

RFP Ref. No. HLPPT/NHAI/2024-25

Date 05th November 2024

HINDUSTAN LATEX FAMILY PLANNING PROMOTION TRUST
B-14A, IInd Floor, Sector 62, Noida, Gautam Budh Nagar, Uttar Pradesh - 201307

Request for proposal (RFP) for providing IT Solutions for Real Time Tracking, Reporting & Monitoring of toll plaza staff training under NHAI Project

Disclaimer:

This Request for Proposal (RFP) document contains statements derived from information believed to be true and reliable as of the date of acquisition. The RFP document does not constitute a recommendation, offer, or invitation to enter into a contract, agreement, or any other arrangement regarding the services. The provision of the services is subject to adherence to the selection process and the agreement upon appropriate documentation between HLPPT and any successful Bidder, as identified by HLPPT following the completion of the selection process outlined in this document. No contractual obligation shall arise from the RFP process unless and until a formal contract is signed and executed by duly authorized officers of HLPPT and the Bidder. The purpose of this RFP is to furnish the Bidder(s) with information to aid in the formulation of their proposals. This RFP does not assert to contain all the information that each Bidder may require. HLPPT makes no representation, warranty, and assumes no liability under any law, statute, rules, or regulations for the accuracy, reliability, or completeness of this RFP. HLPPT may, at its absolute discretion and without any obligation to do so, update, amend, or supplement the information in this RFP.

Activity Schedule

S.No.	Event/Activity	Details
1	RFP Ref. with date	RFP Ref. No. HLPPT/NHAI/2024-25 / No- 111 dated 05 th November 2024
2	RFP Release Date	05 th November 2024
3	Address for communication/submission	Procurement & Commercial Division Hindustan Latex Family Planning Promotion Trust B-14A, 2 nd Floor, Noida Sector-62 Gautam Buddha Nagar-201307Uttar Pradesh
4	Mode of Submission	Agency to submit proposal in two bid system i.e. duly mentioned on envelopes: Technical Proposal for Engaging Agency <u>To provide IT Solutions for Real Time Tracking, Reporting & Monitoring of toll plaza staff training under NHAI Project</u> And Financial Proposal for Engaging Agency <u>To provide IT Solutions for Real Time Tracking, Reporting & Monitoring of toll plaza staff training under NHAI Project</u> (row no.3)
5	Last Date & Time for submission of Bids	13 th November 2024 latest by 6.00PM

Any change to the Activity Schedule will be notified through website (<https://www.hlfppt.org/RFP>) only. Amendments/corrigendum, if any, to this RFP would be hosted on our website only.

In case the date of an event like last date for submission of bids, opening of bids etc. are declared as holiday in Noida, the respective date shall be treated as postponed to the next working day.

1. Introduction:

HLFPPT is a Not-For-Profit Trust promoted by HLL Lifecare Limited, a Government of India Enterprise under the Ministry of Health & Family Welfare. Founded in 1992, HLPPT is registered under the Travancore-Cochin Literary, Scientific, and Charitable Societies Registration Act, 1955. HLPPT works in large scale implementation of projects with Central and State Government, PSUs and Corporates. Also, HLPPT's core area of work is RMNCHA+, primary health care, elderly care, TB, HIV prevention & control, family planning, capacity building, skill development to serve communities deprived through health solutions and contributing towards health system strengthening through direct programme implementations, technical assistance and capacity building.

2. Purpose:

HLFPPT invites proposal from Service provider for providing IT Solutions for Real Time Tracking, Reporting & Monitoring of toll plaza staff training under NHAI Project as per Scope of work. (Annexure -9)

