

Taxes on Motor Vehicles

4.2 IT Review: Activities of registration of vehicles in regulatory wing of Transport Department

Highlights

Unauthorised software lacking proper validation checks, were operational in various registering authorities (RAs) with the result captured data was neither comprehensive nor reliable. Due to different database structure, data of different RAs was not integrable.

(Paragraph 4.2.6.1)

There were a large number of cases of same chassis numbers and engine numbers for more than one vehicle which were not only illegal but was also fraught with risk of plying of invalid/stolen vehicles.

(Paragraph 4.2.9.1)

In RA, Faridabad data analysis revealed 787 cases where same receipt number was shown against amount received for registration of different vehicles. Due to lack of validation checks, the captured data was unreliable and might facilitate misappropriation of cash.

(Paragraph 4.2.9.5)

Introduction

4.2.1 The Transport Department of Government of Haryana is governed by Haryana Motor Vehicles Rules, 1993, Central Motor Vehicles (MV) Act, 1988 and Central Motor Vehicles (MV) Rules, 1989. The regulatory wing of the Transport Department is responsible for collection and accounting of receipts relating to registration of vehicles, issue of driving licences, permits, taxes, fees etc. as per the provisions contained in state and central motor vehicles acts and rules. Total receipts of the department in the year 2006-07 were Rs.223.66 crore.

Organisational set up

4.2.2 At apex level, Financial Commissioner and Principal Secretary, Transport Department is responsible for formulation of policies, programmes and their implementation by the department. In performance of duties, he is assisted by State Transport Controller (STC) who exercises general superintendence over the functioning of the department. At district and sub division level, there are 47 RAs and 47 regional transport authorities (RTAs) which are controlled by sub divisional magistrates. The RAs are responsible for registration and licensing of non commercial vehicles and RTAs are

responsible for registering and issuing licences for operating commercial vehicles.

Objectives of computerisation

4.2.3 Computerisation in Transport Department was envisaged with a view to prevent leakage of revenue by way of ensuring data integrity and to enable various regional transport officers (RTOs) to check the driving licences, registration certificates (RCs) and permits throughout the country in an efficient manner thereby strengthening the regulatory functions of such authorities. Department of Road Transport and Highways (DRTH), Government of India (GOI) instructed (January 2001) all the states to adopt a standardised data format and software for front end and back end applications for the purpose of issuing driving licences and registration of motor vehicles and maintaining their databases so that a national register of motor vehicles and driving licences could be prepared. The objective was to ensure compatibility of databases developed at state levels and their integration at the national level. Standard software was developed by DRTH through National Informatics Centre (NIC) in 1999 and was provided free of cost to states.

NIC developed the software called ‘Vahan’ for registration of vehicles to enable all RTOs to regulate the issue of RCs and permits throughout the country. Customisation of software as per local needs and integration support at back end on central server was to be provided by NIC. For regulatory functions, a smart card with micro processor chip of minimum 4K bytes was to be introduced using a standardised and uniform format for registration and driving licence so that the cards are readable throughout the country.

Scope of audit and methodology

4.2.4 The office of STC and seven RAs* out of 47 RAs were selected for field study. Out of these 47 RAs, 30 RAs were stated to be computerised for activities relating to registration of non commercial vehicles as of March 2007. Databases maintained in respect of data generated during January 2000 till date of audit (May 2007) by the seven selected RAs was analysed using Computer Aided Audit Techniques (CAATs).

Audit objectives

4.2.5 Information Technology (IT) based review of Transport Department was conducted during April 2007 to May 2007 with the objectives to ascertain:

- effectiveness of computerisation in various RAs across the state;
- reliability of the information generated and extent of information security provided by the system; and
- completeness of registration database (since implementation of computerisation).

* RAs at Ambala, Ballabgarh, Faridabad, Hisar, Jagadhri, Jind, and Kaithal.

