

## CHAPTER-III

### DEPARTMENT OF POSTS

#### 3.1 Audit of Core Insurance Solution (CIS) in Department of Post

##### 3.1.1 Introduction

Postal Life Insurance (PLI) was initially introduced in 1884 by the Government for the benefit of the Government employees and later extended to employees of Central, State, Public Sector Undertakings (PSUs), Nationalized Banks, etc. PLI also extends the facility of insurance to the officers and staff of the Defence services and para-military forces. Apart from single insurance policies, Postal Life Insurance also manages a Group Insurance scheme for the Gramin Dak Sevaks of the Department of Post (DoP). PLI offers seven types of policies viz. Whole Life Assurance (SURAKSHA), Convertible Whole Life Assurance (SUVIDHA), Endowment Assurance (SANTOSH), Anticipated Endowment Assurance (SUMANGAL), Joint Life Assurance (YUGAL SURAKSHA), Scheme for Physically handicapped persons and Children Policy

**Rural Postal Life Insurance (RPLI)** was established to extend its coverage to the rural areas to transact life insurance business with effect from 24 March 1995. The prime objective of the scheme is to provide insurance cover to the rural public in general and to benefit weaker sections and women workers of rural areas in particular and also to spread insurance awareness among the rural population.

The details of number of active policies under PLI/RPLI, Sum assured and Premium Income for the two years ending 31 March 2017 is furnished in the Table below:

**Table 1**

#### Details of Number of active policies, Sum Assured Premium Income

Particulars		2015-16	2016-17
Number of active policies (in lakh)	PLI	49.30	46.80
	RPLI	149.15	146.84
Aggregate Sum Assured (₹ in crore)	PLI	109982.09	113084.81
	RPLI	81733.73	83983.47
Premium Income (₹ in crore)	PLI	6657.03	7233.89
	RPLI	2012.17	2120.02

##### 3.1.2 Implementation of Computerization of Core Banking (CBS) and Core Insurance Solution (CIS)

As a part of Information Technology (IT) Modernization Project, DoP carried out Business Process Re-engineering (BPR) across various functional areas and created To-Be processes to achieve BPR objectives. In order to implement these To-Be processes in a sustainable manner, Core Insurance Solution (i.e. McCamish system) was

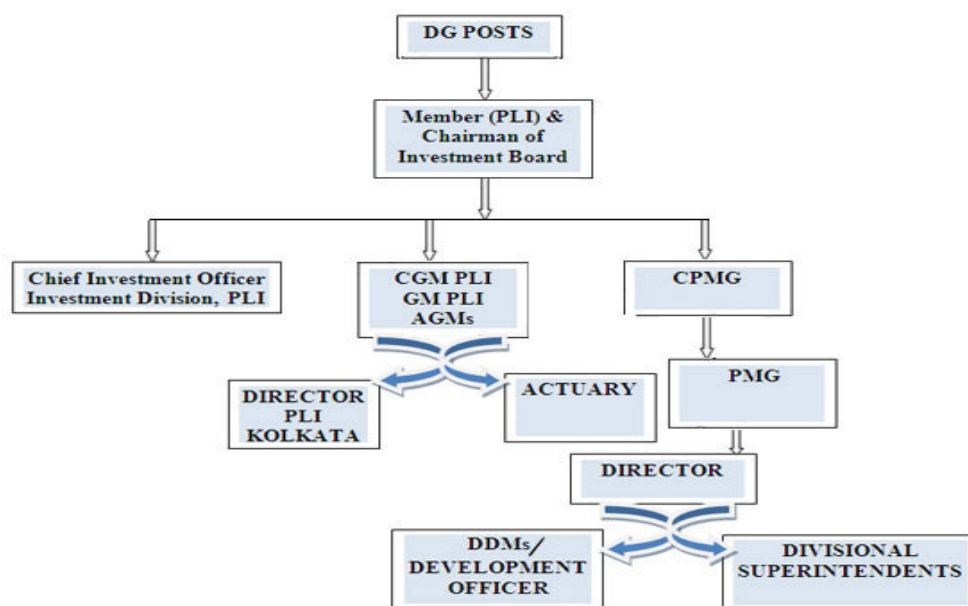
embedded in the Financial Services System Integrator (FSI), one of the eight silos of the India Post 2012 IT modernization Project. The project for Computerization of Core Banking (CBS) and Core Insurance Solution (CIS) was awarded (August 2012) to M/s Infosys as a single Financial System Integrator (FSI) at a cost of ₹ 649 crore, out of which the cost of software related to CIS was ₹ 70.70 crore. The project components like central/branch level hardware and network are commonly shared by CBS and CIS. The project commenced in September 2012 and migration was completed in July 2016. The scheduled date of completion of acceptance testing was 28 July 2014. The Roll Out including data migration of CBS, PLI and Enterprise Content Management System (ECMS) was accepted on 31 July 2016 and certificate of acceptance was issued on 26 December 2016. As of date (March 2017), the project is under Operation and Maintenance by M/s Infosys.

The Key Objectives of the Life Insurance being part of India Post Project were:

- To become the first choice insurer in rural India;
- To develop a fully integrated life insurance platform to enable efficient and cost effective service to existing and new customers;
- To improve the quality of service being offered to the customers; and
- To achieve “financial inclusion” of the un-insured rural population, while minimizing the cost of operation.

### **3.1.3 Organisational setup**

Directorate of PLI under the DoP, headed by a Chief General Manager, is the apex body for formulation of all policies, products and administration of the Post Office Insurance Fund. The procurement of business, after sale service and all types of claims management are performed in the field, i.e. Circles. The Office of Director, PLI, Kolkata functions as the Central Accounting Office. The Investment Division, PLI is headed by the Chief Investment Officer, PLI and is located at Mumbai.



McCamish is a total insurance solution which handles the following functions:

- New Policy Proposals
- Policy Serving
- Document Scanning & saving
- Managing Agents
- Customer Service

The above activities are carried out by the following systems:

- Lead Management System-Monitor and track all prospective clients, generate calling schedules, distribute leads and route them to designated agents, generate reports to monitor sales pipeline, track and capture client communication etc.
- Work Flow Management System - Rule-based workflow on policy creation, issue, approvals, claim servicing, loan sanctions, sales & marketing etc. and Task automation (SMS alert, generation of customer IDs, alerts on policy approval, cheque bouncing, e-mail notice, policy lapse notice, etc.).
- Agency Management System-Manage day to day transactions with agents (monitor sales, generate agency performance), agency profile creation, agency recruitment, licensing, calculation of commission, disbursement of commission, training, etc.
- Enterprise Content Management System (ECMS)-A separate system integrated with McCamish for scanning and storage of documents as soft copies.

