

compounded by the Commissioner, non-levy of surcharge of 100 *per cent* of the license fee on Foreign Liquor (FL) retailers, delay in disposal of confiscated liquor goods *etc.* involving ₹ 2.24 crore.

Transport Department

There are 14 auditable units in the Transport Department. A total of 38,135 vehicles were registered during 2020-21 in the State. Audit selected eight units for test check and entire case of vehicles registered were verified during audit. Audit noticed 22 cases of non-renewal of permits of M/C taxi, non-recovery of contract carriage permit fee, non-payment of road tax, non-payment of passenger tax, non-compounding of offence, short levy of fee for special number, non-levy of higher penalty for second offence, short levy of Registration fee on vehicles registered in the name of firms, collection of road tax in excess of rates prescribed by Government of Goa *etc.* involving ₹ 3.24 crore.

An IT Audit on Implementation of Vahan 4.0 and Sarathi 4.0 in Goa was also conducted during the year 2020-21.

Registration Department

There are 15 auditable units in the Registration and Stamp Department of which three units were audited during 2020-21. A total of 16,383 instruments were registered during 2020-21 out which 92 instruments were selected for test check. Audit noticed six cases of realisation of deficient registration fee, escapement of stamp duty and registration fees due to splitting of sale deeds, short levy of Registration fee due to under valuation of property, short levy of Stamp duty and Registration fees due to non-application of minimum land rate *etc.* involving ₹ 11 lakh.

Transport Department

2.2 Information Technology (IT) Audit on Implementation of Vahan 4.0 and Sarathi 4.0 in Goa

The National Informatics Centre (NIC) developed centralized web-based applications called Vahan 4.0 and Sarathi 4.0 for the automation of vehicle and license related transport services in the country. These were operationalized by the Directorate of Transport (DoT), Government of Goa during 2017 and 2018. Information Technology Audit of these applications was taken up to evaluate the effectiveness of their implementation.

Department neither had an action plan nor a formal mechanism for monitoring the progress of implementation of Vahan 4.0 and Sarathi 4.0. As at the end of April 2021, 14 modules of Vahan 4.0 and 05 modules of Sarathi 4.0 were implemented and only 09 out of 31 online services were provided end-to-end, while the remaining 22 services were partially implemented. Department may prepare an action plan for the time bound

implementation of the remaining modules, including all the end-to-end online services envisaged.

Audit noticed certain instances of incorrect/non-mapping of business rules resulting in irregularities in the levy of fee on fresh issue of Smart Registration Card in certain cases, grant of Driving License (DL) to underaged persons, penalties for registration beyond validity period, misclassification of certain vehicle categories, inconsistent application of rules for issue of Fitness certificate *etc.* This indicated gaps in the application controls, which impacted the correct application of rules, data integrity and Management Information System (MIS) reporting.

Due to certain inadequacies in input controls, data validation in key fields relating to vehicle classification, homologation module, pollution control validity, change in class of vehicles, receipt matching with treasury challans *etc.* was lacking. This caused some inaccuracies/incompleteness in data and erroneous application of rules.

Further, the absence of adequate output controls resulted in incorrect tax collection years in the database, incorrect passenger tax defaulters' data, inconsistencies in the MIS reports and mismatch between Analytics portal and Parivahan dashboard. The Department may put in place adequate output controls, ensure correct MIS reporting and address the data mismatch issues between the Analytical portal and Parivahan website, to facilitate dissemination of correct information to the stake holders.

Segregation of roles pertaining to data entry, verification and approval was not enforced, which made the system vulnerable to inaccuracies and manipulation. Further, weak logical access controls such as use of default passwords, absence of periodical password change process and One Time Password (OTP) related issues were noticed.

2.2.1 Introduction

The Ministry of Road Transport and Highways (MoRTH), Government of India makes the broad policy for regulation of road transport in the country, while the State Governments are responsible for the public transport system, registration of vehicles, issue of driving licenses, road permits, fitness certificates and collection of road taxes as per the Motor Vehicles (MV) Act, 1988. The MoRTH envisaged the Transport Mission Mode Project (MMP) under National e-Governance Plan (NeGP), with the objective of modernizing the IT infrastructure and improving the quality of services provided to citizens by bringing in efficiency, transparency, accountability and reliability in services. Accordingly, the National Informatics Centre (NIC) developed the applications; Vahan for registration of vehicles and Sarathi for the issue of driving licences to facilitate the functionalities mandated by the Central and State Motor Vehicles Acts and Rules. NIC was to extend

support for configuring the applications as per the State specific needs to the extent possible within the framework of a centralised architecture.

In Goa, the Vahan and Sarathi applications (Version 2.0) were implemented from the year 2010. Subsequently the NIC developed new centralised web-based versions of these applications; Vahan 4.0 and Sarathi 4.0 and the various modules for providing transport related services by the State departments were made available under the Parivahan portal. All the states were required to implement the new web-based version by March 2017, as per MoRTH's communication (June 2016). Key modules/services under Vahan 4.0 and Sarthi 4.0 are depicted in **Chart 2.4** and **Chart 2.5**.

Chart 2.4: Key modules/services under Vahan 4.0



Chart 2.5: Key modules/services under Sarathi 4.0



2.2.2 Organisational set up of the Transport Department

The management and functioning of the Transport Department in the State at the apex level is overseen by the Secretary (Transport). The Director of Transport (DoT) is the authority for implementing the provisions of the MV Act⁷ and Rules⁸ made there under and is assisted by a Deputy Director (Admin), two Deputy Directors (Transport) and 10 Assistant Directors of Transport (ADT)⁹ at the taluka level. There are two Enforcement wings¹⁰ in two districts, each headed by an ADT and five border check posts¹¹ functioning under the Enforcement wing.

2.2.3 Audit objectives

The Information Technology (IT) audit was taken up with a view to examine whether:

- The Transport Department formulated a strategic plan and action plan for providing online services and implementation of Vahan and Sarathi modules;
- Proper mapping of business rules was ensured in Vahan and Sarathi;

⁷ Central Motor Vehicles Act, 1988/ The Goa Daman and Diu Motor Vehicles Tax Act, 1974 and The Goa Daman and Diu (Taxation on Passengers and Goods) Act, 1974

⁸ Central Motor Vehicles Rules, 1989 / The Goa Motor Vehicles Rules, 1991

⁹ North Goa- Panaji, Mapusa, Bicholim, Pernem, South Goa- Margao, Ponda, Vasco, Quepem, Canacona, Dharbandora

¹⁰ One each at North and South Goa

¹¹ Mollem, Polem, Dhargal, Dodamarg, Keri

- The controls were adequate to ensure integrity, reliability, confidentiality and availability of data;
- Adequate system and data security policies have been framed and implemented for accessibility, retrieval and security of data; and
- Monitoring and supervision was adequate to ensure effective and efficient functioning of the applications.

2.2.4 Audit criteria

The audit criteria for this IT audit are based on the following:

- The Central Motor Vehicles (CMV) Act, 1988 and Central Motor Vehicles (CMV) Rules, 1989;
- The Goa, Daman and Diu Motor Vehicles Tax (GDDMV) Act, 1974, the Goa, Daman and Diu Motor Vehicles Tax (GDDMV) Rules, 1974, the Goa Daman and Diu (Taxation on Passenger and Goods) Act, 1974 and the Goa Daman and Diu (Taxation on Passenger and Goods) Rules, 1975 and Goa Motor Vehicle Rules, 1991;
- User manuals of various modules of Vahan 4.0 and Sarathi 4.0; and
- Guidelines/Instructions/Circulars/Orders issued by the Department.

2.2.5 Scope of audit and methodology

The IT audit was conducted between July to December 2021 covering a period of five years from 2016-17 to 2020-21. Audit evaluated the implementation of Vahan 4.0 and Sarathi 4.0 and its utilisation by the Department of Transport. Checks were exercised to ascertain the General and Application controls of the system and aspects relating to planning, implementation and monitoring by the Department. State level data pertaining to registration of vehicles, taxation, conversion, fitness, transfer of vehicles, homologation data, issue of licences *etc.* was carried out by using IDEA software on the Vahan 4.0 and Sarathi 4.0 datasets. For this purpose, the records and data maintained in the office of Director of Transport and four¹² offices of the ADTs were selected out of 12¹³ ADT offices for scrutiny through random sampling method. As enforcement activities were also carried out by the registering authorities, the two Enforcement offices were not considered for selection.

The audit objectives, criteria, scope and methodology of audit were explained in an entry conference held (July 2021) with the Secretary (Transport) and other concerned officers. The audit findings, conclusion and recommendations were discussed in the exit conference held (May 2022) with the Secretary (Transport). Replies received from the Department are incorporated at appropriate places in the report.

¹² Panaji, Mapusa, Margao and Canacona

¹³ At taluka level- 10 ADTs (Registering Authority), 02 ADTs (Enforcement)

2.2.6 Details of revenue and registration of vehicles

The details of number of vehicles registered, licenses issued, and revenue collected by the Department during the period 2016-17 to 2020-21 are shown in **Table 2.14**.

Table 2.14: Details of number of vehicles registered, licences issued and revenue collected

Year	Total vehicles registered	Total licences issued	Total revenue ¹⁴ collected (₹ in crore)
2016-17	80403	37438	275.56
2017-18	86119	28558	341.97
2018-19	75076	40960	327.54
2019-20	57817	53184	299.32
2020-21	38135	50245	233.32

(Source: Information received from Department)

2.2.7 Acknowledgment

Audit acknowledges the co-operation and assistance extended by the State Government and its implementing offices in conducting the IT audit.

Audit Findings

2.2.8 Planning and implementation

2.2.8.1 Lack of planning

As part of its vision for providing efficient, safe and modern transport environment for the people, the Transport Department envisaged to make its work faceless, system driven and online, with very little interaction of public with employees of the Department, by 2025. However, there was no specific plan or action plan for achieving this vision or for the implementation of Vahan 4.0 and Sarathi 4.0 applications. Further, there was no formal mechanism for monitoring the progress and timely implementation of the applications.

