



**Report of the
Comptroller and Auditor General of India**

**Performance Audit on
Integrated Financial and Human Resource
Management System in Tamil Nadu**



SUPREME AUDIT INSTITUTION OF INDIA
लोकहितार्थ सत्यनिष्ठा
Dedicated to Truth in Public Interest



Government of Tamil Nadu
Report No. 3 of the year 2023

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Comptroller and Auditor General of India**

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PREFACE

This Report for the year ended March 2022 has been prepared for submission to the Governor of Tamil Nadu under Article 151 (2) of the Constitution of India, for being laid before the State Legislature.

The Report of the Comptroller and Auditor General of India contains the results of Performance Audit on Integrated Financial and Human Resource Management System in Tamil Nadu covering the period from 2015-22.

The instances mentioned in the Report are those, which came to notice in the course of the performance audit conducted during April 2022 to September 2022. Matters relating to the periods outside the audit period have also been reported in places where they were found necessary.

The Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Why we did this Audit?

The vision of the Finance Department of the State - which is vested with the responsibility of managing the public finances of the Government of Tamil Nadu - is to ensure that the finance function in the State Government is modernised to be in tune with the twenty first century and that overall levels of accountability are substantially enhanced and there is real time control on flow of funds.

To achieve this, Government of Tamil Nadu implemented Integrated Financial and Human Resource Management System (IFHRMS) through Finance Department to optimise and manage the State finances with the help of technology. IFHRMS was conceptualised to automate the Finance and Treasury functions, using real-time technology with two core components viz., (i) Financial Management System (covering Department of Finance and Treasury functions) and (ii) Human Resource Management System (covering Employees and Pension management functions).

Considering the importance of IFHRMS in rendering data to Government on a real time basis for monitoring and for policy making, CAG took up this Performance Audit covering the activities during 2015-22 with focus on functioning of IFHRMS modules based on the data for the financial year 2021-22, as IFHRMS went Go-live from January 2021. Of the envisaged 14 modules, six modules were fully functional and eight modules were yet to become operational. Four functional modules viz., Budget, Financial and Accounting system, Human Resource and Pension modules were selected for detailed check. The objectives of this Audit were to assess whether IFHRMS (1) was developed in a cost-effective manner within the agreed timeline; (2) has brought the treasury and human resource management functions of all user department into one unified system as envisaged and (3) was designed with adequate controls and authenticity of the data and its security is ensured.

What we found?

System Requirement Specification sign-off was deficient and gave rise to numerous Change Requests and the consequent time taken for developing the Change Requests largely delayed achievement of project Go-live by four years.

The delay in achieving project Go-live resulted in cost overrun of ₹79.91 crore on account of hardware maintenance, application resources, field level technical support and bandwidth charges during the period of delay.

The Monitoring Committee which had to ensure that project met its goals, milestones and suggest necessary modifications and course corrections, did not manage the project as envisaged, which led to continued dependence on System Integrator (M/s Wipro Limited).

Budget operations module allowed transfer of funds between Grants, incurring of expenditure without budget provision and withdrawal of entire budget allocation

after expenditure had been incurred in violation of budget manual provisions. Further, provision/withdrawal of funds during last week of financial year to arrive at final modified appropriation shows that re-appropriation is a mere year-end adjustment exercise.

IFHRMS does not provide a complete picture of all Government expenditure and receipt, as receipts are still compiled outside IFHRMS using old software and instances of booking of expenditure under wrong heads of account were noticed. As a result, Accountant General (Accounts and Entitlement) has to follow up with respective offices for rectification, which amounted to duplication of work involving additional time and effort. Thus, accounts are not compiled in real time and required manual intervention.

Bill processing module is a critical module of IFHRMS as it handles the entire Government disbursement. However, even after two years of IFHRMS rollout, it allowed double payment for same claim, could not process bills within stipulated timeline and Pay and Accounts Office/Treasury had to rely on physical copies of sanction orders, vouchers, etc., as bills could be presented online without attaching the soft copies of supporting documents.

Pension management system, a citizen centric module, had inaccuracies in pensioner database which delayed sanction of additional pension to eligible pensioners and allowed creation of multiple pensioner IDs for the same pensioner leading to double pension payment. Further, incorrect mapping of pensioner ID to pension pay order prevented pensioners from logging into IFHRMS for updating basic personal information like bank details, address, etc.

Automatic updation of employee's e-Service Record did not take place as integration between Human Resource and e-Service Record was incomplete due to which there was continued dependence on manual service registers. Further, all service regulations were not mapped and there were no validation controls to ensure that employee status, increment, leave details and date of retirement were correctly captured in the system, for which users had to depend on System Integrator to update their employee profile even after two years of project Go-live.

A mission-critical system such as IFHRMS did not have robust security measures like biometric access, machine-based access rights and protection of user credentials. Transactions by 'anonymous user' indicated vulnerabilities in the system and inadequate security management. Non-conducting of periodic disaster recovery trials exposes the entire system to likely higher downtime and loss of confidential data.

Monitoring Committee did not meet periodically to ensure that the project was completed as per the agreed timelines. Project e-Mission Team was not established to monitor the project during development, implementation and post Go-live of IFHRMS. The complaints raised by the IFHRMS users were not analysed to resolve the recurring system issues.

What we recommend?

We have made 27 recommendations as given below:

PROJECT MANAGEMENT:

- ✓ Government should redraw project timelines and ensure that IFHRMS is completed in all aspects without further delays.
- ✓ Government should revisit the Change Requests approval process to avoid invalid Change Requests at the time and cost of the State exchequer.
- ✓ Government should recover the excess amount paid to System Integrator for deploying field level technical support engineers as it was not covered in the agreement.

BUDGET OPERATIONS AND ACCOUNTS COMPILATION:

- ✓ Government should strengthen budget module to prevent transfer of funds between Grants by strictly enforcing provisions of budget manual.
- ✓ Government should strengthen budget module to prevent expenditure in Heads of Account without budget provision and withdrawal of budget allocation for Heads of Account where expenditure had been incurred.
- ✓ Government should achieve standardisation in Accounts classification to ensure correct classification of expenditure figures in the books of account.
- ✓ Government should ensure that master data of Head of Accounts is continuously updated, so that accounts are not booked under non-existent Head of Account.
- ✓ Government should bring all receipt transactions into IFHRMS for a truly automated accounting system.

PROCESSING OF BILLS:

- ✓ Government should strengthen IFHRMS to prevent generation of bills under wrong Head of Account.
- ✓ Government should strengthen IFHRMS to ensure that bills are presented/returned online along with the required supporting documents to avoid continued dependency on physical bills.
- ✓ Government should address the Server performance issues so that uniqueness of each bill generated in the system is maintained.
- ✓ Government should strengthen IFHRMS to ensure that bills are processed within stipulated timeframe so that beneficiaries get their due payments without any delay.
- ✓ Government should direct the System Integrator (M/s Wipro) to incorporate appropriate coding in IFHRMS software to prevent double payment for same claim. Government should also put in place an

alternative mechanism to avoid double payments until such coding is made available in IFHRMS.

- ✓ Government should maintain uniqueness in creation of pensioner ID to avoid payment of double pension to the same pensioner.
- ✓ Government should correctly map the pensioner ID with pension pay order to ensure that pensioners have hassle free access to IFHRMS portal.
- ✓ Government should ensure timely delivery of additional pension benefits to eligible pensioners by ensuring that pensioner date of birth details in the system are correct.

HUMAN RESOURCE MANAGEMENT SYSTEM:

- ✓ Government should fix a timeline to achieve complete integration of Human Resource and e-Service Record to ensure that correct employee information is captured in e-Service Record in real-time environment. Government should authenticate correctness of e-Service Records using Digital Signature Certificates (DSCs).
- ✓ Government should ensure that all service regulations are correctly mapped in Human Resource module so that all service particulars of employees are captured with proper validation controls.
- ✓ Government fix a timeline to cleanse e-Service Record data captured so far to ensure that employees are not subjected to any hardship at a later date due to missing/wrong information in their respective e-Service Records.

SECURITY MANAGEMENT:

- ✓ Government should strengthen user access controls and create awareness about the risks in sharing of user credentials.
- ✓ Government should disable anonymous users in IFHRMS transactions to ensure audit trail.
- ✓ Government should provide envisaged security features in IFHRMS to safeguard Government money.
- ✓ Government should conduct periodic disaster recovery drill in real-time environment.

MONITORING AND EVALUATION:

- ✓ Government should ensure that the Monitoring Committee meets periodically to review IFHRMS.
- ✓ Government should ensure that the Department analyses the complaints raised by users through Help Desk to resolve recurring system issues.

- ✓ Government should consider levying penalty if System Integrator (M/s Wipro) fails to meet the performance indicators envisaged in the Service Level Agreement.
- ✓ As training is a continuous process, Government should ensure periodical refresher courses to all the users so as to enable them to understand the application and reduce dependence on the System Integrator (M/s Wipro).

Government's response to audit recommendations

Government while responding to the Audit observations raised, assured necessary corrective action wherever required. Audit acknowledges and appreciates the corrective action taken/proposed by the Government to bring required controls and facilities in IFHRMS to address the issues pointed out in this report.

CHAPTER I

INTRODUCTION

CHAPTER I

INTRODUCTION

1.1 Need for Integrated Financial and Human Resource Management System

The Department of Finance (DoF) of Government of Tamil Nadu (GoTN) is the custodian of State exchequer and is responsible for (i) overall management of State finances starting from budget preparation and allocation, (ii) budget control through continuous monitoring of expenditure and revenue and (iii) ensuring debt obligations are met. The Department of Treasuries and Accounts (DTA) keeps accounts of receipts and payments made to/by the State Government/Departments and plays a key role in supporting the DoF in passing bills as per budget provision and generation of monthly accounts.

