CHAPTER-VII
OTHER TAX AND NON-TAX RECEIPTS

7.1 Results of Audit

Ports and Transport Department

There are 36 auditable units in the Transport Department which include office of the Commissioner of Transport (CoT) and 35 Transport Districts headed by offices of RTO/ARTOs. Out of these, eight units[1] were selected for audit wherein 16,74,689 vehicles were registered[2]. Out of these, records of 20,651 vehicles (1.23 *per cent*) were test checked. Scrutiny of these cases revealed irregularities involving ₹ 47.06 crore in 3,034 cases (14.69 *per cent*).

In addition to the above, an Information Technology (IT) audit of Vahan and Sarathi was conducted in the Ports and Transport Department, offices of the CoT and 13 RTO/ARTOs.

Energy and Petrochemicals Department

There are 24[3] auditable units in the Electricity Duty Department. Out of these, three[4] units were selected for audit. There were 9,929 cases relating to Collection of fees and electricity duty in these two units. Out of these, audit selected 1,852 cases (18.65 *per cent*) for test check. Scrutiny of these cases revealed irregularities involving ₹ 27.40 crore in 22 cases (1.19 *per cent* of the test checked cases).

Industries and Mines Department

There are 33 auditable units[5] in the Geology and Mining Department. Out of these, seven[6] units were selected for audit wherein 1,687 cases of mining leases were due for audit. Out of these, audit selected 913 cases (54.11 *per cent)* for test check. Scrutiny of these cases revealed irregularities involving ₹ 5.07 crore in 394 cases (43.15 *per cent*).

These cases are illustrative only as these are based on test check of records. Audit had pointed out some of the similar omissions in earlier years. Not only these irregularities persist but also remain undetected till next audit is conducted. There is a need for the Government to improve the internal control system including strengthening of internal audit so that recurrence of such lapses can be avoided.

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1 Office of the CoT and seven RTO/ ARTOs.
2 Between April 2017 and March 2018
3 Offices of the Chief Electrical Inspector and Collector of Electricity Duty: 01, Deputy Chief Electrical Inspector: 04, Assistant Electrical Inspector: 18 and Department of Petroleum.
4 Department of Petroleum, Chief Electrical Inspector and Collector of Electricity Duty and one Deputy Chief Electrical Inspector, cases related to inspection of Lifts, escalators and other industrial/ commercial undertakings and recovery of revenue therefrom.
5 Office of the Commissioner of Geology and Mining: 01, District Geologist/ Assistant Geologist: 32.
6 Office of the Commissioner of Geology and Mining and six District Geologists/ Assistant Geologists.

The irregularities involving ₹ 79.53 crore, broadly fall under the following categories:

Table 01: Results of Audit

Sl. No.	Category	No. of cases	Amount (₹ in crore)
	Taxes on Vehicles and Taxes on Goods and Passengers		
1	Information Technology (IT) audit of Vahan and Sarathi	1	12.49
2	Non/short levy of motor vehicles tax	26	7.93
3	Other irregularities	37	26.64
	Total (A)	**64**	**47.06**
	Electricity Duty/Director of Petroleum		
4	Non/short recovery of inspection fees and other irregularities	8	0.04
5	Other irregularities	14	27.36
	Total (B)	**22**	**27.40**
	Mining Receipts		
6	Non/short levy of dead rent/surface rent	10	1.77
7	Other irregularities	38	3.30
	Total (C)	**48**	**5.07**
	Grand Total (A+B+C+)	**134**	**79.53**

During the course of the year, the Departments accepted and recovered under-assessment and other irregularities of ₹ 1.27 crore in 15 cases, which were pointed out in audit during 2018-19 and earlier years.

This chapter contains one audit paragraph on "Information Technology (IT) audit of Vahan and Sarathi" and few illustrative audit observations mentioned in the succeeding paragraphs:

7.2 Information Technology (IT) Audit of Vahan and Sarathi

7.2.1 Introduction

The e-Transport project, under the aegis of Ministry of Road Transport and Highways (MoRTH), was included under National e-Governance Plan in the year 2002 as a Mission Mode Project (MMP). The project envisaged improvement in the quality of service delivery to the citizens and the work environment of the Regional Transport Offices (RTOs). National Informatics Centre (NIC), in the capacity of a Technical Partner, was entrusted with the design, development, roll out and maintenance of the project across all the States and Union Territories and compiling the data of Vehicle Registrations and Driving Licences of all the States in State Register and National Register. Accordingly, Vahan and Sarathi were conceptualized to capture the functionalities as mandated by the Central and State Motor Vehicles Acts and Rules.

In Gujarat, the Sarathi 1.0 application for driving licence and Vahan 1.0 application for registration of vehicles was introduced from November 2006 and March 2008 respectively. The Transport Department, Government of Gujarat (the Department) implemented (2016-17) Sarathi 2.0 and Vahan 2.0 versions in JAVA based application in 29 Regional Transport Offices/Assistant Regional Transport Offices (RTO/ARTOs) while the remaining six[7] RTO/ARTOs remained on the earlier version. Subsequently, the Department implemented (between September 2016 and March 2018) the latest[8] versions viz. Sarathi 4.0 and Vahan 4.0 in all the 36[9] RTO/ARTOs of the State.

Vahan 4.0 and Sarathi 4.0 were conceptualised to integrate the earlier citizen centric applications i.e. Vahan/Sarathi versions 1.0/2.0, running on disparate platforms, into a common portal that connects to a Centralized database and provides a comprehensive set of G 2 C[10], G 2 B[11] and G 2 G[12] services from a single point. The information services offered through the portal are being enhanced through real-time data access and sophisticated presentation tools like dashboards, Geographic Information System (GIS) based spatial representation of data etc. The online services running at the front-end are being integrated with the back-end RTO applications to ensure that the need for the citizens to physically visit RTO/ARTOs is eliminated or minimized. The Data Centre of Vahan 4.0 is located at National Data Centre (NDC), New Delhi and Data Centre of Sarathi 4.0 is located at NDC, Hyderabad. The disaster recovery site for both the applications is situated at NDC, Bhubaneswar.

The key modules operational in Vahan 4.0 and Sarathi 4.0 are as follows:

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7 Ahmedabad, Bhuj, Rajkot, Surat, Vadodara, Vastral.

8 Architected on a centralised, multi-tenanted, web-enabled platform deployed on NIC cloud infrastructure.

9 Including office of the ARTO Bavla established on 29 May 2017.

10 Government to Customer

11 Government to Business

12 Government to Government

Chart 01: Key Modules/Services operational in Vahan 4.0

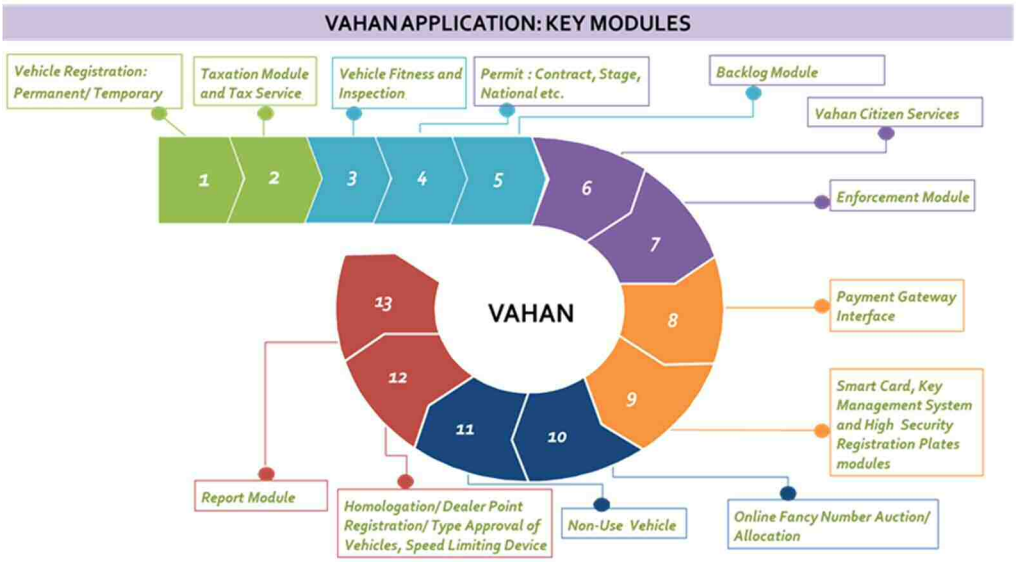
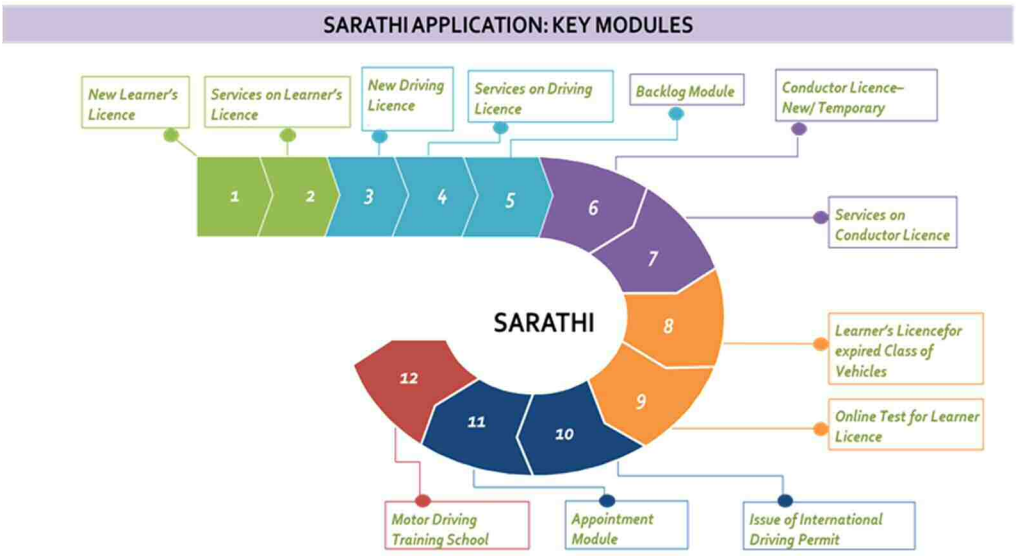


Chart 02: Key Modules/Services operational in Sarathi 4.0



7.2.2 Organisational set-up

The Commissioner of Transport (CoT) heads the Transport Department under the administrative control of the Principal Secretary to the Government of Gujarat (GoG) in the Ports and Transport Department. He is assisted by a Joint Director, two Officers on Special Duty (OsSD); one in-charge of Information Technology, Road Modernisation and Road Safety and other in-charge of Establishment, Enquiry, Tax and Permit, a Motor Vehicles Prosecutor (Legal), an Accounts Officer (Accounts Audit Planning) and a Research Officer (Statistics) in the Head office. There are 14 Regional Transport Offices[13]

[13] Ahmedabad, Bhavnagar, Godhra, Himmatnagar, Jamnagar, Junagadh, Kutchh-Bhuj, Mehsana, Nadiad, Palanpur, Rajkot, Surat, Vadodara and Valsad.

(RTOs), 22 Assistant Regional Transport Offices[14] (ARTOs) and one Inspector of Motor Vehicles (MVI)[15] Office. There are 16 check-posts[16] (CP) and three checkpoints[17] working under 11 RTO/ARTOs.

7.2.3 Audit objectives

IT Audit was conducted to get a reasonable assurance that:

- an IT Action plan was formulated, documented and followed for timely implementation of the systems for achieving the overall objective of the applications;
- mapping of business rules was ensured;
- the controls were adequate to ensure integrity, reliability, confidentiality and availability of data maintained;
- adequate system and data security policies have been framed and implemented for accessibility, retrieval and security of data;
- monitoring and supervision were effective and efficient enough to detect, prevent and take timely corrective actions to resolve the deficiency in the applications.

