

**General Administration Department and
Revenue and Forests Department**

**3.4 Information Technology review of SETU (Integrated
Citizen's Service Centres)**

Highlights

Lack of uniformity in the software implemented in various centres rendered consolidation and transmission of the data from root level to apex level difficult. The system had no security policies/procedures exposing the system to potential risks of invalid inputs, processing, output and access by unauthorised users. SETU service provided to citizen was not at a low cost.

Non-development of uniform software by State Level SETU Society resulted in failure to provide envisaged information at apex level.

(Paragraph 3.4.6)

Due to the absence of adequate input and validation control, cases of duplicate record and gaps in the database were noticed.

(Paragraphs 3.4.7 and 3.4.8)

Non-existence of adequate business continuity plans and change management system led to vulnerability to disasters.

(Paragraphs 3.4.11 and 3.4.12)

Citizens were charged more for issue of various certificates than the rates prescribed by Government, which led to excess collection of Rs 22.09 lakh from citizens by Collector, Thane.

(Paragraph 3.4.13.1)

Government did not pass on the benefit of lower rates of service charges to the citizens from the unspent balance of fees (Rs 12.96 lakh) with State Level SETU Society.

(Paragraph 3.4.13.2)

3.4.1 Introduction

With a view to harness the benefits of Information Technology (IT) for effective and transparent functioning of the administration, Government decided (August 2002) to provide different services to citizens through an IT based project SETU (Project) connoting a 'Bridge' for connecting Government with people.

The first phase of the project contemplated issue of various certificates, licenses and affidavits concerning the Revenue Department to citizens through a single window system. Remaining three phases of the project were to cover

similar activities of other departments inclusive of acceptance of government receipts, taxes *etc.* It was also to cater to the citizens' requirement of facilities like Railways / Bus reservations, issue of passports, issue of election identity cards, *etc.* By May 2006, out of 35 Districts and 358 Talukas in the State, the project was in operation in 27³⁶ District headquarters and 307 Talukas.

3.4.2 Organisational set-up

Director of Information Technology (DIT) was to monitor the implementation of the Project in the State. At the District / Taluka level, existing staff of District Collector was to work at the back-end of the SETU IT system and maintain the basic record and authenticate the certificates issued through the system. District Level SETU Societies (DLSS) registered under the Societies Registration Act, 1860 were to engage software development agencies (Agencies) on the principle of Build-Operate-Transfer (BOT) for front-end manual activities such as issue of blank application forms, stamp papers, scrutiny of documents attached with the applications, ensuring availability of required information and generating receipt of applications through software. Procurement cost of hardware, counters, furniture, stationery, payment to staff, electricity bills and maintenance of hardware for SETU centers was also to be borne by the Agencies. The DLSS was to pay to the Agencies an agreed percentage of the fees levied for the services provided to citizens. All SETU centres were to be connected through Local / Wide Area Network to the District Control Room and the data was to be transmitted to the Mantralaya for display on the Government web-site. A State Level SETU Society (SLSS) was to guide and monitor the work of DLSS. Building for the SETU centers at district as well as taluka places was to be made available by Government on no cost basis.

3.4.3 Audit objectives

The audit objectives were to evaluate:

- the completeness and correctness of data captured in the system;
- whether arrangements exist for ensuring business continuity and
- the efficiency and effectiveness of the system in achieving the stated objectives.

3.4.4 Scope and methodology of audit

The audit of SETU IT system conducted between February 2006 and June 2006 involved scrutiny of records (including digital) and the SETU IT systems for the period August 2001 to May 2006 in seven³⁷ out of 27 Districts

³⁶ Ahmadnagar, Akola, Amravati, Aurangabad, Bhandara, Buldhana, Beed, Dhule, Gondia, Hingoli, Jalgaon, Jalna, Kolhapur, Latur, Nagpur, Nanded, Nashik, Osmanabad, Parbhani, Pune, Ratnagiri, Sangli, Sindhudurg, Solapur, Thane, Wardha, Yavatmal

³⁷ Collector Offices at Chandrapur, Jalgaon, Kolhapur, Nagpur, Nanded, Thane and Yavatmal

along with Taluka SETU centres. Computer Assisted Audit Techniques were used for data analysis and reporting.

Audit findings

3.4.5 Non-implementation of all the phases of SETU

Government had resolved (August 2002) to implement the SETU project in four phases. However, no benchmarks/time limits were fixed for phase-wise implementation of project. As of June 2006, the SETU centres were providing the services envisaged in the first phase only.

DIT stated (May 2006) that the integration of services of various departments in SETU centres was a matter of policy of the department concerned. This reply was not in conformity with the objectives of setting up of the SETU centres.