### **3.1.4 Scope of Audit**

An IT Audit on implementation and functioning of Core Insurance Solution was conducted in 28 Head Post Offices (HPOs) in six selected Circles<sup>1</sup> of Department of Post during the period from April 2017 to June 2017 with a view to ensure that the Department's business needs have been met without compromising security, privacy, cost and other critical business elements. The Data Centre at Navi Mumbai and Disaster Recovery (DR) Centre at Mysore were also visited by the audit team. The records maintained in the Postal Directorate and O/o CGM (PLI) was also examined during the audit.

Management of Investment of Fund of PLI and RPLI was included in Comptroller and Auditor General of India's Report No. 29 of 2016. The following deficiencies were pointed out in the said report:

- Non-consideration of daily net accretion of fund generated through McCamish System for investment; and
- Mismatch of receipt and payment figures as uploaded by HPOs in NIC/McCamish and Cash Account figures prepared by HPOs;

### **3.1.5 Audit Objectives**

The main audit objectives were to:

- ascertain whether the PLI/RPLI related Rules and Regulations were correctly incorporated in the system for its effective functioning; and
- ascertain whether the migration and rollouts were carried out in such a way that the department's objectives in introduction of the system were achieved.

### **3.1.6 Audit Criteria and Methodology**

The criteria considered for assessing the achievement of audit objectives were:

- ✓ The functional/technical requirements specified in the Request For Proposal (RFP) and the milestones prescribed on implementation;
- ✓ The rules and regulations on PLI and RPLI contained in Post Office Life Insurance Rules 2011; and
- ✓ Best practices in Information Technology controls and security.

Audit adopted system based techniques like use of menu facilities in CIS in the HPOs of six selected Circles and examination of relevant records at Postal Headquarters, PLI Directorate. It also involved:

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<sup>1</sup> Delhi, West Bengal, Maharashtra, Punjab, Karnataka and Tamil Nadu

- Visit to HPOs, Divisional Offices, O/o DDM PLI, Postal Circle Offices in six selected Postal Circles;
- Visit to Data Centre at Navi Mumbai, Disaster Recovery Centre at Mysore and Centre For Excellence in Postal Technology (CEPT), Chennai;
- Issue of audit questionnaire and Joint meeting with the IT vendors;
- Interaction with users and System Administrators;
- Examination of records maintained at Circle, PLI Directorate and Postal headquarters level on formulation of the project, implementation of the project and various field reports;
- Checking of functional/technical requirements prescribed in the RFP were carried out in a distributed manner in the selected circles; and
- Confirmation of audit observations through issue of audit memos to the Management before firming up the audit conclusions.

### **Audit Findings**

Audit checks conducted on the software functionalities revealed serious deficiencies on non-compliance with RFP/POLI Rules 2011, flaws in workflow, IT control deficiencies, erroneous calculations etc. which are detailed below:

#### **3.1.7 Functional Deficiencies in the software**

##### **3.1.7.1 Non-generation of Unique Customer ID**

The Request For Proposals (RFP) for Financial Services System Integrator for IT Modernisation Project stipulated that the system must generate Unique Customer ID for every policy owner, life insured, nominee/beneficiary/assignee and for every person who submitted a proposal and whose details were entered in the Core Insurance System. It was essential that a policy holder should be allotted a Unique Customer ID and all subsequent policies should be linked to that ID to ensure that the total sum assured does not exceed the prescribed financial limit for PLI and RPLI. The system provided for tagging with existing customer ID of the proponent who was already having PLI/RPLI policy.

Audit observed that instead of tagging the new proposal of the existing customer with the already available Customer ID by the Data Entry Operator, a new customer ID was being created for new policy enrolled in the system. Hence, different customer IDs were created in the system for different policies taken by the same customer. Consequently, the Core Insurance Solution (CIS) could not exercise necessary system based controls on the financial limit<sup>2</sup> on sum assured for an insurant.

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<sup>2</sup> Maximum or Aggregate Sum assured in respect of PLI and RPLI were ₹ 50 lakh and ₹ 10 lakh respectively.

Though the data entry screen accepted the Aadhaar number of the insurant as one of the identities, it was not a mandatory field.

Ministry replied (October 2017) that functionality for merging more than one customer IDs of same insurant for different policies was already under testing with Centre For Excellence in Postal Technology (CEPT) and once testing was completed successfully, the same would be deployed. It was also stated that in legacy system of National Informatics Centre (NIC), there was no Customer ID and when data was migrated, each policy was assigned separate Customer ID.

While appreciating the limitations of legacy system, Audit contends that the system should have the facility to prompt the data entry operator about matching names, street, etc. so as to prompt for search of any existing Customer ID before generating a new one for the proposal under consideration.

### **3.1.7.2 Functional Deficiencies on Medical Examination of Insurants**

As per Rule 28 of the POLI Rules 2011, when a proposal is not accepted within 60 days after the proposer has been medically examined, a second medical certificate shall be obtained. If the policy is declined by the Department, the amount of premiums shall be refunded to the proponent after deducting the Medical Examination Fee. RFP stipulated that these provisions should be embedded in the system.

Audit, however, observed that the system had following deficiencies:

- i) **Date of Medical Examination:** The date of medical examination was not recorded in the CIS at the time of data entry of the new business proposal. Due to this, the CIS did not prompt for second medical examination in case a proposal was not accepted, after the proposer has been medically examined, within sixty days.
- ii) **Non-deduction of Medical examination fee in respect of declined proposals:** The system failed to deduct medical examination charges and refund sanction was generated without deducting the amount of medical charges.

To illustrate, in case of a proposal declined in Basavanagudi HO under Karnataka Circle and initial refund of premium was made, the receipt generated by the system did not deduct the medical examination fee and sanction was issued manually for the refund net off medical fee.

Ministry replied (October 2017) that regarding date of medical examination, the issue was taken up with the vendor. Regarding Non-deduction of Medical examination fee in respect of declined proposals, it was stated that although the amount was wrongly indicated in the letter generated, correct amount was shown in disbursement. The issue was taken up with the vendor.

The reply indicates that compliance to the RFP as well User Requirement Specifications were not ensured before making the system live.