Lack of IT strategy and planning

4.2.6 Undue delay in implementation of 'Vahan' software

4.2.6.1 GOI instructed (January 2001) that a uniform format and standardised software may be adopted for issue of RCs using smart cards by the Transport Departments of all the States so that a national register of motor vehicles readable through out the country could be prepared and leakage of revenue could be prevented. Standardised software 'Vahan' developed by NIC for this purpose was provided (January 2001) free of cost to the State Governments. It was envisaged that data would be stored by the States in a computer at a central location. Technical assistance to integrate the backend information on a central computer was to be provided by NIC.

It was observed during audit that in the absence of any IT strategy and proper planning, there was not only inordinate delay in implementing 'Vahan'; in many locations unauthorised software were being used instead of 'Vahan'. As of March 2007, out of 47 RAs, 'Vahan' had been implemented in 18 RAs in respect of only non commercial vehicles. No computerisation has been done in any of the RTAs for registration of commercial vehicles and issue of route permits since last six years.

It was further observed that there was no documentation of the modifications, approval and testing of the 'Vahan' software, though a lot of modifications had been made in the software being used by RA, Jind and Hisar for enhancing facilities or for other reasons. RA, Kaithal was still using the older version 1.0. Data captured through this version was not supported by subsequent versions.

Twelve RAs were using unauthorised local softwares which were neither documented nor tested properly before these were operationalised. Frequent need based changes in database structure as well as field structure were made by local officials of NIC without adopting any proper procedure, as a result of which objectives of computerisation of having a national register could not be achieved. Due to use of unauthorised softwares having insufficient validation checks, the project got unduly delayed and unfair practices of duplicate registration and leakage of revenue were prevailing in these RAs as discussed in the succeeding paragraphs.

Unfruitful deployment of junior programmers and data entry operators

4.2.6.2 Additional Central Assistance (ACA) of Rs. two crore given by GOI (2001-03) for improving e-governance and imparting training to the staff of Transport Department was placed at the disposal of HARTRON* without any MOU for computerisation of the Transport Department. It was decided (July 2002) by State Government to customise and test 'Vahan' software at RTA, Faridabad and RA, Ballabgarh and thereafter replicate it at other RTAs/RAs. An indent for providing manpower of 19 junior programmers and 19 data entry operators (DEOs) on contractual basis was placed on HARTRON for this purpose. It was observed during audit that in the absence of any IT strategy and proper monitoring, these personnel remained deployed

* Haryana State Electronics Development Corporation.

at 18 RTAs for carrying out day to day office work which could have been done by the staff existing in the department. Despite deployment of 38 programmers and DEOs, registration of commercial vehicles and issue of route permits have not been computerised even by a single RTA. As a result, neither the software provided by NIC was implemented in any of the RTAs nor any automation of the activities of RTAs was done by these computer professionals. Thus, expenditure of Rs.88 lakh incurred on wages of these computer professionals was unfruitful.

Inordinate delay in finalisation of tenders of smartcards

4.2.6.3 Smartcards were required to be introduced to capture details in visual readable zone and information in machine readable zone under 'Vahan' software. It was observed during audit that tenders for the preparation of smartcard driving licences, vehicle RC and permits were invited (December, 2002) and in response seven firms had quoted their rates. The tenders were subsequently rejected in July 2004. The department had not finalised (April 2007) the tenders for smartcards even after five years of first inviting the tenders. As a result, RCs were still being printed on ordinary paper and security checks as envisaged in GOI scheme could not be introduced.

Non maintenance of centralised data bank

4.2.6.4 It was planned while developing 'Vahan' software that the details of the vehicles would be maintained centrally in a server by NIC. This data would have been beneficial for crime prevention as well as in minimising revenue losses. It was observed that State wide area network had not been established and the data captured by the RAs where 'Vahan' is operational was not being consolidated by NIC at state level.

Non availability of preprinted stationery with security features

4.2.6.5 General format for a computer generated cash receipt and RCs applicable to all RAs has not been approved. No account of RC prints generated on plain paper through computer was being maintained. Receipts as well as RCs were being issued after printing on a plain paper which was fraught with the risk of generation of fake RCs and cash receipts.