The GoTN proposed to implement Integrated Financial and Human Resource Management System (IFHRMS) through DoF in 2012 in order to optimise and manage the State finances with the help of technology. IFHRMS was conceptualised to automate the Finance and Treasury functions, using real-time technology with two core components:

- Financial Management System (covering DoF and Treasury functions)
- Human Resource Management System (covering Employees and Pension Management functions)

1.2 System Architecture of IFHRMS

IFHRMS is an internet-based application running from a centralised location having a modular architecture where different modules interact and share data. The application runs on Oracle E-Business Suite (Oracle Applications) comprising of software modules. The core application has data, application and user authentication modules (**Appendix 1.1**). The main users of the application are Finance Department and Drawing and Disbursing Officers of all Departments. User access rights would be based on roles and responsibilities of respective user.

1.3 Modules of IFHRMS

IFHRMS consists of the following 14 modules.

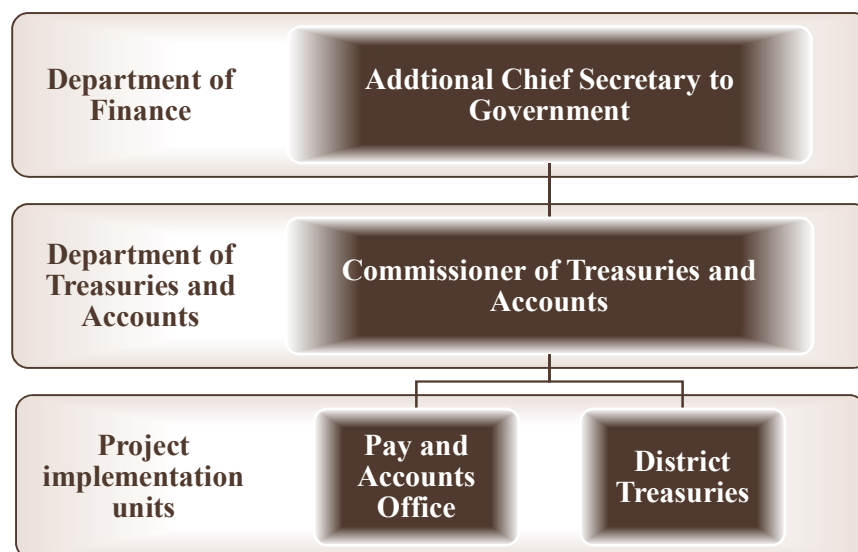
- | | |
|--|--|
| ✓ Budget | ✓ Chief Minister Cell |
| ✓ Financial and Accounting System (Bills and Accounts) | ✓ Grievance |
| ✓ Core Human Resource Module | ✓ Inspection and Audit Para Management |
| ✓ Payroll Module (Payroll and Pension) | ✓ Court case Management System |
| ✓ Strong Room and Inventory Management | ✓ Right to Information Management System |
| ✓ Grievance | ✓ File Movement System |
| ✓ Third Party interfaces | ✓ Web Portal |
| | ✓ Business Intelligence module |

Of the above, six modules viz., Budget, Financial and Accounting system, Core Human Resource (HR), Payroll, Strong Room and Inventory Management and Web Portal modules were fully functional. Other eight modules are yet to become fully operational, of which, Business Intelligence module is still under development.

1.4 Organisation structure

Additional Chief Secretary to GoTN, the administrative head of DoF and Commissioner of Treasuries and Accounts (CTA), head of Department of Treasuries and Accounts are responsible for implementation of IFHRMS. The organisational structure is depicted in **Exhibit 1.1**.

Exhibit 1.1: Organisational structure



1.5 Audit objectives

The Performance Audit objectives are to assess:

- Whether IFHRMS was developed in a cost-effective manner within the agreed timeline;
- Whether IFHRMS has brought the treasury and human resource management functions of all user department into one unified system as envisaged and
- Whether IFHRMS was designed with adequate controls and authenticity of the data and its security is ensured.

1.6 Audit criteria

The criteria adopted to arrive at the audit conclusion are:

- Tamil Nadu Budget Manual;
- Tamil Nadu Financial, Accounts and Treasury Codes;
- Master Level Agreement and Service Level Agreements;
- Tamil Nadu Tender Transparency Act, 1998 and Rules thereunder and
- Government orders and instructions issued from time to time.

1.7 Audit scope and methodology

The PA was conducted from April 2022 to September 2022 covering the period 2015-22 with focus on functioning of IFHRMS modules based on the data for the financial year 2021-22, as IFHRMS went Go-live in January 2021. Four¹ modules were selected for detailed check. The audit methodology included

- Analysis of documents related to project implementation
- Analysis of Application controls
- Analysis of data from the databases of selected modules

The audit plan including audit objectives, audit criteria and audit coverage was shared with GoTN through an Entry Conference held on 20 April 2022. The field work included scrutiny of related files, collection of documentary and electronic evidence. An Exit Conference to discuss the audit findings with the Government was held on 23 January 2023.

¹ Budget, Financial and Accounting system, HR and Pension modules

1.8 Acknowledgement

Audit acknowledges the cooperation extended by Government of Tamil Nadu, Department of Finance, Commissioner of Treasuries and Accounts, Treasury Staff and System Integrator in conducting the Performance Audit. Audit also acknowledges and appreciates the corrective action taken/proposed by the Government to put required controls and facilities in IFHRMS to address issues pointed out in this report.

1.9 Report Structure

The audit findings are grouped under the following chapters:

- Chapter II : Project Management
- Chapter III : Budget operation and Accounts compilation
- Chapter IV : Processing of Bills
- Chapter V : Human Resource Management System
- Chapter VI : Security Management
- Chapter VII: Monitoring and Evaluation

CHAPTER II

PROJECT

MANAGEMENT

CHAPTER II

PROJECT MANAGEMENT

Project Go-live was delayed by four years as System Requirement Specification sign-off was deficient which gave rise to numerous Change Requests requiring additional time for development. The delay in achieving project Go-live resulted in cost overrun of ₹79.91 crore on account of hardware maintenance, application resources, field level technical support and bandwidth charges during the period of delay which was paid to System Integrator. The Monitoring Committee which had to ensure that project met its goals, milestones and suggest necessary modifications and course corrections, did not manage the project as envisaged, which led to continued dependence on System Integrator.

2.1 Introduction

Government of Tamil Nadu (GoTN) engaged a Project Management Consultant¹ (PMC) (July 2012) to define the scope of IFHRMS, project approach, preparation of Detailed Project Report (DPR) including functional requirement specification, selection of System Integrator (SI), implementation of pilot rollout and State-wide rollout of IFHRMS. The PMC was also responsible to establish Project e-Mission Team (PeMT) as an institutional structure within the Department consisting of domain specialists and Information Technology (IT) specialists to participate and add value in the System Requirement Specification (SRS) review and to support the development and deployment of e-governance solution.

2.1.1 Selection of System Integrator

Based on DPR (June 2013), tenders were invited in May 2014 for selecting the SI. Two firms² submitted their tenders and the bids were opened in September 2014. After pre-qualification, technical qualification and commercial bid evaluation, a Master Service Agreement (MSA) was executed with L1 bidder viz., M/s Wipro Limited in May 2015, for developing and implementing IFHRMS at a cost of ₹288.91 crore. According to MSA, SI had to develop IFHRMS in 20 months from May 2015 and IFHRMS should Go-live by January 2017. The core activities of the SI were:

- Designing, developing, deploying and maintaining IFHRMS;
- Procuring and commissioning of IT infrastructure and
- Establishment of centralised Help Desk.

¹ Accenture Services Private Limited.

² Wipro Limited and Rolta India Limited.

SI was also responsible for management of IT infrastructure along with other support activities for five years after Go-live of IFHRMS. A Third-Party Audit Agency³ was also engaged (November 2016) at a cost of ₹54.63 lakh to certify the completeness and security of the IFHRMS.

2.1.2 Cost components of IFHRMS

The agreed project cost (₹288.91 crore) included the following components (Table 2.1).

Table 2.1: Cost components of IFHRMS

Sl. No.	Component	Cost (₹ in crore)
1	State Data Centre, Near Data Centre, Disaster Centre	62.93
2	Connectivity	21.88
3	Application development	86.77
4	Training	2.25
5	Manpower (Help desk)	23.27
6	Infrastructure cost	57.03
7	SR Digitisation	2.80
8	Data Scanning	1.30
9	Taxes	30.73
	Total	288.96
	Less: Buy-back value of old computers	0.05
	Total cost	288.91

(Source: Minutes of empowered committee meeting)

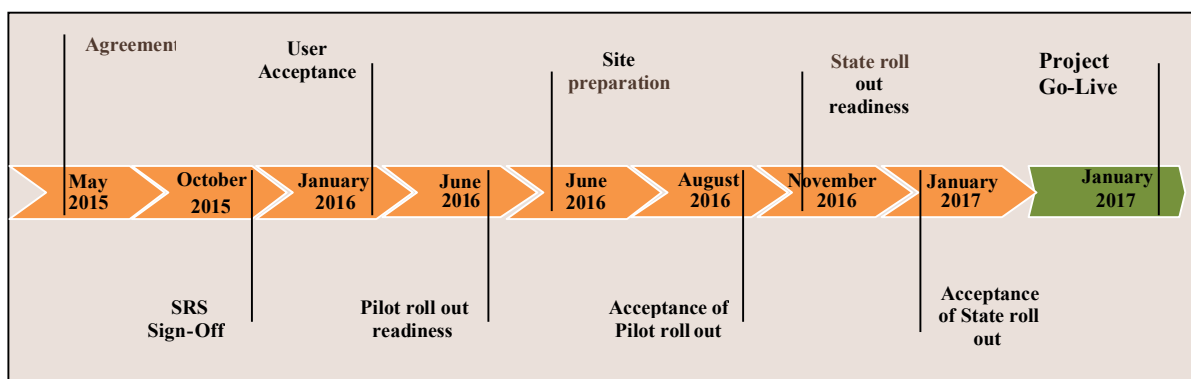
Component-wise cost analysis showed that IT infrastructure (₹62.93 crore + ₹57.03 crore) constituted 42 *per cent* of total cost followed by application development cost of 30 *per cent*. Against contract value of ₹288.91 crore, SI has been paid ₹278.54 crore (as of October 2022). The project Go-live planned for January 2017 was achieved in January 2021 after a delay of four years. The time and cost overrun are discussed in subsequent paragraphs.

