

CHAPTER-VII

Finance Department, Government of Maharashtra Directorate of Account & Treasuries

A Performance Audit on “**IT Audit of Government Receipt Accounting System**” was conducted and results of audit are mentioned in the following paragraphs.

Highlights

A Performance Audit on “**Information Technology audit of Government Receipts Accounting System (GRAS)**” revealed the following:

- Prescribed procedure for recording e-Receipts in the cash book was not followed in three offices under the Inspector General of Registration (IGR) and four offices of the State Excise Department.

(Paragraph 7.9.2)

- Reconciliation of e-Receipts was not carried out with the Principal Accountant General (Accounts and Entitlements). Further, reports with classification details required for reconciliation were not available for the user Departments.

(Paragraph 7.9.3)

- Technical documentation on the database was inadequate as the Data Dictionary descriptions of the fields were absent and the Entity Relation Diagram (ERD) was not available.

(Paragraph 7.9.4)

- Though the Government had made it mandatory to quote the users’ IT PAN in e-challans for receipts exceeding ₹ 10,000, the instructions were not followed in 1,45,272 cases. Further, validation checks in this regard were absent.

(Paragraph 7.10.1)

- Data of e-Receipts accounted by Pay and Accounts Office were uploaded to the GRAS website only for the period 2012-13, that too partially.

(Paragraph 7.10.2)

- There was absence of proper procedure for rectification of misclassification of heads of accounts. Further, misclassification of heads of accounts for the year 2013-14 involving an amount of ₹ 32.53 crore was noticed in two offices.

(Paragraph 7.10.4)

- Though the e-Receipts are required to be defaced after service to the user has been provided, same was not done so in respect of e-Receipts amounting to ₹ 14,503.95 crore for the period 2011-12 to 2013-14 in all the departments test checked.

(Paragraph 7.10.5)

- The user access controls to GRAS were weak as user IDs were allotted in the code name of the user office and shared by multiple individual users.

(Paragraph 7.11.3)

- The audit trail in the system was inadequate as transactions in the system lacked a unique identifier or transaction code.

(Paragraph 7.11.6)

7.1 Introduction

Government of Maharashtra (GoM) had decided (May 2008) to create a new treasury called '**Virtual Treasury**'. Accordingly Finance Department (FD) initiated (February 2009) to develop and implement an online Government Receipt Accounting System (GRAS) which enables tax payers/other revenue payers to make payments through e-Challan on its website using participating banks' internet banking facility. The GRAS system was introduced in June 2010 with a vision to transform the state receipt transactions from manual to electronic mode by building a safe, secure, sound, efficient and accessible system. e-Payment is a mode of payment in addition to the conventional methods of payment offered by GoM. GRAS is operated and maintained by the Virtual Treasury.

Virtual Treasury System is a module under the Treasury Computerization Project which is a Mission Mode Project (MMP) under the National e-Governance Plan (NeGP). The objectives of the Treasury Computerization Project are to make budgeting processes more efficient, improve cash flow management, promote real time reconciliation of accounts, strengthen Management Information Systems (MIS), improve accuracy and timeliness in accounts preparation, bring about transparency and efficiency in public delivery systems, better financial management along with improved quality of governance in states.

Yearwise collection of revenue through GRAS is indicated in **Table 7.1**.