7.2.4 Audit Criteria

The audit criteria were derived from the following Acts, Rules and other documents governing the process of system of registration of vehicles, issue of licences, fitness certificate, permits, assessment, levy and collection of motor vehicles tax etc.:

- The Motor Vehicles (MV) Act, 1988 and Rules made thereunder;
- The Gujarat Motor Vehicles Tax (GMVT) Act, 1958 and Rules made thereunder;
- Guidelines/Instructions/Circulars/Orders issued by the Department**;**
- User Manuals of various modules of Vahan 4.0 and Sarathi 4.0

7.2.5 Scope and methodology of audit

The records maintained in the offices of the Ports and Transport Department and Commissioner of Transport for the period from 2015-16 to 2018-19 were verified during December 2018 to May 2019 to ascertain the level of planning, procurement, implementation and monitoring of the system. Data of Vahan and Sarathi provided by National Informatics Centre (NIC), New Delhi and Hyderabad respectively through Virtual Private Network (VPN) and the Report Module data accessible at RTO/ARTOs was analysed by Computer

[14] Anand, Amreli, Bardoli, Bavla, Bharuch, Botad, Chhota Udepur, Dahod, Dang-Ahwa, Gandhinagar, Khambaliya- Devbhoomi Dwarka, Mahisagar-Lunavada, Aravalli, Morbi, Navsari, Patan, Porbandar, Rajpipla, Surendranagar, Veraval – Gir Somnath, Vastral and Vyara.

[15] Gandhidham

[16] Ambaji, Amirgadh, Bhilad, ChhotaUdepur, Dahod, Gundari, Jamnagar, Kaparda, Sagbara, Samkhiyali, Shamlaji, Songadh, Tharad, Thavar, Waghai and Zalod.

[17] Adesar, Hazira and Surajbari.

Assisted Audit Techniques (CAAT). Out of 36 RTO/ARTOs, 13 RTO/ARTOs[18] were selected using Stratified Simple Random Sampling method for scrutiny of the records and verification of the data analysis results. In addition to this, the data available in public domain (*www.parivahan.gov.in*) and the 'Parivahan Analytics and Reporting Portal' (Analytics Portal) was utilised wherever necessary.

An entry conference was held on 13 December 2018 with the Principal Secretary, Ports and Transport Department and Commissioner of Transport to discuss the audit objectives, scope and methodology of audit.

7.2.6 Acknowledgement

Indian Audit and Accounts Department acknowledges the co-operation of the Ports and Transport Department and NIC in providing the necessary data and records to Audit.

Audit Findings

7.2.7 Delay in implementation of Sarathi 4.0 and Vahan 4.0

The Science and Technology Department of Government of Gujarat had prescribed a policy guideline for availing IT/ITES solutions, projects, products and related services vide its Resolution dated 30 July 2004 wherein it had instructed that the Organisations will prepare a comprehensive IT Action Plan and identify/prioritise projects that are critical to delivering services to citizens or increasing revenues or improving internal processes.The vision of the Transport Department is to provide and facilitate transport-related services to the people with a thrust on speed, safety, environment-friendliness and fuel-efficiency in a transparent and citizen-friendly fashion, thus accelerating the growth and development and thereby furthering the interests of the State and the Nation.

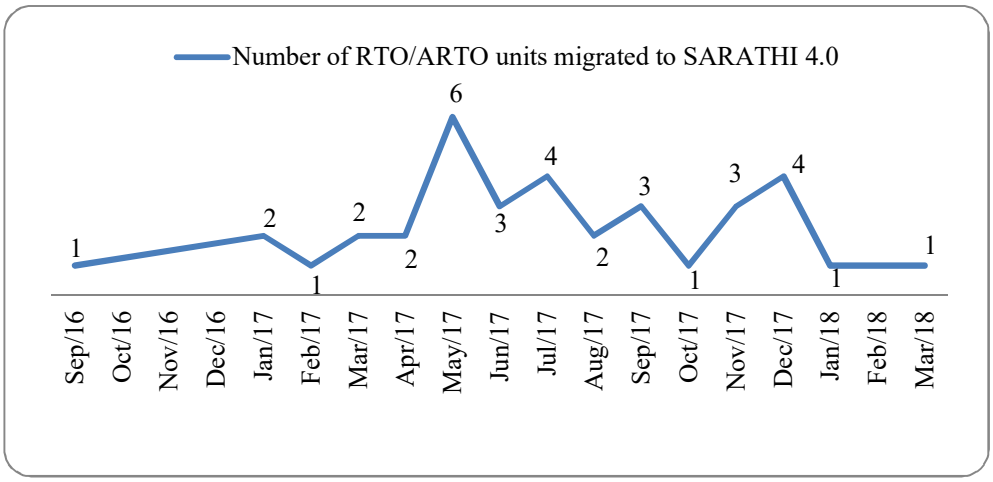
As per the mission statement, the Department envisaged to provide the services in a computerised environment. However, there was nothing on record for audit to verify whether any comprehensive IT Action Plan was prepared by the Department and followed scrupulously for prioritising projects that are critical to delivering services. No roadmap was charted out to achieve the vision and mission of the Department. Further, the Department neither prepared any document providing a definite timeline for implementation of Vahan 4.0 and Sarathi 4.0 applications nor constituted any committee to watch fast implementation of the applications. Due to lack of planning, there was delay in implementation of Vahan 4.0 and Sarathi 4.0 applications and its various modules and services as discussed below:

[18] Ahmedabad, Bavla, Bharuch, Bhavnagar, Botad, Chhota Udepur, Dahod, Gandhinagar, Jamnagar, Khambhalia, Modasa, Narmada, Surat.

Sarathi 4.0

ARTO, Gandhinagar was the first unit to implement (30 September 2016) Sarathi 4.0. Though the first unit was migrated from Sarathi 2.0 to Sarathi 4.0 in September 2016, the last unit (RTO, Bhuj) was migrated to Sarathi 4.0 in March 2018 with a time span of 18 months. The following chart shows the month of implementation of Sarathi 4.0 in the 36 RTO/ARTOs in the State:

Chart 03: Implementation of Sarathi 4.0

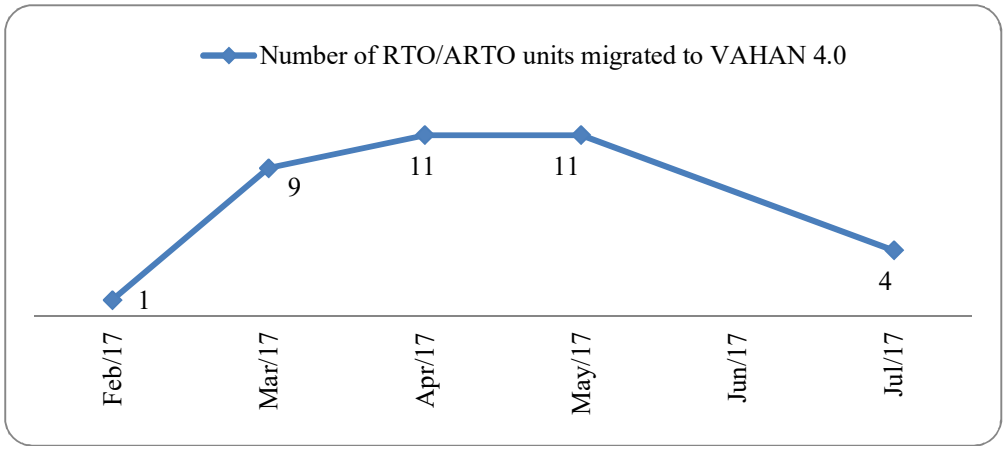


From the above chart, it can be seen that even after successful pilot operations in September 2016, the pace of implementation of Sarathi 4.0 was slow which is attributable to lack of planning resulting in delayed implementation of the application, depriving public the benefits of online services provided in Sarathi 4.0 during this period.

Vahan 4.0

The ARTO, Anand was the first (21 February 2017) while RTO, Surat and RTO, Bhuj were the last (July 2017) units to port data to Vahan 4.0 from Vahan 1.0/2.0. The following chart shows the month of implementation of Vahan 4.0 in the 36 RTO/ ARTOs in the State:

Chart 04: Implementation of Vahan 4.0



Thus, implementation of Vahan 4.0 was comparatively faster (achieved within a period of five months) than the implementation of Sarathi 4.0 which took

around 18 months. However, some of the modules/services in Vahan 4.0 were either not implemented or operationalised with delay ranging from three to 14 months after the implementation of Vahan 4.0 application. Further, in some of these modules/services, web access to the customer for real time data entry, payment of fees/tax etc., is not provided, hence, the customer is required to visit the RTO counter to avail these services as tabulated below:

Table 02: Operationalisation of various modules/ services of Vahan 4.0

Name of Module	Nature of service	Date of implementation of the module / service	Number of months since Vahan 4.0 was implemented	Whether Real time online web access to customer available
Payment Gateway Interface	Tax and fees payment for new vehicles registration	03 August 2018	12 months	Yes
	Change in tax payment mode from recurring to lifetime			No
Online Fancy Number Auction/ Allocation	E-auction of Fancy numbers for new non-transport vehicles	01 November 2017	3 months	Yes
	Fancy number auction for transport vehicle			No
Enforcement	E-Challan- Manual entry of Departmental Action (DA) memos issued by IMVs and payment at RTO/ ARTO office	12 June 2018	10 months	No
Non-use vehicle	Reporting of transport vehicles not in use	01 October 2018	14 months	No
Vehicle Fitness and Inspection	Issue of fitness certificate	Date of implementation not available on records		No
Vahan Citizen Services	Transfer of ownership, Change of address, Hypothecation addition/ termination, Alteration of vehicles, Renewal of Registration etc.	11 September 2018	13 months	16 services: Yes 21 services: Not implemented

From the above table, considerable delay may be seen in operationalisation of various modules/services of Vahan 4.0 after its implementation. Further, the Permit module has been implemented partially. While the National Permit, Special and Temporary Permits can be obtained online, the customer is required to visit the RTO office to get the permits for Goods Carriage, Auto Rickshaw, Taxicab, Maxicab and All India Tourist Permits. In addition to this, the non-availability of many services with real time web access to the public was also not in line with the vision and mission statement of the Department. There is a need to make concerted efforts to make Vahan 4.0 and Sarathi 4.0 fully functional.

On this being pointed out, the Department stated (May 2020) that no committee has been constituted for implementation of the applications but continuous monitoring and review of the implementation of operations was done at the level of Additional Chief Secretary. Further, it was also stated that the delay in the implementation of Vahan 4.0 and Sarathi 4.0 in the State was administratively unavoidable due to premature and some technical and legal policy decisions. The reply is not convincing since Sarathi 4.0 was

implemented in the first unit in September 2016 and constitution of a committee as well as a clear road map could have facilitated the fast implementation of the applications in the remaining units.

7.2.7.1 Modules/Services unavailable/ unimplemented in Vahan 4.0

(i) Refund Module

Section 9 of the Gujarat Motor Vehicles Tax Act 1958 (GMVTA) and Rule 14 of the Gujarat Motor Vehicles Tax Rules 1959 (GMVTR) provide for refund of motor vehicles tax paid in advance subject to certain conditions. However, no module for processing of refunds has been incorporated in Vahan 4.0. The refunds are being processed manually. Thus, the automation to that extent is incomplete.

On this being pointed out, the Department replied (May 2020) that any transactions made for RTO related vehicle and license related services will compulsorily pass or fail within 30 minutes time frame under online payment facility provided under SBI ePay Payment Gateway and hence, there will be no issue of online refunds. The reply is not relevant as audit contention is not regarding the online refund but non-availability of the module which is essential for processing the refund cases prescribed under the provisions of the Act and Rules mentioned above.