2.1.3 Agreed timelines vs actual timelines in achieving Go-live status

Project timelines as per MSA is as given Exhibit 2.1.

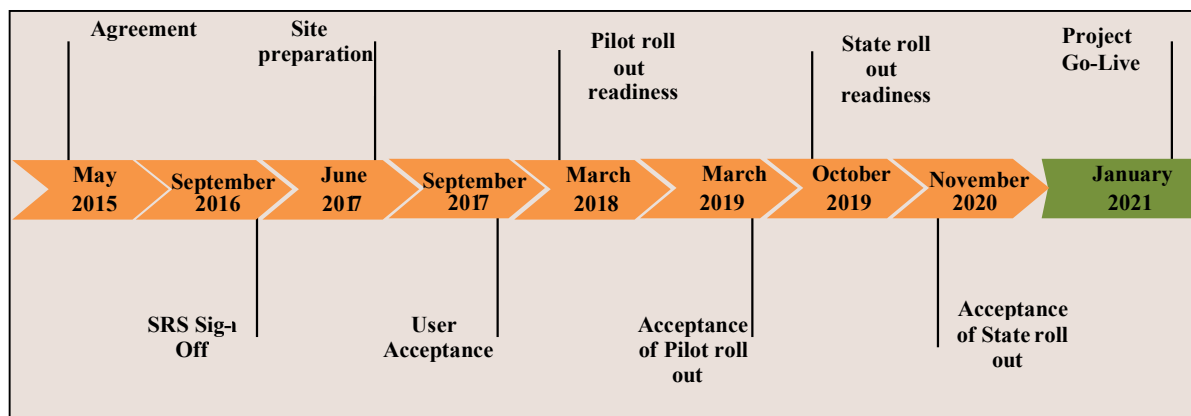
³ PricewaterhouseCoopers Limited.

Exhibit 2.1: Agreed timeline as per MSA



SI prepared SRS for development of application software. However, SRS was not prepared within the agreed timeline. The SRS sign-off was completed in respect of all modules only in September 2016, after a delay of 11 months. The Department, however, failed to ensure that SRS was complete in all respects before signing-off. As a result, 1,702 Change Requests (CRs) were proposed, out of which 751 CRs were accepted as valid and SI was permitted to implement them. Because of numerous CRs, the project and software development got delayed and Go-live status was achieved only in January 2021, as shown in **Exhibit 2.2**.

Exhibit 2.2: Actual timeline achieved



The time overrun of four years also led to cost overrun due to which the Department had to pay additional compensation for hardware maintenance, field level technical support, application resources, bandwidth charges, etc. as shown in **Table 2.2**.

Table 2.2: Time and cost overrun

Sl. No.	Time Overrun			
	Contract signing May 2015	Planned Go-live January 2017	Actual Go-live January 2021	Delay in achieving the respective mile stones (months)
	Mile stone	Time line as per contract	Actual time line achieved	
1	Sign-off of detailed System Requirement Specification	October 2015	September 2016	11
2	Completion of User Acceptance Test	January 2016	September 2017	20
3	Pilot rollout readiness	June 2016	March 2018	21
4	Successful completion of site preparation and infrastructure deployment		June 2017	12
5	Statewide rollout readiness	August 2016	October 2019	38
6	Acceptance of Pilot rollout	November 2016	March 2019	28
7	Acceptance of State rollout	January 2017	November 2020	46
8	Go-live and Operations and maintenance phase	60 months starting from January 2017	Go-live commenced from 1.1.2021	48
Over all time delay in achieving Go-live				4 years
Cost overrun				(₹ in crore)
9	Additional compensation paid to SI on account of Change Requests, warranty, field level technical support, application resources, bandwidth and SR digitisation			79.91

(Source: Compiled from MSA and Monitoring Committee Meeting (MCM) minutes)

Thus, delays starting from SRS sign-off had an impact at every stage of milestone due to poor project management by Department, which further delayed Go-live by four years.

2.2 Time overrun

GoTN constituted (July 2015) a Monitoring Committee⁴ (MC) under the chairmanship of Principal Secretary to Government, Finance Department to take necessary policy decision and render guidance to the project. The committee was also empowered to decide on matters relating to scope, time and deliverables. According to agreed timelines, IFHRMS should be developed in T⁵ + 20 months and IFHRMS should Go-live in January 2017. However, the timeline was extended thrice by MC as detailed in **Table 2.3**.

⁴ Principal Secretary (IT), Secretary (Expenditure), Additional Secretary (Finance), Commissioner of Accounts and Treasuries and Principal Accountant General (A&E) would be the members.

⁵ T = May 2015, i.e. the month of signing the agreement.

Table 2.3: Revision of Timelines for IFHRMS Roll out

Sl. No.	Extended up to	Reasons
1	July 2017	Due to administrative delays.
2	March 2018	Delay in SR Digitisation, System Requirement Specifications Sign-off and carrying out corrections based on Conference Room Pilot (a demo of pilot version of modules to key users).
3	December 2018	No reasons recorded for extension of time in the MC meeting held on 20 September 2018.

(Source: Compiled from MCM minutes)

In the first two instances timelines were extended with the condition that there would be no additional cost to Government. However, MC was silent about additional cost when timeline was extended for the third time. Though project timelines were not extended beyond December 2018, IFHRMS went live only in January 2021.

Recommendation 1:

Government should redraw project timelines and ensure that IFHRMS is completed in all aspects without further delays.

2.2.1 Delay in preparation of SRS

System Integrator had to deploy resource personnel to study the existing system, finance and treasury regulations, functioning of the Department through structured questionnaires and interviews with user groups to ensure the requirements were complete, accurate, consistent and unambiguous. Based on the study, SI prepared System Requirement Specifications (SRS) for Finance, Treasury and Human Resource Management related processes which was approved by the Department during January 2016 to September 2016.

The first milestone for IFHRMS was SRS sign-off in T + 5 months i.e., by October 2015. However, SRS sign-off for all modules took place between January and September 2016. It was observed that the Department did not document the details of the meetings conducted between SI and DoF for SRS sign-off. Thus, the reasons for delays in SRS sign-off by the Department, which lasted up to 11 months, could not be assessed.

Government replied (January 2023) that IFHRMS integrated finance and HR processes together, which required multiple levels of discussion with many stake holders, references to the erstwhile documents of various departments to bring clarity. Hence, it required reasonable time in documenting the SRS.

The reply is not acceptable, as the Department had adopted the timelines for preparation of SRS based on Functional Requirement Specification (FRS) prepared by PMC engaged by Government for the project.

2.2.2 Defective SRS sign-off leading to numerous CRs

The SRS, prepared by SI and approved by the Department was an important document, as IFHRMS was developed specifically based on the requirements

included in SRS. Any change after signing off SRS would result in cost and time impact.

After sign-off of SRS, SI conducted a Conference Room Pilot (CRP) in December 2016 and Key User Training (KUT)/ User Acceptance Test (UAT) during May 2017. In CRP/KUT/UAT numerous changes in addition to what was already specified in the signed-off SRS were identified. As these changes were necessary for successful development and implementation of IFHRMS, SI proposed 971 'software application' related 'Change Requests' (CRs) in seven lots.

To study the above CRs, GoTN formed (July 2017) a sub-committee⁶ to decide on validity of CRs and its cost implications. The sub-committee deliberated and found that 512 CRs were valid (**Table 2.4**).

Table 2.4: Application CRs proposed by SI and considered as valid

Sl. No.	CR Lot	Proposed CRs	Valid CRs	Cost implication (₹ in crore)	Time implication (Man month)
1	1 to 5	672	406	3.28	170.48
2	6	133	65	0.58	28.50
3	7	166	41	0.34	17.61
	Total	971	512	4.20	216.59

(Source: Compiled from related Government orders and change control notes)

Audit checked the 512 CRs and found that 417 were either basic requirements or already mentioned in SRS. However, the same were omitted and rendered the application incomplete (**Table 2.5**).

Table 2.5: Application CRs considered invalid by Audit

Sl.No.	CR Lot	CRs considered as valid by Department	CRs considered valid by Audit	Invalid CRs as per Audit
(1)	(2)	(3)	(4)	(5) = (3)-(4)
1	1 to 5	406	73	333
2	6	65	11	54
3	7	41	11	30
	Total	512	95	417

(Source: Compiled from change request data provided by DoF)

Audit observed that 417 CRs (including 297 CRs critical for process completion) were invalid for the reasons as shown in the **Table 2.6**.

⁶ Deputy Secretary to Government (Budget), Deputy Secretary to Government (Administrative Reforms), Additional Director (e-team), Joint Director (e-team) and Joint Director (New Health Insurance Scheme).