TERMS AND CONDITIONS

1. This Request for proposal is not an Agreement and neither an offer nor invitation by HLPPT to the prospective Applicant or any other person.
2. No agency shall be entitled to submit more than one bid whether jointly or severally. If one does so, all bids wherein the agency has participated shall stand disqualified.
3. The agency shall bear all costs associated with the preparation and submission of bid.
4. HLPPT reserves the right to accept /reject/ select one or more than one agency and to annul the bidding process any or all bids at any time prior to award of contract without thereby incurring any liability to the affected agency.
5. Supply, Installation & training of IT solution for real time tracking, reporting & monitoring of NHAI Toll Plaza staff training across the country should be done as per coordination with HLPPT representative. The installation and training to be done according to the numbers, specifications, quality, schedule and locations approved and provided by HLPPT at the time of issuing Work Order.
6. The agency shall be able to provide IT Solutions for Real Time Tracking, Reporting & Monitoring of toll plaza staff training as per Scope of work (**Annexure - 9**).
7. The selected agency would be required to provide demo after installation as a proof of proper installation & functioning.
8. All source Code created for IT solutions solely to HLPPT and cannot be used by anyone else in any way, shape & form.

9. Agency will be required to provide online support through any Desk, Team viewer etc.
10. Agency will be required to provide Free App Maintenance over currency contract.
11. Prompt action to be taken towards support in case of any query raised/intimation by HLPPT.
12. The agency will be responsible for compliance of all the applicable laws and obligations arising out from the action of providing the services. Then Agency shall undertake to indemnify the HLPPT for any liability under any Law arising out while providing the service as per content.
13. HLPPT reserves the right to cancel the contract based on performance without assigning any reason thereof.
14. Evaluation of the bids will be done by competent committee from HLPPT.
15. In the event of award of order the agency shall be able to provide IT solution for real time tracking, reporting & monitoring of NHAI Toll plaza staff training across the country within 30-45 days from Award of Order (as & when issued by HLPPT).
16. The agencies who will be technically qualified after desk review, will only be considered for Opening of Financial Bid
17. Any technical bid with inadequate information and those which do not meet the eligible criteria or received after the closing date & time will not be entertained and considered under any circumstances. HLPPT is not liable to communicate to bidders whose offer is not considered or not found eligible for further processing.
18. The bidder is expected to examine all instructions, forms, terms and specification in this RFP Failure to furnish all information required under this RFP or to submit a bid not substantially responsive to this RFP in all respect will be at bidder's risk and shall result in rejection of the bid.
19. The bidder must have valid certifications
20. The bidder and their respective officers, employees, agents shall observe the highest standards of ethics dividing the bidding process. Notwithstanding anything to the contrary contained herein, HLPPT shall reject bid without being liable in any manner whatsoever to the bidder if it determines that the bidder has directly or indirectly or through an agent, engaged in corrupts/fraudulent/coercive/undesirable or restrictive practice in the bidding process.
21. **Documents Establishing eligibility:**

The following documents should be submitted along with the application.

- a. Self- attested copies of valid certifications held by the Agency as on the date of application.
- b. Copies of the balance sheets for the last three financial years, duly certified by a Chartered Accountant.
- c. Copy of GST Certificate
- d. Copy of PAN allotted to the Agency
- e. All other documents/information as mentioned above under "Eligibility"

22. Technical Evaluation of the agencies would be done on the following basis-

1	Experience with HLPPT/Govt. Agency/NGO/Development Sector Experience	25
2	Audited Balance Sheet of Last three Financial Year	25
3	Infrastructure – Experience in similar activities on PAN India basis	15
4	Clientele <u>The agency to enclose the copies of agreement and copies of Work orders for providing IT Solution as the details mentioned in this document at multiple locations from each clientele as a documentary evidence.</u>	20
5	Any other criteria as per discretion of Management	15

Agency should submit the Technical bid as per details as mentioned in above table as per Annexure-1, 2 & 3: Technical Bid Format.

23. The RFP shall be evaluated strictly based on the substantive information/credentials/documentary evidences submitted by the agencies.

24. The bidder is expected to examine all instruction, forms, terms and specification.

25. HLPPT Management Reserves the Right to award the work to more than one Agency as per requirement.

26. Agencies would not be allowed to subcontract, partial/full of the work assigned to them. In such case the Management reserves the right to cancel the order with the agency.

27. Pricing:

The agency would be required to quote the rates of inclusive of all duties, levies or taxes leviable under the law. The Agency will also have to bear all the expenses etc.