(ii) CNG Vahan Sewa module

'CNG Vahan Sewa' module in Vahan 4.0 is designed for uploading inventory details of CNG/LPG[19] kits by the manufacturers and it's further linking with the vehicle fitted with these kits by the dealers. MoRTH instructed (15 November 2018) all the States/ UTs to implement the module for retro fitment of CNG/LPG kits to ensure safety and compliance of standards as mandated under Rule 115 of the Central Motor Vehicle Rules, 1989 (CMVR). It was also mentioned in the instruction that the module was running smoothly in Delhi for last two years.

However, it was noticed that the 'CNG Vahan Sewa' module had not been implemented (November2019) in Gujarat State even after lapse of one year since the issuance of the instructions in this regard by the MoRTH. Hence, the purpose of the module in keeping track of CNG/LPG kits fitted in the vehicles was not served.

On this being pointed out, the Department replied (May 2020) that currently the process of implementation of CNG module has been started and the work is expected to be completed by 31 May 2020.

7.2.7.2 Online services

The primary thrust of introducing the web-based applications Vahan 4.0 and Sarathi 4.0 was to bring the services to the doorstep of the citizens, to remove

[19] Compressed Natural Gas/ Liquefied Petroleum Gas

the hassles faced in obtaining any kind of services related to Transport Sector and to make the system secure, transparent, cost-effective and user-friendly.

The online payment through 'payment gateway interface' module in Vahan 4.0 and Sarathi 4.0 was implemented with effect from 03 August 2018. The following table shows the percentage of all India average of online transactions as against that of Gujarat since implementation of the applications in the State:

Table 03: Online transactions in Vahan 4.0 and Sarathi 4.0 in Gujarat vis-à-vis rest of India

(₹ in crore)

Name of Application	Period	No. of months	State	Tax and fees collection mode			Percentage of online revenue collection to total revenue
				Cash, DD and Challan	Online	Total	
Vahan 4.0	August 2018 to March 2019	8	Gujarat	760.25	1,418.33	2,178.58	65.10
			All India (except Gujarat)	11,086.98	17,318.12	28,405.10	60.97
Sarathi 4.0	August 2018 to March 2019	8	Gujarat	36.22	64.97	101.19	64.21
			All India (except Gujarat)	470.79	699.43	1,170.22	59.77

(Data source: Vahan 4.0 and Sarathi 4 Dashboards of *Parivahan* website)

Thus, despite delayed implementation of the applications (especially Sarathi 4.0), the average online transactions in the State were comparatively higher than the all India average under Vahan 4.0 and Sarathi 4.0 applications. The situation could have been even better had the applications been implemented with all the modules/ services fully operational.

7.2.8 Irregularities in procurement and utilisation of hardware

The Science and Technology Department of Government of Gujarat (GoG) constituted (23 February 2011) Secretaries Purchase Committee (SPC)-IT[20] for procuring/ availing Information Technology (IT)/Information Technology Enabled Services (ITES) solutions, projects, products and related services. Subsequently, an IT Committee[21] was formed (25 March 2013) with reference to the policy guideline of Science and Technology Department of GoG for procuring/ availing IT/ITES solutions, projects, products and related services valuing ₹ one crore or less in CoT and subordinate offices.

[20] Comprising of Additional Chief Secretary (ACS), Science and Technology Department as Chairman, Principal Secretary, Industries and Mines Department, Principal Secretary (Expenditure) Finance Department, ACS/Principal Secretary/Secretary of the concerned Department and Chairman cum Managing Director, Gujarat Informatics Limited (GIL) as members and Deputy Secretary (IT), Officer on Special Duty (OSD) of Science and Technology Department as member secretary.

[21] Comprising of CoT as Chairman, Director of Gujarat Informatics Limited, Deputy Secretary of Ports and Transport Department, Accounts Officer of Ports and Transport Department, Deputy Secretary of Science and Technology Department and OSD of CoT office.

The IT Committee meeting was held on 13 July 2017 for giving administrative approval for purchase of new hardware (computers, laser printers, barcode reader, tablets, Bluetooth thermal printers and scanners) for Transport Department in connection with the implementation of Vahan 4.0 and Sarathi 4.0.

Audit observed certain irregularities in the procurement of hardware as detailed in the following paragraphs:

(a) Biometric devices for access control in Vahan

- The IT committee, though was not empowered, had given (13 July 2017) administrative approval for the purchase of hardware (computers, laser printers, barcode reader, tablets, Bluetooth thermal printers and scanners) worth ₹ 2.53 crore with condition that necessary need analysis of actual requirement of hardware shall be done by the Department. Since, the value of the proposed hardware was more than ₹ one crore, the matter was required to be referred to SPC-IT for securing administrative approval. Thus, the administrative approval granted by the IT committee beyond its financial powers was irregular.

- As per the directions of IT committee, a meeting for analysing the requirement of hardware for Transport Department was held (17 July 2017) in the CoT office which was attended by CoT, OSD (IT) and GIL representative. In the meeting it was decided to purchase Biometric devices as advised by NIC for optimum utilization of Vahan 4.0 and Sarathi 4.0 applications. The Department had not included the estimated expenditure for purchase of Biometric devices in the agenda of the IT committee meeting held on 13 July 2017, as such no administrative approval was sought for the intended purchase. However, the Department purchased 910 numbers of Biometric devices costing ₹ 22.01 lakh in May 2018 without any authority for such purchase.

- Further, though the devices were purchased in May 2018, the Department did not co-ordinate (as on July 2019) with National Informatics Centre (NIC) to develop the software to install the Biometric devices to enforce Aadhar based login into Vahan 4.0 and Sarathi 4.0. Non-installation of Biometric devices resulted in infructuous expenditure of ₹ 22.01 lakh besides not securing the access control in the applications as discussed in paragraphs 7.2.9 (ii) and 7.2.10 (Case Study 2) *infra.*

On this being pointed out, the Department stated that though Biometrics was not mentioned in the IT Committees proposal, it was purchased on a competitive basis and transparent manner. Further, it was also stated that the biometric was not installed due to a probable legal issue. However, the Department, had intimated NIC in May 2020 to make necessary provisions in the applications for use of Biometric devises for RTO/ARTO staff to log into Vahan and Sarathi software.

(b) Tablet and Bluetooth Thermal Printer for e-Challan

e-Challan is a sophisticated software application comprising Android based mobile app and web interface, developed for the purpose of providing comprehensive solution for Transport Enforcement Officers and Traffic Policemen. This app-cum-application is integrated with Vahan 4.0 and Sarathi 4.0 applications and is intended to provide several user-friendly features while covering all major functionalities of Traffic Enforcement System. It was envisaged that with the implementation of e-Challan, issuance of manual memo to the defaulters would be replaced by electronic challan. Under this system, during enforcement activities, penalty from the defaulters would be collected on the spot.

NIC had circulated a brochure providing information on e-Challan - Comprehensive Enforcement Solution (Mobile App cum Web Application), wherein the implementation requirement of software, hardware and the specifications of hardware were mentioned. In respect of specification of hardware for the mobile application, two options[22] were provided by NIC, of which the Department could adopt anyone.

In connection with the implementation of e-Challan module in Vahan 4.0, the Department had identified the requirement of 350 Tablet and 350 Bluetooth Thermal Printer for all offices and took the IT Committee's administrative approval on 13 July 2017. For trial run, the Department placed order for procurement of 25 Tablets and 25 Bluetooth Thermal Printers. However, only 13 Tablets and 25 Bluetooth Thermal Imager Printers could be procured in October 2017 and April 2018, respectively. The devices procured were even having less than the minimum 2GB RAM prescribed by NIC in the brochure. As these devices could not yield the desired results due to less visibility, slow speed etc., the Department proposed (October 2018) purchase of 700 Integrated Hand Held Devices (IHHD) in place of Tablets and Bluetooth Thermal Printers, which was pending for approval as on 31 March 2019.

Audit noticed that the e-Challan module was made operational from June 2018. In absence of the essential devices, the memos issued manually by the IMVs were data entered and scanned in the Vahan 4.0 e-Challan module at RTO/ARTOs. Thus, the Department's lack of preparedness defeated the very purpose of implementation of e-Challan module. Further, the deficiencies in e-Challan module because of not procuring the devices are discussed in paragraph 7.2.12 (i) *infra.*

[22] First option: Mobile smart-phone or Tab with data connectivity, 5" or higher screen size, @ 2 GB RAM, Good camera, 2000+ MAH battery capacity, fast connectivity with other optional features such as Finger Print sensor, Stylus pen option, power bank and in case on spot challan print-out is required, a portable thermal printer connected to the mobile devices through Bluetooth is a desired accessory.
Second option: Integrated Hand Held Devices (IHHD) containing functionalities of the devices mentioned in the first option which would provide more ease of use.

7.2.9 General controls

(i) IT Security Policy not updated

MoRTH, in March 2013, had issued a security policy/guideline prepared by NIC for circulation to the State Departments and Regional Transport Offices/District Transport Offices across the country.

Audit noticed that the security policy and guidelines prepared were in connection with the implementation of Vahan and Sarathi of earlier versions (1.0/ 2.0) and were outdated. However, since implementation of Vahan 4.0 and Sarathi 4.0, there have been substantial upgradations/advancements and accordingly the security policies and guidelines were required to be updated to cater to the new version of the applications in terms of roles and responsibilities of User Departments, System Administrator, Database Administrators, Vahan/Sarathi Users and the Security Policy and Guidelines for Version Control, Server Management, User Management, Database Maintenance and Backup Policy, Disaster Recovery Policy etc. However, the Department did not co-ordinate with MoRTH and NIC to revise and update the security policy and guidelines.

To create the environment in which the application systems and application controls operate, the Department needs to formulate a security policy that should be circulated at all levels for protection of hardware and software of the system. Preventive and detective measures like installation and updating antivirus software, User ID and passwords should be adopted. The IT system must have in-built controls to ensure that all the key information has been entered before the transaction is recorded in the database.

(ii) Weak logical access control

Information System security involves the protection of computerised data from unauthorised modification. Logical access controls are restrictions imposed by the computer software. These are tools used for identification, authorisation and accountability in computer information systems and enforce access control measures for system, programs, processes and information. Logical access controls can be embedded within operating system, applications, add-on security packages or database.

Audit noticed that the password policy and access controls assigned to RTO users were inadequate as detailed below:

- the system was not designed to compel the RTO users to regularly change the password.

- the biometric devices, though purchased, were not used to authenticate the users.

- Vahan 4.0 and Sarathi 4.0 being web enabled applications, the RTO users were able to access the applications from any computer having web connection irrespective of place or time i.e. outside the office

premises and beyond office hours. Thus, the RTO user/Cashier could have collected the motor vehicles tax and fees from outside the office premises at any point of time and issued receipts to the vehicle owners. The analysis of Vahan 4.0 database of the 13 selected RTO/ ARTOs for the period from 1 August 2017 to 31 August 2018 revealed that 1,07,366 cash receipts valuing ₹ 50.47 crore out of the total 7,48,006 cash receipts were generated either before or after the office hours (between 07.00 pm and 10.00 am).

In order to improve the access controls, the Department introduced (01 September 2018) three additional security features such as (a) access to the application during office timings which could be extended by the administrator (b) Bind Internet Protocol (IP) Address[23] for users and (c) One Time Password (OTP) based login.

However, the new security features introduced by the Department were not fool proof considering the points mentioned below:

- Though, the OTP was being sent to the registered mobile number of the Sarathi user each time he/she logs into the system, the OTP sent to the registered mobile number of the Vahan 4.0 user was valid for 12 hours. Thus, as far as Vahan 4.0 application is concerned, the feature of OTP based login partly served the purpose as the IP address was vulnerable to unauthorised access in the event of access to the OTP by any unauthorised person.

- The Sarathi application was hacked[24] on holidays (25 and 26 December 2018) and illegal/ wrong entries were made in the Backlog module of the application as detailed in paragraph 7.2.10 (Case Study 2). Thus, the additional security features viz. access to the application during office timings, Bind Internet Protocol (IP) Address and One Time Password (OTP) based login proved insufficient. Moreover, the hacking came to the notice of the authorities on 28 January 2019 after lapse of more than one month. This further indicated poor monitoring by the authorities regarding security features of the applications.