Inadequacies in implementation of general controls

4.2.7 General controls create the environment in which the application systems and application controls operate e.g., IT policies, standards and guidelines pertaining to IT security and information protection. The observations in this regard are given below:

Physical access control

4.2.7.1 Physical access controls are specifically aimed at ensuring that only those officers/officials who have been authorised by management have physical access to the computer systems. During audit it was noticed that in four RAs* the vehicle owners after duly filling up necessary forms and paying the requisite dues, brought the documents to the concerned computer operator

* Ballabgarh, Faridabad, Naraingarh and Palwal.

in the computer centres. The unauthorised entry of persons put the system and data at risk of unauthorised intentional/accidental manipulation/destruction etc.

Environment controls

4.2.7.2 Environment controls are aimed at ensuring that the assets of the project are not put to risk. This requires that risk assessment and preventive measures be undertaken prior to implementing the project. During audit it was seen that the department had neither undertaken any risk assessment nor had put any preventive measures like offsite storage, disaster management plans, business continuity plans etc. in place before putting the system in use.

Inadequate segregation of duties

4.2.7.3 It was observed during audit that the staff responsible for data entry was also responsible for authorisation as all rights for authorisation of data entry were provided to data entry staff in all the RAs test checked in audit.

Logical access control

4.2.7.4 It was observed that although each and every operator had different user ID and password, the operators shared their password with each other and in case of unavailability of any one of them, the work of that user was being done by the other users by utilising his/her password. This informal methodology adopted was fraught with risk of loss of trail for any unauthorised entries. Also, no documented password policy specifying the need to change the password periodically was circulated. There was also no restriction on logon attempts to prevent access by unauthorised users. As such the system was exposed to the risk of unauthorised access and consequent loss. Data analysis of RA, Kaithal revealed that passwords were readable at backend and had not been encrypted.

Analytical review of data generated by 'Vahan' package

4.2.8 Analytical review of data generated by 'Vahan' package as implemented in RAs, Jind, Hisar and Kaithal revealed a number of deficiencies related to absence of processing controls.

Non deposit of revenue in treasury

4.2.8.1 In RA, Kaithal, fine to be charged due to delay on part of registrants in registration of tractors was not being reflected in the computerised cash book though shown in computerised receipts. It was observed during audit that neither the actual fine realised was corrected in the computerised cash book nor reconciled with the amount deposited in the treasury.

Further investigation in audit revealed that the dealing assistant after collecting the fine, issued receipts but did not deposit the amount in the treasury as it did not appear in the computerised cash book resulting in short deposit of Rs 19,745 during the period November 2006 to April 2007. RA, Kaithal accepted the facts and a sum of Rs 19,745 was deposited (August 2007) at the instance of audit. Further action to be taken in this regard was awaited.

Audit observed that all the receipts were not getting reflected in the computerised cash book because of faulty processing logic in the program leading to non deposit of fines realised on account of delayed registration of tractors.

Incorrect calculation of road tax

4.2.8.2 Rates of one time road tax to be recovered were revised and circulated (June 2006) in case of non commercial vehicles. However, the new rates were not incorporated for assessment in 'Vahan' software being used in RA, Kaithal. It was observed that 'Vahan' version 1.0 was being used in RA Kaithal which did not support the revised rates of one time road tax. Tax calculated through the software was erroneous and led to short calculation amounting to Rs 2.26 lakh which was corrected manually. It was necessary to incorporate new business rules in the software wherever RAs were computerised.

Non levying of fine

4.2.8.3 STC notified (December 2006) the rates for fine to be charged in case of delay in registration of vehicles (Mopeds, two wheelers and LMVs*). It was noticed in audit that calculation of fine for delay in registration of such vehicles was not being done in the computerised system. Data analysis in three RAs** revealed that in 4,982 cases during the period December 2006 to May 2007 (Jind: Rs.5.19 lakh in 944 cases; Hisar: Rs.10.85 lakh in 2,831 cases; Kaithal: Rs.4.14 lakh in 1,207 cases), no fine had been charged though the delay in registration of vehicles exceeded one month. This resulted in under charging of Government dues to the extent of Rs.20.18 lakh.

