234/15	21-06-20
329	13.50	14.16	15.12 ½	-----	16.06	HRTC	20-21/RS	21-05-20
330	13.52	14.18	15.14	15.14	16.08	SANDHU	313/RS	02-05-20
331	13.54	14.19	15.15 ½	15.15	16.10	ABTC	24/1-4	6.4.20
332	13.56 ½	-----	-----	-----	-----	PRB ✓	50/PRB	31.5.20
333	13.59 ✓	14.24 ✓	15.18 ✓	-----	16.13 ½	PRB ✓	116-17/R.S	18.7.20
334	14.01 ½	14.27 ✓	15.21 ✓	15.20	16.17	PRP 28 ✓	44-64/R.S	21.6.20
335	14.03 ½	14.29	15.22 ½	15.22	16.19	United/NMB	28/15	21.6.20
336	14.05 ½	-----	15.24	15.24	16.21	United	28/2	25.5.20
337	14.07 ½	14.35	15.26	15.28	16.23	Gill	25/2	25.5.20
338	14.10 ✓	14.38 ✓	15.30 ✓	15.31	16.25 ½	PRP 29 ✓	172-78/R/S	20.12.20
339	14.13 ✓	14.41 ✓	15.33 ✓	15.33	16.28 ✓	PRB ✓	43/PRB	16.5.20
340	14.15	14.43	15.35	15.35	-----	ABTC	520/SC	28.2.20
341	-----	-----	-----	-----	16.30	Khehra	264/R/S	21.5.20
342	14.17	14.45	15.37	15.37	16.32	Sohi	222/R/S	23.2.20
343	-----	-----	-----	-----	16.34	Sohi	666/R/S	18.4.20
344	14.19	-----	-----	-----	-----	NAYYAR	2037/SC	31.5.20
345	-----	-----	15.39	15.38	16.36	ABTC	520/SC	31-05-20
346	14.22 ✓	14.49 ✓	15.41 ½	15.39	-----	PRE ✓	43/PRB	11.6.20
347	14.25 ✓	14.52 ✓	15.44 ✓	15.42	16.39	PRP 30 ✓	44-64	21.6.20
348	-----	-----	-----	-----	16.41	Bajwa	824-R/S	29-05-20

ATR DAN GSP DMC BTR

349.	14.27	14.54	15.46	15.44	-----	Ex-man	287/R/S
350.	14.29	14.58	15.48	15.50	-----	N.K.Saini	12/R/S
351.	14.31				-----	Janta	2044/SC
352.	-----		-----		-----	N.P.	395/R/S
353.	14.34	15.00	15.50 1/2	15.53	16.43	PR.Patti	50-52
354.	14.37	15.03	15.53		-----	PRB	11-12/R/S
355.	14.40	15.06	15.55	15.57	16.50	PRB	65-73/R/S
356.	14.43	15.09	15.57	15.59	16.53	PRB	43/PRB
357.	14.45	15.11	15.59	16.01	-----	MIDH	241/R/S
358.	-----				-----	MIDH	41/11
359.	14.47	15.13	16.01	16.03	16.57	MIDH	41/1-3
360.	14.49	15.15	16.03	16.05	16.59	MIDH	41/1-3
361.	14.51	15.17	16.05	16.07	17.01	Himalya	41/1-3
362.	14.53	15.19	16.07	16.09	17.03	MIDH	41/1-3
363.	14.55	15.21	16.09	16.11	-----	S.S.	512/5
364.	14.57	15.23	16.11	16.13	17.05	GULMARG	2283/SC
365.	15.00	15.26	16.14	16.16	17.08	HRTC	160-61
366.	-----				-----	Rohini	721/R/S
367.	15.02	15.28	16.16	16.18	17.12	Dashmesh	25/1
368.	-----		16.18	16.20	17.14	ROHTAK	481/R/S
369.	15.04	-----	16.20	-----	17.16	Choudhary 1/2	140/RS
370.	15.06	-----	16.22	-----	17.18	Harjinder S of A	58/RS
371.	15.08	15.32	16.24	16.24	-----	ABTC	520/SC
372.	-----				17.20	Khehra	264/R/S
373.	15.11	15.34	16.27	16.27	17.23	PRB	50/R/S
374.	15.14	15.37	16.30	16.30	17.26	PRP	65-73
375.	15.16	15.39	16.32	16.32	17.28	Romana	312/R/S
376.	-----		16.34	16.34	17.30	ABTC	24/15
377.	15.19	15.43	16.37	16.37	17.33	PRB	49/PRB
378.	15.22	15.45	16.40	16.40	17.36	PRP	44-64/R/S
379.	-----				17.38	NP	395/RS
380.	15.24	15.47	16.42	16.42	17.40	Yogesh	634/R/S
381.	-----		16.44	16.45	17.42	M.S.S	635/RS
382.	-----		16.45	-----	-----	Kahlon	465/RS
383.	-----				17.44	Nishat	707/SC
384.	-----				17.46	RAJ	117-18/
385.	-----				17.49	PRB	30-35/RS
386.	-----				17.51	RAJ	269/SC
387.	-----				17.53	RAJ	197/R/S
388.	-----		16.48	16.46	17.56	PRTC	3132/RS
389.	-----		16.51	16.47	17.59	PRB	3130/RS
390.	-----		16.53	16.48	18.01	Mohit	822/R/S
391.	-----		16.55	16.49	18.03	Vishal	833/RS
392.	15.29	15.52	16.58	16.50	18.06	PRA-I	42/R/S
393.	15.32	15.55	17.01	16.52	18.09	PRP	198-201/R.S
394.	15.34	15.57	17.03	16.54	18.11	United	28/8
395.	15.36	15.59	17.05	16.56	18.13	United	28/9
396.	15.38 1/2	16.02	17.07 1/2	16.59	18.15 1/2	PRB	37/RS
397.	15.41	16.04	17.10	17.02	18.18	PRP	198/201/RS
398.	15.43	16.06	17.12	17.04	18.20	Dhillon	24/14
399.	15.45	16.08	17.14	17.06	18.22	HOLY CITY	234/15