- The Department could have further improved the access controls by enabling biometric access through the devices purchased in May 2018 which were not used till July 2019.

On this being pointed out, the Department, while accepting the audit contention, stated (May 2020) that instructions had been given by CoT office to enforce changing the password on the last day of every week by every employee/officer. Further, the Department stated that Telecom Regulatory Authority of India has been asked to develop a low-cost SMS system. Regarding the incident of hacking of Sarathi application, the Department stated

[23] RTO users can access their account only on the assigned IPs for their user account. User cannot access his/ her account outside the office premises.

[24] The clerk and IMV who were authorised to enter, verify and approve the backlog entries of Sarathi 4.0 did not receive One Time Password (OTP) to log into the system.

that when the matter came to notice, disciplinary action was taken against a Government employee.

Audit recommends that the Department may coordinate with NIC for sending OTP to the RTO user of Vahan 4.0 each time he/she logs into the system, analyse the security flaws in the system and further improve the access controls.

7.2.10 Issues in respect of legacy data and backlog module

In the interest of data security, entry of legacy data should be made, completed and closed under close supervision. However, it was noticed that the legacy data in Vahan 4.0 was incomplete as detailed below:

(i) Incomplete data in Vahan 4.0

The completeness of data is of paramount importance for any IT Project to be a success. Legacy data requires well defined strategy in terms of timeliness and arrangement for data entry.

The contract for scanning and data entry of RTO records in connection with digitisation of all records relating to registration of motor vehicles in Gujarat was awarded to a Company in June 2011. As per the scope of work, the Company was required to scan and convert all documents to PDF format, index them as retrieval ready entry into document management system and make data entry in Vahan software or any other software specified by the Department.

As per the records furnished to audit, the Company had scanned and digitised 66,70,613 records till January 2016. Out of which, only 4,79,468 records were activated in Vahan 1.0/2.0 applications and ported to Vahan 4.0. Audit noticed that the remaining 61,91,145 records (i.e., almost 95 *per cent* of total records) were neither activated nor ported to Vahan 4.0. Thus, the data of Vahan 4.0 was incomplete rendering the State Register and National Register incomplete.

On this being pointed out, the Department stated (May 2020) that all legacy data related to vehicle and driving licenses has been obtained from NIC on September 2019 and RTOs have been instructed regarding the procedures to be adopted to verify and approve the legacy data.

(ii) Deficiencies in the Backlog module of Vahan 4.0 and Sarathi 4.0

As discussed above, the data of Vahan 4.0 was incomplete. Thus, for the purpose of digitisation of the remaining legacy data, Vahan 4.0 is provided with separate backlog data entry module by which data finds its way to the database of the system. The data in respect of the remaining vehicles was being entered in the backlog module by the authorised staff based on the original documents produced by the vehicle owner at the time of transfer of ownership, change of address, hypothecation termination etc. However, the backlog channel is vulnerable to creation of manipulated records as discussed below:

Vahan 4.0

Audit noticed that the input restriction or validation of data entered in the fields such as date of registration, date of purchase, tax paid date, receipt number etc., in the backlog module in Vahan 4.0 system was missing. The backlog module thus poses serious threat of entry of invalid and unauthenticated data. This has been corroborated with the detection of evasion of motor vehicles tax of ₹ 56.26 lakh involving 20 vehicles at ARTO, Gandhinagar where the backlog module was used to manipulate data of newly registered vehicle and fake tax receipt numbers, dates and amounts were entered in the system to depriving Government of its revenue. The details are given in **Appendix XXVI - Case Study I**.

On this being pointed out, the Department stated in May 2020 that in case of data manipulation in Vahan application, matter is under investigation by the department against responsible employee of RTO Gandhinagar and FIR would be lodged based on outcome of investigation. Further, the Department also stated that NIC has been informed about the modifications to be done for input restriction or data validation in view of the unforeseen incidents.

Sarathi 4.0

The data of Driving Licenses (DLs) issued prior to the year 2010 was entered in the system by the authorised staff based on the original documents produced by the licensees. Audit noticed that the input restriction or validation of data entered in the fields such as Original DL No., DL issue date, educational qualification etc., in the backlog module was missing. The backlog module thus poses serious threat of entry of invalid and unauthenticated data. Audit noticed from the database that the Department during February 2018 to March 2019 had detected and blocked 3,519 illegal/wrong backlog entries in eight RTO/ARTO offices[25].

Besides, a case of illegal data entry in 84 DLs using the backlog module of Sarathi 4.0 in RTO office Ahmedabad on holidays has been detected by the Department wherein the system allowed to add transport vehicles class in the existing DLs of the licensees though they did not possess the prescribed minimum educational qualification. This, reveals the lack of input validation controls in backlog module. The details are given in **Appendix XXVI - Case Study 2**.

On this being pointed out, the Department stated (May 2020) that in case of Sarathi, FIR has been lodged and the issue of licence has been withheld. Further, the Department also stated that NIC has been informed about the modifications to be done in the system for input restriction or data validation in view of the unforeseen incidents.

It is recommended that the Department may improve input and validation controls in the backlog module of both Vahan and Sarathi applications

[25] RTO: Ahmedabad, Ahmedabad (East), Kutchh, Surat; ARTO: Banaskantha, Bardoli, Junagadh, Kheda

and ensure that access to the module is limited to authorised staff only. Further, the Department may ensure that there is an audit trail in the applications to monitor amendments made through backlog module so as to avoid data manipulation.

7.2.11 Delegation and Segregation of duties

(i) Delegation of powers to non-supervisory staff

The provisions of the MV Act 1988, GMVT Act 1958 and the Rules made thereunder empower the RTO, being the Registering authority/Taxation Authority, to grant registration of vehicles, issue permits, validate post registration services[26] and assess tax. Rule 73 of the CMVR, 1989 empowers the RTO or Motor Vehicles Inspector (MVI) to issue tax clearance certificates to the effect that the vehicle is not in arrears of the motor vehicles tax or any compounding fees.

The Regional Transport Officer/Assistant Regional Transport Officer is the designated system administrator of Vahan and Sarathi applications at the unit level and assigns various roles to the different employees of the RTO/ ARTO. The Vahan 4.0 is provided with different levels of authorization viz. entry[27], verification[28] and approval[29]. Audit noticed various deficiencies in the Segregation of duties and monitoring by the higher authorities as detailed below:

On analysis of the information furnished by 12 RTO/ARTOs[30] out of 13 selected RTO/ ARTO offices, it was observed that privileges of the administrator (RTO/ ARTO) were assigned to the non-supervisory staff also. Out of the above 12 RTO/ ARTOs, only in two offices the RTO/ ARTO had utilised the privileges of approving various services through Vahan 4.0. The authority under which the powers of Registering and Licensing Authorities were delegated to non-supervisory staffs was not furnished to audit by the Department. The number of approvals granted by supervisory and non-supervisory staffs in Vahan 4.0 in respect of applications for new registration (Transport and Non-Transport), Issuance of Permits, backlog, tax clearance, Vahan Citizen Services (Post Registration Services) are shown in **Appendix XXVII**.

Audit noticed that the assignment of various supervisory roles to the non-supervisory staff indicated a potential risk to the integrity of data and system.

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[26] Post Registration Services includes Alteration of vehicles, Transfer of ownership, Change of address, Hypothecation addition and/ or termination, Renewal of Registration, issue of No Objection Certificates, Renewal of fitness etc.

[27] Application inward process.

[28] Includes the functions of checking whether correct entries were made in the system with reference to the documentary proofs produced/ uploaded.

[29] The final stage to validate the transaction in its entirety.

[30] Except RTO Ahmedabad

(ii) Inadequate segregation of duties

Segregation of duties (SoD) is a proven way of ensuring that transactions are properly authorised, recorded and assets are safeguarded. Separation of duties occurs when one person provides a check on the activities of another. It is also used to prevent one person from carrying out an activity from start to finish without the involvement of another person. Inadequate segregation of duties increases the risk of errors being made and remaining undetected, fraud and the adoption of inappropriate working practices. Segregation of duties is a fundamental control requirement as it reduces the risk of error and fraud.

(a) Audit noticed that in nine out of the above 12 RTO/ARTO offices, various levels of roles and authorisations *viz.* entry, verification and approval in respect of various services had been carried out by the same official. The details of multiple roles and authorisations granted to the same staff in these RTO/ARTO offices are given in **Appendix XXVIII**. This was not only against the principle of segregation of duties but also indicated absence of compensating controls or monitoring mechanism in the system to protect against the risks associated with clubbing of functions.

The Departmental authorities detected data manipulation case in RTO office Bhavnagar, wherein invoice values of 80 two-wheeler vehicles were modified to evade motor vehicles taxes of ₹ 7.03 lakh including interest and penalty. Audit noticed lack of segregation of duties in the office as one of the reasons for the occurrence of the fraud as multiple roles such as rectification of entry, verification and approval have been assigned to the same non-supervisory staff without the supervision and control of RTO. The detail of the case is given in **Appendix XXIX – Case Study 3**.

(b) The right to collect cash, generate receipt and cancel the receipt so generated has been given to the Cashiers. In the 13 selected RTO/ARTOs, 65,375 receipts valuing ₹ 97.25 crore were cancelled during the period from 2015-16 to 2018-19 due to various reasons such as mistake in entering vehicle details, tax/fee amount etc. No supervisory mechanism of verification and approval for cancellation of the receipt is assigned in the Vahan 4.0 application. Further, the system though shows the details of the cancelled receipt in the Report module, it does not show whether cash was collected and another receipt was issued against the cancelled receipt. In the absence of a supervisory mechanism to ascertain the genuineness of cancellation of receipts, the possibility of misappropriation of cash cannot be ruled out.

On this being pointed out, the Department stated (May 2020) that in the RTOs around 50,000 applications are disposed of every day and around 125 lakh applications are disposed annually. In comparison to the increasing number of vehicles and the number of applications, the sanctioned administrative posts and filled up posts are very less. The Department stated that instructions have been issued to the RTO offices regarding the audit contention and different officers/employees have been appointed for follow up of operations.

Audit recommends that the Department may strictly follow the principle of segregation of duties in accordance with the hierarchy of the organisation to ensure data integrity.

7.2.12 Mapping of business rules in Vahan and Sarathi

(i) Deficiencies in e-Challan module

In the absence of devices for issuance of e-Challan, the challans issued manually by the Inspector of Motor Vehicles during enforcement activities were scanned and the data was entered in the e-Challan module of Vahan 4.0 at the RTO/ARTO offices. Audit noticed following deficiencies in the e-Challan module:

(a) Short levy of penalty

The MV Act provides for levy of penalty for various types of offences committed against the provisions of the Act. The Central Government has notified from time to time, the rates of penalties leviable for different types of offences. The quantum of penalty is decided by the instance (first, second and subsequent offences) of violation of the particular provision of the Act.

No centralised database of e-challans issued and entered in the e-Challan module in respect of Gujarat State was provided to audit. However, four[31] RTO/ ARTO offices had provided the database of e-Challans which revealed that out of 80,020 challans issued manually, in 2,351 challans, there was same type of offence (s) committed by the vehicle owners on different dates. The e-Challan module did not identify whether the offence was for the first or second (and subsequent) time for deciding applicability of higher rate of penalty. Hence, the penalty for second and subsequent offences was charged at the rates applicable to the first-time offence. Thus, absence of proper mapping of the penalty provisions of the MV Act resulted in short levy of penalty of ₹ 13.98 lakh as shown below:

Table 04: Short levy of penalty due to improper mapping of business rules

(₹ in lakh)

Sl. No.	Name of office	Total no. of challans entered in e-Challan module	No. of vehicle owners committed same second or subsequent offence	Penalty chargeable	Penalty levied	Short levy of penalty
1.	RTO Bharuch	17,648	483	4.48	2.05	2.43
2.	RTO Jamnagar	18,998	373	3.32	1.49	1.83
3.	ARTO Modasa	11,233	949	3.47	1.26	2.21
4.	RTO Surat	32,141	546	14.67	7.16	7.51
Total		**80,020**	**2,351**	**25.94**	**11.96**	**13.98**

On this being pointed out, the Department, while accepting the audit observation stated (May 2020) that modifications will be done in consultation with NIC in accordance with Motor Vehicle Act and notifications.