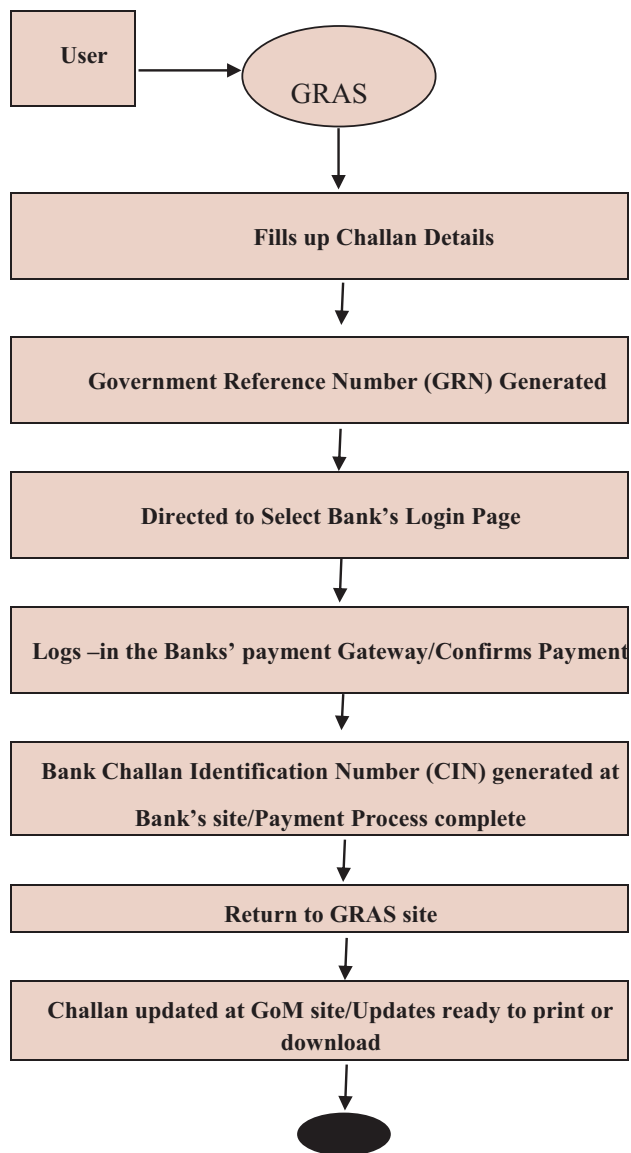
Table 7.1

Year	No. of Challans	(₹ in crore)
		Amount
2010-11	30,547	457
2011-12	1,23,352	10,365
2012-13	3,83,147	22,612
2013-14	17,65,143	27,044

Source: Information furnished by the Department

GRAS is a web based application and the transactions take place through a web-portal <https://gras.mahakosh.gov.in>.

7.2 The process



The fund collected in the Virtual Treasury Account is remitted to Government's account with the Reserve Bank of India (RBI) electronically or as per the guidelines of RBI. The application software was designed and developed by National Informatics Center (NIC), Pune and the system is hosted at Data Centre of Tata Communications Limited (TCL). A Disaster Recovery site is also available.

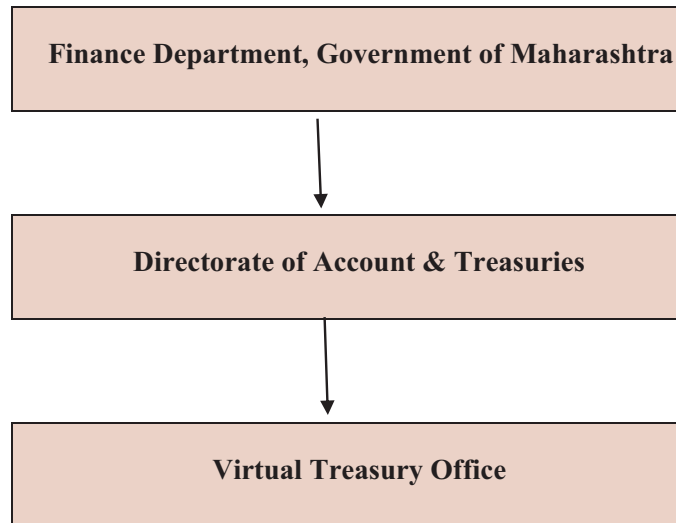
7.3 User departments

Major user departments of GRAS are:

- (i) Offices under Inspector General of Registration (IGR) for payment of Stamp Duty & Registration Fee

- (ii) Offices under Excise Department for payment of Excise Duty and other Taxes of the Department
- (iii) Regional Transport Officers (RTOs) under Transport Commissioner for Vehicle registration payments by dealers

7.4 Organisational setup



The Virtual Treasury Officer (VTO) administers the overall functioning of the GRAS application.

7.5 Audit objectives

The audit objectives are to evaluate whether:

- the planning and implementation of the system were appropriate to meet the objectives of the computerisation of government receipts;
- the input, processing and output controls were adequate to ensure integrity of the system and that they complied with the rules and procedures;
- reliable controls were in place to ensure data security and necessary audit trails have been incorporated in the system;
- the integration of data in GRAS with systems of Treasury/user departments and its reconciliation is done as per the laid down procedure; and
- the system meets the requirement of internal audit.

7.6 Audit scope and methodology

Audit analysed the data and records relating to GRAS with the help of Computer Assisted Audit Techniques (CAAT). Data analysis covered the period from 2010-11 to 2013-14.

Audit sample included the Virtual Treasury Office, Pay & Accounts Office (PAO), Mumbai and nine offices of major user departments. Selection of nine offices was done by random sampling, i.e., three¹ offices under the Inspector General of Registration (IGR), four² offices under Excise Department and two³ Regional Transport Offices (RTOs) under Transport Commissioner.

The Entry Conference was held with the Secretary, Finance Department (FD) (Accounts and Treasuries), on 16th May 2014. Audit findings and recommendations were discussed in the exit conference held on 5th November 2014. The Secretary, FD (Accounts and Treasuries) and other officers from the Directorate of Accounts and Treasuries (DAT) attended the meeting. Replies given during the exit conference and at other points of time have been appropriately included in the relevant paragraphs.