Table 2.6: Details of CRs considered invalid

Description	Number of CR items
Items omitted in SRS/FRS but provision already available in Rules	23
Items discussed in SRS/FRS but not included in the design	44
Items part of work flow management flowing from extant Rules and SRS/FRS	350
Total	417

(Source: Compiled from change request data provided by DoF)

Audit observed that failure of Department to ensure that business rules and workflow requirements were included in SRS, led to defective SRS sign-off and significant number of CRs. As a result, Department had to accept 417 CRs (81 *per cent*) out of the 512, which should have been otherwise included in SRS. This resulted in avoidable cost overrun of ₹3.44 crore and additional 177.60 man months for development of CRs, which delayed Go-live of IFHRMS.

Government replied (January 2023) that these items were found not to be basic standard process requirement or documented in SRS or Request for Proposal (RFP) and were discovered in later stages and felt necessary for day to day ease of use of system.

The reply was not acceptable, as Government while justifying the delay of 11 months in SRS sign-off had stated that SRS was prepared after multiple levels of discussion with many stake holders, references to the erstwhile documents of various departments to bring clarity. Such being the case, failure in not ensuring that all requirements were incorporated in SRS establishes that SRS sign-off was defective.

Recommendation 2:

Government should revisit the Change Requests approval process to avoid invalid Change Requests at the time and cost of the State exchequer.

2.3 Cost overrun

Master Service Agreement stipulated that the contract period is the period from date of signing of MSA to five years after Go-live or as further extended by the Department. Warranty, maintenance and support throughout the contract period was the responsibility of SI. Contract cost also included application development cost, Help Desk, manpower and back-up network connectivity charges. However, due to poor project management as discussed in the preceding paragraphs, the project got delayed and Department had to compensate the SI for this delay on various counts as discussed below:

2.3.1 Avoidable payment due to delay in achieving Go-live

Delayed Go-live as already discussed entailed additional cost to the Department on various counts during the project development period until Go-live was achieved in January 2021 as follows:

- The MC agreed to compensate the SI from October 2018 to the date of Go-live, considering it as interim period and paid ₹26.45 crore for the interim period towards deployment of application resources, provision of Help Desk, etc.
- ₹25.62 crore towards cost of maintenance of installed hardware⁷ for the period from May 2017 to December 2020.
- ₹6.76 crore towards redundant connectivity charges for the period from January 2018 to December 2020 and
- ₹3.89 crore towards deployment of 123 field level technical resources for the period from May 2018 to May 2019.

As such, the Department had to incur additional cost of ₹62.72 crore on the above counts, which could have been avoided by better project management to avoid delays.

Government replied (January 2023) that all end user assets, manpower deployed and network connectivity were used for the various activities like data collection/cleansing, fine tuning of application, sensitisation and training of DDOs, digitisation of Service Registers etc. and hence additional cost paid was justified.

The reply was not acceptable because, as per clauses (c) and (d) of Section 3.1 of MSA, commercial proposal includes cost for all the above items and SI will be solely responsible to bear the cost of any items that are not quoted or are under-quoted in this proposal, but are required to meet the Service Level Agreements (SLAs) or any other requirements as stated in the RFP. No additional payment for these components would be made to the System Integrator.

2.3.2 Over-payment for deploying additional field level technical support

During January 2019, SI requested deployment of additional field level resources based on the difficulty assessed during DDO training. The MC rejected this (January 2019) stating that additional resources (application support personnel) required by SI to meet SLA requirements should be deployed only at SI's cost. However, when SI again requested (September 2019) in this regard, it was sanctioned (March 2020) and ₹13.75 crore was paid to the SI for deploying 228 additional resources at the rate of ₹36,785 per resource per month from June 2020 to November 2021.

⁷ Desktops, printers, UPS and network switches.

During the course of audit, it was noticed that SI sub-contracted deployment of application support personnel in violation of non-assignment clause in MSA, which stipulated that SI shall not sub-contract maintenance of application and Help Desk. Further, application support engineers deployed were actually paid ₹10,704 only against ₹36,785 quoted by WIPRO and sanctioned by Government. The lower salary paid to support personnel also violated the minimum wages fixed by GoTN viz., ₹13,440 and ₹14,100 for 2020-21 and 2021-22 respectively.

Thus, SI gained undue profit of ₹10.15 crore, (74 *per cent*) as only ₹3.60 crore⁸ out of ₹13.75 crore paid by the Department was actually incurred by SI for deploying additional resources.

Government stated (January 2023) that the work was executed only through authorised partners of SI and the cost quoted included all allowances and benefits of the employees. It was further stated that payments were made at the agreed rate and hence there was no over payment.

The reply was not acceptable, as MSA stipulated that, sub-contractor was the one assigned with any part of the work by SI after necessary consent of the Department, which was not done. Besides, the agreement stipulated that the contract should be construed, interpreted and applied in accordance with the laws of the land. Thus, failure of the Department in ensuring the above and accepting the claims as presented by the SI resulted in undue profit to the SI.

Recommendation 3:

Government should recover the excess amount paid to System Integrator for deploying field level technical support engineers as it was not covered in the agreement.

⁸ Calculated at the rate of ₹10,704 for the number of staff deployed during that period.

CHAPTER III
BUDGET OPERATIONS AND
ACCOUNTS COMPILATION

CHAPTER III

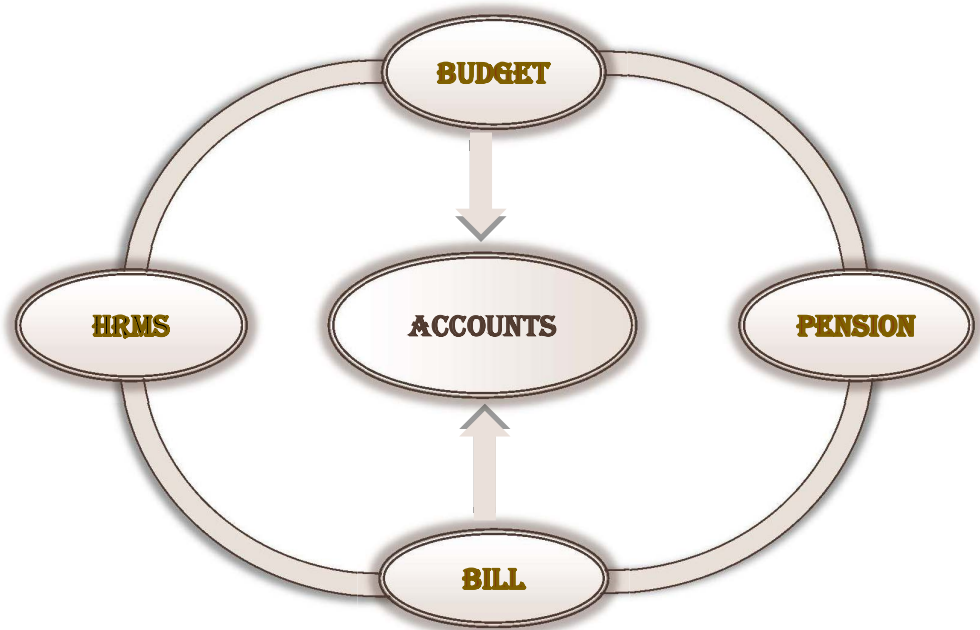
BUDGET OPERATIONS AND ACCOUNTS COMPILATION

IFHRMS envisaged standardisation of budget operations with less manual efforts. This was not achieved as budget operation module allowed transfer of funds between grants in violation of the provisions of budget manual, incurring of expenditure without any budget provision and withdrawal of entire budget allocation after expenditure had been incurred based on such budget allocation.

3.1 Introduction

There are 14 modules in IFHRMS and audit covered the following core modules viz., Budget, Financial and Accounting (Bills and Accounts), Pension and Human Resources for detailed scrutiny in this Performance Audit. The relationship between the selected modules is shown in **Exhibit 3.1**.

Exhibit 3.1: Core modules relationship



The data flow in IFHRMS starts from allocation of budget. Based on the budget allocated, Drawing and Disbursing Offices (DDOs) raise the bills (salary and non-salary), forward them to the respective Pay and Accounts Offices (PAOs)/District Treasuries (DTs) for processing and payment to beneficiaries is made through Electronic Clearing System (ECS). The transaction data generated is then compiled and furnished to Accountant General (A&E) for preparation of monthly accounts. The process starting from

budget allocation to accounts compilation in IFHRMS is discussed in the following paragraphs.