[31] RTO Bharuch, RTO Jamnagar, ARTO Modasa and RTO Surat

No provision for entering penalty paid in cash

e-Challan module did not provide for entering the data in respect of the vehicles where the penalties for the offences were paid on the spot in cash. Not entering the details of such offences results in incomplete database/ history of offences of an offender and makes it difficult to levy correct amount of penalty as prescribed.

(b) Incomplete/ incorrect data in e-Challan module

- Out of the 80,020 challans, in 11,727 cases involving penalty of ₹ 53.37 lakh, the vehicle number/chassis number, vehicle class was entered as 'NA' (not applicable) in the e-Challan database. The details are given below:

Table 05: Incomplete/ incorrect data in e-challan module

(₹ in lakh)

Sl. No.	Name of office	Total no. of challans entered in e-Challan module	No. of cases in which vehicle no./Chassis no. is entered as 'NA'	Penalty chargeable
1.	RTO Bharuch	17,648	4,368	32.77
2.	RTO Jamnagar	18,998	5,404	9.61
3.	ARTO Modasa	11,233	206	0.34
4.	RTO Surat	32,141	1,749	10.65
Total		**80,020**	**11,727**	**53.37**

In absence of the vehicle number/chassis number, unless the vehicle owner/offender turns up to pay the penalty, the Department would not be able to recover the penalty of ₹ 53.37 lakh. Further, in absence of vehicle number, second or subsequent offences committed in these cases, if any, would also not be ascertainable.

- Out of 80,020 challans in 436 cases of three[32] RTO/ARTO offices, the class of vehicle/ the details of offence was entered incorrectly. For example, challans had been issued for the offence of not wearing helmets or not having helmets of specific standard under Section 177 (1) of the MV Act 1988 to vehicle class other than two wheelers i.e. three wheelers, goods carrier, motor car, buses etc. Thus, the e-Challan module lacks validation control to ensure that penalty leviable correlates to the class of vehicle.

On this being pointed out, the Department (May 2020) stated that the main reason for incomplete data of engine numbers and chassis numbers is because the e-Challan is implemented on a server with different capacities on the e-Challan module. The Department stated that NIC has been intimated about the necessary validations to be made in the system.

(ii) Short levy of registration fees due to incorrect categorisation of construction equipment vehicles in Vahan

The construction equipment vehicles have been defined under Rule 2 (ca) of the CMV Rules 1989. The MV Act 1988 and the CMV Rules 1989 do not

[32] RTO: Bharuch, Surat; ARTO: Modasa

categorise any vehicle as heavy motor vehicle (HMV) or medium motor vehicle (MMV). Ministry of Road Transport and Highways, vide its Notification dated 29 December 2016, prescribed fees for issue or renewal of certificate of registration and assignment of new registration mark to various categories of vehicles under Rule 81 of CMVR. The construction equipment vehicles are required to be categorised as 'Others' and attract fee of ₹ 3,000.

Audit noticed in the 'fees master table' of Vahan 4.0 that the vehicle category included MMV and HMV and fees for the same had been provided as ₹ 1,000 and ₹ 1,500 respectively. It was observed that out of 3,358 cases of registration of construction equipment vehicles falling under 13 selected RTO/ ARTO offices, 1,284 vehicles were incorrectly categorized as LMV, HMV and MMV. The misclassification of construction equipment vehicles had, thus resulted in short recovery of registration fees ₹ 23.94 lakh in these 1,284 cases.

On this being pointed out, the Department stated (May 2020) that RTO/ARTO offices have been intimated to verify the cases and initiate appropriate action.

(iii) Non-mapping of business rules regarding levy of penalty and interest for delayed payment of tax

Section 8 (a) of the GMVT Act prescribes for levy of interest at the rate of 18 *per cent* per annum for the delayed payment of tax. Further, the Ports and Transport Department vide its Resolution dated 28 June 2010, prescribed for levy of penalty at the rate of four *per cent* of the balance amount of tax in cases where any portion of the lump sum tax is paid after seventh day but before 30 days from the date of purchase of the vehicle and if the delay is beyond 30 days, 25 *per cent* of the balance amount of tax shall be levied as penalty. The CoT office vide Circular dated 11 December 2012, clarified that the motor vehicles tax shall be paid within seven days from the date of sale invoice by the dealer (purchase date) or the date of insurance or the date of delivery, whichever is earlier.

- **Non-levy of penalty and interest**

During data analysis of the Vahan 4.0 data for the period 2015-19, pertaining to the 13 selected RTO/ ARTO offices, audit noticed in cases of newly registered vehicles liable to pay lump sum tax, that the Vahan system was not mapped with the conditions of the Circular dated 11 December 2012. It was observed that in 70,131 cases, the date of tax receipt was after a delay of seven days from the date of insurance/date of sale invoice. In these cases, the tax was calculated based on the date in the field "tax from" by the RTO office user/dealer which was not matching with the earliest of the date of the insurance, sale invoice or delivery. The penalty of ₹ 6.91 crore and interest of ₹ 2.63 crore aggregating to ₹ 9.54 crore was chargeable in these cases. However, no penalty and interest were levied in these cases due to absence of mapping of the provisions of the Departmental instructions. This has resulted in non-realisation of ₹ 9.54 crore revenue to the Government.

- **Deficiencies in the 'Dealers Point Registration' module**

It was observed (July 2019) that the date of reckoning tax was modified to be calculated in the system with reference to the date mentioned under the field "tax from" which is auto populated from the 'purchase date' or 'insurance date', whichever is earlier. However, Audit noticed that the system adopts the 'date of entry of data' in the 'Dealers Point Registration module' as the 'purchase date/delivery date' which in turn is auto-populated in the system as 'tax from' date. Though, there is option in the 'Dealers Point Registration module' to edit the 'purchase date', the system did not prompt the dealer to enter the actual purchase date/delivery date as per the sale invoice date. As per Circular dated 11 December 2012, levy of penalty is based on 'purchase /insurance/delivery date, whichever is earlier. Thus, in order to ensure levy of correct amount of penalty in the cases of delayed payment of tax, the system is required to be designed to prompt the dealer to enter the 'date of purchase' instead of adopting 'date of data entry' by default.

On this being pointed out, the Department stated (May 2020) that RTO/ARTO offices have been intimated to verify the cases and initiate appropriate action.

(iv) Not mapping provisions for calculating penalty for registration beyond validity period

Section 43 of the MV Act 1988 mandates the vehicle owner to get a temporary registration number (non-renewable) having a validity period of one month from the date of purchase. Within the validity period of the temporary registration number, the vehicle is required to be registered under Section 39 of the Act *ibid*. The offence of using vehicle without registration or in spite of suspension or cancellation of registration in public place under Section 192 of the Act *ibid* attract different amount of penalty for different category of vehicles[33].

The analysis of Vahan database of the 13 selected RTO/ARTO offices revealed that in 13,724 cases of vehicles registered during the period 2016-18, there was delay in registration beyond one month from the date of purchase of the vehicle. Audit noticed that the penalty for delayed registration in these cases was collected by the Department under the head miscellaneous fees/fines[34]. However, it was noticed that due to absence of mapping of the penalty structure prescribed under Section 192 (3) of the MV Act in the Vahan system, incorrect amount of penalty was charged in these cases. The details are given in the following table:

[33] Penalty slab - ₹ 500 for two wheelers, ₹ 1000 for three wheelers, ₹ 2000 for four wheelers and ₹ 5000 for others.

[34] No description of miscellaneous fees was given in the system.

Table 06: Short levy of penalty for registration of vehicles beyond validity period

Sl. No.	Category of vehicle	No. of vehicles	Penalty rate (₹ per vehicle)	Total penalty chargeable (₹ in lakh)	Total penalty levied (₹ in lakh)	Short levy of penalty (₹ in lakh)
1.	2-wheeler	9,465	500	47.33	17.89	29.44
2.	3-wheeler	400	1,000	4.00	1.85	2.15
3.	4-wheeler	2,185	2,000	43.70	10.14	33.56
4.	Others	1,674	5,000	83.70	23.70	60.00
Total		**13,724**				**125.15**

The non-mapping of penalty structure resulted in short realisation of penalty of ₹ 1.25 crore in these 13,724 vehicles.

On this being pointed out, the Department stated (May 2020) that RTO/ARTO offices have been intimated to verify the cases and initiate appropriate action.

(v) Incorrect rounding off of fraction of a rupee

Section 4 (2) of the GMVT Act 1958 provides that in calculating the amount of tax due, the fraction of a rupee not exceeding fifty paise shall be ignored and the fraction of a rupee exceeding fifty paise shall be taken as a rupee.

It was noticed that Vahan 4.0, instead of ignoring the fraction of a rupee not exceeding fifty paise, rounds off the tax amount to the next higher rupee.Thus, the system calculates the tax payable on a higher side which necessitates modification in the application to align with the provisions of the GMVT Act.

(vi) Irregular collection of fees on new Certificate of Registration (RC) issued due to cancellation of Hypothecation agreement

Form 23A of the CMVR 1989 provides that the particulars be printed on the Visual Inspection Zone (VIZ) of smart card-based Registration Certificate (RC) which does not provide any field for printing of Hypothecation details[35]. Thus, the smart card RCs are required to be issued without mentioning Hypothecation details in the VIZ of the card though these details are available in the Machine-Readable Zone (MRZ)/ chip of the smart card RCs. Further, as per note 2 of the Notification dated 29 December 2016 issued by MoRTH, in case of smart card RCs, an additional fee of ₹ 200 shall be charged except in the case of issue of fresh certificate of registration after cancellation of hire purchase or lease or hypothecation agreement.

It was observed that the Department had issued smart card RCs to the new registered vehicles wherein details of hypothecations were printed on the smart card which was against the form prescribed for Visual Inspection Zone of the RCs. On scrutiny of the data generated from Vahan 4.0 in respect of the 13 selected RTO/ ARTO offices it was observed that during the period from 2017-18 to 2018-19, 2,93,083 vehicle owners had applied for updating of RCs

[35] Hypothecation details includes name of financier, address of financier, hypothecation date from and hypothecation upto.

on termination/ cancellation of hypothecation. The Department had collected fees of ₹ 5.86 crore for issuance of new Smart Card RCs in these cases by charging ₹ 200 each from the respective vehicle owners. Thus, non-mapping of the provisions of the Notification dated 29 December 2016, resulted in irregular collection of fees from the vehicle owners.

On this being pointed out, the Department stated (May 2020) that RTO/ARTO offices have been intimated to verify the cases and initiate appropriate action.

(vii) Not uploading manufacturer's tax invoice in Vahan 4.0

The motor vehicles tax leviable on new registrations is based on the 'cost of vehicle'[36] as defined under Section 2 (1A) of the GMVT Act 1958. The cost of vehicle in relation to a vehicle manufactured in India means the sale price of the vehicle shown in the invoice of the vehicle issued either by the manufacturer or the dealer of the vehicle; and a vehicle imported into India means the sum of value of vehicle as assessable under the Customs Act, 1962 and endorsed as such in the Bill of Entry under that Act including the amount of customs duty and any other duty, cess or charges payable thereon. The CoT office vide Circular dated 6 July 2017, instructed the RTO offices to verify and call for clarifications from the State Tax and Commercial Tax Department wherever the difference between the cost of vehicle mentioned in the Manufacturer's tax invoice and sale price mentioned in the Dealer's sale invoice varies noticeably.

