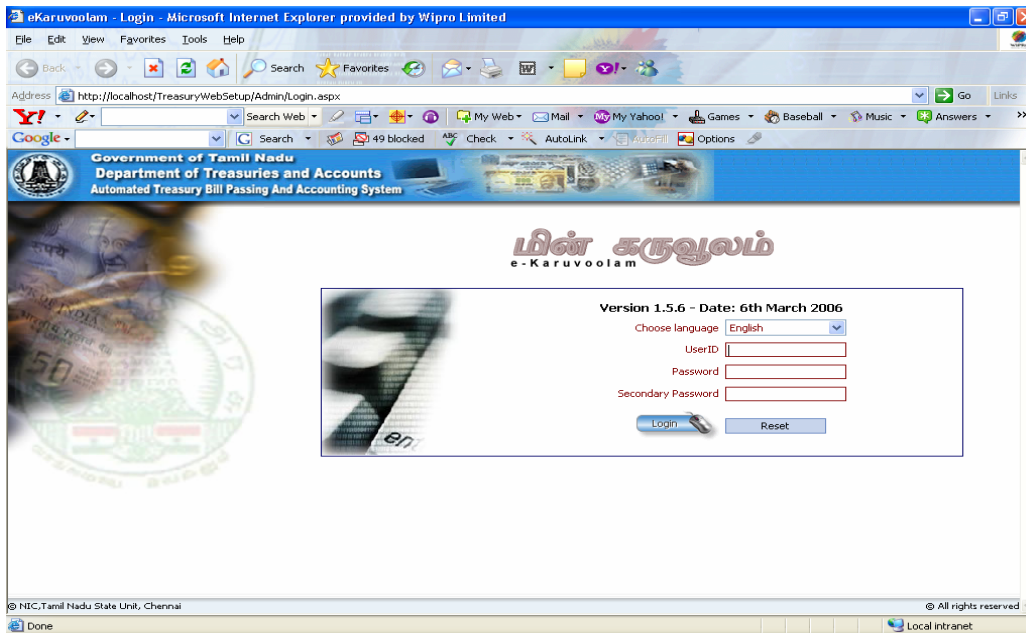


E-Karuvoolam

Automated Treasury Bill Passing System



Treasury Workflow based System

Automated Treasury Bill Passing System (e-Karuvoolam) is aimed at automating the existing manual billing system of Treasury Department

The Workflow based Systems developed for the Treasury Department, enables to capturing the data starting from bill submission stage at the counters. This was taken up for pilot implementation at the following locations:

- Karur District Treasury and its 3 Sub Treasuries
- Theni District Treasury and its 5 Sub Treasuries
- Pay and Accounts Office, Secretariat, Chennai

Treasury is the “Bank of Government”, functioning with the objective of maintaining all transactions to the government and sending reports to the Accountant General. Any

transaction related to government is performed in the form of a bill. Initially a bill is submitted to the counter of a Sub Treasury / District Treasury / Pay and Accounts Office through a messenger. The bill goes through a phase of approval. This phase is called auditing the bill. Auditing clerk can reject the bill or can approve the bill. If the bill is approved, it is sent to the cheque release counter. The clerks at cheque release counter handover the cheque to the messenger if Treasury type is banking. If the Treasury is non-banking type, cash is given to the messenger.

The application software developed by NIC provides online environment with systems available on all working tables starting from the bill submission counter. The officials can process the bills online and take action for passing / rejecting the claim.

The system is under pilot implementation at Theni, Karur and Pay and Accounts Office Secretariat.

2 Features of the system:

- Bills can be accepted at the counters
- Bill can be sent online with digital signature
- Since the Banks are connected to the Sub Treasuries, challan remittance and payment transactions are directly stored in the Treasury Systems
- Bank Scrolls for Payment and Receipt can be generated at any time

3 Present set up:

At each Sub Treasury, Xeon servers are connected with PC clients and thin clients. The work flow based transactions will be carried out using local Servers at each location. Banks are connected with the respective Sub Treasuries through dialup connectivity. Daily transactions are carried with this hardware setup.

At District Treasury, Xeon servers are connected with PC clients and thin clients to carry out the day today transactions. Dialup connectivity is established between the Sub Treasuries and the District Treasuries for data transmission. Banks are connected with the District Treasury through dialup connectivity.