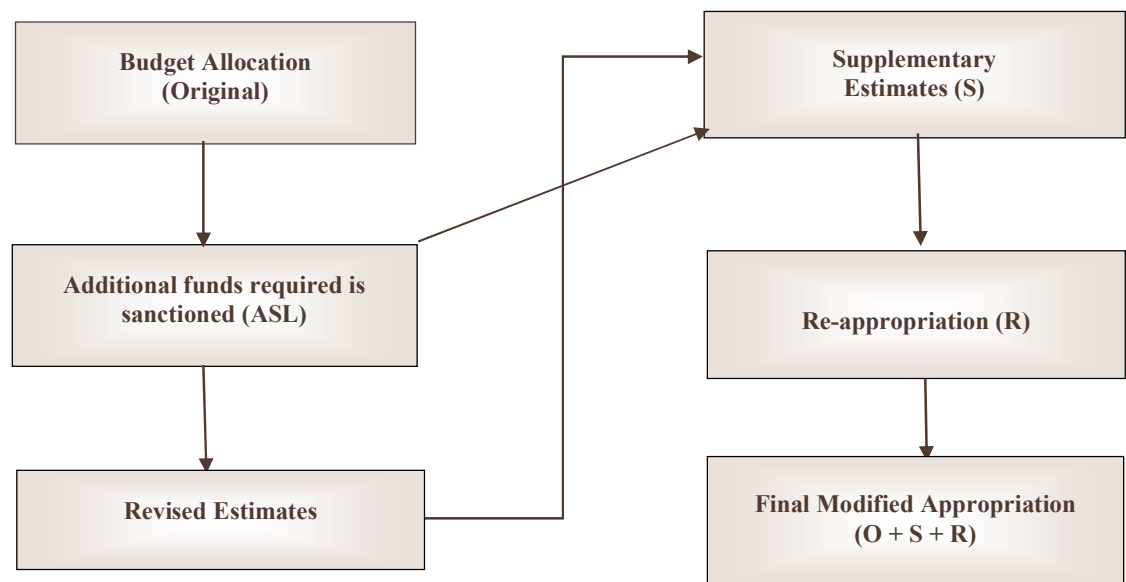
3.2 Budget Operations

In pre-IFHRMS scenario, Department of Finance (DoF) manually collected budget requirement details from Heads of Departments (HoDs) in Compact Disks and carried out budgeting activity in Microsoft Access.

IFHRMS envisaged standardisation of budget operations with less manual efforts, real-time budget control, monitoring and analysis. However, audit observed that improved decision making for Budget Transfer and re-appropriations was not achieved due to absence of processing controls which allows transfer of funds between Grants, incurring of expenditure without budget provision and withdrawal of budget provision after incurring expenditure as discussed in the succeeding paragraphs.

The process of funds flow from Budget allocation to Final Modified Appropriation (FMA) is shown in the **Exhibit 3.2**.

Exhibit 3.2: Funds flow from Budget allocation to Final Modified Appropriation



3.2.1 Budget allocation

Budget allocation and additional funds sanctioned through Additional Sanction Ledger (ASL) are distributed to all Budget Control Officers (BCOs) by HoDs through 'budget transfer' sub-module in IFHRMS. BCOs in turn distribute them to DDOs under their control. Workflow analysis revealed the following shortcomings:

- (i) Budget Manual stipulated that budget should not be transferred from one grant to another grant. Test check, however revealed that IFHRMS budget transfer process allows transfer of funds between HoDs irrespective of the

grants involved. For e.g. from Grant 6 (HoD code 0602-Animal Husbandry Department) to Grant 7 (HoD code 0701-Fisheries Department). This indicated gaps in design of budget transfer process.

Government replied (January 2023) that budget transfer process is designed in such a way that it will not allow re-appropriation of budget from one grant to another. The reply was not acceptable, as budget transfer process allows transfer of funds between HoDs without any validation to restrict transfer of funds only between the HoDs of respective grants. As a result there is a likelihood of funds getting transferred between HoDs across different grants, which contravenes clause 143(i) of Budget Manual.

Recommendation 4:

Government should strengthen budget module to prevent transfer of funds between grants by strictly enforcing provisions of budget manual.

(ii) When budget allocation is transferred initially or during re-allocation of funds between DDOs, the availability of funds is known only on generation of Budget availability report. However, the report has neither a date field to reflect the budget availability on that 'date' nor have description of the scheme for which budget was allocated and hence was not user-friendly (**Exhibit 3.3**).

Exhibit 3.3: Budget availability report without nomenclature and date

Budget Availability Report							
DDO CODE: 41010390 - AAO, DAH&VS, Chennai / TANVAS Uty							
SL.NO	HOD CODE	DDO CODE	HOA CODE	DH CODE	BUDGET AMOUNT	AMOUNT PROCESSED	BUDGET AVAILABLE
							Amount in Rupees
1	00602	41010390	205901053AY	31801	24000000	0	24000000
2	00602	41010390	205901053AY	31804	1000	0	1000
3	00602	41010390	240300001AA	30103	102000	5000	97000
4	00602	41010390	240300001AA	30104	306000	140461	165539
5	00602	41010390	240300001AA	30107	50000	0	50000
6	00602	41010390	240300001AA	30401	650000	53583	596417
7	00602	41010390	240300001AA	30402	40000	0	40000
8	00602	41010390	240300001AA	30501	550000	66157	483843

Government replied (January 2023) that as suggested by Audit, the description sub-head and date/time stamp had been included in the Budget availability Report.

3.2.2 Additional Sanctions process in IFHRMS

DoF sanctions additional funds for an item of New Service (NS)¹/New Instrument of Service (NIS)²/Specific Inclusion³/Re-appropriation⁴ based on

¹ An expenditure on new scheme not contemplated in the Budget.

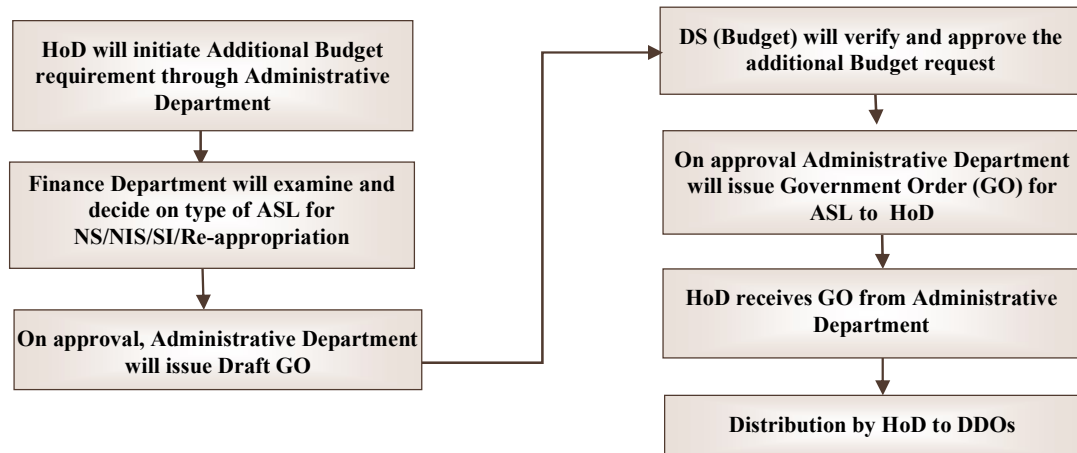
² An expenditure on new scheme, which has been voted in the Legislature in the past.

³ An expenditure for which specific approval of the Legislature is not necessary except to the extent savings could not be found from budget.

⁴ Re-allocation of funds from the savings of one unit to other unit within the grant.

type of request from HoDs. Additional Sanction Ledger (ASL) in DoF contain details of all additional funds sanctioned over and above original budget estimates. ASL is part of budget operations viz., Revised Estimates⁵/ First or Final Supplementary Estimates⁶/Final Modified Appropriation⁷ (FMA). The ASL approval process is shown in **Exhibit 3.4**.

Exhibit 3.4: ASL work flow



Work flow analysis of ASL revealed the following short comings:

(i) ASL notifications are received in budget section of DoF for verification as a pooled list without any identification as to which department the individual ASLs are related to. Due to this deficiency, the Department seeking ASL could not be identified. Therefore, ‘Verifier’ in budget section processes the notification only on receipt of physical file from Department concerned which delays the ASL approval process.

Government replied (January 2023) that suggestion of Audit to improve the ASL screen will be taken up with SI while carrying out value addition process for improving the user friendliness.

(ii) After approval, HoDs receive ASL notification for distributing additional funds sanctioned. However, they could not act immediately on it as ASL GOs are not uploaded by Administrative Departments as provision to upload/ attach ASL GOs is not made mandatory in IFHRMS. In the absence of details of distribution required for further allocation in IFHRMS, HoDs have to wait for physical copy of GO, which delays distribution of funds to BCOs/DDOs.

Government replied (January 2023) that the gap identified by Audit has been addressed and uploading of ASL GO had since been made mandatory.

⁵ Estimate of probable receipt/expenditure for a financial year, made in the course of a year with reference to transactions already recorded and anticipated for the remainder of the year.

⁶ Statement to be laid before the Legislature showing the estimated amount of further expenditure necessary over and above the expenditure authorised in Annual Financial Statement for that year.

⁷ Sum allotted to an unit of appropriation as it stands at the end of the financial year.

3.2.3 Operation of Contingency Fund

Contingency Fund (CF) is operated under major head '8000'. The CF is placed at disposal of Governor of the State to enable sanction of advances for meeting unforeseen expenditure pending authorisation of expenditure by State Legislature. The State currently has a CF corpus of ₹150 crore. Funds for schemes identified as New Service/New Instrument of Service during the year after presentation of original estimates is generally provided in Supplementary Estimates through Additional Sanctions. However, based on urgency, Contingency Fund Advance (CFA) is sanctioned on specific request by HoDs. Once the State Legislature authorises the CFA, the advances from CF is recouped.

3.2.3.1 Non-adherence to manual provision in recoupment of CF

As per Section III of Tamil Nadu Contingency Fund Act, 1934 when additional funds for expenditure met from CF advance are approved by State Legislature and necessary Supplementary Appropriation Acts are passed, the entire expenditure booked under Part II - Contingency Fund would have to be transferred to appropriate heads under Part I - Consolidated Fund by minus debit under various heads opened under CF major head '8000'. Accountant General (A&E) is solely responsible for making the recoupment adjustment entries and this was clearly brought out in SRS. IFHRMS, however, allowed adjustment entries by Finance Department for recoupment of Contingency Fund indicating lack of processing controls to ensure that only AG (A&E) could do such adjustments.