The 'Dealers Point Registration' (DPR) module in Vahan 4.0 provides for uploading (w.e.f. 01 August 2018) of various documents[37] while applying for registration of new motor vehicles. It was noticed that no option was provided in the DPR module for uploading the Manufacturer's tax invoice nor was it linked to Homologation module and made accessible by the RTO offices for cross verification of the price of the vehicle while approving the new registration. Further, Audit also noticed that no option was provided for uploading the Bill of Entry as well as the manufacturer's invoice in case of registration of imported vehicle due to which, the difference if any, between the dealer's invoice and the manufacturer's invoice/bill of entry could not be ascertained. Thus, there is a need to modify the application so that the authorities could be able to implement the provisions of the Act and the circular mentioned above to safeguard the revenue. Further, there is a need to make provision in the application to generate pop-up message to ask for further clarification in cases of considerable variation in the cost of vehicle as per Manufacturer's/ Dealer's tax invoice to avoid leakage of revenue.

(viii) Incorrect grant of Driving Licences to persons aged between 16 and 18 years

As per Section 4 (1) of the MV Act 1988, no person under the age of 18 years shall drive a motor vehicle in any public place, provided that a motor cycle

[36] 'Cost of vehicle' in relation to a vehicle manufactured in India means the sale price of the vehicle as shown in the invoice issued by the manufacturer/ the dealer of the vehicle.

[37] Form 20, Form 21, Form 22, Identity proof and address proof of the vehicle owner, Insurance Certificates, Sale invoice of the dealer etc.,

with engine capacity not exceeding 50 Cubic Centimetre (CC) may be driven in a public place by a person after attaining the age of 16 years.

Audit noticed that 3,69,260 Driving Licences (DLs), imprinted with the wording MCWOG (Motor cycle without gear), were issued to persons aged between 16 and 18 years though these persons were eligible for issuance of DLs imprinted with "Motor Cycle with engine capacity not exceeding 50 CC" as per the provisions of the MV Act. It was seen from the Vahan database that the minimum engine capacity of the two wheelers registered with the Department was 59.9 CC. Thus, it can be concluded that the DLs issued to the persons aged between 16 and 18 years were for the two wheelers having engine capacity more than 50CC which was against the provisions of the MV Act. Moreover, there was no system to ensure that the persons aged between 16 and 18 years use two wheelers having engine capacity up to 50 CC only while appearing in driving test in the automated driving test tracks of the RTO/ARTO offices.

Thus, the application is required to be updated/ modified to ensure that persons aged between 16 and 18 years are issued DLs for "Motorcycle with engine capacity not exceeding 50 CC" only.

(ix) DL issued to ineligible applicants

The CMVR 1989 prescribes eighth standard pass as minimum educational qualification for obtaining a licence to drive a transport vehicle.

During analysis of the Sarathi database, it was noticed in 12[38] RTO/ARTO offices that 95 driving licences for transport class of vehicles were issued (between January 2011 and March 2019) to applicants who did not possess the minimum educational qualification of eighth standard.

Thus, the application is required to be updated/ modified with proper validation controls to ensure that condition of minimum educational qualification is satisfied before issuance of driving licence for transport vehicles.

On this being pointed out, the Department stated (May 2020) that RTO/ARTO offices have been intimated to verify the cases and initiate appropriate action.

(x) Collection of fees in advance for driving licence and smart card against the requirements of the Rules

MoRTH, vide Notification dated 29 December 2016, revised the fees for issue of Learner's Licence (LL) and Driving Licences (DL). As per note 2 read with serial number 1 to 3 of the table of fees of the Notification, the fees chargeable for LL test or retest (₹ 50), issue of LL in Form 3 for each class of vehicle (₹ 150) and test or repeat test of competence to drive each class of vehicle (₹ 300) shall be charged collectively (₹ 500) at the time of submission of application for issue of LL or DL or for endorsement of another class of

[38] Ahmedabad, Bharuch, Bhavnagar, Botad, Chhota Udepur, Dahod, Gandhinagar, Jamnagar, Khambhaliya, Modasa, Narmada, Surat

vehicle, as the case may be. Further, as per note 1 read with serial number 4 of the table of fees, for issuance of a DL, ₹ 200 is chargeable and where a Smartcard type driving licence is to be issued in Form 7, an additional fee of ₹ 200 shall be charged.

Audit noticed that while receiving application for new LL, the Sarathi 4.0 application automatically calculates a fees of ₹ 900 for a single class of vehicle and ₹ 1,350 for two classes of vehicles (₹ 150+ ₹ 300+ ₹ 900), which includes ₹ 400 for issuance of DL along with the smart card charges as mentioned at serial number 4 of the table of fees. The validity of the LL is for six months from the date of issuance of the licence (in case of clearance of LL test). If the applicant is unable to clear the LL test or fails to clear the DL test within the prescribed time limit or does not appear for the competency test to drive vehicle, he/she would have to apply afresh for new LL. The charges paid for issuance of DL and smart card also get lapsed and there is no provision for refund or adjustment of fees paid by the applicant previously. Hence, each time the same applicant applies for LL, he/she has to pay ₹ 400 for DL and smart card in addition to the other prescribed fees irrespective of success/ failure in the LL/ DL test. Charging of this additional amount of ₹ 400, each time the applicant applies for LL, is not in consonance with the provisions of the rules. Thus, Sarathi 4.0 application is required to be modified in view of the provisions of the Notification dated 29 December 2016 to avoid undue financial burden on the applicant.

(xi) Classification of maxi cabs as motor cabs and *vice versa*

Section 2 (22) of the MV Act 1988 defines 'maxi cab' as any motor vehicle constructed or adapted to carry more than six passengers, but not more than twelve passengers, excluding the driver, for hire or reward. Similarly, 'motor cab' is defined under Section 2 (25) as any motor vehicle constructed or adapted to carry not more than six passengers excluding the driver for hire or reward. The motor cab attracts lump sum motor vehicle tax while the maxi cab attracts recurring motor vehicle tax under the GMVT Act, 1958.

Data analysis of the 13 selected RTO/ ARTO offices revealed that in 10[39] offices, 62 vehicles adapted to carry between seven to 12 passengers were registered (during the period from 2015-16 to 2018-19) as motor cabs instead of maxi cabs. Similarly, in six[40] offices, 15 vehicles adapted to carry not more than six passengers were misclassified as maxi cabs instead of motor cabs. The audit observation points to the lack of mapping of the provisions of the MV Act in classification of vehicles with reference to the number of seats.

On this being pointed out, the Department stated (May 2020) that RTO/ARTO offices have been intimated to verify the cases and initiate appropriate action.

Audit recommends that the Department may take necessary steps in co-ordination with NIC to incorporate all the business rules and procedures in the system.

[39] Ahmedabad, Bavla, Bharuch, Bhavnagar, Botad, Chhota Udepur, Gandhinagar, Modasa, Narmada and Surat,

[40] Ahmedabad, Bhavnagar, Dahod, Gandhinagar, Jamnagar and Surat

7.2.13 Application controls

Application controls are controls over the input, processing and output functions. These controls help ensure data accuracy, completeness, validity, verifiability and consistency and thus ensure the confidentiality, integrity and availability of the application and its associated data.

Audit found that data accuracy was compromised rendering the applications *viz.* Vahan and Sarathi database unreliable. The findings are mentioned in the following paragraphs:

(i) Vehicles registered at multiple RTO/ARTO offices

Under Section 49 of the MV Act 1988, if the owner of a registered vehicle changes his place of residence or business, he has to apply for change of address in the RC to the new Registering Authority in whose jurisdiction his new address falls and after effecting the change of address, the new Registering Authority is to communicate the altered address to the original Registering Authority who then removes the registered vehicle from his database.

Data analysis of Vahan 4.0 data for the period from 2015-16 to 2018-19 pertaining to the 13 selected RTO/ ARTO offices revealed that 52,474 vehicles were having active registration at two or more RTO/ARTO offices as shown below:

Table 07: Vehicles registered at multiple RTO/ ARTOs

Sl. No.	No. of vehicles	No. of RTO/ARTOs in which vehicle registration was active
1	52,018	2
2	455	3
3	1	4
	52,474	

Test check of these cases revealed that No Objection Certificates (NOC) had been issued for transfer of records from one office to the other office but this fact was not captured in the system. It was further observed that these cases were of migration of data from earlier version of Vahan 1.0/ 2.0 to Vahan 4.0. Thus, there were deficiencies in data migration.

On this being pointed out, the Department replied (July 2019) that the NIC had developed a module named 'De-Duplicate Registration Number' to identify this issue. Multiple records within the State and other States can be removed by the authorised person in CoT office (State Administrator) in the module on receiving application by the concerned RTO office.

(ii) Lack of data authenticity in fitness module with reference to PUCC

Rule 115 (7) of the CMVR 1989 provides that after the expiry of a period of one year from the date on which the motor vehicle was first registered, every such vehicle shall carry a valid "Pollution Under Control" (PUC) certificate

issued by an agency authorised for this purpose by the State Government which will be valid for six months. MoRTH issued a Notification dated 06 June 2018 for linkage of PUC certificate with Vahan database as per the directions of the Supreme Court in the matter of W.P(C) No. 13029 of 1985, M.C. Mehta V/s Union of India dated 10 August 2017. The MoRTH notified 01 April 2019 as the last date of linking the emission data with Vahan database in respect of Gujarat.

Audit observed certain deficiencies in the database related to PUCs as described below:

- At the time of approval of fitness certificate, the RTO office enters the data of fitness in the module provided for the purpose in Vahan 4.0. However, the authenticity of the PUC Certificate was not verified nor was it linked (as on 31 March 2019) by the Department with the agency approving or certifying it.

- Moreover, the application does not calculate validation period of PUCC automatically based on date of issue of the certificate. Thus, the validity date is entered manually by the IMVs. In the event of incorrect entry of validity date, the validation period is reflected in the system in negative number of days or in excess of 180 days.

Thus, it is evident that there was no system to validate the authenticity of the data. As a result of which incorrect data was being entered in the fields while processing the fitness certificates.

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

(iii) Absence of data validation in key fields

Analysis of the Vahan and Sarathi database of the 13 selected RTO/ ARTO offices for the period from 2015-16 to 2018-19 revealed that certain key fields contained incorrect data/ values in several records due to inadequate data validation. The details are as under:

(a) Incorrect mention of Cubic Capacity (CC) - CC of 2,436 two-wheeler vehicles of 13 RTO/ ARTO offices was entered as 'NULL' or was ranging from 0 to 49, though, as per the make and model of the vehicle, the CC of the vehicles was much higher. Out of these, 334 vehicles were registered in Vahan 4.0 between August 2017 and March 2019.

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

(b) Incorrect data of number of seats under various category of vehicles – In 4,104 vehicles of 12 RTO/ARTO offices[41], the number of seats had been entered as ranging from 14 to 999, though these vehicles did not

[41] Ahmedabad, Bharuch, Bhavnagar, Botad, Chhota Udepur, Dahod, Gandhinagar, Jamnagar, Khambhalia, Modasa, Narmada, Surat.

carry these many seats. Out of these, 119 vehicles were registered in Vahan 4.0 between August 2017 and March 2019. The details are given in the following table:

Table 08: Incorrect data of number of seats under various category of vehicles

Sl. No.	Name of RTO/ARTO offices	Period of registration between	Vehicle Class	No. of vehicles	No. of seats ranging between
1.	Bharuch, Bhavnagar, Chhota Udepur, Dahod, Gandhinagar, Jamnagar, Khambaliya, Modasa, Narmada, Surat	April 2015 and March 2017	 Motor Cycle/ Scooter	131	22 and 999
2.	ChhotaUdepur, Khambhaliya, Modasa, Surat	May 2015 and July 2018	 Three-Wheeler (Goods)	5 (1)	435 and 999
3.	Ahmedabad, Bharuch, Botad, Chhota Udepur Dahod, Gandhinagar, Jamnagar, Khambaliya, Modasa, Surat	August 2015 and March 2019	 Motor Car	45 (15)	14 and 999
4.	Ahmedabad, Bharuch, Bhavnagar, Dahod, Gandhinagar, Modasa, Surat	May 2015 and August 2018	 Goods Carrier	35 (5)	14 and 999
5.	Ahmedabad, Bavla, Bharuch, Bhavnagar, Botad, Chhota Udepur, Dahod, Gandhinagar, Jamnagar, Khambhalia, Modasa, Narmada, Surat	April 2015 and March 2019	 Tractor, Trailer, Constructions Equipment Vehicles and others[42]	3888 (98)	14 and 999

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

(c) Incorrect entry of tax collection period - According to Section 3 read with Section 4 of the GMVT Act 1958, tax shall be levied and collected in advance as per the schedule of payment of tax for each category of vehicles prescribed by the Government from time to time.