**3.1.7.3 Failure to accept revival amount in instalments in respect of lapsed policies**

As per POLI Rules, 2011, revival of a lapsed policy shall be subject to payment of all arrears of premia with interest thereon at the rates prescribed by the Director General of Posts. The interest prescribed by the Director General of Post was 12 *per cent* per annum calculated as simple interest upto 12 months of default and at the compounded rate for more than 12 months.

Audit scrutiny revealed the following irregularities in the system on revival of lapsed policies:

**i) Excess Calculation of Interest**

A test check in Tamil Nadu Circle revealed that the interest calculated by McCamish for the revival of policies was higher than the actual interest due in 15 cases.

Ministry replied (October 2017) that issue was being examined with the relevant data available in the system for taking needful action.

The reply does not address the audit observation regarding deficiency in the system.

**ii) Non-acceptance of dues in instalments**

Audit scrutiny in Tamil Nadu Circle also revealed that even though the system generated the revival quotes for payment of dues in one lump sum or in instalments up to 12, the system could not accept payment in instalments. As a result, revival of RPLI policies were affected as most of the insurants preferred only payment through instalments. Further, on payment of first instalment, the status of policy became active and premium for all defaulted months were shown as paid, resulting in leakage of revenue.

Ministry replied (October 2017) that in accordance with the spirit of POLI Rules 2011, the system treats the policy as active when the regular instalments of arrears of premium with due premium is received. However, in case there is a default in making payment of instalment within due date till last instalment, the status of the policy becomes lapsed again and the amount already paid in instalments would move to suspense. Thus, there was no defect in the system. Ministry further stated that updating all instalments of policy on payment of the first instalment and cases of non-acceptance of instalments were being examined by obtaining details from Circles and also getting data of instalment revivals from Infosys.

The reply indicates that compliance to the RFP as well User Requirement Specifications were not ensured before making the system live. As the defects pointed out could result

in loss of money to the Government in case of complete reliance on the system, Ministry needs to ensure that the defects are set right at the earliest.

### 3.1.8 Computational Errors in Surrender Value, Rebate and Interest.

#### 3.1.8.1 Surrender Value

##### a) On Conversion:

As per POLI Rules 2011, Convertible Whole Life Policy can be converted into an Endowment Assurance (EA) policy maturing at a specified age, at the end of five years (with a grace period at the end of six years) from the date of commencement of risk. When such a policy is converted to EA, the bonus will be retrospectively recalculated as if the policy existed as EA from the date of issue. It was noticed that the surrender value calculated by the system was in excess by ₹ 18,898.31 in a single case in Maharashtra Circle.

##### b) On Commutation

Audit observed that the paid up value generated by the system were more than the actual amount due in case of surrender of policies where the policy holders opted for commutation of policies (commuted prior and after migration to McCamish) as detailed below:

**Table 2**

Sl. No.	Policy Number	Paid up Value as per CIS (₹)	Paid up value Due ( Sum Assured * No. of prem. Paid/Total no. of Premium (₹)	Excess (₹)
1	TN-540438-B	69,078.95	59,064.33	10,014.62
2	TN0585768-CS	1,19,302.05	1,15,413.54	3,888.51
3	TN-598310-CS	1,54,861.89	1,44,478.85	10,383.04
4	R-TN-EA-2354292	92,500.00	89,090.91	3,409.09
	<b>TOTAL</b>			<b>27,695.26</b>

Calculation of higher paid up value was particularly noticed in those cases where the sum assured was reduced through commutation.

Ministry replied (October 2017) that the issues were taken up with the vendor,

As the defects could result in loss to the Department, expedite action needs to be taken to set right the same to avoid both duplication (generation of calculation by the system and checking of the same manually) as well as delay to the customers in settlement of the claims.

#### 3.1.8.2 Rebate

In terms of Policy Design Brochure of PLI/ RPLI as circulated by the PLI management, the tables of premium are based on “Monthly Premium for per ₹ 10,000/- sum assured”.



In terms of Rule 22 of POLI rules, 2011 rebate is allowable for advance deposit of PLI premium for 6, 12 or more months. Rates of such spot rebate are two *per cent* for greater than 11 months and one *per cent* for greater than five months in case of PLI premium. No rebate is allowable in case of advance deposit of premium for 3 months (quarterly).

A test check of CIS generated dummy quotations revealed that system allowed rebate in excess of the eligible rebate in cases of half yearly and yearly mode. System also allowed irregular rebate on quarterly payments. It was also noticed during audit that the system calculated premium for half yearly and annual premium at a lower rate than those applicable for advance deposit for equivalent periods on monthly basis with rebate.

Maharashtra Circle replied that there was a difference between manual and system calculation premium which was not rectified, West Bengal Circle stated that a pre-devised chart of premiums payable for quarterly and annual mode was fed in the system and accordingly system generated quotations matched with the same chart. As such, there was no excess rebate allowed.

Ministry stated (October 2017) that the system was calculating the rebate and premium as per rules.

The reply is not acceptable since the rate chart pertained to 2003 and did not match with the prevailing rate of rebate. Thus, the rate chart was not updated in the system indicating that there was no periodic review of the rates entered in the system so as to ensure their relevance.

### **3.1.8.3 Delay in incorporation of changes in POLI rules**

Any changes made in the POLI Rules are to be duly incorporated in the CIS through necessary modifications in the software. As per the Gazette Notification of January 2016, the condition for payment of a given sum of money was changed from 'death of the insurant' to 'on attaining the age of 80 years' in the case of Whole Life Assurance (WLA) and Convertible Whole Life Assurance (CWLA) policies. The Centre of Excellence of Postal Technology (CEPT), Chennai, under DoP was authorized to test all modifications in software before implementation.

During the audit of CEPT, Chennai, it was noticed that the necessary software patch for incorporating the above change was not submitted by the FSI vendor for testing even after more than one and a half years and the fact was accepted by the Department.

Ministry stated (October 2017) that the FSI vendor was directed to provide the functionality which would be offered for UAT in seven weeks from 01 October 2017.

The reply indicated the Department's failure in initiating timely action for incorporating the change in the software.

### **3.1.9 Functioning of Agency Management System (AMS)**

As per the RFP, the Agency Management System (AMS) of CIS must assist PLI team to manage day-to-day transactions with agents, view agent database to assign leads, monitor sales and premiums collected. The system should also have ability to generate agency performance management reports, handle agency billing, payments, licensing, filing, reporting, performance management and ensure that commissions will only be paid to the agents for the business procured by them while their agency is active. It must have the ability to calculate additional incentives based on performance management and special promotion schemes.