7.7 Audit criteria

The planning and implementation of the GRAS, data management and monitoring were examined with reference to:

- Maharashtra state e-Governance Policy 2011;
- Maharashtra Treasury Rules 1968;
- Maharashtra Treasury Manual;
- Government Resolutions (GR);
- Guidelines issued by Directorate of Accounts & Treasuries (DAT); and
- Generally accepted good IT practices.

7.8 Acknowledgement

We acknowledge the co-operation of FD, VTO and nine user offices in providing the necessary information and records to audit.

Audit observations

7.9 General controls

We examined the general controls relating to system development, strategy and policies, documentation, project monitoring associated with the IT system. Weaknesses noticed in audit are discussed as follows.

¹ General Stamp Office (GSO)-Mumbai, Deputy Inspector General of Registration (Dy. IGR) Pune, Joint District Registrar (JDR)- Thane Urban

² Superintendent of Excise Kolhapur, Nashik, Amravati and Aurangabad

³ Regional Transport Office (RTO)- Pune and Mumbai(West) at Andheri

Planning and management

7.9.1 Inadequate project management

Government of India (GoI) has approved the scheme for the implementation of the Mission Mode Project (MMP) “Computerization of State Treasuries” in July 2010. For implementation of Treasury Computerization including GRAS the GoM has received an amount of ₹ 990 lakh during the period 2011-12 to 2012-13.

As per the Guidelines of MMP of GoI dated July 2010, Directorate of Accounts and Treasuries (DAT) has prepared the Detail Project Report (DPR) including Institutional Mechanism for Project Management in September 2010.

As per Para 13 of the DPR for the purpose of governance and program management the following institutional setup was proposed:

An apex body consisting of high level functionaries to provide management support, formulate the strategy and be the driving force behind escalation, resolution and decision making.

- The departmental core team for overall implementation of the project will act as an interface between the apex body and the users.
- External users group consists of stakeholders such as RBI & Agency Banks, Accountant General (Accounts), Accountant General (Audit) to provide inputs on requirements.
- Internal users group consists of end users whose day to day work will get impacted by implementation of this project and to provide inputs on requirements and User Acceptance Testing support.

Audit observed that the external and internal user groups were not formed for providing inputs for requirements and user acceptance tests. Thus the FD did not have the necessary project management structure in place which carried the risk of user needs not being fully met.

On this being pointed out (August 2014), the Joint Director (Computer & State Record Keeping Agency), DAT stated that a High Power Committee (HPC) and Project Implementation Committee were formed by GoM for approval of MMP funds and fund for all systems was sanctioned by HPC in January 2012.

The Department is silent on the setting up of an institutional arrangement such as apex body, departmental core team, external user groups and internal user groups. In absence of adequate user involvement, the system carries deficiencies that are described in the subsequent paragraphs of the report.

In the exit conference, the Secretary, FD accepted the audit observations.

Policies and procedures

7.9.2 Procedure relating to maintenance of cash book for e-Receipts not followed

Rule 108A of the MTR, incorporated in October 2011, provides for payments in the Treasury through the electronic mode and accounts of such electronic

payments shall be maintained by the Virtual Treasury. As per GoM Circular (December 2011) on procedure for accounting and reconciliation of e-Receipt of GRAS, the concerned office should download the e-Receipt from GRAS and an entry to be taken in the cash book and a monthly statement of account to be sent to the controlling officer. Scrutiny of records of the nine units revealed that the cash books for e-Receipts were not maintained in the four and three concerned offices of IGR and Excise respectively. In two RTO offices, it was observed that the data on GRAS are downloaded regularly into the system of the RTO and related services were provided to the payee through their system. Accounting related comments in respect of these two RTOs are discussed in para 7.10.3.

It was further observed that features were not designed in GRAS to generate the required reports for the concerned offices such as daily cash account with complete classification details for each unit/department to reconcile the e-Receipts.

Thus the departments continued with the manual process of accounting and had not followed the procedures prescribed for the changed business process of the Virtual Treasury.

On this being pointed out the concerned offices accepted the audit observation and stated that no cash book is maintained for e-Receipts. Further, GSO Mumbai stated that due to GRAS they were not aware of requirement of maintaining separate cash book for e-Receipts. Further VTO stated that this may be due to not knowing the concept of the GRAS and training would be provided to the user department.