3.4.6 Absence of uniformity in software

SLSS was to develop a common software for all SETU centres for facilitating consolidation and transmission of data available at Taluka and District levels to the official web site of the Government. It was, however, observed that different back-end software for databases were in use in various SETU centres.

Centralised software for SETU system was not developed

| SETU centre | Front-end | Back-end database and number of BOT agencies |
|-----------------------|----------------------|---|
| Collector, Chandrapur | Access, Visual Basic | Access: 2, |
| Collector, Jalgaon | Access, Visual Basic | Access: 14, SQL:2 |
| Collector, Kolhapur | Access, Visual Basic | SQL: 1, Access: 1 |
| Collector, Nagpur | Access, Visual Basic | Access: 1, SQL: 1 |
| Collector, Nanded | Access, Visual Basic | SQL: 1, Access: 10, DB-2: 1 |
| Collector, Thane | Access, Visual Basic | SQL: 2, Access: 1 |
| Collector, Yavatmal | Access | Access 2000: 2 |

DIT stated (May 2006) that development of a common software was under active consideration.

3.4.7 Input controls and validation checks

The system lacked input controls as it did not ensure complete and correct collection of the required primary data in its database. Absence of various validation checks in the system design made the system vulnerable to data inaccuracies as is evident from cases cited below:

3.4.7.1 Incomplete database

As data relating to certificates for caste, non-creamy layer, senior citizen, domicile certificates *etc.*, was not being maintained, the system was unable to generate such certificates. Instead, these certificates were being word processed from the manually available data thus defeating the objective of the system (Kolhapur).

3.4.7.2 Inaccurate database

The system accepted applications from persons below 18 years of age to execute affidavits

- In seven cases, applicants below 18 years of age had executed affidavits (Jalgaon).
- It was observed that nine duplicate token numbers were issued during June 2003 to October 2005 (Kolhapur).
- Out of 147 cases, in 31 cases the date of issue of certificate was earlier than the date of application (Kolhapur).
- The master table for castes contained duplicate data. In 55 out of 114 cases for same caste and category, different Caste_ID were noticed (Nanded).
- In domicile certificate table, out of 516 cases, in 90 cases the date of birth was not mentioned. In 23 cases it was shown as 31 December 1899 and in three cases it was shown as 3 January 1900 (Nanded).

Thus, in the absence of input and validation controls, the databases were incomplete and unreliable.

3.4.7.3 Incomplete generation of tokens

In SETU center at Kolhapur, 65,969 tokens from February 2003 to May 2006 for issue of certificates were generated, whereas actual number of certificates issued was 57,119

In SETU center at Kolhapur, the database indicated generation of 65,969 tokens from February 2003 to May 2006 for issue of certificates, whereas actual number of certificates issued, as per cashbook was 57,119. The receipt of Rs 0.89 lakh towards fees were, thus, was either not accounted for or was not collected.

In SETU center at Kolhapur further, affidavits executed as per database were 81,445, whereas the cashbook indicated the number of affidavits issued as 77,055 which led to less realisation of Rs 0.44 lakh on account of SETU charges.

Thus, in the absence of adequate input controls less realisation of Rs 1.33 lakh towards fees went unnoticed till it was pointed out in audit.

3.4.8 Processing controls

Some cases of inadequate processing controls are detailed below:

- There was no provision in the software for generating Token numbers for execution of affidavits (Nanded and Kolhapur).
- In 21,696 out of 37,242 cases, software allowed generation of Affidavits without photographs (Jalgaon).
- One hundred and eighty three gaps and 329 gaps were detected in the auto-generated fields respectively for tokens and certificates (Jalgaon and Nanded).

Audit trail was also not available. Thus, the correctness in issue of affidavits and charges collected therefore could not be ensured.

3.4.9 Logical access control

In the seven³⁸ SETU centres, there was no documented password policy for the SETU application, databases and operating system.

- In Collectorates Chandrapur and Yavatmal it was seen that the BOT agencies had purchased readymade software and the password to the databases was not available with them nor the Department insisted upon it. In absence of password, access to the databases was not possible.
- In Collectorates Jalgaon, Kolhapur and Thane there was no password provided for user_ID to the application software and databases implemented by the BOT agencies. Hence the system was prone to risk of unauthorised access.

Thus, in the absence of logical access control, the data security could not be ensured.

3.4.10 Non-availability of source code

Tender documents for operating SETU center on BOT basis envisaged that the source code of the application software would be the intellectual property of DLSS. However, none of the DLSS had collected the source code for the SETU system from the BOT agency.