The Financial rates quoted by the agency will be inclusive of all Taxes/ Installation and Training etc. (as per location shared by the HLPPT at the time of placing order.) as per Annexure- 4.

The quoted offer shall remain valid for 01 year from the submission of proposal. The L1 rates shall be counter offered among all the participated vendors and accordingly order will be issued to the vendors on L1 rates.

21. Corrupt, fraudulent or unethical practices

HLFPPT requires that the Agency observes the highest standards of ethics during the procurement and execution of contract for providing the IT Solution.

22. Indemnity:-

The Agency shall indemnify the HLFPPPT against all actions, suits, claims and demands brought or made against the HLFPPPT in respect of anything done or committed to be done by the Agency in execution of or in connection with the work of this Order/contract.

23. Payment Terms

- Payment to successful bidder shall be made in Indian Rupee through account payee Cheque/NEFT/RTGS.
- Payment to the successful bidder shall be released in 45 days after submission of the original invoice & proof of deliverable.
- Payment shall be made subject to deduction of TDS (Tax deduction at source) at the rate applicable from time to time as per the income Tax act 1961 and other applicable deductions/Taxes.

24. The issue of this RFP does not imply that HLFPPPT is bound to select a bidder or subsequently to award the contract/Order to the shortlisted bidder, as the case may be, for the project/services and HLFPPPT reserves the right to reject all or any of the bids or bidders without assigning any reasons.

25. Conflict of interest/ Authorization/Undertaking

- The Vendor will warrant that, to the best of its knowledge after making diligent inquiry, at the date of signing the contract no conflict of interest exists nor is likely to arise in the performance of its obligations under the contract. A Bidder shall not have a conflict of interest that may affect the evaluation process. Any bidder found to have a conflict of Interest shall be disqualified. Bidder to require to provide undertaking to this effect as per Annexure – 5, Annexure 6 and Annexure - 7 of this RFP.

26. MSME Registration:

- The bidders participating as Micro/Small Enterprises (MSE) shall submit an Undertaking in the prescribed format (Annexure-8) given in Bid Document declaring the status of their firm under the provisions of Micro and Small Enterprises along with a copy of the document/ certificate issued by any of the Authority mentioned below:
 - District Industries Centres
 - Khadi and Village Industries Commission
 - Khadi and Village Industries Board
 - Coir Board
 - National Small Industries Corporation (NSIC)
 - Directorate of Handicrafts and Handloom
 - MSEs registered under Udyam Registration (UR) portal

- Any other Body specified by Ministry of Micro, Small and Medium Enterprises.
- The registration certificate submitted by MSEs issued from any one of the above agencies must be valid as on close date of the tender. The MSEs who have applied for registration or renewal of registration with any of the above agencies/bodies, but have not obtained the valid certificate as on close date of the tender, are not eligible for exemption/preference.

27. Right to terminate the Process

- HLFPPT may terminate the RFP process at any time without assigning any reasons whatsoever. HLPPT makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- This RFP document does not constitute an offer by HLPPT. The bidder's response to this RFP may/may not result into selection of bidder(s) after completion of selection process as detailed in this RFP document.
- HLFPPT reserves the right to accept or reject any proposal, and to annul the RFP process and reject all proposals at any time, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for its action. The decision of HLPPT will be final in this matter.

28. Disqualifications

- HLPPT may, at its sole discretion and at any time during the evaluation of Proposal, disqualify any Bidder, if the Bidder has:
- Made misleading or false representations in the forms, statements or attachments submitted in proof of the eligibility requirements.
- Exhibited a record of poor performance such as abandoning works, not properly completing the contractual obligations, inordinately delaying completion or financial failures, etc. in any project.
- Submitted a proposal that is not accompanied by required documentation or is non-responsive.
- Failed to provide clarifications related thereto, when sought.
- Submitted more than one Proposal.
- Been declared ineligible by the Government of India/State/UT Government/ PSUs for corrupt and fraudulent practices or blacklisted. Submitted a Proposal with price adjustment/variation provision.