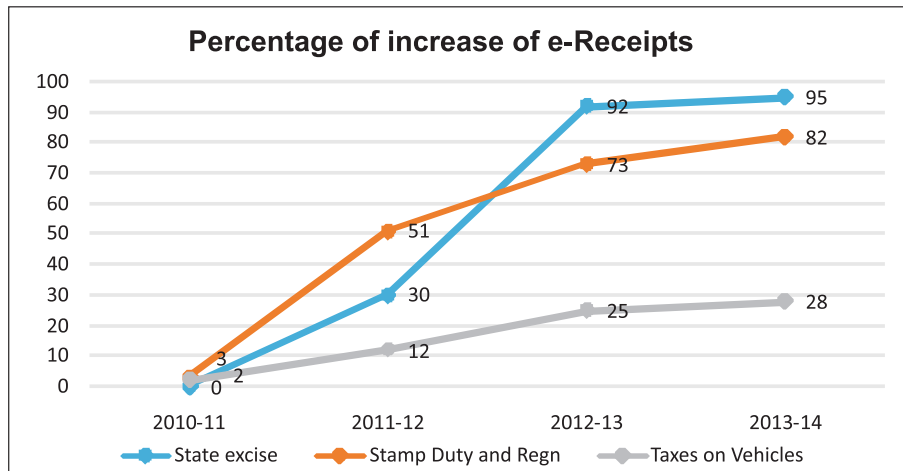
The fact remains that the implementation of prescribed procedure relating to GRAS in the user department was not monitored by the VTO/FD. The deficiencies in maintaining the cash book for e-Receipts could result in lack of control over the monitoring of e-Receipts and related services provided to the payee.

In the exit conference, the Secretary, FD accepted the audit observations and stated that necessary action would be taken.

7.9.3 Non-reconciliation of e-Receipts

As per the Maharashtra Budget Manual, Rule 157, Appendix 3, Para 3, the controlling officer should do the reconciliation with Principal Accountant General (Accounts & Entitlement) [PAG (A&E)]. Further, as per the GoM Circular (December 2011), the procedure for reconciliation was required to be followed for e-Receipts also.

There is a substantial increase in payments through e-Receipts from 2010-11 to 2013-14. The percentage of increase in e-Receipts of State Excise, Stamp Duty and Registration, and Taxes on Vehicles are given below:



Scrutiny of the records of the nine units taken up for audit revealed that though there was substantial increase in payments through e-Receipts, reconciliation with the figures of monthly accounts of PAG (A & E) was done only for the receipt other than e-Receipts. It was further observed that the reports with classification details required for reconciliation were not available for the user departments.

On this being pointed out the concerned offices accepted the audit observation and stated that e-Receipts were not reconciled with the figures of accounts of PAG (A & E). VTO stated that required MIS reports will be made available to the user department.

The non-reconciliation of e-Receipts despite substantial amount of receipts through e-Receipts since 2010-11 leads to the risk of failure to identify, investigate and resolve recurring problems of the newly introduced system which would result in their continued reoccurrence in future periods.

In the exit conference, the Secretary, FD accepted the audit observations and stated that all the departments would be instructed to reconcile the e-Receipts.

7.9.4 Documentation

Documentation of an IT system such as System Requirement Specifications (SRS), System Design Document (SDD) and Entity Relation Diagram (ERD), Data Dictionary (DD) etc. are necessary for regular operation and future maintenance.

The documentation relating to SRS and Data Dictionary were furnished to audit and we observed that-

- The Data Dictionary description of the field to understand the Data fields were not depicted.
- The System Design Document (SDD) and the Entity Relation Diagram (ERD) which describes a process flow and shows a relation with the various data stored in different tables were not available.
- Documentation for Change Management process was not available.

Inadequate technical documentation would not only result in high reliance and dependency on outsourced personnel but also pose a major risk for the future

maintenance of the application system, system up gradation by other agencies and usage of data.

In the exit conference, the Secretary, FD accepted the lacunae in the documentation of the system and the Joint Director (Reforms) stated that in future, documentation would be maintained in specific format.

The fact remains that the documentation on the system was inadequate and this needs to be set right.

7.10 Application controls

Application controls pertain to specific computer applications. They consist of input, output and processing controls and help to ensure rule mapping, proper authorization, completeness, accuracy and validity of transaction.

Input controls

Input controls ensure that the data entered is complete and accurate. The accuracy of data input in a system could be controlled by imposing computerised validity checks. Weaknesses in the input controls noticed in audit are discussed below.

7.10.1 Mandatory PAN data not captured

Rule 112 of the MTR prescribes that any person paying money into the treasury or the bank on government account should present in form MTR 6. In October 2008 GoM revised the form of challan for receipt (MTR Form 6) which is suitable for manual as well as e-payments and it was made mandatory to quote the PAN number of the user for e-Challan over an amount of ₹ 10,000. In GRAS the relevant data such as name of the department, type of payment, office name, location, name of the payee, PAN number, account head details etc. are to be entered in the e-Challan.

Analysis of GRAS data revealed that a large number of e-Challan did not capture the PAN number for e-Payments above ₹ 10,000 as shown in **Table 7.10.1**.