It was noticed that the AMS was not operating in an integrated way to deliver the desired objectives as defined under the RFP. The incentive/commission due to be paid to the agents was not generated by CIS. The sanctions for the incentives to agents were issued on the basis of manual calculations. Such manual process involves risk of improper payments besides defeating the objective of computerization.

Ministry stated (October 2017) that initially AMS was working fine for policies where premium was collected in CIS directly. The issue of non-generation of incentive/commission by the system cropped up in the year 2016 as a major issue. The matter was taken up the vendor who intimated that fixing of this issue would take considerable time. It was also stated that non-updation of premium posting for pre-migration period and also non-collection of premium through collection screen of CIS after migration were contributory factors for non-generation of incentive/commission correctly by the system. Ministry further stated that provision for the new marketing structure and new incentive/commission structure effective from 01 August 2016 and 01 April 2017 respectively were yet to be made in the system. As the vendor was insisting that it was a major change involving cost, the matter was taken up with the Project Management Unit (PMU) Division for defining major and minor changes. The Department also stated that the agency module was not fully operational and the agent's commission was calculated manually.

The reply indicates that proper training was not given to data entry operators regarding the process of collection of premium as well as the fact that timely updation of the rates in the system was not ensured.

#### **3.1.9.1 Flaws in Work flow Methodology resulting in Polices escalating to Wrong approver**

Work Flow Management System (WFMS) in CIS must have the ability to assign proposals automatically to the appropriate data entry operator, based on business rules/criteria. When the aggregate limit on a claim exceeds the limit prescribed for the user, WFMS must assign the claim to the supervisor for approval. The Work Flow should move from one stage to the other stage based on the responsibility level and financial powers granted to departmental officers. Further, the policies should escalate

only to the authorized approvers and they have to be removed promptly from the queue once approval/rejection was granted.

During audit, it was noticed that there were deviations in the work flow which resulted in policies escalating to wrong approvers in 18 cases in Maharashtra, two cases in Karnataka Circle and 38 cases in Tamil Nadu Circle. Deficiencies in workflow resulted in non-observance of the financial limits prescribed by the DoP for approvers at various level.

Ministry stated (October 2017) that as per system design, aggregation in sum assured was checked by system for policies attached with same Customer ID. If the new proposal was not tagged with the Customer ID during the data entry, system will not aggregate the sum assured and move the case to approver based on sum assured of the said proposal. It was also stated that in legacy system of National Informatics Centre (NIC), there was no Customer ID and when data was migrated, each policy was assigned separate Customer ID. Ministry further stated that a new functionality to merge different customer IDs was under testing with CEPT.

While appreciating the limitations of legacy system, Audit contends that the system should have the facility to prompt the data entry operator about matching names, street, etc. so as to prompt for search of any existing Customer ID before generating a new one for the proposal under consideration.

### **3.1.10 Integration of other applications with CIS**

#### **3.1.10.1 Inconsistencies in treatment of cheque payment by customers due to lack of system functionality in reversing the credit in the event of cheque dishonor**

Industry practice and Post Office Life Insurance (POLI) Rules 2011 as amended from time to time prescribes that date of receipt for Cheque is the date of receipt of premium.

The RFP specified that the date of receipt for cheque should be date of receipt of premium and in case of cheque bounce; the system must provide the functionality to reverse the premium entry, if already passed in CIS. It must also reverse the subsequent entries passed, if any.

Audit observed that there was no uniform procedure in the Circles in accepting and accounting cheque payments. While Karnataka, Tamil Nadu and Maharashtra Circles accounted the date of presentation of cheque as the date of payment. Punjab, Delhi and West Bengal Circles accounted the date of clearance of the cheque as the date of payment. Further, the system was not reversing the entries automatically in case of dishonor of cheques.

Ministry replied (October 2017) that as per system design, cheque has to be accepted in the CIS on date of presentation of cheque. The system would send the details of the cheque to CBS for clearance and premium is updated in CIS. However, in case of dishonor of cheque, CBS would pass on the information to CIS and system would

automatically reverse all entries passed. Presently, integration of CIS and CBS was not in place and hence, automatic reversal of credit was not happening. Integration issue was taken up with the FSI vendor. It was also stated that till such integration was made, an alternate solution for reversing the entries of dishonored cheque was made available through suspense maintenance of CIS system.

As different procedures have been adopted by different Circles, the reply that as per system design, cheque has to be accepted in the CIS on date of presentation of cheque is not convincing. Ministry may review the prevailing procedure in all Circles and ensure that the procedure is not only uniform but also complies with the statutes.

### **3.1.10.2 Integration of CBS with CIS**

As per RFP, the system should seamlessly integrate with other business systems such as Mail, Package Applications, etc. when India Post Integration backbone is available

Due to non-integration of CBS with CIS, the insurant could not pay the premium/loan amount by auto transfer from his Post Office Savings Bank (POSB) account. The credit in respect of maturity value/loan also could not be transferred to the insurant's POSB account by the Department.

Ministry stated (October 2017) that the matter was taken up with the FSI vendor and being pursued vigorously.

The reply indicates the fact that compliance to RFP was not ensured in entirety resulting in various shortcomings and necessitating manual intervention defeating the objective of computerisation.

### **3.1.10.3 Declaration of bonus**

Actuarial Valuation is a process by which a prudent estimate is made as to the value of the unexpired policy liabilities of the insurer. Declaration of bonus on PLI/RPLI policies is made on the basis of such valuation report. RFP specified the following functional requirements for generating data connected with actuarial valuation:

- (i) Must be able to generate reports based on claim type (surrender, maturity, and death), product type and area of loss to actuarial department and product development department
- (ii) Must be able to generate reports products wise, Claim amount paid on incurred basis to actuarial department and operating office
- (iii) Core Insurance System must allow the actuarial team to access case wise data of existing product portfolio to assess the product performance

In DoP, the actuarial valuation is done after preparation of financial review and preparation of revenue account by the Director, PLI, Kolkata and approval by Postal Secretary. The required data is to be given to the valuating agency by the PLI Directorate by 30 September every year to the actuarial agency. Under the legacy

system, bonus declaration was made after a delay of one year and till such time bonus for the policies matured during the year was paid at the rate applicable for the previous year.

Audit observed that the data required for actuarial valuation could not be generated in the system leading to delay in completing the actuarial valuation. Bonus for the year 2015-16 could not be declared so far (December 2017) due to problems connected with generating the required data from CIS.