We agree and abide by all terms and conditions as mentioned above including the validity of the offer

Utmost confidentiality of the data provided shall be maintained.

ANNEXURE- 1
Technical Bid Format
(To be filled, sign & stamp by Agency)

A

S.No	Particulars	Remarks	Work Experience
1	Experience with HLPPT/Govt. Agency/ NGO/ Development Sector	Yes/No	
2	Experience in similar Type of work	Year	

B

S.No	Particulars	Last 3 Year		
3	Annual Turnover/ITR	2021- 22	2022-23	2023-24

C

S.No	Particulars	Top 5 Client List
4	Clientele List	

D

S. No.	Particulars	Details (No.)
5	PAN	
6	GST	
7	MSME	

ANNEXURE-2

**Hindustan Latex Family Planning Promotion
Trust B-14A, IInd Floor, Sector 62, Noida,
Gautam Budh Nagar, Uttar Pradesh - 201307**

**APPLICATION FORM FOR PROVIDING IT SOLUTION FOR REAL TIME TRACKING, REPORTING & MONITORING OF NHAI TOLL
PLAZA STAFF**

S.No	Item	Details
1	Name of the Agency	
2	Constitution (Company/ Partnership/ Proprietorship)	
3	Details of Registration (Registering Authority; Registration No. & Date)	
4	Year of commencement of business	
5	Sale Tax No	
6	PAN Number	
7	Whether Manufacturer/ Authorized Distributor/ Dealer / Agency	
8	Name(s) of the Proprietor/ Partner/ Director / Official with designation authorized to make commitment to the HLPPT	
9	Telephone No Mobile No Email	
10	Mailing Address	
11	Whether VAT clearance certificate is available with the Agency.	
12	Whether the billing system is computerized?	
13	Names of the Government/ Public Sector/ Corporate clients of the Agency for Providing IT Solutions	
14	Name and address of Principal Banker Please also give phone numbers.	

I have read and understood the notice issued by HLPPT, containing the eligibility criteria and the terms and conditions for providing IT solution for Real Time Tracking, Reporting & Monitoring of Toll Plaza staff training. I fully accept the terms and conditions. I also understand that the HLPPT reserves the right to accept any or reject any or all of the applications without assigning any reasons.

Name:

Signature Designation:

Date:

Note: Applications complete in all respects in the above format may be submitted in closed envelopes super scribed as "Application for providing IT solution for Real Time Tracking , Reporting & Monitoring of Toll Plaza staff training under NHAI Project" accompanied by the copies of documents. Applications should be addressed to the Procurement and Commercial Division, HLPPT, Noida on _____.

ANNEXURE- 3: TECHNICAL BID FORMAT

	SPECIFICATION (TECHNICAL)			AGENCY'S REPOSE (Agreed/Disagreed)
1	Technical Specifications of IT solution for Real Time Tracking , Reporting & Monitoring of Toll Plaza staff training			
	S.No	Particulars (Item Name)	Specifications/	
	1	IT Solution for Real Time Tracking, reporting & Monitoring of Toll Plaza	Mobile App and Web as per Attached SOW	
2.	Providing IT solution for real time tracking , reporting and monitoring to be done according to the quantities, specifications, quality, schedule and locations approved by HLFPT and as per Scope of work			
3	The receipt of product (IT Solution for Real Time Tracking, Reporting & Monitoring of Toll Plaza) to be submitted as proof along with invoice.			
4.	The agency is capable (as defined in RFP document) and agrees to complete the supply within specified time as agreed upon otherwise penalty clause will be invoked.			
5.	Past experience of the agency in supply of similar Activities, as listed in this RFP. Please give details or provide list of clients to whom similar activities have been done.			
6.	Management reserves the right to place the order one or more agency (on the basis of quality consideration/ experience of the agency) in addition to rates parameters.			
7.	Constitution of the agency whether Proprietor ship/Partnership/Company. Give details of Proprietor/ Partner/Directors.			
8.	For how many years the agency is engaged in similar line of activities.			
9.	Registration certificate with GST need to be submitted along with the technical quotation.			
10.	Penalty clauses will apply as per the company's policy, as per terms of the purchase order: the decision of the HLFPT/ Project Management shall be final and binding in this regard.			
11.	The final price will remain valid for 06 months from the submitted proposal			

Please Note:-

- Form must be completed in all respects; incomplete forms may liable to be rejected.
- The form must be duly signed and sealed by the Authorized signatory
- The form must be submitted on or before due date and time.