Table 7.10.1

(₹ in crore)		
Year	No of Challans	Amount
2011-12	484	1.09
2012-13	3,251	6.74
2013-14	1,45,272	1,026.19

The Department needs to address these control weakness in the system to ensure the completeness and accuracy of data.

The VTO stated that due to citizen demand and user department's request the PAN field has been made non-mandatory and a proposal to change the mandatory requirement of PAN would be sent to the Government.

The reply is not acceptable in view of the fact that as per the existing procedure approved by the Government, PAN is mandatory to be captured.

The objective of the Government for having such information could not be achieved.

In the exit conference, the Secretary, FD accepted that the PAN number had to be captured and the Joint Director (Reforms) mentioned that the necessary validation would be incorporated in the system.

Processing controls

Process controls inbuilt in the system must ensure that process was complete and accurate and processed data was updated in the relevant files. Data analysis revealed the following weaknesses.

7.10.2 PAO accounted data not uploaded

VTO was under the control of Pay and Accounts Office (PAO), Mumbai till May 2014 due to delay in allotment of separate treasury code for the Virtual Treasury. The daily transactions in GRAS were downloaded in the PAO system and accordingly monthly accounts were prepared. As per the GoM Circular dated July 2013, all the GRAS Challans accounted in the PAO accounts were required to be uploaded in the GRAS system manually to enable the user departments to verify the e-Receipts.

Analysis of data in respect of PAO accounted e-Receipts uploaded in GRAS revealed that such e-Receipts accounted in the PAO system were uploaded partially to the GRAS website for the period 2012-13 as detailed in **Table 7.10.2**

Table 7.10.2

Year	(₹ in crore)					
	Total e-Receipts		PAO accounted e-Receipts uploaded in GRAS		Difference	
	No. of e-Receipts	Amount	No. of e-Receipts	Amount	No. of e-Receipts	Amount
2012-13	3,83,147	22,612.06	3,18,882	19,418.44	64,265	3,193.62

This indicated that PAO accounted e-Receipts would not be available to the user departments. This partial uploading /non-uploading of accounted GRAS challans defeated the objective of enabling the user departments to verify the e-Receipts accounted by Government.

On this being pointed out (May 2014) the VTO stated that PAO accounted data is uploaded partially due to incompatibility between the format of data in the PAO system and GRAS.

In the exit conference, the Joint Director (Reforms) stated that the necessary instructions have been issued to PAO to upload the remaining data into GRAS.

7.10.3 Accounting of e-Receipts in cash book

As per the GoM Circular (December 2011), the concerned office should download the e-Receipt from GRAS and an entry is to be made in the receipts side of the cash book on the same day and deposited to virtual treasury in the expenditure side.

Vahan system⁴ is in use in individual RTO offices for registration of vehicles and e-Receipts in GRAS is downloaded by the concerned RTO offices regularly. In the Vahan system, when services were provided the e-Receipts were categorized as Used Challan and where services were not provided such e-Receipts are categorized as Unused Challan. Scrutiny of the procedure followed at RTO, Mumbai (West) and RTO, Pune revealed that the e-Receipts were recorded in the cash book only on the date of providing services to the customer which is later than the actual date of receipt of money through the online system. From the instances discussed below it can be seen that there was delay in accounting of e-Receipts due to improper integration of two separate systems i.e. GRAS and VAHAN.

i) Non-accounting of e-Receipts in the cash book.

Analysis of data for various periods between October 2010 and March 2014 of GRAS revealed that e-Receipts amounting to ₹ 134.6 lakh and ₹ 2.18 lakh were not accounted in the cash book of RTO, Mumbai (W) and Pune respectively and shown as unused Challan. This is contrary to the Finance Department circular of December 2011.

ii) Accounting of e-Receipts in different financial year

Scrutiny of the GRAS database and data relating to cash book of RTO, Andheri on e-Receipts revealed that e-Receipts of the financial year is not accounted in the same financial year and instead it is accounted in the subsequent financial year as detailed in **Table 7.10.3 (ii)**.

Table 7.10.3 (ii)

(in ₹)			
Financial Year of GRAS Receipt	No. of e-Receipts	Amount	Financial Year of Cash Book of RTO Andheri
2010-2011	50	5,76,098	2011-2012
2011-2012	144	58,14,373	2012-2013
2012-2013	85	26,78,263	2013-2014

iii) Non-availability of e-Receipts in the department system

Records furnished by RTO, Mumbai (West) revealed that four e-Receipts for the period between May 2011 and June 2012 amounting to ₹ 11.12 lakh were not available in the cash book as well as the Used and Unused list of Vahan system. This is contrary to the Finance Department circular of December 2011.

⁴ Vahan System is an application software implemented in RTOs for computerization of vehicle registration and related receipts.

In reply, RTO Mumbai (West) stated that GRAS Receipts are downloaded in the Vahan system where the dealers register the vehicle within seven days of making payments and delayed cases of registration for more than seven days are not downloaded and hence not reflected in the used or un-used list.