RAs Hisar and Jind replied (July 2007) that instructions issued by STC in December 2006 were received late in their office. Hence, no action could be taken. The reply was untenable as no fines were charged even after five months of issue of instructions.

Non allotment of registration numbers even after six months of registration

4.2.8.4 In RA, Hisar, there were 108 cases out of 28,115 cases where vehicles were not allotted registration numbers even after six months from the date of registration. Fictitious registration numbers were being shown in the database against these vehicles. Such numbers were suggestive of the fact that these vehicles were either being plied without any valid registration number or the details of any registration numbers that might have been allotted are not available with RAs.

Analytical review of data generated by unapproved end user applications

4.2.9 Data analysis in RAs, viz. Ambala, Faridabad, Ballabgarh, and Jagadhri, where locally developed software were being used, revealed that these applications lacked data validation controls leading to severe deficiencies.

* Light motor vehicles.

** Hisar, Jind and Kaithal

Lack of control over monitoring of duplicate engine/chassis number

4.2.9.1 Chassis number and engine number are unique identification marks of a vehicle which are essential for the purpose of its registration under the provisions of the Motor Vehicles Act and rules made thereunder. It was, however, noticed in audit that there were no validation checks in the computer applications being used in RAs at Ambala, Jagadhri, Ballabgarh and Faridabad to enable RA to ensure that a vehicle with its unique identification was not re-registered again without cancellation of the previous registration. In addition, it was also observed that due to lack of networking of headquarters office with RA offices, the possibility of the same vehicle getting registered in different RAs could not be ruled out.

Analysis of data of four RAs revealed that large number of cases of duplicate chassis and engine number were available in the database as tabulated below:

Name of RA	Total number of records analysed	Number of duplicate chassis and engine numbers	
		No of cases where owner was same	No of cases where owner was different
Ambala	99,990	93	72
Jagadhri	79,992	70	60
Ballabgarh	44,158	Nil	14
Faridabad	53,517	40	12

Same chassis and engine numbers were suggestive of duplicate registration of a single vehicle. For a detailed scrutiny, audit requested for manual records of such cases detected from the system. Test check of aforementioned cases in RAs Faridabad, Ballabgarh and Jagadhri confirmed the allotment of duplicate registrations made against the same chassis/vehicle. RA, Ambala did not produce requisite record despite constant pursuance.

Duplicate registration of the same vehicle was not only illegal but was obviously fraught with the risk of plying invalid/stolen vehicles as well as insurance irregularities by declaring non existent vehicles as stolen.

The concerned RAs accepted the facts and stated that validation checks would be incorporated in the software to avoid entry of duplicate engine/ chassis numbers. RA, Faridabad while admitting the instance of duplicate registration numbers issued notices to vehicle owners in 52 cases. No action was taken by the RA, Ambala in these cases. Further investigation by the department in these cases and action taken in the matter was awaited (August 2007).

Same registration numbers were allotted to two vehicles

4.2.9.2 Data analysis at RA, Ambala revealed that in 34 cases out of 99,990 cases of registration, registration numbers allotted in the first instance were cancelled by the RA, Ambala and a new number was allotted. However, further analysis revealed that out of these 34 cases, the new number allotted

was previously allotted to some other person in 14 cases. RA, Ambala did not produce the relevant records for further audit investigation.