The importance of a detailed action plan and the role of an empowered committee to steer the course of the project in ensuring the successful implementation of IT projects of this nature cannot be over emphasised. Their absence led to implementation delays and non-completion of modules in Vahan 4.0 and Sarathi 4.0, as well as inability to systematically address the issues that came up during the course of implementation, as discussed later in this report.

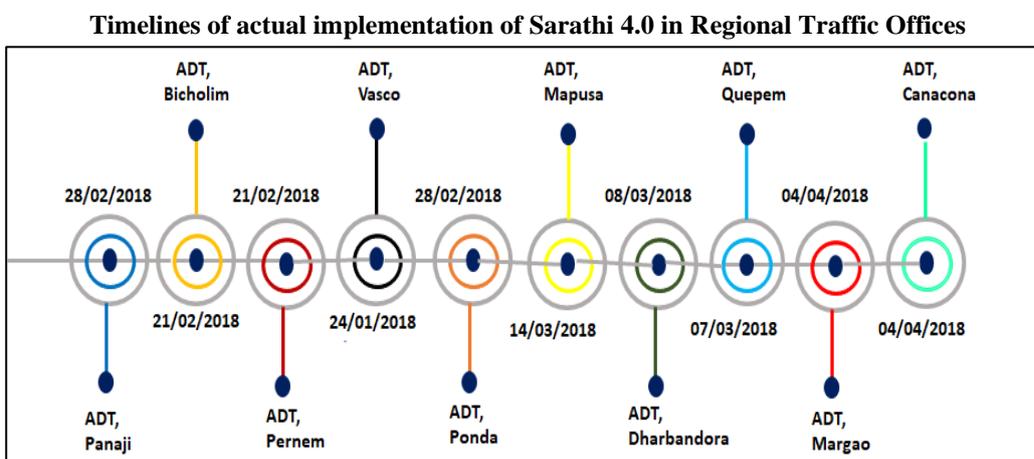
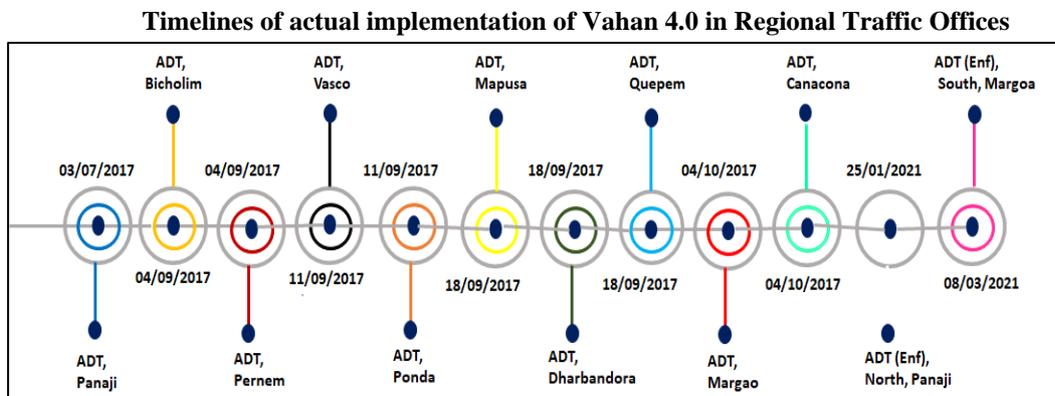
Accepting the audit observation, the Department constituted a Steering Committee under the chairmanship of the Director of Transport in January 2022.

2.2.8.1 (i) Delay in implementation of various modules

A total of 17 and 07 modules each in Vahan 4.0 and Sarathi 4.0 respectively were to be implemented in Goa. The Department issued an order to implement Vahan 4.0 on pilot basis from 01/07/2017 and then roll out in all ADT offices by

¹⁴ Road tax, passenger tax, fees & fines, cess, other receipts

31/07/2017. For Sarathi 4.0, the implementation was planned to start from 22/01/2018 and be completed by 04/04/2018. However, no detailed action plan with timelines for implementation of Vahan 4.0 and Sarathi 4.0 and its modules/across the Department was prepared to guide the timely implementation of the said modules.



As against the timeline of March 2017 mandated by the MoRTH, following delays were noticed in the implementation of the applications:

- a) There was an overall delay in implementation of Vahan 4.0 by three to six months and Sarathi 4.0 by 09 to 12 months in the 10 registering offices.
- b) The two¹⁵ ADT offices for Enforcement were brought under the ambit of Vahan 4.0 after a delay of 45 to 47 months.
- c) The following modules under Vahan 4.0 were implemented with a delay ranging from 12 to 50 months by the Department:

¹⁵ ADT (Enforcement) Panaji in January 2021 and ADT (Enforcement) Margao in March 2021

Table 2.15: Delay in implementation of the module under Vahan 4.0

Sl. No.	Name of module	Nature of service	Date of implementation of the module	No. of months delayed against targeted completion mandated by MoRTH (March 2017)
1	Tax	Tax payment	04/04/2018 (four ADTs)	12 months
2	Fitness	Fitness Certificate	10/10/2019 (Panaji) 09/01/2019 (Mapusa) 01/04/2019 (Madgaon) 11/10/2018 (Canacona)	16 to 30 months
3	e-Challan	Enforcement related activity	14/12/2020 (four ADTs)	44 months
4	Permit	Permit ¹⁶ to transport vehicle	08/03/2021 (Mapusa) 03/06/2021 (Canacona)	47 to 50 months
5	Fancy number	Allotment of fancy number	04/04/2018 (four ADTs)	12 months
6	Payment gateway	Online payment	04/04/2018 (four ADTs)	12 months

(Source: Data compiled by audit)

- d) Under Sarathi 4.0, Conductor's licence was partially implemented in two ADT offices (Mapusa, Panaji) after a delay of 42 months. The Driving School module was partially implemented in one ADT office (Panaji) after a delay of 52 months.
- e) DoT was required to link the emission data with Vahan database from April 2019 as per notification issued by the MoRTH (June 2018). Emission results obtained during testing of the vehicle were required to be uploaded through an online process into the Vahan database. Linkage of the Pollution Under Control (PUC) data was implemented after a delay of 16 months (*w.e.f.* 30/07/2020) by the Department.

Hence, there were delays in implementation which could have been avoided through better planning and monitoring.

2.2.8.1 (ii) Non-implementation of certain modules

The following modules/services are yet to be implemented by the DoT.

- The Check post module (Vahan 4.0) facilitates online tax payment by vehicle owners, saving them the effort of physically visiting the transport office, while enabling the Department to collect taxes in a cashless and seamless manner. However, the Department was yet to implement this module and the check posts in Goa continue to use an offline application developed by NIC which is not integrated with Vahan 4.0. Hence, people still need to visit the check post office for making payments, which is inconvenient, non-transparent and carries the risk of revenue leakage.

¹⁶ Permit relating to Panaji, Margao are covered by ADT (Enforcement) North and South respectively

- As per Rule 33 of CMV Rules- Motor vehicles in the possession of the dealer shall be exempted from the necessity of registration subject to the condition that he obtains a trade certificate from the registering authority that has jurisdiction in the area. Further, as per Rule 18 of GDDMV Tax Rules, 1974 the vehicle owner not intending to use the vehicle can avail exemption from payment of tax by making a declaration of non-use. Trade Certificate module and ‘Non-use’ service, though available in Vahan 4.0, were not implemented and were being processed manually by the Department.
- As per Section 29 of the CMV Act, no person can act as a conductor of a stage carriage without having a valid license. Conductors’ License module (Sarathi 4.0) was not implemented in two (Margao, Canacona) out of four selected ADT offices and the licenses were issued manually. Further, as per Rule 24 of the CMV Rules, a driving school cannot be established without a license issued by the licensing authority. Driving School module was not implemented in three (Mapusa, Margao and Canacona) out of four selected ADT offices and the licenses were issued manually.

On being pointed out by Audit, the Department replied (05/05/2022) that Trade Certificate module was implemented *w.e.f.* 30/03/2022 and conductor licence module was in use at all ADTs. Testing of Check post module was in progress. Also, the ADTs were directed to use ‘non-use service module’ under Vahan 4.0 for processing and approving the applications received for non-use of vehicle.

2.2.8.1 (iii) Delay in providing certain end-to-end online services

Out of 31 online services that could be provided end-to-end, online services were provided by the Department only for five services under Vahan 4.0 and four services under Sarathi 4.0 (December 2021) the services are operational now, as detailed in **Table 2.16**.

Table 2.16: Delay in implementation of end-to-end online services under Vahan 4.0 and Sarathi 4.0

Sl. No.	Application	Due date	Date implementation of the Department	Delay in implementation
Vahan 4.0				
1	Online tax payment	31/03/2017	04/04/2018	12 months
2	Update mobile number in Registration Certificate (RC)	31/03/2017	04/04/2018	12 months
3	Service withdrawal	31/03/2017	04/04/2018	12 months
4	Fancy number booking	31/03/2017	17/03/2020	35 months
5	Apply for new goods permit	31/03/2017	15/04/2021	48 months
Sarathi 4.0				
1	DL Extract	31/03/2017	04/04/2018	12 months
2	Application cancellation	31/03/2017	01/04/2021	48 months
3	Mobile number update	31/03/2017	01/04/2021	48 months
4	Apply for learner license	31/03/2017	01/07/2021	51 months

(Source: Data compiled by audit)

The implementation of these end-to-end services under Vahan 4.0 was delayed by 12 to 48 months and 12 to 51 months under Sarathi 4.0 from the timelines mandated by MoRTH. Several of the remaining¹⁷ online services were partially implemented and the applicant had to visit the ADT office at the later stage of the process, to avail the services. Delays in implementation of end-to-end online services, available in Vahan 4.0 and Sarathi 4.0, impacted the timely achievement of the Department's goal of providing cost-effective and user-friendly services to the public. Further, MoRTH¹⁸ had identified 16 contactless services to be provided online with Aadhar based authentication.