Government replied (January 2023) that it plans to issue amendment to Budget Manual as the CF recoupment process is system triggered in IFHRMS and the matter has been taken up with AG (A&E) to accept the change in existing procedure.

3.2.3.2 Other points of interest

(i) Two-stage processing for CFA sanction viz., one for ASL and another for CFA is time consuming and avoidable. Shortening the ASL to CFA approval workflow process by introducing one more ASL type viz., 'ASL-CF' would avoid delays in sanctioning CFA as (i) CFA request could be initiated soon after ASL GO is issued and (ii) it would do away with need for separate GO for CFA.

Government replied (January 2023) that ASL for CF process was not automated to avoid blocking of funds and hence two stage processing exists. The reply is not acceptable, as the existing process only delays release of funds from CF and thereby defeats the purpose of CF sanction.

(ii) An account of CF transactions and CF balance details as on date shall be maintained by DoF in Form 'B'. However, IFHRMS report provides only the details of CF utilisation and not the CF balance. As a result CF balance details have to be watched through a manual register which defeats the purpose of computerisation.

Government replied (January 2023) that the shortcoming highlighted by Audit has been addressed and from January 2023 'Form B' report will exhibit the CF balance.

(iii) The CF Government Order (CF GO) is issued only after the sanction/approval of CF advance and thus 'CF GO date' should be invariably on or after 'CF sanction date'. Audit noticed that due to lack of input controls, the system accepts a date earlier than CF sanction date. For instance, in respect of CFA number 2022080074⁸, CF sanction date is 24 August 2022, while CF GO date is 22 August 2022 resulting in lack of credibility of IFHRMS data.

Government replied (January 2023) that following audit observation the bug has been fixed by providing necessary validation control for date.

(iv) CFA number is auto generated in IFHRMS. Cross verification of a CFA GO with CFA processed in IFHRMS, revealed that the auto-generated CFA number 2022080074 dated 24 August 2022 differs from the CFA number mentioned (i.e. number 6) in GO. Also, instead of auto-generating CFA number from '1' at the beginning of a financial year, the system randomly auto generated the number 74 for 2022-23 wrongly portraying that 73 CFAs were already sanctioned in the financial year, when only 5 CFAs were sanctioned. Thus, IFHRMS auto-generates incorrect and misleading 'CFA number'.

Government replied (January 2023) that the issue has been rectified and proper sequential numbering of the CFA sanctions has been ensured.

3.2.4 Budget utilisation

Analysis of budget allocation *vis-a-vis* expenditure at sub-head level is given in **Table 3.1**.

Table 3.1: Sub-head wise budget allocation and expenditure

Sl. No.	Number of sub-heads	Budget allocation (₹ in crore)	Expenditure (₹ in crore)	Expenditure to Budget ratio
1	4,806	3,49,737.81	3,12,479.89	0.89
2	35	1.50	38.23	25.49
3	203	0.32	5,011.94	15,662.31
Total	5,044	3,49,739.63	3,17,530.06	

(Source: Budget data)

It is seen from **Table 3.1** that while expenditure was within allocated budget in 95 *per cent* of the sub-heads (4,806) in the remaining sub-heads (238) it exceeded the budget allocation by more than 25 times. The increase was more pronounced in 203 sub-heads, where against total budget allocation of ₹0.32 crore expenditure booked was ₹5,011.94 crore (15,662.31 times). In most of these cases, only token provision was made in original/supplementary

⁸ First 4 digits denotes year, next 2 digits the month and last 4 digits the serial number.

estimates and the balance amount was met by re-appropriation, indicating that expenditure was incurred without sufficient funds either in Original or in Supplementary estimates. This points to inaccurate budget estimation despite availability of previous three year budget and expenditure data in the system for compiling the budget estimates for the current year.

It was also seen that though availability of budget is mandatory for processing non-salary bills in IFHRMS, salary bills (i.e. salary/pension), could be processed. Thus, there is no validation control for DDOs to check for budget availability in respect of salary bills.

Government replied (January 2023) that token provisions are made with an aim to bring to the notice of the Legislative Assembly of the proposed implementation of the new scheme and additional fund sanction would be brought to the notice of the Legislative Assembly through Supplementary Estimates. It was further stated that after the system gets stabilised, salary bills would be validated with budget allocation limits at DDO level.

While Government accepted the observation on lack of validation control for DDOs to check for budget availability in respect of salary bills, in so far as the observation about expenditure being incurred without sufficient provision either in Original/Supplementary estimates, the reply is not acceptable as in the above cases, major portion of expenditure was incurred only through re-appropriation.

3.2.5 Re-appropriation

Re-appropriation is transfer of saving from one unit of appropriation to meet additional expenditure under another unit of appropriation within the same grant/charged appropriation by competent authority. According to Paragraph 14 (2) of TN Budget Manual, sufficient funds should have been provided for the expenditure in the Appropriation Act or by re-appropriation by the authority competent to sanction re-appropriation. Analysis of re-appropriation data revealed the following:

- In 1,082 sub-heads, additional provision given in FMA-I (24 March 2022) was subsequently withdrawn in FMA-II (31 March 2022) and in 133 sub-heads provisions withdrawn in FMA-I was given in FMA-II, all within a week's time.
- In nine Grants involving 14 sub-heads, expenditure of ₹37.92 crore was incurred based on Original/Supplementary provisions. This included ₹34.51 crore incurred during August 2021 towards Madurai Airport Expansion, for which fund was provided⁹ in Supplementary estimates. However, the provision was later entirely withdrawn through re-appropriation as there was no processing control in IFHRMS to retain the provision to the extent of expenditure incurred. This resulted in expenditure being incurred without any budget provision.

⁹ Through Additional Sanction Ledger to be included in Supplementary provision.

- In five Grants, expenditure (₹2.26 crore) was incurred under six sub-heads based on funds given only through re-appropriation i.e. there was no Original/Supplementary provision. The expenditure included ₹2.05 crore (State Share) incurred¹⁰ in March 2022, for 'Inclusive Education for disabled at Secondary Stage'. Thus, IFHRMS allowed incurring of expenditure without Original/ Supplementary provision, i.e. without authority of the Legislature.
- In Grant 16 - Finance Department, an amount of ₹32,000 was incurred under Head of Account (HoA) '7610 (Loans to Government servants) 00-202-AB', without any fund allocation in original, supplementary or re-appropriation. Scrutiny revealed that the expenditure related to refund of excess loan recovered from Government Servant. However, as there is no provision in IFHRMS to record deduct entry under the Loan head, it was shown as expenditure. Due to this shortcoming in IFHRMS, 35 similar refund transactions (April 2021 to June 2022) were all incorrectly exhibited as loans disbursed, inflating the loan expenditure during the year.

Therefore, withdrawal of provision sanctioned by Legislature after incurring expenditure and provision of funds through re-appropriation for items not approved by Legislature, violates provisions of Budget Manual. Moreover, audit observed that re-appropriation takes place outside IFHRMS and provision/withdrawal of funds during last week of financial year shows that re-appropriation is a mere year-end adjustment exercise.

Government accepted the observations and stated (January 2023) that (i) provision of alert message would be made while generating FMA report, (ii) instances of withdrawal of provision after incurring expenditure and allowing of expenditure through re-appropriation without provision of funds would be taken up for detailed scrutiny and gaps, if any, would be addressed and (iii) bug noticed in the bill type would be fixed so that the refunds are not allowed as an expenditure.

Recommendation 5:

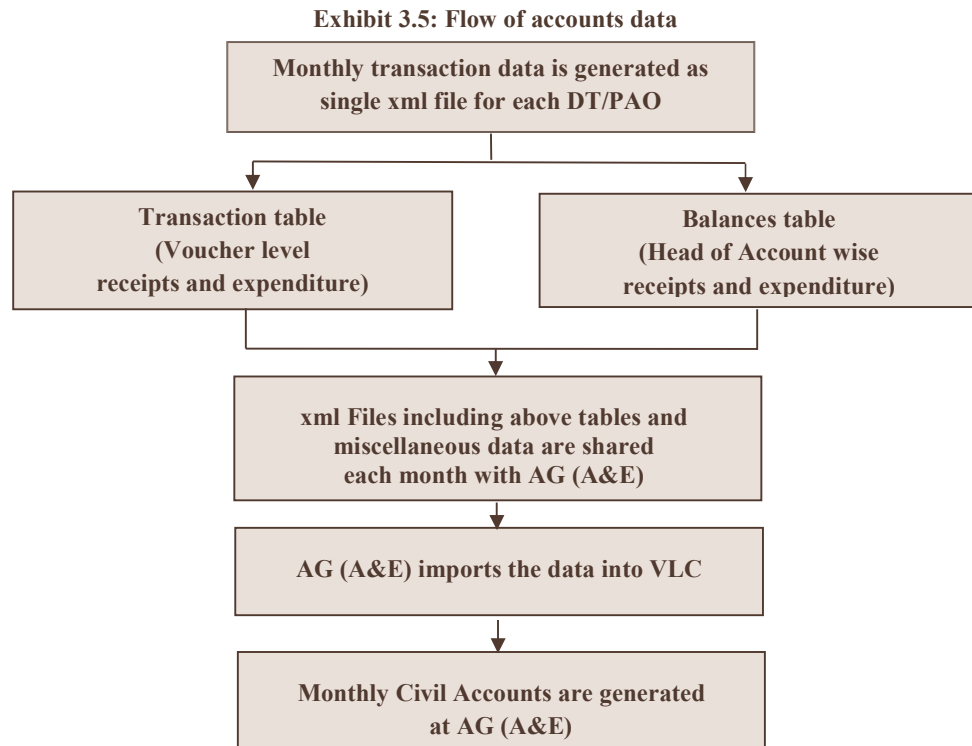
Government should strengthen budget module to prevent expenditure in Heads of Account without budget provision and withdrawal of budget allocation for Heads of Account where expenditure had been incurred.