Thus it is evident that the prescribed procedure is not followed in maintaining the cash book and in the reconciliation the figures of the department will not match with the figures of accounts of GoM.

In the exit conference, the Secretary, FD agreed with the audit observations and stated that the matter would be taken up with the concerned departments.

7.10.4 Misclassification of e-Receipts

Accounts classification codes are to be mapped with the concerned department so that such information would be available for the Users at the time of making payment in GRAS system.

i) Classification code not available in Master Data

Account classification code for all the payment relating to an office should be available in GRAS. Scrutiny of master table relating to the mapping of classification code for account head revealed that the code of pension contribution was not mapped with the Excise Department and thus was not available for the payment of pension contribution. Analysis of data relating to Superintendent of State Excise, Kolhapur revealed that pension contributions in 132 cases of e-Receipts amounting ₹ 43.03 lakh were wrongly classified under Excise receipt.

ii) Classification code not properly mapped with the units

Separate account classification codes are prescribed for General Stamp Office (GSO) and Inspector General of Registration (IGR) for monitoring revenue collection. Audit observed that account classification codes relating to GSO and IGR were not mapped with the respective units in the GRAS system. Due to this, classification codes other than the classification of the concerned units were listed in the drop down box which resulted in selection of incorrect classification codes at the time of filling of the e-Challans.

This led to misclassification and under-statement of ₹ 9.70 crore during 2012-13 and ₹ 25.25 crore during 2013-14 pertaining to various heads of account relating to GSO and over-statement of the amount in various heads relating to IGR. Similarly under-statement of ₹ 4.78 crore during 2012-13 and ₹ 7.28 crore during 2013-14 pertaining to various heads of account relating to IGR and over-statement of the amount in various heads relating to GSO.

iii) Misclassification

Scrutiny of data of Superintendent of State Excise, Kolhapur relating to import fees in 19 cases amounting to ₹ 275.92 lakh for 2011-14 and license fees in two cases amounting to ₹ 48.21 lakh for 2012-13 were misclassified as Excise Duty on IMFL

The department needs to address the control weakness in the system to plug the possibilities of the misclassification by the external user who are not familiar with the account classification.

Table 7.10.5

(₹ in crore)						
Department	Year	Total e-Receipts	Amount	No. of e-Receipts not defaced	Amount	Percentage of e-Receipts not defaced
IGR	2010-11	896	392.51	876	381.08	97
	2011-12	11,547	7,291.79	4,505	2,816.16	39
	2012-13	89,831	12,764.94	75,076	4,126.78	32
	2013-14	12,83,296	15,245.80	5,20,147	2,295.97	15
EXCISE	2010-11	7,808	0.26	7,805	0.26	100
	2011-12	15,338	2,555.07	3,504	420.12	16
	2012-13	74,341	8,566.59	11,091	723.59	8
	2013-14	1,02,615	9,553.82	32,865	730.33	8
RTO	2010-11	21,826	64.31	17,131	46.54	72
	2011-12	92,811	508.36	81,684	460.73	91
	2012-13	2,01,927	1,235.09	1,89,890	1,169.24	95
	2013-14	2,17,821	1,441.35	2,06,687	1,333.15	92
Total					14,503.95	

This indicates that the departments have not followed the prescribed procedures for defacement of e-Receipts and verification of e-Receipts on providing service which may lead to misuse of e-Receipts. On providing service the department has to verify the e-Receipts and deface it ensuring the authenticity of the e-Receipts submitted by the payee.

In the exit conference, the Secretary accepted the audit observation and stated that necessary procedures would be strictly followed.

7.10.6 Forged e-Receipts were noticed for payment of stamp duty on delivery orders

GoM levies stamp duty on delivery orders on imported goods lying in any port or in any warehouse. Custom House Agents (CHA) can pay stamp duty on delivery orders by way of e-payments through GRAS. Container Freight Service (CFS) agencies verifies the e-Receipts and releases the goods. Facility for verification and defacement of e-Receipts was given to the CFS only in January 2014.

Test check of records in respect of e-Receipts relating to stamp duty on delivery orders at one of the agency of CFS at Uran, revealed that in two cases prior to January 2014, e-Receipts were found prima facie to be forged as GRN numbers of the two e-Receipts were not available in the GRAS database. These e-Receipts were used as proof of payment of stamp duty on Delivery Orders of imported goods as shown in **Table 7.10.6**.