The Department, while accepting the audit observation, stated (05/05/2022) that seven additional services were implemented as on 08/04/2022 and for the remaining services NIC was requested to expedite implementation.

2.2.8.1 (iv) Absence of Refund module in Vahan 4.0

Section 9 of the GDDMV Tax Act, 1974 provides for refund of MV tax paid in advance, subject to certain conditions. The four selected offices have granted 95¹⁹ refunds of ₹ 44.20 lakh during the period 2016-17 to 2020-21 as detailed in **Table 2.17**.

Table 2.17: Details of refund cases

(₹ in lakh)

Year	Cases	Refund amount
2016-17	07	01.10
2017-18	15	11.24
2018-19	09	07.19
2019-20	20	05.69
2020-21	44	18.98
Total	95	44.20

(Source: Data compiled by audit)

The refunds were processed manually as no module for processing refunds has been incorporated in Vahan 4.0 by NIC and automation to that extent was incomplete. Manual processing of refunds meant that, the public were bound to visit the office to apply for their refund claims as well as to know the status of refund. Given the increase in the number of refund cases over the years, processing of refund cases through Vahan 4.0 would improve the efficiency of processing and ensure better service to the public.

The Department replied (16/11/2021) that NIC has been requested to incorporate the provision of processing the refund cases in Vahan 4.0.

¹⁷ Transfer of ownership, hypothecation termination and addition, issue of duplicate RC, issue of fitness certificate, change of address in RC, RC renewal, RC cancellation, conversion of vehicle, alteration of vehicle, apply for driving licence, DL renewal, change of address in DL etc.

¹⁸ Notification dated 03/03/2021 by MoRTH

¹⁹ Refund cases of ADT Margao for the period 2016-17 were not included as the same was not provided

2.2.8.1 (v) Delay in procurement and non-utilization of hardware

With a view to ensure enhanced performance and compatibility with the upgraded versions of the application, NIC provided (October 2017) the technical specifications for computers and peripherals²⁰ required for the implementation of Vahan 4.0 and Sarathi 4.0. Based on this the Department obtained the hardware requirements from all the ADT offices. Audit observed the following:

- There were delays in the procurement of computers and peripherals as the same were procured between July 2018 and February 2019 *i.e.* well after the implementation of Vahan 4.0 (October 2017) and Sarathi 4.0 (April 2018) applications.
- The e-Challan application comprising an android based mobile app and web interface was a sophisticated application software integrated with Vahan 4.0 and Sarathi 4.0, providing several user-friendly features covering all major functionalities of Traffic Enforcement System and management of traffic violations. It facilitates, on-site card payment and offences recorded through the e-Challan module, directly blocks the transactions against the RC/DL and records repetition of offence. NIC had recommended the procurement of Smart phone/Tabs (handheld devices) for the e-Challan module. However, the Department implemented the e-Challan module in December 2020 without procuring the required hardware. Even as of December 2021, the Department did not procure the necessary hardware and was issuing challans manually.
- At ADT Canacona, seven computers have remained unused since their procurement (February 2019) due to lack of office space, which showed that adequate planning was not done before the procurement of hardware, resulting in scarce resources lying idle.

Poor planning led to delays in procurement of computers as well as non-procurement of hardware for the e-Challan module, impacting project timelines and the Department's ability to reap the benefits of the new applications in full.

The Department replied (05/05/2022) that computers lying idle had been relocated to other ADTs and handheld devices for e-Challan module provided to all the ADTs.

Recommendation 1: The Department may prepare an action plan for the time bound implementation of the remaining modules/services in Vahan 4.0 and Sarathi 4.0, including the provision of all the envisaged end-to-end online services.

²⁰ Desktop computers and peripherals (laptop, servers, scanners, printers, UPS *etc.*)

2.2.9 Application controls

Application controls consist of input, output and processing controls and help to ensure rule mapping, proper authorization, completeness, accuracy and validity of transactions. Audit findings on the mapping of business rules in the applications and adequacy of application controls are discussed in the following paragraphs.

2.2.9.1 Mapping of business rules in Vahan 4.0 and Sarathi 4.0

The Department is governed by the MV Act and Rules, and all the extant business rules are to be incorporated in the IT applications. Data analysis was carried out to assess the compliance of Vahan 4.0 and Sarathi 4.0 applications with the relevant rules and regulations. Several instances of incomplete, improper and non-mapping of business rules were noticed, as detailed in the following paragraphs:

2.2.9.1 (i) Levy of irregular fee on issue of fresh RC smart card on cancellation of hypothecation agreement

As per the notification of Government of Goa (May 2017), an additional fee of ₹ 200 was not to be charged for issue of fresh smart card upon cancellation of hypothecation agreement.

During the period between 12 May 2017 to 31 March 2021, in 56,709 cases in respect of all the registering authorities (37,473 cases in selected units), fee amounting to ₹ 1.14 crore (₹ 75.35 lakh in selected units) was collected on the issue of fresh smart cards after cancellation of hypothecation agreements, which was in violation of the relevant provision. Non-mapping of the business rule as per the Government's notification resulted in an irregular levy on the public.

The Department, while accepting the audit observation replied (05/05/2022) that the customisation in fee calculation was tested successfully on the test server and requested NIC to make it live.

2.2.9.1 (ii) Non mapping of penalty provisions for registration beyond the validity of temporary registration and irregular collection of penalty for delayed registration of new vehicle

Section 43 of the CMV Act, 1988 mandates a vehicle owner to get a temporary registration number with a validity period of one month. 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 a vehicle without registration or despite the suspension or cancellation of registration attracts different amounts of penalty²¹ for different categories of vehicles under Section 192 of the Act.

a) Analysis of Vahan 4.0 database for the period²² between April 2016 to March 2020 in respect of all the registering authorities revealed that 504 temporary registered vehicles were not registered permanently within one month from the

²¹ Heavy Motor Vehicle- ₹ 3,000, Taxi cab/Minibus/Motor car/motor cycle- ₹ 2,000

²² Due to exemption provided during pandemic 2020-21 was not considered.

date of temporary registration. In the four selected units, 352 vehicles were not registered permanently within one month. Out of these, in the case of 220 vehicles it was seen that the penalty was levied under wrong heads viz. miscellaneous or difference of fee instead of penalty head.

As the relevant provision was not mapped in Vahan 4.0 the penalty u/s 192 of the Act was not calculated/levied automatically. Non-mapping of penalty provisions in the IT application resulted in non-levy of penalty of ₹ 3.59 lakh in respect of 132 vehicles as detailed in **Table 2.18**.

Table 2.18: Non levy of penalty beyond the validity of temporary registration

Type of Vehicle	No. of Vehicles	Penalty rate leviable	Short levy of penalty
Goods carriage, Bus, Construction equipment, Dumper, Crane mounted and forklift	95	3000	285000
Taxi cabs, Auto rickshaws, Motor cars and tractors	37	2000	74000

(Source: Data compiled by audit)

On being pointed out by Audit, the Department replied (16/12/2021) that NIC has been requested to map the Vahan 4.0 system with provision to auto calculate the penalty u/s 192 in case of delay in registration.

b) As per Rule 47 of CMV Rule, 1989, an application for registration of a motor vehicle shall be made to the registering authority within a period of seven days from the date of delivery of the vehicle, excluding the period of journey.

Audit noticed that a penalty of one *per cent* per month of MV tax was levied on new vehicles which did not apply for temporary registration within the stipulated time period. However, this rate of penalty was not authorised by any Act, notification or provision. During the audit period, a total of ₹ 21.78 lakh was collected irregularly as penalty in 807 cases by all the registering authorities in Goa. In the selected units, fine amounting to ₹ 16.49 lakh in 651 cases was collected as detailed in **Table 2.19**.

Table 2.19: Cases of fine collected for delayed registration

Name of office	2016-17		2017-18		2018-19		2019-20		2020-21	
	No. of cases	Penalty collected (in ₹)	No. of cases	Penalty collected (in ₹)	No. of cases	Penalty collected (in ₹)	No. of cases	Penalty collected (in ₹)	No. of cases	Penalty collected (in ₹)
Panaji	0	0	13	18429	11	19319	23	51113	88	61715
Mapusa	0	0	32	54806	39	218498	40	316179	123	116659
Margao	1	12750	37	86712	68	143741	67	318355	81	219188
Canacona	0	0	05	2658	01	231	05	3224	17	5617
	1	12750	87	162605	119	381789	135	688871	309	403179

(Source: Data compiled by audit)

The Department, while accepting the audit observation, replied that levy of this penalty was as per prevailing practices and the process of amendment had been initiated.

Collection of penalty without any authority is irregular and the Department is required to frame the necessary rules for levy of penalty for delayed registration. Further, non-existent business rules should not be built into the IT application.

2.2.9.1 (iii) Non mapping of registration fee provision for construction equipment vehicles

Construction equipment vehicles²³ have been defined under Rule 2 (cab) of the CMV Rules 1989 and the registration fee for issue or renewal of certificate of registration is prescribed under Rule 81 of the CMV Rules for various types²⁴ of vehicles. Construction equipment vehicles are required to be categorised as ‘any other vehicle’ and attract a fee of ₹ 3,000 as per notification (12/05/2017) issued by the Government of Goa.

Analysis of Vahan 4.0 data in respect of all the registering authorities revealed that 119 construction equipment vehicles/crane mounted vehicle/earth moving equipment vehicles were incorrectly categorised as LMV or MMV resulting in short levy of registration fee amounting to ₹ 2.87 lakh. As these vehicles did not belong to any of the specified categories, as per the extant provisions, they were to be registered under the category ‘any other vehicle’ and fees levied accordingly. The misclassification was further verified in the selected units where 62²⁵ construction equipment vehicles were misclassified leading to short levy of registration fee amounting to ₹ 1.51 lakh during the audit period.

The Department, while accepting the audit observation, replied (25/11/2021) that NIC has been informed to incorporate the necessary provision for mapping the registration fees with the correct vehicle type.