Handwritten: BT, 16.11, 17.16, 17.09, 18.25

400	16.11	17.16	17.09	18.25	PRB	40/PRE
401	16.14	17.19	17.12	18.28	PRPL 42	44-64
402	16.16	17.21	17.14	18.30	ASR	2265/SC
403	16.18	17.23	17.16	18.32	ASR	25/6
404	16.20	17.25	17.18	18.34	ASR	25/25
405	16.22	17.27	17.20	18.36	APBS	25/6
406	16.24	17.29	17.26	18.38	Simarjeet	24/7-10
407	16.26	17.31	17.28	18.40	ABTC	24/5-6
408	16.28	17.34	17.31	18.42	PRB	11-12/PRB
409	16.31	17.37	17.34	18.45	PRP 43	198-201/R.S
410	16.34	17.39	17.37	18.48	PRP 43	44-64/R/S
411	16.36	17.41	17.39	---	Rohak	1031/SC
412	---	---	---	18.50	Rohtak	761/SC
413	16.15	16.38	17.43	17.41	---	20/7-8
414	---	---	---	---	Rohtak	2031/SC
415	16.17	16.40	17.45	17.43	---	2056/SC
416	---	---	---	---	Rohtak	2031/SC
417	16.19	16.42	17.47	17.45	---	563/SC
418	16.21	16.44	17.49	17.47	---	24/15
419	16.24	16.47	17.52	17.49	ABTC	118-20
420	16.27	16.50	17.55	17.52	PRB	44-64
421	16.29	16.52	17.57	17.56	PRPL 44	139/R/S
422	16.31	---	17.59	17.58	---	7-8/R/S
423	16.33	---	18.02	---	Green	31-32/RS
424	16.36	17.00	18.05	18.04	PRB	198-201/RS
425	16.38	17.02	---	19.08	PRPL 45	265/R/S
426	16.40	17.04	18.07	18.06	Dehati	144/RS
427	16.42	17.06	18.09	18.08	SWBS	370/R
428	16.45	17.09	18.12	18.11	---	47/PRB
429	16.48	17.12	18.15	18.14	PRB	172-78/R/S
430	16.50	17.14	18.17	18.16	PRP 46	40/1-2/R/S
431	---	---	---	19.18	ABTC	111/RS
432	16.52	17.16	18.19	18.18	BALJEET	40/1-4
433	16.54	17.18	18.21	---	Janta	2044/S
434	16.56	17.20	18.23	18.22	Janta	40/1-4
435	16.58	17.23	18.26	18.25	Janta	47/PRB
436	17.01	17.26	18.29	18.28	PRB	172-78/R/S
437	17.03	17.28	18.31	18.30	PRP 47	24/7-10
438	17.05	17.30	18.33	18.32	Simarjeet	28/1-12
439	17.07	---	18.35	---	United	28/1-12
440	---	---	---	19.36	United	679-80
441	17.10	17.33	18.38	18.34	United	65-73/R/S
442	17.13	17.37	18.41	18.37	PRP 48	44-64/R/S
443	17.15	17.39	18.43	18.39	PRP 49	20/1-6
444	17.17	17.41	18.45	18.41	Rohtak	20/1-6
445	17.19	---	---	---	Rohtak	99/88
446	17.22	17.46	18.49	18.48	Chanpreet	169-70
447	17.25	17.50	18.52	18.51	PRA-II	44-64/R/S
448	17.27	17.54	18.54	18.50	PRP 50	168/R/S
449	17.29	17.56	---	---	ZIMIDARA	169/R/S
450	17.31	17.58	---	---	Sky	165/R/S