Test check of the Vahan database for the period 2015-16 to 2018-19 revealed that in case of 80 tax receipts of 51 vehicles under seven[43] RTO/ ARTO offices, the period for which the recurring tax was paid by the vehicle owners had been entered incorrectly in the system. In these cases, tax was paid for the period 2012-13 to 2018-19, however, the database showed that the tax was paid for a future period (for the period

[42] Excluding buses
[43] Ahmedabad, Bharuch, Chhota Udepur, Gandhinagar, Jamnagar, Narmada, Surat.

between December 2018 and March 2032). Audit noticed that the system neither validates the period for which the recurring tax was last paid in respect of a particular vehicle nor does it automatically determine the period from which the tax is due to be paid.

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

(d) Invalid registration numbers – In case of 162 vehicles, the registration numbers were without the code of the State/Registration Authority as detailed below:

Table 09: Invalid registration numbers

Type of series	Number of vehicles
Registration number starting with 'XX'	160
All Numeric numbers	2
Total	**162**

The reason for showing such incorrect/invalid registration numbers was that inaccurate data was entered in earlier versions of Vahan 1.0/ 2.0 and was migrated to Vahan 4.0. Thus, migration of data took place without validation of the data.

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

(e) Invalid date of registration of vehicles – In 67 cases of migrated data of registered vehicles from Vahan 1.0/2.0 at nine[44] RTO/ARTO offices, the registration date of vehicle was mentioned incorrectly due to absence of validation checks during migration. For example – A vehicle (Trailer-Agricultural) purchased on 08 May 2017 was shown as registered on 08 May 0417. Further, in 1,075 vehicles (including five vehicles registered in Vahan 4.0 between January 2018 and March 2019) registered in the 13 RTO/ARTO offices during the period 2015-16 to 2018-19, the date of registration of the vehicles was prior to the date of purchase of vehicles ranging between one to 764 days**.**

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

(f) Lack of data input validation - Vahan 4.0 application does not restrict entering space and/or special characters in various fields[45] while filling the online application for new registration and Vahan Citizen Services. During printing of the smart card RCs, the space and/or special characters so entered are printed as question mark or unintelligible characters and data mismatch is displayed during the KMS[46] process. These cases are referred back by the

[44] Ahmedabad, Bharuch, Bhavnagar, Chhota Udepur, Dahod, Gandhinagar, Jamnagar, Khambaliya, Surat.

[45] Name of applicant, Insurance cover note number, Financer's name etc.

[46] KMS is a software developed by NIC to sanctify the pre-personalised cards. The smart cards are inserted through a KMS reader by the authorised persons for authentication of data and activation of the chip.

agency responsible for printing smart card RCs to the respective RTO/ ARTO office for removal of the space and/or special characters in the database. The process of verification, approval, printing and KMS is required to be repeated after rectification of the error. Thus, due to lack of validation control for data input, there was wastage of resources and time.

On this being pointed out, the Department stated (May 2020) that the matter will be resolved in consultation with NIC.

Audit recommends that the Department may take necessary steps to have in-built input and validation controls to prevent capturing of incorrect and incomplete data in the system.

7.2.14 Lack of documentations

Once a system is implemented, change control should be put in place to ensure that the changes to the system are authorised, tested and documented to ensure adequate audit trail. The request for changes should be signed by the higher-level functionaries of the Department and all changes should be tested before they are put to use in the live environment.

(i) Technical documents not furnished to audit

Audit noticed that the Department did not have proper written and authenticated documentation of the modules developed by NIC. The documents such as User Requirement Specifications, System Requirement Specifications, data flow diagram etc. were called for from NIC but were not produced to audit. In the absence of such records, audit could not verify the adequacy of documentation and system support.

(ii) Absence of Change Management Control

The modifications in Vahan 4.0 and Sarathi 4.0 systems are undertaken in the system by NIC personnel on the request of the Department. The errors or deficiencies in the Vahan 4.0 and Sarathi 4.0 applications are reported to the CoT office through e-mail by the RTO/ARTO offices and the CoT office in turn forwards the e-mail to NIC, Gandhinagar for mitigation of the error or deficiencies in the system. However, the procedure for change management was neither documented nor was there any procedure for authorisation of the changes in the system at the appropriate level. In absence of change management controls, the system was fraught with the risk of undetected unauthorised changes.

(iii) Absence of structured complaint management system

Audit observed that no central register or priority list was maintained/marked separately to identify the prominent issues having revenue implications requiring immediate attention. As no register or structured complaint management system was maintained, audit could not ascertain whether all the issues reported by the RTO/ ARTO offices had been forwarded timely to NIC

and were promptly responded. The actual time taken to mitigate the deficiencies was also not ascertainable due to absence of proper complaint management system.

Audit recommends that the Department may devise a robust complaint management system in co-ordination with NIC to monitor timely mitigation of errors and deficiencies in the system.

7.2.15 Deficiencies in Report Module

Audit noticed that the Report module of Vahan 4.0 was enabled to generate reports of various activities of RTO/ARTO offices especially Pendency of cases report, Tax defaulters report etc., for a maximum period of 180 days at a time. For example, a report of pendency of cases can be generated for a period starting from 1 January 2019 to 30 March 2019 which will show only those pending applications which were applied during that period. No consolidated reports showing the status of cases on a specific date could be generated by the RTO/ARTO offices from the Report module. This hinders monitoring of various issues and taking corrective actions by the authorities. Few issues are discussed below:

(i) Pendency of cases of new registration

On receipt of an application under Rule 47 of the CMVR 1989 and after verification of the documents furnished therewith, the registering authority shall, subject to the provisions of Section 44 of the MV Act 1988, issue to the owner of the motor vehicle a certificate of registration in Form 23A within the period of 30 days from the receipt of such application.

During the course of audit, it was noticed in the Report module of Vahan 4.0 application at 13 selected RTO/ ARTO offices that 11,649 applications for registration of new vehicles filed during the period from 2015-16 to 2018-19, were pending for verification and approval by the Registering Authority. In these cases, the dealer had paid fees and tax as applicable but had not produced the required documents and vehicles to RTO/ARTO offices.

The age wise pendency of cases in the 13 selected RTO/ ARTO offices as of June 2019 is as follows:

Table 10: Pendency of registration applications

Period	Pending at verification level	Pending at approval level	Total pendency
01.04.2015 to 31.03.2016	1	17	18
01.04.2016 to 31.03.2017	66	32	98
01.04.2017 to 31.03.2018	2,813	135	2,948
01.04.2018 to 31.03.2019	7,970	615	8,585
Total	**10,850**	**799**	**11,649**

(Source: Report Module of Vahan 4.0)

Thus, 11,649 vehicles were plying on road without valid registration number against the provisions of the MV Act. Availability of consolidated reports of

pending registration cases on a particular date in the Report Module would have facilitated effective monitoring by RTO/ARTO offices.

(ii) Tax defaulters

Section 12 of the GMVT Act 1958 provides that no motor vehicle used or kept for use in the State shall be used on any road in the State where the tax payable in respect of such vehicle remains unpaid for more than 30 days after it has become due under the provisions of this Act, until the tax, penalty and interest, if any, due is paid. Chargeability of penalty is prescribed under Section 18 of the Act *ibid.*

Vahan 4.0 application supports generation of the list of tax defaulters as well as notices/memos for issuing to the defaulters from the Report module and the Vahan transaction module. Audit noticed certain inconsistencies in the two modules discussed below:

(a) The defaulters list and notices in Gujarati language could be generated from Vahan Report module only for a maximum period of 180 days at a time. This would mean that the data generated would only contain the details of the defaults happened during the said requested period of 180 days. Thus, a consolidated report of a particular defaulter could not be generated from the Report module.

(b) Category-wise and age-wise defaulters report can also be generated from the Vahan 4.0 transaction module but it does not provide the facility for extracting list of defaulters for any particular period. As a result, the data available does not facilitate control measures for analysing pendency of arrears year/period wise and their collection. Further, the memos here are generated in English language without a mention of the applicable provisions of the Act and the total amount due.

Audit noticed in most of the RTO/ARTO offices, the defaulters list and notices had been generated from Vahan Report module rather than the memos from the Vahan transaction module. In these offices, the notices were issued only to those defaulters who had defaulted during the report generation period of 180 days. Thus, in order to negate the probability of leakage of revenue, consolidated data of each defaulter in one place in the application is necessary for the department to effectively monitor the realization of tax dues from the defaulters.

Audit recommends that the system may be modified to have the option of generation of notices/memos from only one source instead of multiple sources. Further, option to generate category-wise, age-wise and registration number-wise tax defaulters list and corresponding multilingual notices containing the relevant information according to the provisions of the Act and Rules, may be provided in the system.

7.2.16 Deficiencies in Analytics Portal

Considering the volume and complexity of data generated through various transport services, a progressive Analytics Portal has been implemented in the project (Vahan and Sarathi) by NIC. NIC has adopted open source Business Intelligence (BI) tools such as JavaScript Libraries, Elastic Search and Text Search. An open source database Postgres is used for all the required data repositories. The portal, provisioned with an aim to enable efficient decision-making and forecasting, serves the following key purposes: (1) Business Intelligence Portal to fulfil the analytics and reporting needs related to Vahan, Sarathi and other transport related data and comprehensive dashboards for Vahan and Sarathi to analyse and monitor the important analytics Key Performance Indicators (KPIs). (2) Advanced, fast and comprehensive search utility to quickly access details of Vahan RC and Sarathi DL (3) Leveraging Advanced Analytics to forecast the occurrence of events in future, based upon the historical data.

The data of Gujarat State extracted from the Analytics Portal by audit revealed huge variations in figures of fees and tax in Analytics Portal and *Parivahan* dashboard as detailed below:

Table 11: Mismatch in data of Analytics Portal vis-à-vis *Parivahan* Dashboard

(₹ in lakh)

	Calendar Year	Data as per Analytics Portal			Data as per *Parivahan* Dashboard		
		Fees	Tax	Total revenue	Fees	Tax	Total revenue
Vahan	2016	54.53	1,95,275.83	1,95,330.36	27,703.74	2,06,191.64	2,33,895.38
	2017	88.48	2,48,862.31	2,48,950.79	62,038.37	2,58,144.57	3,20,182.94
	2018	17.51	2,40,439.75	2,40,457.26	64,805.07	2,81,047.25	3,45,852.32
Sarathi	2016	0.41	-	0.41	0.41	-	0.41
	2017	3,869.38	-	3,869.38	3,834.02	-	3,834.02
	2018	12,545.02	-	12,545.02	14,184.42	-	14,184.42

In addition to the above, neither the Analytics Portal nor the dashboard of *parivahan* website shows bifurcated data of vehicles paying lump sum tax, recurring tax along with the revenue generated under these categories of vehicles. Further, the option to extract financial year wise data or data pertaining to a specific period is not provided in the Analytics portal. Thus, the incorrect/insufficient representation of data defeats the purpose of the portal and also could adversely impact the monitoring and decision-making process of the management.

Audit recommends that the Department may ensure that there is no mismatch of information available in the Analytics Portal and *Parivahan* website to facilitate dissemination of correct information to the stake holders.