Name & Signature of Authorized Signatory
Name & Seal of the Firm/ Agency
Address:
Telephone/
Fax

HINDUSTAN LATEX FAMILY PLANNING PROMOTION TRUST
B-14A, IIND FLOOR, SECTOR 62, NOIDA, GAUTAM BUDH NAGAR, UTTAR PRADESH - 201307

ANNEXURE-4: FINANCIAL BID FORMAT

I am submitting below the lowest quotation for the above after understanding completely the technical specifications and other terms and conditions of the RFP.

	SPECIFICATIONS (FINANCIAL)
1.	Rates will be inclusive of all Taxes/Levies/ Installation/Training and other charges etc.
2.	TDS as applicable will deduced as per Income Tax Act, 1961
3.	Payment will be made through cheque / NEFT/ RTGS.
4.	Payment shall be made within 45 days after submission of original invoice & delivery of IT Solution for real Time tracking, Reporting & monitoring of NHAI Toll Plaza Staff
5.	Penalty clauses will apply as per the company's policy, as per terms of the purchase order: the decision of the HLPPT/Project Management shall be final and binding in this regard.

I am submitting below my lowest quotation for the above after understanding completely the technical specifications and other terms and conditions relating to time frame, quality as spelled out in the Bid document.

S.No	Particulars	Specification	Rate Per Toll Plaza Staff(Per Day) in Rs. (Inclusive of all Taxes, Installation, Training and other charges etc.)
1	IT Solution for Real Time Tracking, Reporting & Monitoring of Toll Plaza Staff Training	Mobile App & Web as per Scope of Work (Annexure- 9)	

Important Note-

- IT solution to be done according to the quantities, specifications, quality, schedule and locations approved by HLPPT
- The rates quoted shall be valid for 01 year from issue of Work/Purchase order.
- Cost of item should include all kind of installation, training & other charges along with taxes.

ANNEXURE - 5 UNDERTAKING TO BE SUBMITTED BY AGENCY
(On Company Letter Head duly signed & stamped)

This has reference to the RFP datedIn response to the RFP, we have submitted our technical & financial bids on.....at your officeIn connection with the above bids, we hereby declare as under:-

1. That we are neither related to any of your Trustees, Officers and other employees nor do we have any financial, commercial or other interests with any of the above persons in any capacity whatsoever.
2. That we have submitted the bids in the name of M/S.....and declare that no other bids have been submitted by us in the name of any other firms/companies/proprietors/individuals which comes under the same management and related parties.
3. We undertake that:
 - a) All information furnish by us in respect of fulfillment of eligibility criteria and qualification information of the Bid is complete,correct and true.
 - b) All copy of documents, credentials and documents submitted along with this Bid and genuine, authentic, true and valid.
4. We undertakes that:-
 - a) We are not involved in any litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment.
 - b)We are not blacklisted by any Central/ State Government/ agency of Central/ State Government of India/Public Sector Undertaking/ any Regulatory Authorities/ Multilateral Funding agency in India for any kind of fraudulent activities.
5. We hereby undertakes that If any information and document submitted is found to be false/incorrect or we violate any declaration at any stage of contract, HLFPT has right to cancel my/our Bid and action as deemed fit may be taken against me/us, including termination of the contract, forfeiture of all dues and banning of our firm etc.

ANNEXURE -6**Authorization to sign documents pertaining to bid submission against RFP no:**

[To be given on agency/firm/company on Rs.10 stamp paper/ Letter Head/ RFP FORMAT Duly Sign & Stamp]

It is certified that we M/s

having registered office atare

Submitting a bid proposal against RFP No. & dated.

for Providing IT Solution for.....