¹⁰ Funds provided through ASL.

3.3 Accounts Compilation

The quality of IFHRMS accounts data provided by the Department to AG (A&E) leaves a lot to be desired due to incorrect mapping of group codes, wrong classification of Voted/Charged expenditure, booking expenditure under HoAs not in LMMH, unauthorised operation of HoAs by PAOs/DTs, wrong classification of sub-accounts, incorrect classification of cash remittances, mismatch between debit and credit figures and wrong booking of deduct refunds boosting the revenue receipts. IFHRMS data does not provide a picture of all Government expenditure and receipt without manual intervention, as receipts are still compiled outside IFHRMS using old software, while on expenditure side AG (A&E) has to follow up with the DDOs concerned for rectification, which amounted to duplication of work involving additional time and effort. Thus, the purpose of automation of accounts compilation is lost, as manual intervention defeated the expected outcome of IFHRMS.

IFHRMS envisaged that AG (A&E) should be able to prepare Monthly Accounts¹¹ through the system itself and furnish the same online to Department of Finance. However, interfacing between AG (A&E) and IFHRMS is yet to be achieved. The flow of accounts data from IFHRMS is shown in **Exhibit 3.5**.



¹¹

Including all out of Treasury transactions by AG (A&E) for the month.

Workflow analysis by Audit revealed that compilation of receipts and expenditure in IFHRMS and reconciliation of accounts still requires manual intervention. Further, analysis of the IFHRMS data for the year 2021-22 showed that the system lacked validations to prevent wrong booking of expenditure leading to incorrect classification of heads of accounts. The outcome of the analysis is discussed in succeeding paragraphs.

3.3.1 Standardisation and structural uniformity not achieved

As part of standardisation and to bring in structural uniformity in accounting codes, Government decided (March 2019) to introduce modifications in the Heads of Accounts structure, at various levels in IFHRMS. Analysis of implementation of those modifications revealed the following:

(i) Wrong classification of 'Voted' and 'Charged' expenditure

As part of standardisation and bringing in structural uniformity, all non-salary items of expenditure are to be distinguished as 'Voted' and 'Charged' at sub-detailed head level¹². For this purpose, 'Voted' expenditure was assigned sub-detailed heads '01' to '49' and 'Charged' expenditure was assigned '51' to '99'.

Audit observed that the above classification was not implemented in IFHRMS as sub-detailed heads from '01' to '99' were operated for both 'Voted' and 'Charged' expenditure without any distinction as seen from data analysis:

- In 1,476 records, transactions amounting to ₹2,289.66 crore (**Appendix 3.1**) was classified as 'Charged' under sub-detailed heads ranging between '01' to '09' meant for 'Voted' items.
- Conversely, in 506 records, transactions amounting to ₹3.92 crore was classified as 'Voted' under sub-detailed head codes '51' and above meant for 'Charged' items. (**Appendix 3.2**).

In the case of salary items this distinction is at sub-head level only. As long as salary and non-salary items of expenditure operate with same sub-detail heads, limiting 'Voted' and 'Charged' distinction at sub-detail head level to 'Non-salary items' leaving out 'Salary items', the intended standardisation and structural uniformity in account codes would not be achieved.

Thus mapping of sub-detailed heads to the relevant nature of Voted/Charged expenditure was incomplete leading to wrong classification of Voted/Charged expenditure.

Government replied (January 2023) that possibilities would be explored to bring in unique sub-detailed head codes for the salary related heads of accounts.

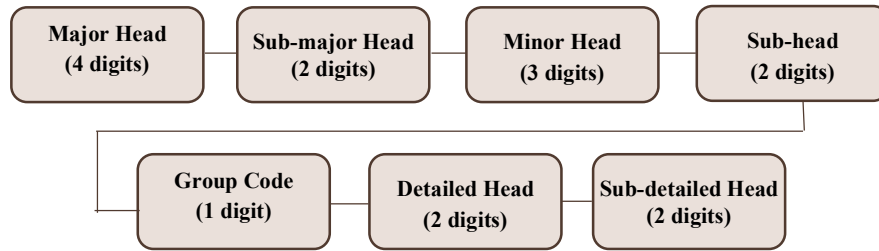
(ii) HoA with incorrect Group Codes:

A group code (one digit) for classification of Receipts and Expenditure was introduced (March 2019). In IFHRMS, HoA is identified by 16 digit code as

¹² Also mentioned in 'Introductory Note' of Budget publication, 2021-22.

follows *vis-a-vis* 15 digit code in the erstwhile ATBPS¹³ as shown in Exhibit 3.6.

Exhibit 3.6: Structure of Head of account



As shown above, the group code precedes the detailed head for identifying the type of receipt/expenditure *viz.*, central receipts, capital expenditure, etc.

Analysis of ‘Balances Table’ revealed that unrelated group codes were assigned to transactions totalling ₹2,740.01 crore in 110 records (**Table 3.2**). The transactions were receipts/refund of receipts/recoveries of overpayment, carried out in ATBPS involving manual interventions, as discussed in **Paragraph 3.3.9**.

Table 3.2: Wrong group codes

Sl.No.	Description	Correct group code	Wrong group code	Transaction Amount (₹)
1	Central Receipts	1	2	18,20,579
2	State Resources	2	1,3	2,78,992
3	Capital Expenditure	4	3	4,82,02,722
4	Loans and Advances	5	6	40,90,37,949
5	Public Debt	6	5	26,94,07,43,910
6	Public Account	8	2,3	27,120
Total				27,40,01,11,272

(Source: IFHRMS accounts data)

Assignment of incorrect group codes defeated the objective of standardisation and structural uniformity in accounting codes.

Government replied (January 2023) that correct group code combination is being validated now while converting ATBPS account entries for incorporation into IFHRMS.

Recommendation 6:

Government should achieve standardisation in Accounts classification to ensure correct classification of expenditure figures in the books of account.

¹³ Automated Treasury Bill Passing System - The old software system used to raise bills and still in use for raising bills of nearly 18,000 employees of Aided Schools and Courts which are outside IFHRMS.

3.3.2 Operation of incorrect Major Heads

(a) According to Rule 26(d) of Government Accounting Rules, 1990, detailed classification of account heads in Government accounts shall be as prescribed in the List of Major and Minor Head (LMMH) from time to time. No head of account other than the Major/Sub major/Minor heads prescribed in LMMH can be operated for booking transactions.

Audit noticed the following from data analysis of Balances Table:

(i) Two transactions totalling ₹5,300 were booked in IFHRMS by operating major head '0271' (**Table 3.3**). This head is not prescribed in LMMH.

Table 3.3: Booking of expenditure in '0271' Major Head not in LMMH

Sl. No.	Head of Account	Detailed Head	Amount (in ₹)
1	027160800AT	21101	5,000
2	027103800AA	21101	300
Total			5,300

(Source: IFHRMS accounts data and List of Major and Minor Head)

(ii) Nineteen transactions totalling ₹8,17,730 (**Appendix 3.3**) were booked in IFHRMS under major head '8005' which was replaced with major head '8009' from LMMH *vide* CGA Correction Slip No.379 dated 22 June 2000.

(b) Audit noticed that 459 transactions totalling ₹12,24,751 were wrongly booked under '8001', a major head not in IFHRMS code reference for 2021-22. On further analysis, these transactions were found to be receipts, which were done through ATBPS involving manual interventions, as discussed in **Paragraph 3.3.9** defeating the purpose of computerisation of accounts.

All the above indicated that the HoA Master Tables in IFHRMS is incomplete, as they did not update the corrections done by Controller General of Accounts.

Government replied (January 2023) that the incorrect major heads have been identified and disabled in IFHRMS from August 2022 and henceforth the booking under incorrect major heads would not happen.

Recommendation 7:

Government should ensure that master data of head of accounts is continuously updated, so that accounts are not booked under non-existent Head of Account.

3.3.3 Unauthorised operation of HoA by PAOs/District Treasuries

For making payment in IFHRMS, LMMH prescribes distinctive HoAs '8670-00-111; 8670-00-113' for ECS payment and '8670-00-102; 8670-00-104' for cheque payments by PAOs and Treasuries respectively.

During data analysis of 'Balances Table', Audit noticed that payment for 2,33,176 transactions totalling ₹2,59,648.20 crore was made under HoA '8670-00-101-AA', which is meant for cheque payments and to be operated by AG (A&E). Incorrect use of HoA '8670-00-101-AA' by PAOs/Treasuries/Sub-Treasuries, instead of the LMMH prescribed HoA, gives a misleading picture that all the above payments were made through cheques. This was due to wrong mapping of HoAs for payments in IFHRMS. Similar instances of wrong mapping of HoAs, which are to be operated by AG (A&E) but being operated by PAOs/Treasuries, are listed in **Table 3.4**, indicating absence of validation control in IFHRMS.