2.2.9.1 (iv) Incorrect requirement of NOC for change of address/ ownership of vehicles from one ADT office to another within the State

As per provisions of Section 48, 49 and 50 of the CMV Act, 1988, No Objection Certificate (NOC) from the Department was required for transferring a vehicle from one state to another, while there was no such requirement for change of address and ownership of the vehicles within the State.

Analysis of NOC data for the audit period in respect of all the registering authorities revealed that a total of 76,230 NOCs (47,097 NOCs in selected units)

²³ Rubber tyred, rubber padded or steel drum wheel mounted, self-propelled, excavator, loader, backhoe, compactor roller, dumper, motor grader, mobile crane, dozer, fork lift truck, self-loading concrete mixer or any other construction equipment vehicle

²⁴ Invalid carriage, Motorcycle, Light Motor Vehicle (LMV), Medium Goods Vehicle, Heavy Goods vehicle, Medium passenger vehicle, Heavy passenger vehicle, imported motorcycle, imported vehicle and any other vehicle not mentioned above

²⁵ Construction equipment vehicle-32, crane mounted-22, earth mover-08= 62

were issued for transfer from one registering authority to another within the State on account of changes in the address or ownership of the vehicles. Vahan 4.0 application did not provide access to another RTO for change of address or ownership of the vehicles unless the NOC was recorded at the previous RTO. Vahan 4.0 application requires processing through the NOC service for change of address or ownership from one ADT office to another within the State, as the provisions of Section 49 and sub-clause (i) of Sub-section 1(a) of Section 50 of the Act have not been mapped correctly. Incorporation of rules in violation of the provisions of the Act is irregular and goes against the spirit of the Department's mission of providing hassle-free services to citizens.

The Department, while accepting the audit observation, replied (05/05/2022) that NOC service has been enabled in Vahan 4.0 as an end-to-end online service. Reply is not acceptable as the requirement of NOC within the State delays the transfer from one R.T.O. to another and defeats the purpose of an online system.

2.2.9.1 (v) System accepted MV tax without confirming the validity of insurance

Under Section 4(1) read with Section 3 of the GDDMV Act, 1974, at the time of making payment of Motor Vehicle tax, the vehicle owner must produce before the authority a valid certificate of insurance before making the payment of tax. In Vahan 4.0, the insurance data was directly captured from insurance companies and the latest renewal status of insurance was readily available.

Analysis of tax payment data for the year 2019-20²⁶ and the validity of insurance at the time of payment of tax revealed that in 1,545 cases in respect of all the registering authorities (991 in selected units), tax payment was made even though the insurance had expired. The system accepted payment of MV tax without ensuring the validity of insurance, in violation of the provision of the Act.

The Department, while accepting the audit observation replied (05/05/2022) that necessary check had been introduced in the software.

2.2.9.1 (vi) Incorrect grant of driving licence to underaged persons

As per Section 4 of CMV Act 1988, no person under the age of 18 years shall drive a motor vehicle in any public place, except a motorcycle with engine capacity not exceeding 50 Cubic Capacity (CC) that may be driven in a public place by a person after attaining the age of 16 years.

A total of 1,603 driving licenses were issued by all the registering authorities in Goa during the audit period (1,150 in selected units) to the applicants in the 16 to 18 years age group under the category "motorcycle without gear", though these applicants were eligible for DL only under the category "motorcycle with engine capacity not exceeding 50 CC" as per provision under Section 10(2) of the Act.

²⁶ Period 2020-21 not considered due to prevalence of pandemic

As the Sarathi 4.0 application was not mapped in accordance with the requirement of the Act, underage persons were allowed to drive all categories of two wheelers without gear, including those with engine capacity exceeding 50 CC.

Accepting the audit observation, the Department replied (16/12/2021) that NIC has been requested to make the necessary changes in the Vahan 4.0 software.

2.2.9.1 (vii) Delay in issuance of registration certificate for want of updation of HSRP details

Vehicle dealers carry out registration of new vehicles through the Dealers Point Registration module. As per the citizen charter of the Transport Department, the smart card registration certificate was to be issued within 15 days of the date of registration of the vehicle. High Security Registration Plates (HSRP) were mandated by the MoRTH (December 2018) for all new vehicles sold on or after 01/04/2019. The smart card registration certificate could be printed only after linking the plate's unique code²⁷ with assigned vehicle registration mark²⁸.

In 623 cases in respect of all the registering authorities the smart card registration certificates could not be generated and issued within the prescribed time as the HSRP updation by the dealers was pending (as on 11/04/2022) in Vahan 4.0. As the service level requirement of issue of registration certificate within 15 days of the vehicle registration was not built into the system, there was no control feature that could enable monitoring and enforcement of compliance with the citizen's charter by the Department.

The Department replied (05/05/2022) that the matter would be taken up with the dealers to speed up fixation of HSRP once a new vehicle is registered.

2.2.9.1 (viii) Fitness certificate not allowed to vehicles with road tax arrears whereas allowed to vehicles with passenger tax arrears

As per Section 56 of the CMV Act 1988, a certificate of fitness can be issued to a transport vehicle only when the vehicle complies with all the requirements of the Act and the rules made thereunder.

Audit noticed that in Vahan 4.0, the issue of fitness certificate was not allowed where MV tax of the vehicle was in arrears, whereas it was allowed in cases where passenger tax was in arrears. Data analysis of fitness certificates issued and passenger tax paid details revealed that during the audit period, in respect of all the registering authorities in Goa, 1,169 vehicles (706 in selected units) with arrears of passenger tax were granted fitness certificate in Vahan 4.0. Incomplete mapping of business rules resulted in inconsistent and wrong application of the rule.

²⁷ At the time of manufacture of HSRP plate the unique code is generated by the vendor and the same updated in Vahan 4.0 after obtaining assurance from the dealer.

²⁸ Provided by RTO

Accepting the audit observation, the Department replied (25/11/2021) that Vahan 4.0 was not configured to check for passenger tax up to date status for any vehicle related transaction. The NIC has been requested to check for passenger tax up to date status before any transaction could be made.

2.2.9.1 (ix) Cancellation of receipts without prior approval of ADT

In Vahan 4.0 and Sarathi 4.0, the right to collect cash, generate receipts and cancel the receipts so generated has been given to the cashiers. A total of 4,475 receipts amounting to ₹ 7.58 crores were cancelled in respect of all the registering authorities during the period 2017-18 to 2020-21 due to various reasons such as entry of incorrect registration certificate, entry of incorrect transaction, non updation of manually issued fitness certificate validity in Vahan 4.0 etc.

In four selected ADTs, 814 receipts valuing ₹ 5.29 Crore were cancelled during the said period as detailed in **Table 2.20**.

Table 2.20: Cases of cancellation of receipts without prior approval of ADT

Name of the ADT office	2017-18		2018-19		2019-20		2020-21	
	No. of Receipts	Amount (in ₹)	No. of Receipts	Amount (in ₹)	No. of Receipts	Amount (in ₹)	No. of Receipts	Amount (in ₹)
Mapusa	89	385812	90	368890	72	165729	28	48333
Panaji	68	3831051	92	45968666	34	72953	44	205012
Margao	10	194418	98	597494	88	837674	71	128136
Canacona	-	-	07	11460	07	9290	16	58525
Total	167	4411281	287	46946510	201	1085646	159	44006

(Source: Data compiled by audit)

Cancellation of these receipts in the system was done through OTP authentication from the registered user's mobile.

Audit observed that prior approval of the ADT for cancellation of receipts was not obtained in the system, as the system did not facilitate a two-level check, as is available for other services *i.e.* through segregation of verification and approval roles for receipt cancellation. Due to the absence of system-based approval by the ADT, manual approvals for cancellation were later obtained from the ADTs. Cancellation of receipts without a system-based prior approval of the supervisory authority is fraught with the risk of misuse.

Accepting the audit observation, the Department replied (20/12/2021) that NIC has been requested to make the provision for two level processing and approval of cancellation of receipts under Vahan 4.0 and Sarathi 4.0.

2.2.9.1 (x) Absence of mapping of revenue collection modes

Vahan 4.0 and Sarathi 4.0 provided for two modes of revenue collection- cash and other than cash (only draft option). Though revenue was also collected through debit/credit cards using Point of Sale (PoS) machines and bank challans, the same were reflected under the cash option due to the non-availability of corresponding options. For example, a revenue of ₹ 30.87 crore shown in Vahan 4.0 dashboard

as collected by way of cash during January 2020 to March 2021 was not reflective of the true position. Due to the absence of the provision to capture the details of all permissible modes of revenue collection in Vahan 4.0 and Sarathi 4.0 the MIS reports were inaccurate to that extent.

Accepting the audit observation, the Department replied (13/08/2021) that the discrepancy was intimated to NIC for necessary amendment in the system. The bank challan, draft, NEFT/RTGS modes have been made available in the system from 31/08/2021 in the 'other than cash mode'.

However, audit observed that in the 'other than cash mode', the PoS which was the main mode of revenue collection, has yet to be integrated with the system.

2.2.9.2 Input controls

Input controls pertain to computerized validity checks/controls on the data being entered in a system with a view to ensure that the data being entered is complete and accurate. When inaccurate/incomplete data is allowed to be entered into the system, the outputs generated will be inaccurate/incomplete, compromising the integrity and usefulness of the system. Certain deficiencies were noticed in the input controls in the Vahan 4.0/Sarathi 4.0 applications as described under:

Absence of data validation in key fields

Analysis of Vahan 4.0 and Sarathi 4.0 database of the four selected offices for the period April 2016 to March 2021 revealed that certain key fields contained incorrect data/values in several records due to inadequate data validation. The details are as under:

2.2.9.2 (i) (a) Vehicles not classified based on seating capacity

Section 2 (22) of the CMV Act defines 'Maxi cab' as any motor vehicle constructed or adopted to carry more than six passengers but not more than 12 passengers, excluding the driver, for hire or reward. Similarly, 'Motor cab' is defined under Section 2(25) as any motor vehicle constructed or adopted to carry not more than six passengers excluding the driver for hire or reward. 'Omnibus' is defined under Section 2(29) as any motor vehicle constructed or adopted to carry more than six persons excluding the driver. The MV tax is levied²⁹ at different rates³⁰ based on the seating capacity. Following was noticed in the analysis of registration database:

- In respect of all the registering authorities, in 197 cases, vehicles with seating capacity of more than eight were registered incorrectly as Motor cab in Vahan 4.0 instead of the applicable class (Maxi cab/Omnibus). In the selected units, 166 vehicles were wrongly classified as Motor cab as shown in **Table 2.21**.