DIT stated (May 2006) that as the BOT agencies had developed the software at their own cost, taking possession of source code did not appear justified. This reply was contradictory to the terms of contract with the BOT agencies.

3.4.11 Business continuity and disaster recovery plan

It was observed in seven³⁸ SETU centres that documented business continuity and disaster recovery plans did not exist. The District Collectors also did not have the backup of data generated by the SETU agencies though it was envisaged in the contract with the agencies.

DIT stated (May 2006) that the establishment of data centers at the State level was under consideration and also stated that the Collectors had the backup of the data. The reply of DIT was not acceptable in view of non-availability of backups with Collectors Chandrapur, Jalgaon, Nagpur, Nanded, Kolhapur and Yavatmal.

3.4.12 Change management system

Records in seven³⁸ Collectorates revealed that there was no documented policy for change management. The Collectors at Chandrapur, Kolhapur and Nagpur stated that the changes required in the application software were communicated verbally.

DIT stated (May 2006) that changes in the software were done as and when some problem arose at the execution level.

³⁸ Chandrapur, Jalgaon, Kolhapur, Nagpur, Nanded, Thane and Yavatmal

There was no policy for change management

3.4.13 Collection of fees

3.4.13.1 Excess collection

SETU centres under Collector Thane unauthorisedly collected excess fees of Rs 22.09 lakh from citizens

Government had prescribed (September 2002) a fee of Rs 10 to be charged by BOT agencies for issue of caste certificates, income certificates, affidavits, solvency certificates, domicile certificates, senior citizen certificates *etc.* Similarly, maximum fees to be collected for issue of 7/12³⁹ certificate from August 2004 was Rs 15 subject to actual expenditure incurred for issue of the certificate.

It was, however, noticed that the charges levied for issue of various certificates varied from district to district as shown below:

| District | Rate per certificate (Rupees) | Rate for issue of 7/12 certificate (Rupees) |
|------------|-------------------------------|---|
| Chandrapur | 15 | 15 |
| Jalgaon | 20 | 10 |
| Thane | 23 to 29 | 17 |
| Yavatmal | 19 | 15 |

This resulted in extra burden of Rs 13 to Rs 19 per certificate to each applicant in Thane district and consequent unauthorised collection of Rs 22.09 lakh from them during October 2004 to February 2006.

Collector, Thane stated (July 2006) that as per the decision taken in the meeting held on 11 September 2003 (of the district level society) the rates were increased to Rs 25 per certificate. The reply was, however, not acceptable as there were no orders from Government for increasing the fees payable by citizens for availing of the services from SETU centres.

3.4.13.2 Unspent balance of fees with SLSS

Unwarranted formation of SETU society

Government approved (August 2002) formation of the SLSS and DLSS for providing services which the Government was providing through their own staff. The SETU societies were to charge Rs 10 per certificate to be issued to the citizens through the BOT agencies operating the SETU centres. The BOT agencies utilised Government buildings, infrastructure and the services of the Government staff for backend work and monitoring. The role of DLSS in maintaining the SETU system was, thus, reduced merely to collecting service charges from citizens. Government had also directed (August 2002) that 10 *per cent* of the collections made by the DLSS were to be transferred to SLSS. It was observed that the SLSS had Rs 12.96 lakh as of May 2006 towards the transfer of service charges by six⁴⁰ Collectors to SLSS through DIT.

As the SETU system was operated on the principle of BOT by private agencies, Government should have passed on the benefit of lower rates of

³⁹ Village form No. 7 depicting the details of land, owner of the land, rate of land revenue and Village form No. 12 depicting the details of crops yielded by the farmer during the year.

⁴⁰ Aurangabad, Chandrapur, Dhule, Jalgaon, Osmanabad and Yavatmal

service charges to the citizens. Government, thus, failed to ensure service to citizen at a low cost.

3.4.14 Conclusion

Though the SETU project was launched in 2002, Government failed to implement all the phases of the SETU project. In the absence of a common software, consolidation and transmission of the data from SETU centres to Government was not possible. Incomplete modules and failure to enter all relevant data led to incomplete databases. IT security was deficient exposing the system to potential risks of unauthorised access and modifications. Due to non-observance of the provisions of tender agreement the business continuity could not be ensured. Failure to levy service charges at the rates approved by Government led to excess burden on the citizens in terms of certificate and village form fees.

3.4.15 Recommendations

- Single window service provided to citizens should be made available at a least cost and
- A comprehensive software should be rolled out within a stipulated time frame to cover:
 - the requirements of all the phases of the project and
 - adequate input, validation and access controls.

The matter was referred to the Principal Secretary to the Government in August 2006. Reply has not been received (October 2006).