7.2.17 Conclusion

The Department neither prepared IT Strategy Plan nor prepared a definite timeline for implementation of both Vahan 4.0 and Sarathi 4.0. Hence, there was delay in implementation of Sarathi 4.0/ various modules of Vahan 4.0. The delayed implementation of the applications deprived the public of

the benefit of web-based services available in Sarathi 4.0 and Vahan 4.0. Non-installation of Biometric devices purchased in May 2018 not only proved infructuous expenditure but also deprived the applications of improved access controls. The Department's lack of preparedness for procuring equipment with correct configuration defeated the purpose of implementation of e-Challan module. There was inefficient contract management due to which penalty was not levied and MIS portal was not set-up in Smart Card issuance contracts of DL and RC. Due to vulnerability of backlog module, there was manipulation of records which resulted in depriving Government of its revenue. Delegation and segregation of duties was inadequate in all the RTO/ARTO offices selected for audit. Deficient mapping of rules resulted in short levy of fees, non-levy of penalty and interest etc. There was absence of validation controls due to which data accuracy, integrity and migration of the complete data was questionable. The Department needs to improve the efficiency and effectiveness of the applications in close co-ordination with NIC to achieve the purpose of computerisation.

7.2.18 Recommendations

For optimum utilisation of Vahan and Sarathi and to provide service to the customer, it is recommended that the Department may:

- **coordinate with NIC for sending OTP to the RTO user of Vahan 4.0 each time he/ she logs into the system, analyse the security flaws in the system and further improve the access controls.**
- **improve input and validation controls in the backlog module of both Vahan and Sarathi applications and ensure that access to the module is limited to authorised staff only. Further, the Department may ensure that there is an audit trail in the applications to monitor the amendments made through backlog module so as to avoid data manipulation.**
- **strictly follow the principle of segregation of duties in accordance with the hierarchy of the organisation to ensure data integrity.**
- **take necessary steps in co-ordination with NIC to incorporate all the business rules and procedures in the system.**
- **take necessary steps to have in-built input and validation controls to prevent capturing of incorrect and incomplete data in the system.**
- **devise a robust complaint management system in co-ordination with NIC to monitor timely mitigation of errors and deficiencies in the system**
- **take up system modification to have the option of generation of notices/ memos from only one source instead of multiple sources. Further, option to generate category- wise, age-wise and registration number-wise tax defaulters list and corresponding multilingual notices containing the relevant information according to the provisions of the Act and Rules, may be provided in the system.**

- **ensure that there is no mismatch of information available in the Analytics Portal and *Parivahan* website to facilitate dissemination of correct information to the stake holders.**

7.3 Non-realisation of motor vehicles tax

The Gujarat Motor Vehicles Tax (GMVT) Act prescribes that transport vehicles such as contract carriage[47], goods carriage vehicles and non-transport vehicles[48]are required to pay tax on monthly/ half yearly/ yearly basis respectively, except for the period when the vehicles are not in use. As per Section 8A (1) of the Act, in case of delay in payment, interest at the rate of eighteen *per cent* per annum and as per Section 18 and CoT office Circular[49], if the delay exceeds one month, a penalty at the rate of two *per cent* per month subject to a maximum of 25 *per cent* of tax is also chargeable. Section 12 of the Act, *ibid*, authorises the Department to recover unpaid tax in the same manner as arrears of land revenue. Section 12B empowers the Department to detain and keep in custody the vehicles of those owners who defaulted in payment of Government dues.

During test check of the Demand and Collection Registers and Vahan system of five[50] taxation authorities, audit noticed[51] that the operators of 1,179 transport[52] vehicles (Goods vehicles, omnibuses[53]/ maxi cabs[54] etc.) and 216 non-transport[55] vehicles had neither paid tax nor filed non-use declarations[56].

Audit noticed that in case of four[57] taxation authorities, no demand notices were generated in respect of 898 transport vehicles and 216 non-transport vehicles while in case of two[58] taxation authorities, though demand notices were said to be generated in respect of 281 transport vehicles, no records such as office copies of the notices or dispatch registers were maintained to ascertain that the same have been dispatched to the defaulters. There was no proper monitoring system to trace such vehicles in default. Lack of monitoring by the taxation authority to ensure the fact that demand notices have been issued to all the defaulters and proper action under the provisions of the Act has been initiated to enforce the recovery of motor vehicle tax, resulted in non-realisation of motor vehicles tax amounting to ₹ 6.12 crore. Besides, interest and penalty were also leviable at the rates prescribed in the Act.

47 Maxicab, Motorcab etc.
48 Cranes, Compressors, Rigs, Excavators and Loaders etc.
49 No. CoT/Tax Default/Comp./On/5598 dated 16 November 2009.
50 Amreli, Godhra, Jamnagar, Mehsana andRajkot.
51 Between November 2017 and June 2018.
52 Registered between November 1986 and May 2017.
53 Any motor vehicle constructed or adapted to carry more than six persons excluding the driver.
54 Any motor vehicle constructed or adapted to carry more than six persons, but not more than 12 passengers excluding the driver, for hire or reward.
55 Registered between January 1987 and January2018.
56 For various periods between 2011-12 and 2017-18.
57 Amreli, Jamnagar, Mehsana and Rajkot
58 Godhra and Jamnagar

Table 12: Non-Recovery of Motor Vehicles Tax

Type of vehicles	No. of operators/ owners involved	Non-recovery of motor vehicle tax (₹ in lakh)
Transport	1,179	598.63
Non-transport	216	13.52
Total	**1,395**	**612.15**

On this being pointed out in audit, the taxation authorities stated that ₹ 28.60[59] lakh had been recovered in 118 cases while notices had been issued in 287 cases. In case of 21 non-transport vehicles it was stated that the vehicle owners had filed 'non-use declarations'. However, these 'non-use declarations' were not produced to audit. Further reply and details of recoveries are awaited (July 2019).

Industries and Mines Department

7.4 Non-levy of dead rent

Section 9A of the Mines and Minerals (Development and Regulation) Act, 1957, (in case of major minerals) read with Rule 21 of the Gujarat Minor Mineral Concession Rules, 2010 (in case of minor minerals) stipulates that if lease holders do not extract any mineral during the year or royalty paid/ payable on removal/ consumption of mineral extracted is less than dead rent payable, they are liable to pay dead rent or difference between dead rent payable and royalty actually paid.In case of delay in payment of dead rent, interest[60] is also chargeable. Further, as per Rule 28 of the Mineral Concession Rules 1960, read with Rule 42 of the GMMCR Rules, the lease shall be liable for cancellation if the lessee ceases to work on the lease/ quarry for a continuous period of two/ one year.

Audit verified the Demand and Collection Registers of the office of six[61] District Geologists for the period 2009-10 to 2017-18. Out of 866 mining lease/quarry leases[62] for major/minor minerals namely limestone, bauxite, black trap, ordinary sand and bentonite, allotted for a period ranging from three to 10 years, audit selected and checked 531 leases (61.32 *per cent* of the total leases) between November 2017 and August 2018. It was noticed in 120 leases (22.60 *per cent* of the checked cases) that there was non-levy of dead rent as detailed below:

(a) In 26 cases, the lease holder had not excavated any mineral for a continuous period of one/ two years. Thus, the leases were required to be cancelled. However, the Geologist office had not cancelled such idle leases. In these cases, the lessees were also required to pay the dead rent of ₹ 33.14 lakh.

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59 ₹ 25.58 lakh: 72 transport vehicles and ₹ 3.02 lakh: 46 non-transport vehicles.

60 Under Rule 64A of the Mineral Concession Rules 1960 and Rule 72 of the GMMCR 2010, simple interest at the rate of 24 *per cent* per annum and 18 *per cent* per annum respectively.

61 Devbhumi Dwarka, Gir Somnath, Godhra, Kutch-Bhuj, Rajpipla and Vyara (Tapi)

62 Mining leases means a lease granted for the purpose of undertaking mining operation and includes a sub-lease granted for the purpose. 'Query lease' means a lease granted for mining and quarrying operation in respect of minor minerals.

(b) In the remaining 94 cases, the royalty payable/ paid was less than dead rent payable. Thus, the lessees were liable to pay the differential amount between dead rent and royalty payable/ paid, amounting to ₹ 1.65 crore.

The Integrated Lease Management System (ILMS), an integrated Web Portal implemented in the Department to replace the manual processes did not have the provision to compare the dead rent payable in a year with the total royalty paid in that year and levy the difference. In absence of this, the Geologist offices were required to carry out the closing of the account of the leases annually based on the scrutiny of the returns filed by the lessees and raise demand notices wherever there was non-payment/short payment of dead rent with reference to the actual royalty paid. As no closing of accounts was carried out, the Geologist offices did not notice that certain leases were liable to be cancelled and dead rent/ differential dead rent was required to be recovered. This resulted in non-levy of dead rent of ₹ 1.98 crore. Interest was also chargeable for delayed payment.

On this being pointed out, the Geologist office, Somnath, recovered the amount of ₹ 4.06 lakh in seven cases and issued notices in seven cases. Reply in remaining cases has not been received. (April 2020).

7.5 Short levy of Stamp duty

The State Government grants land on lease for the mining activity and the order granting mining lease stipulates for the execution of lease deed by the lessee in this regard. Section 17(d) of the Registration Act, 1908, requires that the deeds conveying leasehold rights on immovable property for any term exceeding one year should be registered compulsorily. Section 3 and 27 read with Article 30 of the Schedule I of the Gujarat Stamp Act, 1958 provide for the levy of stamp duty in case of lease of mines in which royalty or share of produce is received as rent or part of rent depending on the term of the lease and average annual rent reserved. Similarly, Rule 10(2) of the Gujarat Minor Mineral Concession Rules, 2010 stipulates that where a Quarry Lease is granted under Sub-rule 1, the requisite lease deed shall be executed within three months of the date of order sanctioning the lease. Further, as per the Circular dated 04 September 1979 of the Superintendent of Stamps, Gujarat, in case of lease of mines, stamp duty will be levied on the aggregate of the annual dead rent, estimated annual royalty payable during first year, surface rent and security deposit.

During test check of the records of mining/quarry leases granted for the purpose of excavation of lime stone, granite, bentonite, black trap and ordinary sand in five[63] District Geologist offices for the year 2010-11 to 2017-18, audit selected and checked (between November 2017 to August 2018) 69 leases out of total 207 leases.

Out of the 69 mining/quarry leases (33.33 *per cent* of total cases) test checked in audit, it was noticed in 31 leases (44.93 *per cent* of the selected cases) granted for a period of three to 50 years that the District Geologist offices, while furnishing the details to DC (SDVO) / Sub Registrar offices for

[63] Amreli, Bhuj (Kutch), Gir Somnath, Godhra and Vyara

calculation of stamp duty, had inadvertently mentioned the estimated first year production as stated by the leaseholders in their application instead of the estimated first year production figure mentioned in the approved mining plan. Accordingly, the DC (SDVO) / Sub Registrar offices had calculated the stamp duty leviable on the lease deeds based on the incorrect estimated first year production figures provided by the District Geologist offices. As the mining plan is prepared by a technically qualified person and is the closest possible estimate, the estimated production during the first year as mentioned in the mining plan should have been taken as base for the purpose of calculation of stamp duty.

In these cases, stamp duty of ₹ 2.52 crore was required to be levied. However, the Department levied stamp duty of ₹ 68.51 lakh. This resulted in short levy of stamp duty of ₹ 1.84 crore.

On this being pointed out, in one case, an amount of ₹ 95.81 lakh was recovered from the lease holder by the Department. The replies in remaining cases have not been received (April 2020).

Audit recommends that the Department may consider issuing necessary instructions to the District Geologist offices to assess stamp duty leviable on the mining/quarry lease deeds based on the estimated first year production figures mentioned in the approved mining plan.

(H. K. DHARMADARSHI)
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Ahmedabad
The

Countersigned

(RAJIV MEHRISHI)
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