²⁹ Upto 18 seats ₹ 2,000 per annum and for every additional seat ₹ 118

³⁰ Notification dated 21/09/2016

Table 2.21: Vehicles not classified based on seating capacity

Name of office	Seating capacity between 8 to 13 (including driver seat)	Seating capacity more than 13 seats (including driver seat)	Total vehicles wrongly classified as motor cab
Mapusa	53	14	67
Panaji	56	06	62
Margao	20	10	30
Canacona	06	01	07
Total			166

(Source: Data compiled by audit)

Out of 166 misclassified vehicles, in 79 cases a short levy of MV tax of ₹ 1.08 lakh was noticed.

- In, 64 cases in respect of all the registering authorities (34³¹ cases in selected units) vehicles with more than 13 seats were registered incorrectly as “Maxi cab” instead of the applicable class (Omnibus).

The above cases of misclassification indicate that the vehicle category is not validated against the seating capacity under Vahan 4.0, which affected the integrity and reliability of the data, which in turn could impact Government revenues.

Accepting the audit observation, the Department replied (24/11/2021) that the NIC has been requested to make the necessary changes in Vahan 4.0 software regarding seating capacity and class of vehicle.

2.2.9.2 (i) (b) Irregular change in class of vehicles

Section 2 of the Central Motor Vehicle Act, 1988 categorises vehicles in relation to their seating capacity as Maxi cab³², Motor cab³³ and Omnibus³⁴. The rate of MV tax for a vehicle with seating capacity between 8 to 13 seats (Maxicab) was ₹ 2,000 *per annum*.

Audit observed the following upon analysis of Vahan 4.0 data pertaining to change of class of vehicles in the selected units:

- Under the jurisdiction of ADT Panaji and Canacona, 11 vehicles with seating capacity between 08 to 13, which were correctly registered as maxi cab initially, were later changed as motor cab. This change in the vehicle class was approved by non-supervisory staff in Vahan 4.0. The irregular change in vehicle class resulted in a recurring loss of ₹ 5,830 *per annum* on MV tax.
- In respect of 15 vehicles pertaining to three ADT offices (Panaji, Mapusa, Canacona), the class of vehicle was wrongly changed after registration from

³¹ Mapusa-10, Panaji-05, Margao-11, Canacona-08 (seating capacity between 14 to 32 seats)

³² Motor vehicle constructed or adapted to carry more than six passengers, but not more than 12 passengers excluding driver

³³ Motor vehicle constructed or adapted to carry not more than six persons excluding the driver

³⁴ Motor vehicle constructed or adapted to carry more than six persons excluding driver

maxi cab to motor car. Though this was rectified later, there was short collection of MV tax of ₹ 13,780 on these vehicles during the intervening period.

The system lacked validation control linking the class of vehicle with seating capacity. Further, the risk of irregularities and possible malpractice was amplified as there was no segregation of roles of entry, verification and approval and the same person was allotted all the three roles without any supervisory control, resulting in loss of revenue to the Government.

Accepting the audit observation, the Department replied (30/12/2021) that as per letter dated 12/05/2021 from the MoRTH, the permission for correction of vehicle data in Vahan 4.0 at RTO level were withdrawn by NIC and all modifications in vehicle data were to be approved through the State administrator login ID. Further, the Department has requested NIC (24/11/2021) to incorporate validation control regarding seating capacity and class of vehicles.

2.2.9.2 (ii) Deficiencies in homologation module

The homologation module in Vahan 4.0 provides for domestic vehicle manufacturers to furnish the details of vehicles meant for sale in the country. These details are used by the dealers of vehicles who are authorised to register the vehicles as well as by the ADT offices for vehicle registration. At the time of registration of the vehicle, the application automatically links all the details entered by the manufacturer in the homologation module. Analysis of data of all the registering authorities for the period 03/07/2017 to 31/03/2021 revealed the following:

- In 2,17,523 cases (1,30,838 in selected units), the details of the length, width and height of the vehicle were entered as zero by the manufacturer which was accepted in the module.
- In 1,19,689 cases (70,967 in selected units), the sale price of the vehicle was entered as zero by the manufacturer. This was due to lack of necessary application controls, as the manufacturers were not required to compulsorily fill all the data before the vehicle record was accepted into the system.
- The homologation module showed vehicle price as per the purchase invoice issued by the manufacturer, which includes basic manufacturing cost and all applicable taxes on which the MV tax is to be levied. Further, as per Government of Goa notification dated 17 August 2020, for levy of MV tax, registering authority shall not deduct the discounts offered by the dealer/manufacture from cost of motor vehicle. Moreover, in this regard, Department also stated (November 2021) that Vahan 4.0 allows the registering authority (ADT) to change the price of the vehicle in the higher side than the value fetched from the homologation module.

However, Audit noticed that in 126 cases in the selected units, registering authority considered the sale price based on the dealer's tax invoice which was

lower than the sale price in the homologation module (which could be due to discounts offered by the dealer). This resulted into short levy of MV tax amounting to ₹ 30.88 lakh.

The absence of necessary controls in the homologation module resulted in incomplete and inconsistent data, which left the system open to misuse as well as to leakage of government revenues.

On being pointed out by Audit, the Department replied (November 2021) that NIC has been requested to make the necessary update in the software so that manufacturers of motor vehicles are given an option to make master entry of sale price of all the models of vehicles and the same value can be auto fetched while feeding data in the homologation portal by the motor vehicle manufacturer.

The reply is not tenable as mere auto-fetching of sale price in the homologation portal would not prevent the registering authority from entering a sale price lower than the auto fetched price in the homologation module for levy of MV tax.

2.2.9.2 (iii) Incorrect data entered for seating capacity and gross weight of vehicles

Different types³⁵ of motor vehicles are defined based on their laden/unladen weight or seating capacity under Section 2 of the CMV Act, 1988.

Analysis of the registration database of all the registering authorities revealed that the seating capacity (two wheelers) and laden weight (LMV, MMV, HMV) of 11,943 vehicles were not in conformity with the seating capacity/laden weight applicable to these vehicles.

Further analysis of the registration database of four selected ADT offices revealed that the seating capacity (two wheelers) and laden weight (LMV, MMV, HMV) of 6,672 vehicles were not in conformity with the seating capacity (38 vehicles)/laden weight (6,634 vehicles) applicable to these vehicles. Out of these, 86 vehicles were registered in Vahan 4.0. The details are given in **Table 2.22**.

Table 2.22: Incorrect data entered in vehicles details

Sl. No.	Name of Office	Vehicle class	No. of Vehicles	No. of Seats/ laden weight ranging between	No. of vehicles registered in Vahan 4.0
1	Mapusa, Panaji, Margao, Canacona	Two wheelers	30	0 seats	04
			08	05 to 229 seats	
2	Mapusa, Panaji, Margao, Canacona	LMV	6595	0 kg	47
			03	Exceed 7500 kg	
3	Mapusa, Panaji, Margao	MMV	21	0 kg	21
			01	Exceed 12000 kg	
4	Mapusa, Panaji, Margao	HMV	14	0 kg	14

(Source: Data compiled by audit)

³⁵ Heavy goods vehicle, heavy passenger motor vehicle, light motor vehicle, medium goods vehicle, medium passenger motor vehicle, maxi cab, motor cab, motorcycle, omnibus

Accepting the audit observation, the Department replied (24/12/2021) that NIC has been requested to incorporate the validation control between class of vehicle with seating capacity in case of passenger vehicle and laden weight in case of goods vehicle.

2.2.9.2 (iv) Incorrect mention of engine capacity of two-wheeler

Under Rule 2 of CMV Rules 1989, motorcycles are categorized based on engine capacity exceeding 50 CC or not exceeding 50 CC. The Department informed (16/11/2021) that no two wheelers with engine capacity less than 50 CC were registered in the State during the Audit period.

Analysis of the Vahan database of registering authorities in Goa revealed that the CC of 71 two wheelers as per their make and model were much higher but were entered as ranging from 0 to 20 CC. Out of these, 25 vehicles were registered in Vahan 4.0 between August 2017 and September 2019.

Further, analysis of the database relating to the selected units was as detailed in **Table 2.23**.

Table 2.23: Incorrect mention of engine capacity of two-wheeler

Sl. No.	Name of Office	Total two wheelers			Registered in Vahan 4.0
		Non-transport	Transport	Total	
1	Mapusa	12	01	13	01
2	Panaji	08	00	08	05
3	Margao	11	00	11	05
4	Canacona	09	01	10	04
Total		40	02	42	15

(Source: Data compiled by audit)

Thus, as a result of inadequate data validation in Vahan 4.0, vehicle category was not automatically determined by the CC of two-wheeler vehicles, resulting in incorrect data in several records.

On being pointed out by Audit, the Department replied (24/12/2021) that NIC has been requested to incorporate validation control regarding engine capacity and class of vehicle.

2.2.9.2 (v) Incorrect entry of purchase date of vehicles

Section 39 of the CMV Act, 1988 prescribes that no motor vehicle should be driven unless it is registered in accordance with the provisions of the Act.

Scrutiny of registration data in respect of all the registering authorities revealed that in 10 cases the purchase dates of the vehicles were incorrectly mentioned after the registration date, due to absence of validation checks. In the selected units, in six vehicles, the date of purchase of vehicles was shown after the date of the registration ranging between 06 to 623 days. The lack of validation checks resulted in incorrect entries in the database as shown in **Table 2.24**.