4 Security Issues:

The workflow based system being an On-line system, necessary care has been taken in the software to ensure that only valid users have access to the system and carry out transactions. This has been ensured using following options:

- Access control using Operating System provided user-id and password
- Access control using Application Software enabled user-id and password
- Provision has been given for using Bio-metric devices
- PKI / Digital Certificate and Smart card technology usage
- Intrusion Detection and Internal Incident Reporting Systems
- Security Audit

5 Overview of the System

The e-Karuvoolam is a Web enabled application System that provides the following facilities:

- Data capturing modules for entering the details from
 - Bills relating to Salary, Contingency, Travel Expenses, LTC, FBF, GPF, SPF, Pension, Grants, Medical Charges, Festival Advance, Adjustment, Refund, Deposit Refund. Teachers Provident Fund, Wages, Miscellaneous etc.
 - Challans relating to Receipts, Refund, Funds Remittance and Other Receipts
 - Paid Cheque, Pension Payments made etc.

6 Salient features:

- Online data capturing
- Roles of various types of operators are followed
- Software is operated by three important key players
 - Auditor level-1 (Accountants)
 - Auditor level-2 (Superintendents)
 - Auditor level-3 (ATO / TO / PAO)
- Combo boxes are provided to minimize data entry
- Counter level typing work minimized
- DDO wise DP Code control maintained
- Budget Appropriation followed for non salaried items
- User login authentication is verified with main password and Secondary password of the day
- Various types of reports can be generated
- Scanned Drawing officers signature can be verified over screen
- Objection slips are generated for rejected bills

- Cheque printing using the System
- Online Bills acceptance
- Connectivity between SBI and the Treasury Department

7 Types of users:

The following users are identified to operate the system.

- Administrator or Key Resource Personnel
- Auditor Level 1
- Auditor Level 2
- Auditor Level 3 (For District Treasury & PAO only)
- Receipt Counter clerk
- Return / Issue Counter Clerk
- Cheque Issue Clerk
- Input Clerk

8 Major Inputs to the system

- Data capturing at counter level
- Data capturing at Auditor Level 1, 2 & 3
- Input Challan entry
- Deposit Master entry
- Bank scroll entry
- Pension system entry

9 Major Outputs from the system

- Input I - Payment (Vouchers) Transaction repor
- Input II - Receipt (Challans) Transaction Report
- Funds Extract - Funds extract Report such as GPF, SPF, FBF etc.
- Funds Abstract - Funds Abstract Report such as GPF, SPF, FBF etc.
- Pay Funds - Funds Payment Report
- Deposit Funds - Funds Deposit Report
- RBD Statement - Reserve bank deposit Statement

10 Essential Requirements

- Check List consisting of audit queries
- Enfacement slip
- Proper Bill Form
- Tamil Nadu Treasury Coded Provision
- Budget appropriation for Non-salaried items
- Proper sanction Order
- Authenticated bills

11 Product functions

1. Bill details capturing at various levels
2. Bill Auditing
3. Monitoring the bill processing functions
4. Generating daily transaction reports
5. Transmitting daily Data to the district Treasury

12 Operational Functions

1. Counter Level Operation
 - a. Bill receiving & token issue
 - b. Audit Objection bills return & Cheque issue
2. Auditor 1st level Operation
3. Auditor 2nd level operation
4. Auditor 3rd level operation
5. Input statement generation
6. Data transmission to the centralized Server
6. Accounts compilation

Counter Level screen

eKaruvoolam - Counter - Microsoft Internet Explorer provided by Wipro Limited

Address: http://localhost/TreasuryWebSetup/Counter/CounterMain.aspx

Government of Tamil Nadu
Department of Treasuries and Accounts
Automated Treasury Bill Passing And Accounting System

Date: 08-Apr-2006 Operation: BILL_PROCESS User ID: c - (Counter) Help Change Password Logout

Bill Accept Bill Return Bill Status Cheque Issue

Bill Type: Salary Bill-[P] On Line Code: [] Get

Drawing Officer: AB101 | AB101 SPL SECY AGRICULTURE | A125

DP Code: 204700103AB0207 | 204700103AB | 0207 View Signature

Headquarters staff

Bill Amount (Rs.): 1000

Confirm **Note:- Budget Check is Disabled in the Current Setup**

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Auditor Level Screen

eKaruvoolam - PayBill - Microsoft Internet Explorer provided by Wipro Limited

Address: http://localhost/TreasuryWebSetup/Audit/PayBill.aspx

Government of Tamil Nadu
Department of Treasuries and Accounts
Automated Treasury Bill Passing And Accounting System

Date: 08-Apr-2006 Operation: BILL_PROCESS User ID: s1 - (Auditor Level 1) Help Change Password Logout