In this connection Mr./Ms..... working with our company

as..... has been authorized to sign bid proposal documents or any other documents related

to this bid submission.

We, (name of company)... are fully liable of the consequences arising by the act of signing bid documents

by Mr./Ms.....

Signature

Name of Signatory

ANNEXURE 7

UNDERTAKING ON BID SUBMISSION

(To be submitted on Letter head/ RFP FORMAT duly signed and stamped)

I _____ Son/Daughter of
Shri

Proprietor/Partner/Director/ Authorized Signatory of _____
_____(Name of Firm/ Agency) sign this declaration and execute this tender document.

I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

The information/documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I/we/am/are wellaware of the fact that furnishing of any false information/fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law and forfeiture of security deposit submitted by me along with tender.

Place
Date

Signature of Authorized Person
Full Name
Address/Company's Seal

ANNEXURE - 8

UNDERTAKING FOR BIDDERS WHO ARE REGISTERED AS MICRO/ SMALL ENTERPRISE

(This undertaking may be included in relevant section/part of Tender Document)

I /We confirm that the provisions of Micro and Small Enterprise are applicable to us and our organization falls under the definition of the following Category:

- i. ☐ – Micro Enterprises
- ii. ☐ – Small Enterprises

Please tick in the appropriate option box ☐ and attach relevant documents/certificate issued by any of the Authority mentioned below as evidence to their applicability of Micro and Small Enterprises:

- i. District Industries Centers (DICs)
- ii. Khadi & Village Industries Commission (KVIC)
- iii. Khadi & Village Industries Board (KVIB)
- iv. Cair Board o National Small Industries Corporation (NSIC)
- v. Directorate of Handicrafts and Handloom
- vi. MSEs registered under Udyam Registration (UR) portal
- vii. Any other Body specified by Ministry of Micro, Small and Medium Enterprises (MoMSME)

I/ We also undertake to inform the change in this status as aforesaid during the currency of the Contract, if any.

Dated _____

Signature of Bidder _____

ANNEXURE -9

Proposal for NHAI Toll Plaza Training Tracking and Monitoring System Software Development

Introduction

Efficient training and monitoring of toll plaza operations is vital for maintaining service quality, compliance, and operational efficiency. To address the unique challenges of training, tracking, and monitoring toll plaza personnel and operations, we propose a comprehensive software solution. This system will incorporate advanced features to streamline training processes, enhance monitoring, and provide real-time insights.

The proposed solution will involve three mobile applications (Trainer App, Supervisor App, and Trainee App) integrated with a centralized web-based Control Centre for seamless management.

Objectives

1. To create a digital ecosystem for training and monitoring toll plaza operations.
2. To automate and track training processes, ensuring accountability and transparency.
3. To enable centralized monitoring, reporting, and real-time decision-making.
4. To provide robust tools for trainers, supervisors, and trainees to enhance training quality.

Features and Functionalities

1. Toll Management

- Centralized database for managing toll plaza details and operations.
- Integration of training schedules and performance metrics for each toll plaza.

2. RO Management (Regional Office)

- Oversight of toll plazas and training activities under each RO.
- Region-wise training progress and performance reports.

3. PIU Management (Project Implementation Unit)

- Comprehensive tracking of training activities at the project level.
- Live updates on training sessions, attendance, and reports.

4. Training Batch Creation

- Create and manage training batches based on toll plaza requirements.
- Allocate trainers and trainees to specific batches.

5. Toll Supervisor Management

- Maintain records of toll supervisors and their training history.
- Assign supervisors for batch monitoring and reporting.

6. Trainer Management

- Centralized trainer database with qualifications, certifications, and availability.
- Assign trainers to specific batches based on expertise.

7. Assign Trainer to Training Batch

- Automatic or manual assignment of trainers to batches.
- Notifications to trainers with batch details and schedules.

8. Trainee Management with Aadhaar Verification

- Maintain trainee profiles with personal details, Aadhaar verification, and training history.
- Ensure accurate identification and compliance.

9. Trainee Pre/Post-Test Results

- Conduct and evaluate tests to measure knowledge and skill improvement.
- Generate comparative performance reports.