Table 2.24: Incorrect entry in vehicles details

Office	Registration No.	Registration date	Purchase date shown in the details of vehicle in the system
Mapusa	GA03AN2530	20/04/2016	04/01/2018
Mapusa	GA03W1160	28/11/2016	10/11/2017
Mapusa	GA03W3434	02/03/2017	15/11/2017
Panaji	GA07F6737	13/06/2016	14/11/2017
Panaji	GA03W1945	05/11/2016	30/01/2018
Margao	GA08R5302	24/02/2020	03/03/2020

(Source: Data compiled by audit)

On being pointed out by Audit, the Department replied (24/11/2021) that NIC has been requested to incorporate a validation control regarding purchase date being on or before registration date.

2.2.9.2 (vi) Deficiencies in backlog module

To facilitate digitisation of records yet to be captured in the system, a separate backlog module has been provided in Vahan 4.0/Sarathi 4.0. The data in respect of such vehicles/licences was being entered in the backlog module by the staff on the basis of original documents produced by the vehicle owner/licensees.

Analysis of 32,027 backlog entries in Vahan 4.0 revealed that, in 36 cases, the purchase date and registration date were entered incorrectly. The software should be able to identify cases with wrong data for corrective action.

Accepting the audit observation, the Department replied (17/12/2021) that NIC has been requested to incorporate validation control on the data entry.

2.2.9.2 (vii) Discrepancies in fitness certificate issued and PUC validity

As per Rule 115(7) of CMV Rules, 1989, 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 by the State Government. Further, Rule 62 requires the PUC certificate (PUCC) for fitness clearance of the vehicle. The validity of the PUC certificate under Bharat stage IV or VI was 12 months and for others it was six months.

- Analysis of database of vehicle fitness during the audit period in respect of all the registering authorities in Goa revealed that 517 vehicles (408 in selected units) were granted fitness certificates in the system even in the absence of pollution clearance details.
- Analysis of database of PUC certificate of all the registering authorities revealed that in case of 2,113 vehicles (1,828 in selected units) the validity of pollution certificate was either more or less than that prescribed *i.e.*, 180 days or 365 days as shown in **Table 2.25**.

Table 2.25: Validity of pollution certificate

No. of vehicles where validity of PUC shown less than 177 days	No of vehicles where validity of PUC shown between 369 to 911 days
1743 (All Goa)	370 (All Goa)
1517 (Selected units)	341 (Selected units)

(Source: Data compiled by audit)

The system did not have validation control to verify compliance with PUC requirements before the issue of fitness certificate. The Department may ensure that PUC compliance is made mandatory in the system as drop down box before issue of fitness certificate.

Further, the validity period of PUC certificate was not correctly mapped to the relevant stage-Bharat IV or VI. Thus, data integrity was not ensured.

Accepting the audit observation, the Department replied (16/12/2021) that NIC has been requested to incorporate the necessary validation control on PUC validity in Vahan 4.0.

2.2.9.2 (viii) Lack of validation controls in capturing receipt details against treasury challans

In addition to online collection and through PoS machines in ADT offices, the Transport Department collects revenue by issuing challan to the public for payment into Government treasury. Upon payment of the dues into the treasury by an individual, the receipted challan details are entered against the relevant field in Vahan 4.0/Sarathi 4.0. It was observed that neither of the applications had the necessary validation controls to prevent the wrong entry of a challan receipt number.

This can be avoided by integrating the e-challan portal of Director of Accounts with the Vahan 4.0/Sarathi 4.0 applications, so that the challans can be validated.

2.2.9.3 Output and other controls

Output controls ensure that system outputs are accurate, serving the purpose for which those outputs are generated. Certain deficiencies in the output controls noticed in audit are discussed below:

2.2.9.3 (i) Incorrect output of tax collection period

According to Section 3 read with Section 4 of the GDDMV Tax Act, 1974, tax shall be paid yearly in advance by the registered owner as per the schedule of payment of taxes for each category of vehicle prescribed by the Government from time to time.

Analysis of the Vahan 4.0 database for the period 2016-17 to 2020-21 revealed that in 423 cases in respect of all the registering authorities (355 in selected units), the period for which the recurring tax was paid by the vehicle owner was shown incorrectly in the database. In these cases, tax was paid during the period 2016-17 to 2020-21, while the database showed that the tax was paid for a future

period (April 2022 to March 2047). Audit also noticed that the system neither validated the period for which the recurring tax was last paid, nor did it automatically determine the period for which the tax was due to be paid.

On being pointed out by Audit, the Department replied (27/12/2021) that Vahan 4.0 was not capturing the actual tax period for conversion³⁶ of vehicle. NIC has been requested to incorporate necessary changes in the software.

2.2.9.3 (ii) Discrepancies in generation of tax defaulters list and absence of tax amount details in certain cases

As per Section 4 of the GDDMV Tax Act 1974, tax levied under the Act shall be paid in advance and Rule 23 of GDDMV Rules, 1974 deals with show cause notice issued by a taxation authority to a tax defaulter.

The list of defaulters and notices/memos for issuing to the defaulters were generated through the Vahan report service (Notice of dues) and the Vahan transaction service (Notice of demand). The following discrepancies were noticed in the defaulter list and notices generated:

- Where MV tax and Passenger tax had been paid online in the past and subsequently there was a default, the tax defaulter list and memos/notices generated through the system did not indicate the dues of tax or penalty against the vehicle. Though the system identified the tax default status, the amount of default was not available.
- The tax defaulters list included vehicles that were exempted from payment of tax and accordingly notices/memos were generated for exempted vehicles. The tax defaulters list did not contain vehicles migrated from e-Vahan to Vahan 4.0, if no transaction was ever made against the vehicle in Vahan 4.0.
- The system did not have any provision to deliver the notices/memos to the tax defaulters electronically (*viz.* SMS, email).

The above discrepancies showed that the relevant output controls in Vahan 4.0 were not adequate/appropriate, leading to incorrect generation of information, which impacted the Department's capacity to monitor the payment of taxes and realise the taxes due.

Accepting the audit observation, the Department replied (05/10/2021) that NIC has been requested to make the necessary changes so that the tax defaulter list and related amount was calculated correctly.

³⁶ Transport to non-transport category and non-transport to transport category

2.2.9.3 (iii) Deficiencies in the Report Module

MIS reports play a crucial role in enabling the management to assess performance and facilitate faster decision making. Analysis of the report module in Vahan 4.0 and Sarathi 4.0 showed the following:

- Tax arrears report under the Top Management MIS reports did not match with the Department's arrears report which was manually compiled by collecting the information office wise.
- The Report module of Vahan 4.0 generated various type of reports namely Utility, Summary, Treasury, Dealer, Permit *etc.* under which 10³⁷ sub reports were generated for a maximum period of 180 days at a time and 15³⁸ sub reports for a maximum period of 31 days/month.
- All sub reports under Top Management MIS could be generated for only one month at a time. There was no provision for generation of the above reports for an entire year.
- The total tax arrears of multiple years collected during a particular year were shown as tax collections for that year and not with reference to the years to which the arrears pertained. Thus, the report on collection of year-wise arrears and break up of arrears collection *versus* tax collection for that year could not be generated for assessment of status of arrears collection by the Department.

Sarathi Report³⁹ Module generated only office-wise reports and did not generate consolidated reports across the ADT offices.

On being pointed out by Audit, the Department replied (24/11/2021) that NIC has been requested to incorporate the observation made by Audit.

2.2.9.3 (iv) Difference in the fee/tax collected data: Analytics Portal *versus* Parivahan Dashboard

Considering the volume and complexity of data generated through the various transport services, a progressive analytic portal has been implemented in Vahan 4.0 and Sarathi 4.0 by NIC. The Dashboard and Reports under Parivahan website also include various MIS reports to enable decision making and forecasting.

³⁷ Sub reports relating to - fitness, cancelled receipt, HSRP summary, all pendency summary, account statement, parking charges collected, region/route wise permit detail, registered vehicle permit, registered vehicle without permit and special temporary permit report

³⁸ Sub reports relating to - fitness tracker, vahan citizen portal transaction, registered vehicle on road summary, vehicle registration/ KMS/HSRP/RC print/RC dispatch, smart card pendency, fancy number allotment, tax paid, dealer treasury, goods permit, passenger permit, RC dispatched, registration summary, revenue collection summary, tax arrears, VIP number revenue report

³⁹ DL test report, organ donor report, LLs issued through EKYC report, Trans wise pending, issued CL report, faceless report, report on applications, report on DL block, LL and DL count, Darpan report, MIS report on DL, MIS report on application, MIS DL test report *etc.*

Data pertaining to fees and taxes collected as per the Analytics portal⁴⁰ and Parivahan dashboard during the period 2017 to 2020 under Vahan 4.0 and 2018 to 2020 under Sarathi 4.0 was as detailed in **Table 2.26**.

Table 2.26: Analytics and Parivahan portal data

(₹ in crore)

	Calender Year	Data as per Analytics Portal			Data as per Parivahan Dashboard		
		Fees	Tax	Total Revenue	Fees	Tax	Total Revenue
Vahan 4.0	2017	19.64	356.78	376.42	15.45	447.27	462.72
	2018	14.88	243.28	258.16	14.89	244.83	259.72
	2019	17.38	221.31	238.69	17.39	222.77	240.16
	2020	12.69	150.84	163.53	12.70	152.57	165.27
Sarathi 4.0	2018	07.58	-	07.58	09.12	-	09.12
	2019	10.77	-	10.77	10.80	-	10.80
	2020	03.07	-	03.07	08.40	-	08.40

(Source: Data compiled by audit)

The Analytics portal displayed data pertaining to the calendar year. However, data extraction options for specific periods of time or by financial year were not available. It was also noticed that the figures under the Analytics portal and the dashboard did not tally. The difference in figures ranged from ₹ 0.03 crore to ₹ 86.30 crore. Incorrect/incomplete reporting limits the utility and reliability of the portal for financial monitoring and decision-making purposes by the management.