Ministry stated (October 2017) that there were several legacy policies where premium posting was pending before migration due to non-availability of live system at collection counters. Certain fields were added in the actuarial valuation data/reports and analyzing the data received from FSI vendor took time. After analyzing the data and addressing the issues, the data was furnished to Actuary for valuation.

The reply vindicates Audit contention that compliance to RFP was not ensured in entirety resulting in non-utilisation of benefits of computerization.

### **3.1.11 Information Technology Security & Controls**

#### **3.1.11.1 Multiple Logon Functionality**

Multiple logon functionality allows a user to log on the system from more than one terminal concurrently. Multiple logons open up unsecured connections in the network since accessing the system from such open terminals by unauthorized user is possible exposing the system to serious data security risks. Multiple logons will also compromise the traceability in the event of any unauthorized access.

Audit noticed that multiple logon by the same user were allowed in the system.

Ministry stated (October 2017) that the matter was taken up with PMU division for getting necessary provisions made in the system.

As multiple logons would comprise the security of the system, the Department needs to ensure that the facility is disabled at the earliest.

#### **3.1.11.2 Inadequate IT Controls in Bulk Upload Facility**

Bulk Upload Facility is a facility in CIS for updating the premium posting for those policies where

- maturity date has passed or death claim or surrender request has been indexed and no front end collection is, as such, possible;
- policies have lapsed due to non-updating of premium posting in NIC system by offices concerned, and hence, updating of premium posting is required;
- for pay policies, this functionality is used after following process of 'Special Group Collection'.

Except cases mentioned above, in other cases, Bulk Upload utility to update the premium posting of legacy data should not be used as per the Standard Operating Procedure (SOP) issued by Postal Department in September 2015.

The following audit observations were made in this regard:

- Bulk Upload Facility was used for purposes other than that specified in the SOP. For example, bulk upload facility was used for uploading premium collected by salary deduction in other Government/Semi-Government entities;
- The files uploaded through bulk upload contained various errors /deficiencies;
- There was no reconciliation of the amount of receipt updated in CIS through “.csv” files with that of actual receipt accounted in the books of accounts; and
- There was no reporting structure available to the CPC Manager/Circle level to monitor unauthorized use of bulk uploading facility.

The use of bulk upload facility for the above rendered the system vulnerable for fraudulent updating of premium/loan recovery/revival receipts. A fraud case involving misuse of bulk upload was reported in Tamil Nadu Circle where a counter PA misappropriated PLI/RPLI collections to the tune of ₹ 3.15 lakh by not crediting the receipts and uploading bogus excel files through bulk upload by logging into HO/CPC without the knowledge of SPM/HO.

Ministry stated (October 2017) that as per process in system, first collection has to be done through collection screen of CIS for pay recovery policies of a particular special group and then schedules received in soft copies are uploaded against that collection and group. System checks total values of both amount collected and total value of schedule and allows upload of premium posting in policies to the extent of amount collected. It was further stated that there were several legacy policies where premium posting was pending before migration and to update those premium postings in the policies, option for updating the premium posting through “.csv” files was provided. Bulk upload is an essential facility since if the functionality was removed, the Department would not be able to update premium posting in those policies where premium was received and then, servicing those policies would be impacted. Ministry further stated history of uploaded “.csv” files were available in the system along with details of user who uploaded the files and hence, can be checked by the Supervisor of CPC or any other authority having access to this functionality. It was also stated that the instructions were issued to the effect that upload of “.csv” file should be made after approval of CPC Manager and feasibility to restrict the access of premium posting through “.csv” files to Circle or CEPT level was under consultation with the FSI vendor.

The fraudulent transaction as stated above indicates that the SOP issued by the Department did not provide adequate safeguard against misuse of bulk upload facility. Lack of system based supervisory controls facilitated manipulation in bulk upload.

### **3.1.11.3 Lack of Supervisory controls on Cancellation of Premium Collection**

The collection dashboard of McCamish system has a provision (radio-button) for cancellation of receipt of premium/loan. Such cancellation can be done by the Postal Assistant at the counter, after receipt of premium payment and issue of receipt to the customer for which, he/she required no system based authorization/approval from the supervisor. Such cancellation can be done before end of the day and it will not be reflected in day end collection report also. The receipt numbers in the day end collection report was also not in numerical order as the receipts were generated on Pan India basis. The cancellations made at the counter were not reflected in the Treasurer's Cash Book/HO Cash Book but only in the premium collection report. This was a serious control deficiency fraught with the risk of embezzlement of PLI receipts. It could also lead to lapse of policy and subsequent customer hardships.

In December 2016, PLI Directorate issued instructions forbidding cancellation of collection by counter Postal Assistant (PA) on his own without following prescribed procedure of noting the error and permission of authority concerned.

An instance of embezzlement of ₹ 70,000/- being the premium collected by exploiting the lack of system based supervisory control was reported from Tamil Nadu Circle.

The following further system deficiencies were also noticed in this regard:

- i) There was no cross checking mechanism in-built into the CIS for guarding against misuse of such option.
- ii) The staff in the Central Processing Centre section could also access the collection module. This indicated that there was improper segregation of duties.
- iii) The system could be accessed by the users even after closure of business hours for not only accessing reports but also to enter/modify receipts and payments too. In such a scenario, premium could be collected and entered into the CIS even after generation of 'Day end Collection Report' at the close of business hours and such receipt could be kept out of Government account.

Ministry stated (October 2017) that the cancellations were reflected in the Premium Collection Report and it was also directed that DPM/APM/Supervisor of counter would check that no receipt of collection was cancelled by counter PA without following prescribed procedure and permission of authority. It was also stated that the matter was taken up with FSI vendor for making certain provisions in the system for prevention

and detection of irregular activities which included provisioning of restricting collections beyond business hours. Ministry further stated that instruction was being issued for removing access of collection to CPC staff and on implementation of CIS, wherein functionalities of ‘Single sign on’, HRMS and “Identity and Access Management”, were available, PLI staff would have access only to the defined functionalities as per the defined roles in the ‘IAM’ automatically.

Availability of access to the system even after closure of business hours indicates serious system design flaw. Further, despite system checks as stated by the Ministry, the fact misappropriation of money took place calls for immediate review of system design and corrective action to avoid recurrence of the same.

#### **3.1.11.4 Unrestricted rights/ privileges to a System Administrator of a Circle Processing Centre (CPC)**

As per the RFP, the system must allow the administrator to limit access to records, files and metadata<sup>3</sup> to specified users or user groups.