10. Trainee Feedback

- Collect and analyze feedback for continuous improvement.
- Feedback forms integrated into the system with customizable options.

11. Training Batch Food, Setup, and Stationery Management

- Manage logistics, including food, setup, and stationery for training sessions.
- Integration with vendor systems for efficient procurement.

12. Vendor Management

- Maintain a database of vendors providing training-related services.
- Track vendor performance and ensure timely service delivery.

13. Vendor Automatic Order Placement

- Automate order placements for food, stationery, and other essentials based on batch needs.
- Notifications to vendors for order confirmation and delivery updates.

14. Training Reports

- Generate detailed reports on training attendance, test results, feedback, and logistics.
- Customizable reporting templates for stakeholders.

15. Trainer Attendance

- Record trainer attendance with time-stamped logs and location verification.
- GPS-enabled tracking for accuracy.

16. Trainee Attendance with GPS Image

- Record trainee attendance using GPS coordinates and photo verification.
- Real-time updates accessible to trainers and supervisors.

17. Trainee Certificate Issuance

- Automatic generation of training completion certificates.
- Certificates can include QR codes for verification.

18. Control Centre (Web Access)

- Centralized dashboard for real-time monitoring and control of training activities.
- Role-based access for trainers, supervisors, and administrators.
- Access training schedules, attendance, test results, and reports.

19. Live Training Session Recording and Random Image Capture with Geo Tags

- Record live training sessions for review and compliance.
- Capture random images with geo-tags for validation and monitoring.

Application Features**Trainer App**

1. Access assigned training batches and schedules.
2. Mark attendance for trainees with GPS and photo verification.
3. Record live training sessions and capture images.
4. Submit session completion reports and feedback.

Supervisor App

1. Monitor live training sessions remotely.
2. Verify trainee attendance with GPS and images.
3. Provide feedback and suggestions for improvement.
4. Generate and review inspection reports.

Trainee App

1. Access training schedules and materials.
2. Verify attendance with GPS and image submission.
3. Take pre/post-training tests through the app.
4. Provide feedback and access training certificates.

Technical Approach

1. **Platform:**
 - Mobile Applications: Android/iOS for Trainer, Supervisor, and Trainee Apps.
 - Web Access: Centralized Control Centre for administrators.
2. **Technology Stack:**
 - **Frontend:** Flutter (Mobile Apps), HTML5/React-js (Web)
 - **Backend:** PHP/CI-4
 - **Database:** MySQL
 - **Integration:** Aadhaar API for verification, GPS APIs for tracking, Live Training Tool
3. **Security:**
 - Data encryption for secure storage and communication.
 - Role-based access control to restrict unauthorized access.

Benefits of the Proposed System

1. **Automation:** Reduces manual effort and errors in training management.
2. **Accountability:** GPS-enabled attendance and image verification enhance transparency.
3. **Real-Time Monitoring:** Live session tracking ensures quality and compliance.
4. **Data-Driven Insights:** Comprehensive reports for informed decision-making.
5. **Scalability:** Supports multiple toll plazas, ROs, and PIUs seamlessly.

Dashboard Key Points

1. **Training Status:** Overview of ongoing and completed training sessions.
2. **Attendance Summary:** Real-time attendance data with GPS verification.

3. **Test Results:** Pre/post-test performance comparisons for trainees.
 4. **Feedback Analytics:** Insights from trainer and trainee feedback.
 5. **Vendor Status:** Updates on vendor orders and service deliveries.
 6. **Incident Alerts:** Notifications for session issues or logistic requirements.
-

Implementation Plan

1. **Requirement Analysis:** Collaborate with NHAI to finalize system requirements.
2. **Design and Prototyping:** Develop user-friendly interfaces and workflows.
3. **Development:** Build core functionalities and integrate necessary APIs.
4. **Testing:** Perform rigorous testing for accuracy, reliability, and security.
5. **Deployment:** Implement the system with training for end-users.
6. **Maintenance and Support:** Provide ongoing technical assistance and updates.