On being pointed out by Audit, the Department replied (04/10/2021) that NIC has been requested to rectify the mismatches and the incorrect/incomplete reports shown in the Analytics portal and Vahan dashboard.

Thus, it is evident that non-mapping of business rules in the system resulted in irregularities and violation of various provisions of the Act. The lack of necessary input and output controls affected the data integrity and the monitoring and decision making mechanisms in the Department.

Recommendation 2: The Department may ensure that necessary application controls are incorporated in the system as per business rules, along with timely updates to the same, to ensure data integrity and facilitate effective decision making.

⁴⁰ Analytics portal is provisioned with an aim to enable efficient decision making and forecasting. It serves the key purpose of analysis and reporting needs related to Vahan, Sarathi and other transport related data to help in forecast of occurrence of events in future based upon the historical data.

2.2.10 General controls

General controls relate to the general environment in which the IT system is developed, operated, managed, and maintained. They establish a framework of overall control for the IT activity and provide assurance that overall control objectives are satisfied.

2.2.10.1 Lack of integration with payment gateway

As per Rule 5 of Goa Receipt and Payment Rule, 1997, all moneys received by or tendered to Government officers or any agency authorised to collect Government dues on account of revenues or receipts or dues of the Government shall, without undue delay, be paid into the accredited bank for inclusion in Government Account. The Department adopted fully cashless mode of operations since July 2019 and collected revenues for its services through the various channels like online payments, issue of challan (SBI treasury bank) and HDFC PoS terminals at the ADT offices.

The following discrepancies were noticed in the revenue collection mechanism at ADT offices:

- i) The system generated receipts and delivered services without confirming whether the payment transaction made through the HDFC PoS machine was successful or not, as the payment gateway of Vahan 4.0 and Sarathi 4.0 was not integrated with HDFC PoS machines. Thus, the possibility of providing services without receiving the corresponding payment cannot be ruled out.
- ii) As the payment gateway of Vahan 4.0 and Sarathi 4.0 was not linked to the State Payment Portal⁴¹ for revenue collected through HDFC PoS machines, the revenue could not be automatically credited into the Government Treasury account. Instead, these amounts were initially parked in the current account of the designated HDFC banks and thereafter transferred online into Government Treasury account through e-Challan payment gateway of Government of Goa by the ADT office. Due to this, Audit noticed the following discrepancies:
 - Though approval for collection of revenue through HDFC PoS machines was obtained from the Government, the Department did not enter into a formal MoU/agreement with HDFC bank detailing the terms and conditions of this engagement. Such an MoU/agreement should have stipulated the timelines for transfer of collections to Government accounts.
 - Test check of records of four selected months⁴², revealed that there was delay in transfer of revenue deposited with HDFC bank into Government treasury. The delay ranged from 04 days to 34 days at three ADT offices⁴³ and 338 days in one case at ADT Panaji, in three selected months (August 2018, August

⁴¹ e-Challan payment gateway owned by Director of Accounts

⁴² August 2017, August 2018, August 2019 and August 2020

⁴³ Panaji, Mapusa, Margao

2019 and August 2020). Further, an amount of ₹ 11.24 lakh collected in three⁴⁴ cases through PoS machines during the period from 18/07/2018 to 12/07/2019 was not transferred till date from the HDFC bank account to Government Treasury account by the ADT office Panaji.

- Scrutiny of bank statements revealed that at two ADT offices (Mapusa and Panaji), a sum of ₹ 1.84 crore collected through PoS machines was lying in the HDFC bank account of ADT offices to be transferred into Government Treasury Account as on 31/03/2021.

Thus, the decision of the Department to deploy an intermediary's PoS machines without integrating them with Vahan 4.0/Sarathi 4.0 applications led to absence of validation controls for payments received while rendering services, loss to Government due to parking of revenues outside the Government account and delayed transfers from the intermediary bank account.

On being pointed out by Audit, the Department replied (29/12/2021) that it has taken up the matter with HDFC Bank and NIC for integration of bank payment gateway with the portal of Vahan 4.0 and Sarathi 4.0. Further, the Department replied (18/01/2022) that an agreement between HDFC bank and the Department was being processed. The delay in transfer of money was due to various technical⁴⁵ reasons. Also, HDFC bank was requested to revert the deducted amount to the current account of the ADT Margao and also requested not to deduct any amount in the future.

Recommendation 3: The Department may take steps for integration of the payment gateway in Vahan 4.0 and Sarathi 4.0 with the State portal to ensure timely deposit of Government receipts into the treasury and to avoid providing service without confirming payment status of PoS transactions.

2.2.10.2 Same vehicle registration numbers under multiple ADT offices

As per Section 40 of the CMV Act, 1988 read with Rule 42 of GMV Rules 1991, a vehicle owner shall register his vehicle in the jurisdiction of the registering authority where he resides or where the vehicle is normally kept.

Analysis of the data for the period from 2016-17 to 2020-21 pertaining to all the registering authorities in Goa revealed duplicates in the Vahan database.

- In the case of 119 vehicles, active registration was noticed under the jurisdiction of two ADT offices. Databases of different RTO offices were not linked in Vahan 2.0 and the vehicle data was replicated at different ADT offices upon transfer of vehicles from one RTO jurisdiction to another. The same data was migrated to Vahan 4.0 without exercising necessary controls.
- Further, in case of six registration numbers, Audit noticed that one registration number was allotted to two different vehicles under the jurisdiction of different

⁴⁴ ₹ 1,55,277 (18/07/2018), ₹ 8,47,295 (11/09/2018) and ₹ 1,22,348 (12/07/2019)

⁴⁵ Network issue, issues related to login id of HDFC bank account

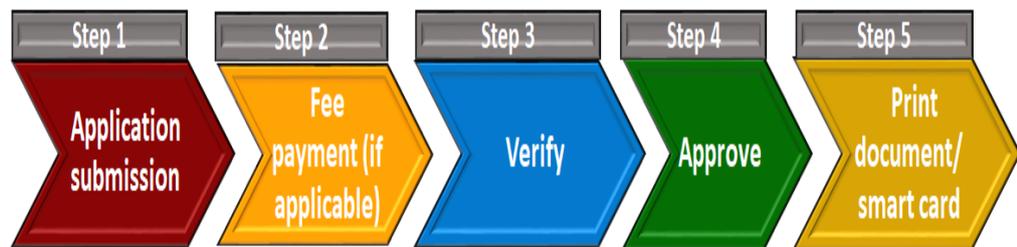
offices, which was irregular and invalid. This resulted in duplicate and invalid records in the database.

On being pointed out by Audit, the Department replied (06/01/2022) that the incorrect records have been removed after verification. In respect of six registration marks shown in different RTOs for different vehicles, the ADTs were directed to verify with physical records available with the office and take further action to update correct data in Vahan 4.0 in coordination with NIC.

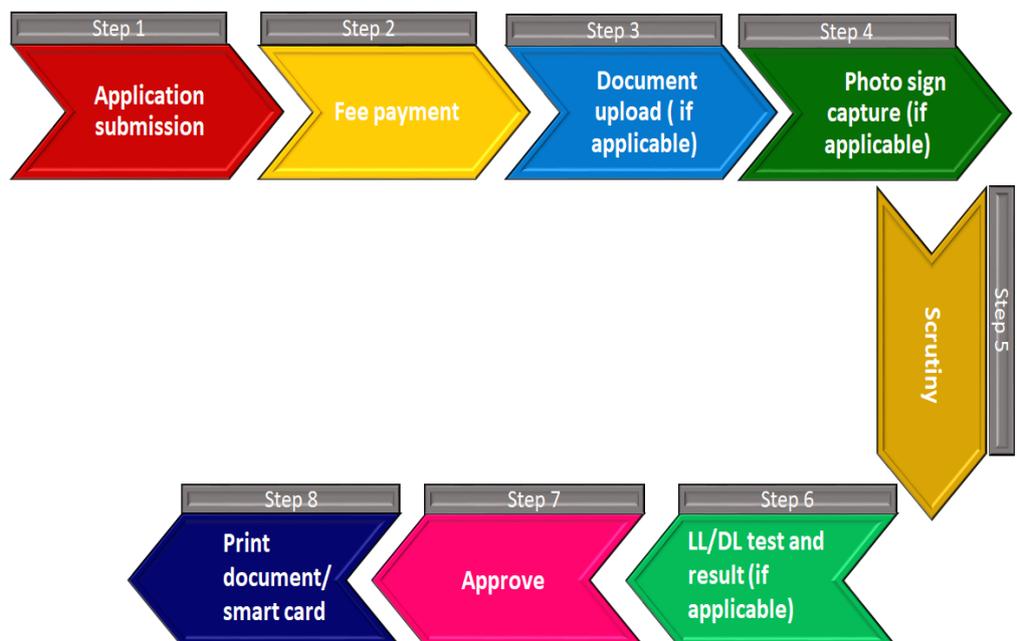
2.2.10.3 Delegation and segregation of duties

Segregation of duties is a proven way of ensuring that transactions are properly authorized, recorded and assets are safeguarded. Inadequate segregation of duties increases the risk of errors being made, remaining undetected and adoption of inappropriate working practices. Following was the envisaged work flow in Vahan 4.0 and Sarathi 4.0:

Work flow process in Vahan 4.0:



Work flow process in Sarathi 4.0



2.2.10.3 (i) Absence of segregation of duties

The ADT as the office administrator assigned roles (entry, verification and approval) to the subordinate staff in the system to deliver the various services of the Transport Department.

Audit noticed that the principle of segregation of duties was not followed by the ADTs while allocating duties in Vahan 4.0. Several instances of all the three roles being allotted to the same person were observed. Some of the crucial functions, where all the three roles were performed by the same non-supervisory staff are detailed in **Table 2.27**.