It was noticed that the System Administrator (SA) of a Circle Processing Centre (CPC) enjoyed the privilege to view/change the roles and authorizations of users of other Postal Circles also. Existence of this provision is a serious threat/security lapse. The SA of a CPC should be able to view only the groups related to that CPC and its Sub Office. Similarly, queue accessing level operation should also be restricted.

Ministry stated (October 2017) that as per system design, System Administrator of a Circle cannot view the users of other Circles. The issue reported was being analysed/ examined for taking appropriate action in the matter.

#### **3.1.11.5 Lack of adequate controls in suspense maintenance menu which gives scope for manipulations in suspense**

During audit, it was noticed that the amount shown under suspense in the system could be transferred to any other policy. The fact that premium of a policy could be transferred to any other policy and the premium could also be reversed was reported by office of Post Master General (PMG) Central Region, Tamil Nadu to the Chief Post Master General, Tamil Nadu in May 2017.

In Tamil Nadu Circle alone, ₹ 210.83 crore was found under suspense in respect of premium, loan and interest recovered through the pay of State and Central Government departments which were updated into the system through bulk upload of “.csv” file. There was no front end tool to watch appropriations out of the suspense head. The lack of necessary controls in suspense maintenance menu is a serious control deficiency which involved the risk of manipulations of suspense available in the system.

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<sup>3</sup> A set of data that describes and gives information about other data



Ministry stated (October 2017) that there were requirements in the RFP for transfer of funds from one policy to another policy and also for reversing the transactions. Instruction was being issued to ensure restriction of suspense maintenance functionality to CPC supervisors only.

### **3.1.11.6 Lack of functionalities on Fraud Management System**

India Post 2012 initiative of DoP envisaged a robust and resilient information security system to protect critical digital assets of the organization. Accordingly the RFP prescribed the following fraud related security requirements:

- (i) The solution must support proactive detection of fraud related incidents;
- (ii) The solution must provide for analytical capability that can quickly detect emerging patterns based on a relative sample of fraudulent activities;
- (iii) The solution must have ability to take feeds from customer contributed fraud related information like fraudulent IP addresses, Device IDs, etc.;
- (iv) The solution must be able to receive inputs from online fraud monitoring services;
- (v) Monitor all channels simultaneously and detect patterns across all of them in real time for enhanced correlation of fraudulent activities;
- (vi) The system shall have the ability to create follow up tasks after fraud case has been flagged; and
- (vii) The system shall flag claims to show that they are under fraud investigation.

However, the above requirements were not available in the system at present. Since these are very critical in detection and prevention of frauds in a network environment, non-implementation of the same would compromise the security of the system.

Ministry stated (October 2017) that the matter was taken up with Infosys about the security requirements listed RFP. PLI Directorate was pursuing the matter with CEPT.

The reply indicates that compliance to RFP was not ensured before the system went live. Department needs to take expedite action to ensure that the above features are implemented without further delay so as to ensure that security of the system is not compromised.

### **3.1.12 Availability of User Log and Audit Trail**

User Log and Audit Trail are two critical capabilities of an IT system to monitor the user activities and changes made in the database. System should generate log report of users logging in and out of the system throughout a period of time and also generate reports for login access, staff with multiple level accesses, functionality based access,

user Ids disabled, suspended, cancelled users, etc. An audit log or audit trail is a chronological record of security-relevant data that documents the sequence of activities affecting an operation, procedure, event, file or document.

### **3.1.12.1 User Log**

As per the RFP, the system should produce and maintain system audit logs on the system for a period agreed to with DoP and on expiry of the agreed period, the audit logs should be archived and stored off-site. The CIS has various levels of users in hierarchical order in-built into the system. Periodical monitoring of logins of the users in various CPCs under each Circle level is very important in identifying any violations of the access policy of the department.

However, it was observed that the user log report was not available in the system in front end at Circle level. There was no provision for periodical back up of the system log. Further, in case, system log was required for investigation purpose in fraud cases, Circle authorities have to depend on the FSI vendor for generation of required details. Absence of such monitoring at Circle level would lead to fraudulent activities going unnoticed.

The system should also support tracking of all the System administration activities within appropriate system log. It was noticed that no such logs were being maintained and system was not configured to auto save the logs in the system. As such, the activities of the System Administrator could not be tracked.

### **3.1.12.2 Audit Log**

As per the RFP, the system should generate audit trails of all transactions. The minimum fields that should be captured in the audit trail are Date and time stamp, Transaction ID linked to every transaction/activity. Transaction ID has to be unique and should not be duplicated. Further the Transaction ID should be generated whether the transaction is successful, unsuccessful/rejected, User ID, Authorized By and Overridden By, etc. It should also track changes made in parameter files along with detailed audit trail. These were essential audit trail related requirements in the RFP.

During audit, it was noticed that there was no provision for a report in the front end to monitor the changes made by the software vendor, in the existing policies after migration. In the absence of any hold on the data available in CIS, loss or mismanagement of data could not be watched/monitored at Circle level.

Ministry stated (October 2017) that audit details for all transactions are available in the tables to the system which can be accessed from the back-end and that the observations have been shared with CEPT for necessary examination and further action to access the audit trails/details/logs. On User log, it was stated that it would be provided by CSI after CSI single sign on was rolled out. On Audit log, it was stated that the details are available in tables for all transactions and can be accessed from the back-end.

The reply regarding Audit log is not convincing since the facility is available from the back-end and not from front end and back-end is not accessible to all.

### **3.1.13 Business Continuity & Disaster Recovery Plans**

The objective of having a Business Continuity<sup>4</sup> and Disaster Recovery<sup>5</sup> (BC & DR) Plan and associated controls is to ensure that the organisation can still accomplish its mission and it would not lose the capability to process, retrieve and protect information maintained in the event of an interruption or disaster leading to temporary or permanent loss of computer facilities. DR is an immediate requirement whereas BC is a more comprehensive and long term requirement. Since the Core Insurance Solution operates in a real-time online mode with a centralized database, disaster recovery and business continuity plans are very critical for the Department. The RFP included necessary provisions on BC&DR system.

The Disaster Recovery Centre was commissioned in the premises of CEPT, Mysore on 19 March 2015 and maintained by the FSI vendor, M/s Infosys. All necessary hardware like the Data Server, Diesel Generator sets and Uninterrupted Power Supply was installed. The connectivity to Data Centre, Navi Mumbai was also provided on digital media. The backup software was also provided at the DR Centre, but even after two years of commissioning, the DR Centre was not functional on account of non-loading of CIS Application software.