Registration of two or more vehicles with same insurance cover note

4.2.9.3 As per provisions of the MV Act and rules made thereunder, every vehicle is required to be insured before its registration. A valid insurance certificate is required to be furnished along with application for registration. Test check revealed that the RAs did not verify whether the insurance cover submitted along with the application for registration of vehicle was actually valid or not. Moreover, there was no validation check in the system to ensure that the insurance cover note submitted for a particular vehicle was not re-used for registration of other similar vehicles. Data analysis revealed that the insurance company and its cover notes for a particular vehicle/owner were common for two or more vehicles in a number of cases as tabulated below:

Name of RA	Total records analysed	Number of insurance cover note used for registering more than one vehicle
Jagadhri	79,992	1,234
Ambala	99,990	25,082

Thus, the system being used in these RAs was fraught with the risk of same insurance cover notes being used again and again for registering more than one vehicle. This was also a result of lack of controls in the system to detect duplicate entries.

Non depiction of transfer/hypothecation fee in computerised database

4.2.9.4 Data analysis in RA, Faridabad revealed that in 316 cases out of 53,517 cases involving transfer and hypothecation of vehicles, fee chargeable as per rules is not reflected in the computerised database. These cases were indicative of a possibility of non recovery or short recovery of due amount.

Lack of control over duplicate receipt numbers being used for registration

4.2.9.5 Data analysis of RA, Faridabad revealed that there were 787 cases out of 53,517 cases of registrations where same receipt number was shown for amount received for registration of two or more different vehicles. Total amount involved in these 787 cases was Rs 16.08 lakh. Further, test check of data revealed that there was error in data entry and lack of validation checks as correct receipt numbers had not been entered. The department in its reply (July 2007) stated that a separate module for entering receipts had been implemented after taking the approval of the Deputy Commissioner, Faridabad. It was observed during audit that this module did not have validation checks and there was no provision in the software to check that repeated receipt numbers were not accepted in the system.

Conclusion

4.2.10 Despite instructions of GOI in January 2001 to implement standard software application called 'Vahan', little progress could be achieved by the State Government and it was found that only 18 RAs were using the standard 'Vahan' package out of 47 RAs for activities relating to issue of registration

certificates to non commercial vehicles. It was also seen that no computerisation could take place in any of the RTAs responsible for issuing RCs and permits in case of commercial vehicles. Little progress has been made in implementing a state wide area network to ensure that the entire state wide data is available at a central server. It was further observed that unapproved software instead of 'Vahan' were being used in a few RAs and such applications were highly deficient from control point of view. This resulted in continuance of unfair practices in view of findings related to use of same engine/chassis number and use of same insurance cover note for registering different vehicles in a large number of cases.

Recommendations

4.2.11 The department should:

- ensure that latest version of software 'Vahan' is used at all the locations so that duplicate registration and insurance cover note could be avoided and data of all RAs can be integrated;
- establish a State wide area network with interconnectivity of all offices to integrate the database with adequate security so that the entire data being captured at RA level can be integrated at the state level; and
- ensure issue of RCs and driving licences on smart cards and computerisation of issuance of RCs by all RTAs/RAs.

4.3 Non charging of permit fee

Under the Haryana Motor Vehicles Rules, where the holder of a permit desires to transfer the permit to some other person under section 82 (1) of the Central Motor Vehicles Act, 1988, they shall make a joint application accompanied by a cash receipt or treasury challan of fee of Rs.100 specified for making application for grant of permit to the State or RTA for issue of permit. If the RTA allows transfer of a permit, it shall call upon the holder of the permit, in writing, to surrender parts A and B of the permit within seven days of the receipt of the order and shall likewise call upon the person to whom the permit is to be transferred to deposit the fee of Rs.2,625 and Rs.1,750 specified for grant of permit for heavy transport vehicle (HTV) and light transport vehicle (LTV) respectively.

During test check of records of nine* offices of district transport officer (DTO), it was noticed between August and December 2006 that holders of 2,608 permits (HTV: 2,275; LTV: 333) applied for transfer of permits during the year 2005-06. Against total recovery of fee of Rs.68.15 lakh, the department charged application fee of Rs.2.61 lakh but fee for grant of permits was not charged. This resulted in short realisation of permit fee of Rs.65.54 lakh.

* Bhiwani, Fatehabad, Jhajjar, Karnal, Kurukshetra, Kaithal, Panipat, Panchkula and Sirsa.