Table 2.27: Number of services performed for all the three roles by the same person

Name of service where all the three roles performed by the same person in Vahan 4.0	Total number of services provided
New registration	95173
No objection certificate	39495
Alteration of vehicles	8990
Conversion of vehicles	8798
Tax clearance	34241
Tax exemption	680
Transfer of ownership	62573
Backlog services ⁴⁶	6604

(Source: Data compiled by audit)

Assignment of all the three roles for a service to the same staff posed a potential risk to the data and system integrity. It also increased the risk of errors being made and remaining undetected as discussed in **Para 2.2.9.2 (i) (b)**.

While accepting the audit observation, the Department replied (17/12/2021) that all the ADTs have been directed to follow the principle of segregation while allotting the three roles and to allot the role of approval to the supervisory staff. NIC has been directed to make necessary changes in the software to prevent assigning multiple roles to the same person.

2.2.10.3 (ii) Non-exercise of approval role by supervisory authority

Vahan 4.0 and Sarathi 4.0 applications provided segregated roles viz. entry, verification and approvals for carrying out different activities in the system. Approval was the final stage in the process of delivering a service and is a supervisory function resting with the head of the office (ADT). None of the ADTs of the four selected units exercised the 'approval' role in Vahan 4.0 during the period covered by audit. The ADT, Canacona did not exercise any approval role under Sarathi 4.0 as well. The approval role in these units was assigned to non-supervisory staff⁴⁷. The assignment of approval role to non-supervisory staff

⁴⁶ Only for the year 2020-21

⁴⁷ Lower Division Clerk, Upper Division Clerk, Data Entry Operator

resulted in lack of supervision by the higher-level authority over the functioning of the subordinate staff in Vahan 4.0 indicating internal control failure.

On being pointed out by Audit, the Department replied (17/12/2021) that an office memorandum has been issued to the ADTs to allot approval role to the supervisory staff.

2.2.10.4 Absence of change management system

Changes in Vahan 4.0 and Sarathi 4.0 are made by the NIC, based on change requests from the Transport Department. The Deputy Director of Transport (North) was authorised to communicate any change requests in Vahan 4.0 and Sarathi 4.0 to NIC Goa. Beyond this, no change management system was put in place by the Department. The following discrepancies were noticed by audit in this regard:

2.2.10.4 (i) Lack of change management controls

As the procedure⁴⁸ for communication of changes were not communicated to the ADTs, the glitches/issues noticed by the field offices in Vahan 4.0 and Sarathi 4.0 were directly reported to NIC by the ADTs for taking corrective action, either through mail or telephone. Also, the DoT was unaware of the glitches noticed by the ADTs.

- A total of 384 issues were raised by three ADT offices during the audit period. Out of these, 48 issues were resolved by the NIC after a delay ranging from 05 days to 126 days and 12 issues (including one with a revenue implication) raised during May 2018 to March 2021 which were communicated by the ADT offices to the NIC were yet to be resolved. Delayed redressal/non redressal by the NIC of issues faced by the ADTs impacted the smooth delivery of services by the concerned ADTs and in the following instance, there were financial implications:
- Government *vide* notification dated 18/01/2018 exempted electric operated vehicles from payment of the tax under GDDMV Tax Act, 1974. Further, as per Section 3B of the Act, Infrastructure Development Cess was to be levied at the time of registration of new luxury motor cars in addition to the MV tax levied under the Act. However, as the Infrastructure Development Cess and MV tax were linked in Vahan 4.0, when the MV tax field was selected for exemption, Infrastructure Development Cess was also automatically exempted. The issue of Infrastructure Development Cess being exempted by default was brought to the notice of NIC by the ADT Mapusa (November 2020). The issue was resolved (February 2021) after being pointed out by Audit. In the intervening period, there was non-levy of Infrastructure

⁴⁸ Dy. Director of Transport (North) was authorised to communicate any change requests in Vahan 4.0 and Sarathi 4.0 to NIC

Development Cess amounting to ₹ 6.30 lakh in respect of 28 vehicles in five ADT offices in Goa.

- No Central Register or Priority list was maintained/marked separately to identify important issues/critical issues with revenue implications, which required immediate attention.

An appropriate change management system would have systematised the process of logging complaints by the users, their review by the competent authority, flagging of issues for priority resolution, especially those with system level or far reaching implications on revenue and the timely resolution of complaints by NIC.

Accepting the audit observation, the Department replied (20/12/2021) that the matter has been taken up with the NIC for providing a structured management complaint system with the provision to view and resolve the issues/feedback/complaints in a hierarchical manner. It was also stated that the recovery of Infrastructure Development Cess would be made.

2.2.10.5 Weak logical access controls

Logical access controls are restrictions imposed by the computer software through a system of measures and procedures in the software products used, aimed at protecting computer resources against unauthorised access attempts. The objective of logical access controls is to protect the IT applications and underlying data files from unauthorised access, amendment or deletion.

Vahan 4.0 and Sarathi 4.0, being web enabled applications, the users were able to access the applications using user id and password. In addition, there was a second level of logical access control through One Time Password (OTP). Audit noticed discrepancies related to the existing logical controls as follows:

- To login to the Vahan 4.0 system, OTP facility was not available for users other than the State administrator and Office administrator. The facility for new OTP for each login was not available in Vahan 4.0. Instead, the validity of OTP was for a long period of 12 hours, which made the system vulnerable to misuse. However, Sarathi 4.0 had an OTP based login which was generated and entered along with user id and password for every login.
- The password protection system in Vahan 4.0 system does not force the users to regularly change the password. This increases the risk of security breach by an unauthorised person or a phishing software/ malware which would continue to make unnoticed changes in the system for a long time till its detection. However, Sarathi 4.0 forces the user to change password once in every six months.
- In Sarathi 4.0, the default password provided for the first-time user was not forced to be changed by the user in the system. However, in Vahan 4.0, the system asks the user to immediately change the default password on first login. As default passwords are set by a person other than the user, they were not

confidential and vulnerable to misuse.

- In the case of non-use, the automatic sign out time under Sarathi 4.0 was after 30 minutes. This makes the system vulnerable to misuse if the user forgets to log out.

On being pointed out by Audit, the Department replied (20/12/2021) that NIC has been requested to incorporate the changes pointed out.

2.2.10.6 Lack of Monitoring and Supervision

For the successful implementation of any project, periodic monitoring and supervision by the senior management is essential. The Department did not set up a steering committee or any other formal mechanism to monitor the implementation and functioning of Vahan 4.0 and Sarathi 4.0. As a result, the progress of implementation of various modules/services, procurement of equipment, providing end to end online services available in applications *etc.* were not reviewed and corrective actions were not taken in a systematic manner, as seen from the delays in project implementation brought out in this audit. Lack of internal controls pertaining to mapping of business rules, segregation of duties, change management *etc.* did not get attention from the management and were managed in an ad-hoc manner, resulting in deficiencies and discrepancies as discussed under **Para 2.2.9.1, 2.2.10.2 and 2.2.10.3.**

Accepting the audit observation, the Department replied (14/01/2022) that an IT Steering Committee under the chairmanship of the Director of Transport has been constituted in January 2022.

2.2.10.7 Deficiencies in Grievance Redressal System

Any IT application providing citizen centric services should provide an appropriate Grievance Redressal System for systematic redressal of grievances. However, till July 2021 the Department did not implement the grievance redressal/feedback system in Vahan 4.0 and Sarathi 4.0. Instead, an archaic system where the ADTs received complaints /grievances through official emails from the public regarding services provided under Vahan 4.0 and Sarathi 4.0 was in place. There were no guidelines/directions prescribing timelines for resolution of different categories of complaints or escalation to higher levels in the office hierarchy in case of non-resolution. There was no periodical reporting to supervisory staff regarding grievances and their redressal.

Though the complaint/feedback system for the public was introduced by NIC in the month of July 2021, the ADTs did not have access to view the complaints/feedback reported.

The Department replied (05/05/2022) that, NIC has updated the system of feedback/complaint with respect to Vahan 4.0 and Sarathi 4.0, which is available on the dashboard and accessible to the concerned authorities.

Thus, non-compliance by the Department with the principle of segregation of roles adversely affected the internal control system. The absence of proper change management system delayed the required resolution of priority/critical issues and the deficiencies in the grievance redressal system adversely affected the quality of service delivery to citizens.

Recommendation 4: The Department may strictly comply with the principle of segregation of roles/duties of the functionaries to ensure data integrity and stronger internal controls. A comprehensive change management system and grievance redressal system may be implemented on priority for improved service delivery.

State Tax Department

2.3 Subject Specific Compliance Audit on processing of refund claims under Goods and Service Tax

Introduction of the Goods and Service Tax (GST) was a significant indirect tax reform in the country, which replaced multiple taxes levied and collected by the Centre and states. It is levied simultaneously by the Centre and states on a common tax base. Central GST (CGST) and State GST (SGST) are levied on *intra-State* supplies and Integrated GST (IGST) is levied on *inter-State* supplies. Given the importance of refund mechanism in tax administration, the Government decided to streamline/standardise refund procedures and make the claim and sanction process completely online.

This Subject Specific Compliance Audit (SSCA) was carried out for the period from July 2017 to July 2020 to assess whether (i) the tax authorities complied with the extant refund provisions, (ii) the systems to ensure compliance by taxpayers were in place and (iii) an adequate internal control mechanism existed to check the performance of departmental officials in disposing of refund applications.

We noticed some delays and non-compliance with prescribed timelines by the Department in the issue of acknowledgement, deficiency memos, sanction and payment of provisional and final refunds (29 *per cent* of sampled cases) to taxpayers. The Government may take necessary steps to adhere to the prescribed timelines, while putting in place a system for ensuring automatic payment of interest in case of delay in sanction of refund.

We also observed some instances of irregular/excess grant of provisional and final refund in case of inverted duty structure and excess grant of refund to taxpayers due to non-deduction of assessed dues (pending arrears) under the extant law. Accepting our recommendation to put in place a suitable mechanism for verification of previous dues, the