It was also noticed that the DoP was yet to finalize its Business Continuity & Disaster Recovery Plan even after a lapse of five years of finalization of the project.

Ministry stated (October 2017) that setting up of Disaster Recovery Centers was in progress and commissioning expected in January 2018. On BCP, it was stated that the same has already been approved.

Non-functioning of the Disaster Recovery Centre can seriously affect the business continuity in insurance service in the event of any major failure of the Data Centre and the only other option available will be to retrieve the data from the daily backups taken at the Data Centre which will be time consuming process. Thus, early setting of Disaster Recovery Centre and finalization of BCP are very crucial.

### **3.1.14 Implementation and Rollout**

#### **3.1.14.1 System not tested for the prescribed number of concurrent users resulting in slowness and interruptions in service.**

The system response time of an IT system depends on the number of concurrent users which it can cater to. As per the RFP, system should support at least 120 Transactions

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<sup>4</sup> **Business continuity (BC)** describes the processes and procedures an organization must put in place to ensure that mission-critical functions can continue during and after a disaster.

<sup>5</sup> **Disaster Recovery (DR)** is the process an organization uses to recover access to their software, data, and/or hardware that are needed to resume the performance of normal, critical business functions after the event of either a natural disaster or a disaster caused by humans.

per Second (TPS) and at least 16,000 concurrent users on the proposed hardware and Solution for Insurance. For Enterprise Content Management System (ECMS), the approximate people scanning the documents shall be approximate 20,000 and the number of users who would be using the data for operational purposes from ECMS would be approximately 3500, with the concurrent users being approximate 600 users and number of peak users shall be approximate 1000 users. The RFP also stipulated that the proposed Database software should be certified and tested by the banking and insurance application OEM to scale upto 40000 concurrent users and 16000 concurrent users respectively.

But it was noticed from the minutes of the PLI sub-committee meeting in March 2015 that the internal testing in CIS was done by Infosys for 6000 concurrent users only. The inadequate concurrent users negatively affected the system response time resulting in slow functioning and error messages despite inputting all relevant data. Similar problems were encountered in ECMS for policy creation.

Audit further observed that the ECMS function was not working properly since the implementation stage of pilot phase i.e. March/June 2014 was interrupted during the months of February to April 2017 i.e. on completion of roll out of phases in all the Postal Circles. The details of interruptions in the Circles covered in audit were as follows:

**Table 3**  
**Details of interruptions**

<b>Sl. No.</b>	<b>Name of circle</b>	<b>Period of Interruption</b>
1	Tamil Nadu	Second week of February 2017 to 08 May 2017
2	Karnataka	February 2017 to April 2017
3	Maharashtra	February 2017 to April 2017
4	Punjab	27 February 2017 to 02 May 2017
5	West Bengal	Third Week of February 2017 to last week of May 2017
6	Delhi	March 2017 to April 2017

The problem reported in ECMS included inability to access URL, log on failures, system hanging, problems in converting the manual scanned policies into virtual scanned policies, request not moving to next stage, etc. Regular recurrence of problem and prolonged interruptions in functioning of ECMS in the last quarter of financial year has negative impacts on the insurance business since it affected activities like issue of policy bond, settlement of maturity cases/death cases/loan, change of address/

nomination, assignment of policy, issue of new policy etc. leading to backlogs and customer dissatisfaction.

Ministry stated (October 2017) that the FSI vendor has since provided with an alternate solution for uploading the scanned copy of docs in the ECMS process during outages/interruptions and the audit observations were communicated to the FSI vendor for necessary action.

### 3.1.14.2 Roll out of CIS in Port Blair HO and Army Postal Service (APS) Circle.

The roll out of CIS in Postal network was planned for 809 HOs in three phases. CIS was rolled out in all HOs included in the roll out plan except Port Blair HO under West Bengal Circle. Port Blair was to be rolled out under phase 2 but not yet rolled out due to connectivity problem.

It was also noticed that Army Postal Service (APS) Circle was not considered for roll out and the policies in APS Circle were still maintained in NIC system. Due to non-roll out of CIS, the policies in Port Blair HO and APS Circle were maintained by National Informatics System (NIC) which caused inconvenience to the Department and the customers.

Ministry stated (October 2017) that PMU Division was being requested for getting the network made available in Port Blair and also for expediting the implementation of complete IT modernization project in APS.

### 3.1.14.3 Adherence to timelines prescribed in Citizen Charter

The Citizen Charter of DoP specified timelines for PLI/RPLI related delivery of services to the customers to sustain its position as the largest network, ensuring customer satisfaction by providing services with speed, reliability and on value for money basis. One of the objectives of implementing CIS was to improve the quality of service being offered to the customers.

Test check of service delivery commitments under Citizens Charter in selected CPCs revealed that there was delay in delivery of various services as detailed below:

**Table 4**

#### Details showing delay in delivery of services

Sl. No.	Service/ transaction	Success Indicator	Service Standards	Delay in Delivery (days)
1	Issue of Acceptance Letter/Issue of policy bond	Time taken from the receipt of completed documents	15 days	1-462
2	Settlement of policy maturity	Time taken from the receipt of completed documents	30 days	1-605

3	Settlement of PLI/RPLI death claims	With Nomination or without nomination (after production of required documents)	30 days	7-1385
4	Paid up value of policy	Time taken from receipt of completed documents	30 days	1-281
5	Revival/ conversion	Time taken from receipt of request	15 days	1-516
6	Loan/change of address/change of nomination/assignment/issue of duplicate bond.	Time taken from receipt of request	10 days	1-378

The delay in delivery of service were attributed to non-functioning of ECMS, problems in work flow, poor network connectivity, delay in generation of letter of acceptance/policy bond, non-digitalization of legacy documents, delay in receipt of case files from respective controlling units, server problems, delay in getting investigation reports, delay on the part of customers in taking payment, etc.

Ministry stated (October 2017) that the problems in functioning of ECMS of the scanned images and workflow cropped up since February 2017 but the FSI vendor could not fix the same within the reasonable time. It was also stated that an alternate solution for uploading the scanned images was provided in June 2017. Till 31 December 2017, scanning of 79,90,226 policies out of more than 2 crore legacy policies was completed but due to storage problem, uploading was disabled. Enhancement of storage is stated to be under the consideration of PMU Division.