Table 7.10.6

(in ₹)				
Sr. No.	GRN No.	Date	Delivery Orders Details	Amount
1	MH000400815201314E	07-08-2013	DO NO. –RCMBD20139640 dt 08.08.2013 IGM NO. – 2065873 ITEM NO. – 773	4230
2	MH000440696201213E	14-03-2013	DO NO. – FDL130338675 dt 16.03.2013 IGM NO. – 2055710 ITEM NO. – 3	1180

On this being pointed out (July 2014), the VTO stated that such e-Receipts were not available in the GRAS system. The Deputy Inspector General of Registration, Thane stated that the matter would be verified and action would be taken accordingly. Further it was stated that necessary instructions were issued in January 2014 to all CFSs to verify and deface the e-Receipts at the time of providing services on delivery orders.

In the exit conference, the Secretary mentioned that the incident is taken seriously by the government.

7.10.7 Refund process not followed

The GoM, Finance Department Circular dated 16 December 2011 prescribed procedure for the treasury for refund of e-Receipts. Accordingly, for the approval of refund application processed by the Department, the Treasury Officer should access GRAS with the login id and password allotted to ensure the correctness of the original challan and then make the necessary note of refund at their level and release payment.

Test check of records at the Office of the Joint District Registrar, Thane Urban relating to the e-Refund of e-Receipts and data in GRAS for the month of March 2013 revealed that the prescribed procedures were not followed by the Treasury Office, Thane as refund payments were made without making necessary entry by the Treasury Office in GRAS in all 29 cases test checked involving a total refund of ₹ 41.72 lakh. Thus not following the procedure regarding note of refund made the risk of not knowing whether the refund has been paid by the treasury or not.

In the exit conference, the Joint Director (Reforms) stated that necessary action is being taken.

7.11 Information system security

7.11.1 IT security policy

An effective IT security policy is important for protection of the information assets created and maintained by an organisation.

By way of enunciating an IT security policy, the organisation demonstrates its ability to reasonably protect all business critical information and related information processing assets from loss, damage or abuse; and also creates enhanced trust and confidence between organisations, trading partners and external agencies as well as within the organisation.

It was observed that GoM did not have an approved IT Security policy and FD did not issue any security guidelines for GRAS.

In the exit conference, the Secretary, FD accepted the audit observation and mentioned that an IT Security Policy would be put in place.

7.11.2 Outsourced Data Hosting Services

GRAS is hosted in a Data Centre of Tata Telecommunication Limited (TCL) at Mumbai along with other systems of FD. As per the agreement with TCL the following conditions were stipulated relating to the security of the system.

- TCL shall sign a Non-Disclosure Agreement.
- TCL shall adhere to the Information Security Policy developed by the GoM.

The Non-Disclosure Agreement was not available for audit scrutiny. As there was no Information Security Policy developed by the GoM, the condition mentioned in the Agreement could not be enforced.

In the exit conference, the Secretary, FD agreed to do the needful.

7.11.3 Generic users

Data in GRAS is accessed by different user categories such as various user Departments, VTO and citizens. In the computerized system, access to data was required to be restricted to authorized individual users only. It was, however, noticed that User IDs were allotted in the code name of the user office instead of the individual users and user IDs were shared by different individual users. Thus individual users responsible for the transactions are not recorded in the system. Some of the access IDs are detailed in **Table 7.11.3**.

Table 7.11.3

Name of the Office	User ID	Name of the User
Dy. Inspector General of Registration, Thane	IGR001	IGR001
Joint District Registrar, Thane (Urban)	IGR108	IGR108
General Stamp Office, Mumbai	IGR537	IGR537
R T O, Mumbai (West)	RTO002	RTO002
R T O, Pune	RTO012	RTO012
Superintendent State Excise, Kolhapur	EXC024	EXC024
Superintendent State Excise, Aurangabad	EXC030	EXC030
Superintendent State Excise, Nasik	EXC039	EXC039
Superintendent State Excise, Amravati	EXC050	EXC050

Further it was noticed that out of 369 users relating to IGR, EXCISE and RTOs, 300 users had not even changed their password since the initial password was issued to them and 43 users have not changed their password for more than 100 days.

This indicates poor control over access to the system and there was risk of misuse. Further, users were not aware of the information security risks.

Access management to the GRAS application needs to be improved and strengthened and a password policy should be framed to enhance data security.

In the exit conference, the Secretary stated that a password policy would be formulated and implemented.

7.11.4 Business continuity and disaster recovery plan

An organisation should have a business continuity and disaster recovery plan with associated controls to ensure that the organization can accomplish its mission and not lose the capability to process, retrieve and protect information maintained in case of eventualities due to interruption or disaster leading to temporary or permanent loss of computer facilities and data.

GRAS servers are hosted in the data centre of TCL. It was informed that mock drill practice was conducted every three months for disaster recovery testing. Audit observed that the VTO did not have any documented business continuity and disaster recovery plan for the GRAS.

The Finance Department may establish a framework of business continuity plan for GRAS due to its rapid increase in volume of transactions.

