



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

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### NHAI /Policy Guidelines /Commercial Operations /2025 Policy Circular No. 17.8.6/2025 dated 08<sup>th</sup> September, 2025 {Decision taken on E-Office File No. ADMIN-11/117/2025-IHMCL (Comp. No. 292439)}

#### Sub: Deployment of Site Engineers (ITS) at PIUs through IHMCL - reg.

In order to further strengthen Fee Plaza Operations, ATMS and other Intelligent Transport System (ITS) features implemented at PIUs, it has been decided to deploy Site Engineers (ITS) at selected PIUs. These Site Engineers are being engaged by IHMCL through a NICSI-empanelled Agency and are posted at PIUs after undergoing basic training on Toll Collection Systems, ATMS and other ITS-related Facilities.

2. The detailed "Duties & Responsibilities" of Site Engineers (ITS) are enclosed at Annexure-A.
3. In the first phase, Site Engineers (ITS) are being deployed at 50 PIUs with Highest Toll Collections. Based on the effectiveness of this initiative, the deployment may be extended to other PIUs in a phased manner.
4. The Reporting Structure of the Site Engineer (ITS) will be as under:
  - a. Functional Reporting: To the Project Director of the respective PIU.
  - b. Administrative Reporting: To IHMCL Headquarter, New Delhi.

The Site Engineer (ITS) will also receive Technical Support from IHMCL and the CO Division of NHAI on matters related to ITS and Tolling.

5. The Salary and Allowances shall be paid to the Site Engineer (ITS) by IHMCL on the certification of Attendance by PDs. The Project Directors are requested to extend necessary Logistic Support to the Site Engineer (ITS) including provision of Vehicle, Sitting Space in PIU, Desktop and other Facilities equivalent to NHAI Site Engineers. Their Services should be effectively utilized to enhance monitoring and improve the operational efficiency of Toll Plazas and ATMS Facilities.
6. The posting orders of Site Engineer (ITS) shall be separately issued by IHMCL.
7. This issue with the approval of Competent Authority.

Encl.: As stated above.

(CS. Sanjay Kumar Patel)  
I/c Chief General Manager (Coord.)

To:

All Officers of NHAI HQ/ ROs/ PIUs/ CMUs/ Site Offices

Copy to:

1. CEO, IHMCL for information and necessary action.
2. Hindi Division for translation in Hindi.
3. Library for hosting the circular on library site.
4. Web Admin for circulation.

### Duties and Responsibilities of Site Engineers Deployed at PIU Offices

S. No.	Duties & Responsibility	Frequency
1	Ensure that only empanelled System Integrators are appointed at the fee plaza.	During SI Appointment
2	Ensure 100% functionality of ETC, MSWIM, SWB, and ANPR systems with proper integration. MSWIM and SWB must be calibrated, stamped, and sealed annually by W&M Department with reports displayed in the TLC panel. Deploy minimum three qualified Site Engineers (one per shift) with relievers for 24x7 operations; ensure engineers hold Graduate/Diploma in Engineering (Electrical/Electronic/IT/CS) with documents submitted to NHAI as per SIs Contract Agreement and other Obligations. Monitor transition from Old to New System Integrator with proper handover and complete TMS data takeover. Ensure monthly updation of Checklist of ETC Infrastructure.	Continuous & As Required
3	Oversee predictive, preventive, and corrective maintenance by System Integrator, ensuring monthly preventive schedules, system cleanliness, ISI-marked fire-retardant cabling, proper numbering/termination, and sealing of ducts/conduits to prevent rodent/insect/water damage. Ensure availability of tools, system manuals, engineering drawings, software, and network/electrical documents at plaza.	Monthly & As Required
4	Monitor system health via TMCC software, conduct random plaza visits, ensure continuous uptime of TMCC application, IoT devices, reliable network, correct IP mapping, and functionality of all equipment.	Continuous
5	Ensure minimum two Internet connections with adequate bandwidth as per Contract Agreement. Confirm ETC system operates per ICD 2.5/latest specifications with SSL, firewall, and domain certificates for real-time processing.	Continuous
6	Ensure all Lane, Booth, PTZ, and Plaza Building Cameras are connected to NVR with video backup maintained for minimum 30 days.	Continuous
7	Track ETC system rollout by SI, monitor dispatch, delivery, verification, and compliance with specifications. Coordinate Go-Live with Acquirer Bank. Maintain spare critical equipment and ensure lane application operates in local mode during plaza server connectivity loss.	As Required
8	Where ANPR is installed, ensure real-time FASTag transaction processing in RFID failure cases and configure system to close boom barrier on VRN mismatch between RFID and ANPR.	Continuous
9	Ensure all critical equipment including RFID readers, Lane Barriers, AVCC, Cameras, and TLCC are procured from OEMs with valid STQC, ARAI, I-CAT, NATRAX, or IIT certifications as per IHMCL empanelment, and verify during SAT.	During Equipment Procurement & SAT



10	Ensure all plaza data is retained within Toll Plaza Server for Agreement period; backup LPIC/ANPR images and Incident Camera footage for at least six months.	Continuous
11	Supervise pest control for plaza equipment, ensure surge protection devices, valid earthing reports, and separate earthing for TMS equipment.	As Required
12	Ensure Site Acceptance Tests (SAT) for ETC, MSWIM, and SWB systems are conducted using approved checklists to validate system functionality and performance.	During System Installation & Upgrades
13	Ensure compliance with NHAI Letter No. NHAI/13013/CO/2025.Manual-122 dated 12.05.2025 regarding SSL certification, firewall, password protocols, VRN masking, remote access restrictions, and external port blocking.	Continuous
14	Ensure licensed antivirus, OS, databases, and TMS software are deployed as per IHMCL guidelines. Verify valid STQC certification for TMS modules and ensure annual CERT-In certification with reports submitted to NHAI/IHMCL.	Annually & As Required
15	Verify TMS software deployment strictly as per Annexure-9 of IHMCL RFE with valid STQC certification for all TMS modules.	During TMS Deployment
16	Ensure no lane is powered off to facilitate unauthorized transactions; power and ETC system remain active at all times. Randomly verify exempt/violation (Non-FASTag) transactions using NVR footage.	Continuous & Random
17	Ensure all manually processed FASTag transactions undergo two-stage validation with ANPR/AVCC evidence within 24 hours before submission to Acquirer Bank, per FASTag Policy Circular No. E-123819 dated 13.04.2023.	Daily
18	Prohibit unauthorized parallel software, mobile apps, handheld ticketing by POS machines, unrecorded lane closures, camera deactivation, and unauthorized storage devices as per IHMCL letter dated 24.01.2025. Promptly report suspicious activities to NHAI/IHMCL.	Continuous
19	Ensure Toll Collection agencies report cases of loose FASTag (Tag in hand) to ETC. Operations@ihmcl.com as per Policy Circular dated 26.06.2025.	As Reported
20	Ensure all toll transactions (Fin, Non-Fin, Cash, and Exempted) transmitted to TMCC w.e.f. 01.09.2025 include corresponding vehicle images stored locally for six months, with transaction records carrying image path references for near real-time fetching and transmission to TMCC Cloud, as per Policy Circular IHMCL/TMCC/e-286235/530 dated 12.08.2025 (Decision taken on e-file 286235)	Continuous