The reply indicates poor planning of the implementation of computerization since the requirements were not properly assessed and met resulting in uploading of legacy policies being abruptly midway.

### **Conclusion**

The objective of computerization of Postal Life Insurance was to develop a fully integrated life insurance platform to enable efficient and cost effective service to existing and new customers, besides improving the quality of service being offered to the customers. Deficiencies in software functionalities, computational errors, non-generation of reports, non-integration with other applications, non-roll out in the entire postal network, multiple log on, Lack of sufficient validation controls along with inadequate system based controls and monitoring have exposed the system to fraud vulnerability. DoP should address these inadequacies urgently and review the function of IT controls to achieve the objectives of higher level of excellence.

### 3.2 Stocking of Cash Certificates in Department of Posts (DoP)

**Non-linking of Receipts of Cash Certificates (CCs) from India Security Press (ISP), Nasik with the indents placed by Circle Stamp Depots (CSD) resulted in excess receipt and resultant accumulation of CCs at the CSDs. As the retention of the certificates in the CSDs is prone to misuse, DoP needs to take immediate action to ensure that all the unsold certificates are obtained by ISP Nasik for appropriate disposal.**

Department of Posts (DoPs) discharges an Agency function on behalf of Ministry of Finance (MoF) for sale of Cash Certificates (CCs) viz. National Savings Certificates (NSC), Kisan Vikas Patras (KVP), etc. through Post Offices. Physical CCs have been discontinued with effect from 01 July, 2016.

The Cash Certificates (CCs) of all type and denominations are printed at India Security Press (ISP), Nasik which supplies it to Circle Stamp Depot (CSD). Post Office Savings Bank (POSB) Manual Volume-II stipulates that a quarterly indent to meet the requirements of cash certificates of three months shall be submitted by the Sub Post Office (SO) to its Head Post Office (HO) by the 15<sup>th</sup> of May, August, November and February and by the HO to the Circle Stamp Depot on 1<sup>st</sup> of June, September, December and March. The CSDs in turn are required to send six monthly advance indents for the printing of CCs to ISP Nasik.

National Savings Institute (NSI) under Ministry of Finance is mandated to monitor and arrange an uninterrupted printing and supply of Cash Certificates to Circle Store Depot and also to make payments to ISP, Nasik for the security material supplied to the Depots.

Stocking of Cash Certificates, Postal Stamps and Stationery in Department of Posts (DoP) was reviewed and overstocking of Cash Certificates was commented in Comptroller and Auditor General of India's Report no. 13 of 2012-13. Ministry, in the Action Taken Note, had assured to take corrective action in this regard.

The details of indents placed by CSDs and Cash Certificates supplied by ISP, Nasik are given in the table below:

Table 5

## Details of Indents placed by CSDs and supplies effected by ISP Nasik

Year	Name of items	Total quantity of different denominations indented by CSDs	Total quantity of different denominations supplied by ISP Nasik	Excess quantity of different denomination received in CSDs	Face value of excess quantity of different denominations (₹ in crore)
2014-15	NSC/KVP	4790000	9084430	4294430	5031.54
2015-16	NSC/KVP	1810000	3871000	2061000	1814.34
<b>Total</b>		<b>6600000</b>	<b>12955430</b>	<b>6355430</b>	<b>6845.88</b>

Scrutiny of records in seven<sup>6</sup> postal circles revealed that ISP Nasik supplied 63,55,430 cash certificates with face value of ₹ 6845.88 crore in excess of the indent placed by five CSDs viz. Chennai (₹ 1064.75 crore), Delhi (₹ 1253.50 crore), Lucknow (₹ 670.00 crore), Nasik (₹ 2601.03 crore) and Ernakulum (₹ 1256.60 crore) during the period from 2014-15 to 2015-16. The excess supply of cash certificates resulted in accumulation of CCs in the CSDs.

Further, DoP issued order/instruction (June 2016) for discontinuation of pre-printed NSC/KVP from closing hours of 30 June 2016. The unsold stock of NSC/KVP was to be returned by HOs to CSD and further by CSDs to ISP Nasik.

Scrutiny of records revealed that CSDs did not send CCs of different denomination (2,17,16,184 in number) after its discontinuance to ISP Nasik but retained the same in their stock as on September 2017 as detailed in table below:

Table 6

## Details of NSC/KVP in Stock

Sl. No.	Name of Circle	Name of CSD	Quantity of NSC/KVP	Face value (₹ in crore)
1	Tamil Nadu	Chennai	1493218	964.38
2	Delhi	Delhi	2223866	1575.07
3	UP Circle	Kanpur	17999100	9175.00
<b>Total</b>			<b>21716184</b>	<b>11714.45</b>

CSD Chennai stated (September 2017) that NSI, Nagpur was informed in June 2015 not to supply KVPs until further orders but were supplied by them. Regarding non-return of CCs post discontinuation, it was stated that the matter was referred to Circle Office and order from the Directorate was awaited. CSD Delhi replied (September 2017) that KVP was received due to reopening of KVPs during 2014-15 and the same were issued for sale. It further added that the disposal of certificates was under process. CSD, Lucknow informed (October 2017) that letter in this regard was written to

<sup>6</sup> Tamil Nadu Circle, Delhi Circle, Punjab Circle, Uttar Pradesh and Uttarakhand Circle, Nagpur in Maharashtra Circle and Kerala Circle



Director NSI for diversion of KVPs of denomination of ₹ 50000. CSD, Nasik replied (October 2017) that ISP Nasik sent cash certificates without mentioning indent reference and receipt of excess was also apprised to the Director of NSI time to time. KCSD, Ernakulum replied (October 2017) that the matter was taken up with the Director of NSI, Nagpur in this regard. CSD Kanpur replied (September 2017) that the certificates would be returned to ISP Nasik after receipt of unsold certificates from six HPOs.

The reply confirms the audit observation that the receipts of CCs from ISP, Nasik were not linked to the indents placed by CSDs resulting in excess receipt of CCs at the CSDs and resultant accumulation. Despite the assurances given in ATN, the irregularities were still persisting. No specific reasons were brought out for non-compliance of DoP's instructions and as the retention of the certificates in the CSDs is prone to misuse, DoP needs to take immediate action to ensure that all the unsold certificates are obtained by ISP Nasik for appropriate disposal. DoP should ensure that physical stock shall be reconciled with documented holdings before destruction of cash certificates. DoP also needs to strengthen the control mechanism to ensure that the instructions are fully complied.