OnLine Bills BillProcess Modify Entry Input Pass Order Bill Transfer

-Salary Bill-Non Self Drawing Pay Bill

Token Number: 200528010002552 Non Self Drawing Pay Bill <<Bill Sub Category-2>>

Bill Type: 010000 TNTC47-Salary Bill

Drawing Officer: AB101 View Signature SPL SECY AGRICULTURE

DP Code: 204700103AB0207 Headquarters staff

Net Amount: 1000

From Month: April To Month: April

From Year: 2006 To Year: 2006

DOType: Non Self Drawing Number of Days (if partial pay): 0 Rate: 0

Gross: [] Deductions: []

Professional Tax: 0 NSD Total: 0

Save

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eKaruvoalam - PayBill - Microsoft Internet Explorer provided by Wipro Limited

Address http://localhost/TreasuryWebSetup/Audit/PayBill.aspx

Gross 1500 Deductions 500
 Professional Tax 0 NSD Total 0

Save

Saved successfully.

Select if OK	Checklist
<input type="checkbox"/>	Whether correct Protective endorsement has been made in red ink
<input type="checkbox"/>	Whether corrections and alteration has been attested with full signature of the D.O. ?
<input type="checkbox"/>	Whether non drawal certificate has been furnished ?
<input type="checkbox"/>	Whether bill has been prepared in the prescribed form ?
<input type="checkbox"/>	Whether the net amount of the bill agrees in words and figures
<input type="checkbox"/>	Whether permanent and Temporary establishment claimed in separate bills ?
<input type="checkbox"/>	Whether G.O. No. and date and period upto which post continuance available has been noted for temp.estt
<input type="checkbox"/>	Whether LPC in respect of first claim has been enclosed ?
<input type="checkbox"/>	Whether 3 months certificate of further continuance of HOD furnished
<input type="checkbox"/>	Whether Page total was struck down ?
<input type="checkbox"/>	Whether prescribed certificates for the drawal of DA,HRA,CCA etc. furnished ?
<input type="checkbox"/>	Whether certificate deduction of IT in respect of Non self Drawing officer furnished ?
<input type="checkbox"/>	Whether all prescribed schedules enclosed ?
<input type="checkbox"/>	Whether increment certificate/pay revision statement for the revision of pay has been enclosed ?
<input type="checkbox"/>	Whether arrears of pay and allowances has not been included in the pay bill ?

Continue...

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Input Preparation Screen

eKaruvoalam - PayBill Input - 04:17:08 PM - Microsoft Internet Explorer

Address http://localhost/ekaruvoolam/Input/PaybillInput.aspx

Department of Revenue and Accounts
 Automated Treasury Bill Passing And Accounting System

Date : 03-Jun-2005. Time : 4:16 PM Operation: BILL_UPDATE User ID g1 - (Auditor Level 1) [Logout]

[Bill Process](#) [Modify Entry](#) [Input](#) [Pass Order](#) [Bill Transfer](#)

Bill: P
 Token No: 200528010002972
 DO Code: MB206-DY DIR OF MEDL EDN
 DP Code: 201400800AJ0195-Constitution of Sta
 Cheque No:
 Bill Amount: 10000

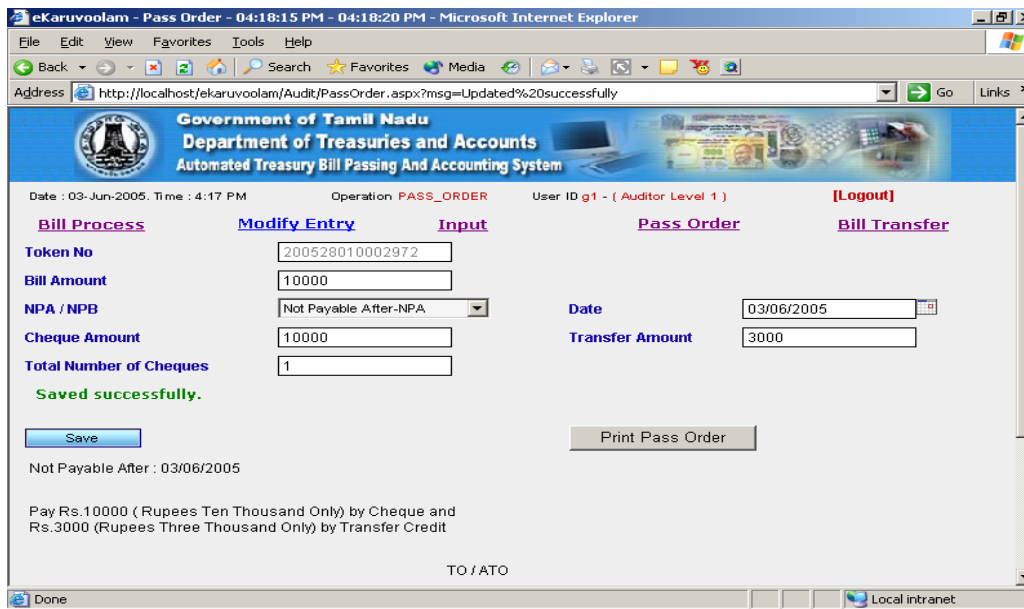
Payment Type: Cash
 DO Type: Non-Gazetted
 Part: Part-I
 SA No:

Pay Breakup					Deductions				Cash Recovery / OR			
Desc.	Code	Amount	Part		Desc.	Code	Amount		Code	Amount		
D.A. ARREAR	0195	10000	Part-I	Add	04-GPF	04	0	Add		0		
	SINo	Code	Desc	Amount	Part					SINo	Code	Amount
Del	Edit	1	201400800AJ0195	10000	1				Total			0
Total				10000		Total		0				

Update

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Pass Order Preparation screen



Existing Back Office Systems

Computerisation of Treasury Accounts was taken up for implementation in all District Treasuries, Sub Treasuries and Pay and Accounts Offices in Tamil Nadu, as an important project of Government, starting with a pilot implementation in two Sub Treasuries during 1992-93. The program was extended in phases since then and implemented in all the 29 District Treasuries, 7 Pay and Accounts Offices, 205 Sub Treasuries and Pension Pay Office, Chennai.

The following factors were taken into account while implementing the systems as one of the first large scale computerization projects of Government of Tamil Nadu at the field level:

- Cost of hardware
- Site conditions at taluk levels
- Ease of use
- Training of field level officials

The above factors resulted in introducing low cost PC systems at Sub-Treasuries and PC/AT - 386/486 systems with multiple terminals for consolidation at District Treasuries and PAO's. The systems were developed in FoxBASE environment for cost effective implementation as back office systems.

The following application sub systems are in use.

Sub Treasuries:

- Preparation of Daily Inputs I & II
- Schedules of Passed Payments
- Quarterly Control of Expenditure
- Pensioners Payment System
- Stamp Accounting

PAO's / District Treasury Offices:

- All the above systems implemented at Sub Treasuries
- Monthly Sub Accounts & Main Accounts Preparation
- Payroll

All the District Treasuries and PAO's are rendering List of Payments and Computerised Accounts every month. In addition to this, the Budget Allocation for individual Drawing Officers are collected at the Sub Treasury / District Treasury / PAO (Sub Detailed Head-wise) and maintained in the system. Bills are accepted after detailed scrutiny and cross checking with the budget available under the Head.

At District Treasuries and PAO's, one Server and four PC nodes are available at present in the computer Centre under Unix/Foxplus environment. At Sub Treasuries, only one system is available currently at each Sub Treasury under DOS/FoxBASE environment.

Back Office System Implementation status:

Implemented at the Level of:

- 203 Sub-Treasuries
- 30 District Treasuries
- 7 Pay and Accounts Offices
- Pension Pay Office at Chennai

More than 60,000 Drawing Officers

More than 1 lakh transactions per day

Reports generated At Sub Treasury Level:

- Daily Input Preparation
- Budget Appropriation Control
- Pension Payment System
- Stamps Accounting System
- Single User System
- In use at 203 Sub-Treasuries

Reports generated At District Treasury Level:

- Accounts Compilation
- Daily Input Preparation
- Budget Appropriation Control
- Pension Payment System
- Payroll
- Multi User System
- In use at 29 Treasuries & 7 PAO's
- List of Payments
- Fly Leaves
- Funds Abstracts
- 45 Sub-Accounts & Main Account

Treasury modules:

- Payments Module
 - Pay, Grants, Wages, Pension & Others
 - Cash Recovery, Cheque Details
- Receipts Module
 - Receipts Challan, Refunds
 - Funds Remittance, Other Receipts
- Reports
 - Input I, Input II
 - Funds Abstract, Receipts & Payments
 - Deposit Receipts, Payments, RBI Deposit

District Treasury Accounts compilation

- Floppy transfer from Sub-Treasuries to District Treasuries on daily basis
- Consolidation of daily data
- Sub-Account wise Reports for AG

Pension Accounting System :

- Monthly Pension calculation
- Bank wise Abstracts
- Branch wise Abstracts
- Pay Certificates
- DA Arrears statements
- Festival Advance accounting
- Annual Pension Pay Card