On this being pointed out (July 2014), VTO stated that back up of the Data is taken regularly.

The Department is silent on the business continuity and disaster recovery plan for GRAS.

7.11.5 Uploading of scrolls by participating Banks in GRAS

The Directorate of Accounts & Treasuries (DAT), Maharashtra State, Mumbai in February 2009 prescribed that the participating banks in GRAS shall remit to RBI all receipts at the end of the day by any payment mechanism/mode acceptable to the RBI. Participating bank should at the same time send an electronic scroll in the format defined by the Government from time to time and a hard copy of the same to the VTO.

Audit observed that out of 16 participating banks, only two (Industrial Development Bank of India and Indian Overseas Bank) were uploading scrolls that were digitally signed and none of the participating banks were submitting hard copy of the electronic scroll to the VTO.

The non-submission of digitally signed scrolls indicates that the data transmitted by banks is vulnerable to risks of unauthorized interception, alteration, duplication and transmission of data.

The absence of digital signature and the non-availability of signed hard copy by a responsible official of the participating banks indicate the deficiency in the maintenance of accounting records.

In the exit conference, the Secretary assured that steps would be taken to make the system more secure.

7.11.6 Audit trails

Audit trails help track the history of transactions, changes/modifications in data, log of system failures, erroneous transactions, etc. In a system, a unique identifier or transaction code would direct the transaction to the proper application programme for processing. Then if one audit entry is deleted a gap in the numbering sequence will appear so that changes can be detected.

Scrutiny of the database in this regard revealed the following lacunae:

- Entries/transactions in the tables in the database did not have a unique identifier or transaction code
- The auditing log is not enabled in the DB2 database

These discrepancies indicated inadequate audit trails and controls over modification and deletion of data in the system.

Use of sequential numbering for transaction identifier will enhance the audit trails features.

On this being pointed out (July 2014), the VTO accepted that audit log is not configured for recording backend modifications at the database.

7.12 Internal audit

Internal audit system both in the manual as well as computerized environment helps provide assurance that necessary controls are in place. As per Rule 74 and 75 Maharashtra Treasury Rules 1968, the workings of the Treasuries/Sub-treasuries/Pay and Accounts Office has to be annually reviewed through inspections covering the cash book, cash balances, book balances and registers.

On scrutiny of the System Requirement Specifications (SRS) and application software we observed that the requirements of audit/internal audit were not included and an audit module was not prepared.

This indicates that though audit is an intrinsic part of assurance on the functioning of the treasury system, the necessary requirements for facilitation of audit in view of the virtual treasury and GRAS were not elicited and incorporated in the system.

In the exit conference, the Secretary, FD agreed to do the needful.

7.13 Management Information System

The application System should provide for various Management Information System (MIS) reports which could act as a tool for various user groups such as user department, audit and treasury to monitor the receipts, account classification, verification of e-Receipts and reconciliation.

We observed that critical MIS reports such as scheme code wise receipts for any period, user wise list of e-Receipts, list of undefaced e-Receipts, list of refund approved by treasury were not available. Due to non-availability in this regard the users could not monitor the misclassified receipts, defacement of e-Receipts and reconciliation.

The Department may identify MIS reports needed for various user groups for necessary monitoring.

In the exit conference, the Secretary, FD agreed to include the required MIS reports in the system.

7.14 Conclusion

The GRAS system under treasury computerization project under National e-Governance plan was implemented since 2010 with a view to promote real time reconciliation of accounts, strengthen Management Information Systems (MIS), improve accuracy and timeliness in accounts preparation, bring about transparency and efficiency in public delivery systems, better financial management along with improved quality of governance in states. However, it was observed that even after four years of implementation, the laid down rules and prescribed procedure for implementation of GRAS were not followed by the user departments for maintenance of cash book and reconciliation of e-Receipts which indicate the absence of ownership and lack of internal controls. Deficient mapping of business rules and validation checks resulted in cases of misclassification. These are not rectified due to lack of reconciliation. Some standard MIS reports required by specific user groups are not available in the system. Defacement of e-Receipts which is binding on the department on providing the services to payee was not done in many cases and cases of forged e-Receipts were also noticed.

7.15 Recommendations

GoM may consider

- **Reviewing the implementation of GRAS by the user departments;**
- **Monitoring the defacement of e-Receipts on providing services to the Payee by the user department;**
- **Ensuring adequate logical access control so that the safety and security of data is not compromised;**
- **Creation of adequate audit trails to track the changes made in the data; and**

- **Analyse the requirements of MIS reports and requirements of Audit and design appropriate MIS module and get better value as assurance from the functioning of the system.**

In the exit conference, the Secretary, FD accepted all the recommendations.

**Mumbai
The**

**(MALA SINHA)
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Countersigned

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The**

**(SHASHI KANT SHARMA)
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