Table 3.4: Unauthorised HoAs operated by DDOs in IFHRMS

Sl. No.	Major Head	Minor Head	Sub Head	Transaction Amount (in ₹)
1	8235-General and Other Reserve Funds	117-Guarantee Redemption Fund	AA-Guarantee Redemption Fund	1,77,115
2	0049-Interest Receipts 04-Interest Receipts of State/Union Territory Governments with Legislature	110-Interest realised on investment of Cash Balance 800-Other Receipts	AA-Other Receipts	25,15,28,964
			CB-Interest on investment from Non-Obligatory Sinking funds [01601]	12,97,73,358
			CI-Interest (Premium) accrued on Open Market Loans	67,73,274
			CW-Interest on Investment of Defined Contribution Pension Scheme Deposits for Government Servants	95,165
3	Receipts head with minor head 901	901-Share of net proceeds assigned to States	..	18,65,125
4	Expenditure Service head with minor head 901 and 902	901-Deduct Recoveries 902-Deduct amount met from [name of the Reserve Fund/Deposit Account]	..	8,08,72,578
Total				47,10,85,579

(Source: IFHRMS accounts data)

Government replied (January 2023) that AG (A&E) operated heads of accounts have been disabled in IFHRMS portal from August 2022 to prevent operation of the same by other users.

3.3.4 Operation of unrelated HoD code for booking expenditure under consolidated fund

In IFHRMS, apart from 16 digit for HoA, additional provision is made for Demand Number (3 digits), HoD (2 digits) and DDO location (8 digits). The HoD code '66' is allotted to 'Part III - Public Accounts'. From data analysis, it was observed that transactions with Major Heads ranging from '0043' to '7610' which pertain to 'Part I - Consolidated Fund' were wrongly booked under HoD code '66'. The above transactions totalling ₹6.46 crore, included 13 receipt heads, seven expenditure heads and one loan head of 'Part I - Consolidated Fund' (**Appendix 3.4**). This indicated that the system had no validation control to prevent booking transactions under wrong HoD code resulting in wrong exhibition of accounts.

Government replied (January 2023) that HoD code and major head of account mapping has been built into system from July 2022 and necessary validations have been placed at post level, bill generation level and bill passing level to ensure correctness.

3.3.5 Wrong sub-account classification

Data analysis of 'Balances Table' revealed that wrong sub-account¹⁴ codes were shown against major heads used for booking receipts totalling ₹3.08 lakh and expenditure totalling ₹167.46 crore (**Appendix 3.5**). As accounts are forwarded to AG (A&E) every month by DTs/PAOs sub-account wise, wrong depiction in monthly accounts impacts the accounting process in AG (A&E) (**Table 3.5**). This indicates deficiency in compilation of monthly accounts by the system.

Table 3.5: List of Major heads with wrong sub account codes

Sl. No.	Major Head	Subsidiary account as per data	Correct Subsidiary account
1	0202	SA-02	SA 14, 15A, 15B, 15C
2	0202	SA-11	SA 14, 15A, 15B, 15C
3	0202	SA-20A	SA 14, 15A, 15B, 15C
4	0202	SA-20B	SA 14, 15A, 15B, 15C
5	0202	SA-27D	SA 14, 15A, 15B, 15C
6	0210	SA-27D	SA 16, 16A
7	0405	SA-18B	SA 18D
8	2012	SA-12	SA 10
9	2405	SA-18C	SA 18D
10	4401	SA-18A	SA 18B
11	4406	SA-18D	SA 05
12	4700	SA-18F	SA 08

(Source: IFHRMS accounts data)

¹⁴ Sub-accounts exhibiting Receipts and Disbursements up to the lowest tier of classification for the Major heads in operation.

Government replied (January 2023) sub-account major head combination had been revisited and the wrongly classified sub-accounts were rectified.

3.3.6 Incorrect classification of cash remittances

As per LMMH, for Expenditure Heads (Revenue Account), '*Recoveries of overpayments*' pertaining to previous year(s) shall be recorded under distinct minor head 'Deduct-Recoveries of Overpayments' (i.e. '911'). This minor head should come below the major/sub-major head concerned as detailed head '77' and sub detailed head '02' '*without affecting gross expenditure under functional Major/Sub-Major Head in the Appropriation Accounts*'.

Data analysis revealed that cash remittances in 93,495 instances amounting to ₹96.72 crore arising out of '*Recoveries of over payments*' of previous years were incorrectly recorded by operating minor heads other than '911', indicating wrong classification. This points to non-incorporation of the above business rule in the system.

Government accepted the observation and stated (January 2023) that all DDOs have been instructed to remit the previous year over payments under 911-over payment recovery head and the business rule would also be incorporated.

3.3.7 Mismatch between debit and credit figures

For any transaction, two entries are recorded, one on debit side and the other on credit side. The debit side total should be equal to credit side total. Both 'Transaction and Balances' tables had these entries.

Data analysis, however, revealed that the 'Balances Table' for May 2021 had a difference of ₹11,060 between Debit and Credit columns totals, indicating a lapse in the system. On further analysis, it was noticed that an Alteration Memorandum (AM) done through ATBPS in May 2021 had minus entry of ₹5,530 on debit side affecting HoA 201400114AK30101 and plus entry of ₹5,530 on credit side affecting HoA 201400114AK37702. Audit observed that AMs are still being proposed through ATBPS because receipts and payments of few aided educational institutions and Courts are still being processed in ATBPS. As ATBPS data was incorporated into IFHRMS, every month this reflected in IFHRMS data too.

Government replied (January 2023) that conversion of ATBPS accounts into IFHRMS is only a temporary arrangement till the vacation of stay obtained by some of the aided institutions who continued to operate in ATBPS. However, instructions would be issued to all TOs/PAOs to cross check the ATBPS entries before sending conversion of Accounts data to IFHRMS.

3.3.8 Wrong operation of '900' (Deduct refunds) Minor Head

As per LMMH, 'Refunds of Revenue' for Receipt Heads should be taken as reduction of revenue receipts under Minor Head '900 - *Deduct-Refunds*' opened under respective major/sub-major heads. The system should be suitably designed to book 'Refunds of Revenue' for Receipt Heads under

minor head '900 - Deduct-refunds' as 'minus entry' under respective major/sub-major heads.

It was, however, noticed from analysis of 'Balances Table' that in 1,358 instances, refunds totalling ₹1.58 crore were incorrectly recorded as revenue receipts under minor head '900', instead of accounting it as a 'Deduct refund minus entry'. Thus the revenue receipts was inflated by ₹1.58 crore during 2021-22 and indicated that the related business rule was not incorporated in the system.

Government replied (January 2023) that business rules to avoid remittance through e-challan under minor head '900 – Deduct refund' have been incorporated. It was further stated that business rule would also be incorporated in the refund bill.

3.3.9 Receipts

Receipts are remittances made to Government for certain purposes. When remittances are made into Government account in IFHRMS portal, e-challans are generated. e-challan remittances take place through four banks viz., State Bank of India (SBI), Bank of Baroda, Indian Bank and Indian Overseas Bank. The receipts from these banks are auto-reconciled and accounted and subsequently included in monthly accounts automatically. Apart from e-challans, the following types of remittances outside IFHRMS are also received:

e-receipts of four departments from various banks

The receipts of four departments viz., Commercial Taxes¹⁵, Registration, Transport and Prohibition and Excise are remitted via 'online payment' mode and agency banks upload their scrolls in e-scroll portal on the next day (i.e. T+1). Entire receipts of the previous month is downloaded from e-scroll portal in xml file and processed in ATBPS server for grouping receipts HoA-wise. Receipts under each HoA is treated as a physical challan remittance and input into ATBPS manually.

Physical challans received from State Bank of India every day

Receipts are also continued to be collected through physical challans presented at cash counters of SBI, Treasury branch. All physical challans are sent daily along with scrolls by SBI, Treasury branch. These individual challan details are manually fed into ATBPS.

e-treasury challans processed at e-treasury branch, SBI

Receipts of some offices¹⁶ are processed as e-treasury receipts at e-treasury branch, SBI. Remittances received by these offices are consolidated and one physical challan is prepared office-wise and are captured in ATBPS.

¹⁵ After 27 December 2021, the remittances are made through IFHRMS i.e. as e-challans.

¹⁶ TNPSC, GCTP POS, TN SANDMINING, E COURT, TNGOVT_RTI, etc.

The above mentioned three kinds of receipts are processed in ATBPS with 15-digit HoA. They are subsequently merged with e-challan receipts (which have 16 digit HoA) generated in IFHRMS to arrive at total monthly receipts and forwarded to AG (A&E) as part of Transactions and Balances tables. Thus, remittances occurring outside IFHRMS have to be brought into IFHRMS through manual interventions for accounts compilation. The compilation of receipts data from different sources and AMs occurring outside IFHRMS, defeats the primary objective of IFHRMS viz., 'leveraging IT for expeditious receipt and accounting of money in the Government Exchequer'.

Government replied (January 2023) that capacity augmentation of e-challan servers is in progress, once the augmentation is completed all the challans generated outside IFHRMS including integration with major department would be brought into IFHRMS, which would eliminate dual accounting (ATBPS and IFHRMS) and would prevent manual interventions.

Recommendation 8:

Government should bring about real time integration of expenditure and receipt transactions in IFHRMS for a truly automated accounting system.

3.3.10 Reconciliation

SRS states that Treasury will reconcile its Payment and Receipts reports with all DDO's on monthly basis and any observations on misclassification of HoAs, realisation of payment for missing entries would be set right and correction entries passed before closure of monthly civil accounts.

Audit, however, observed that 'Form 70' report in IFHRMS, shows all expenditure settled during a month (which also include transactions relating to previous months) instead of expenditure actually booked in the month. As this does not aid monthly reconciliation, DDOs maintain a physical register, wherein expenditure booked for the month are recorded, and submit it to BCOs for monthly reconciliation.

Due to this, BCOs, also manually consolidate the figures received from all DDOs under their control in a physical reconciliation register for reconciliation with Treasury Input Section. They then prepare an abstract and send it to their HoD for reconciliation with AG (A&E) figures. Thus, the entire reconciliation of accounts activity, despite being envisaged as an automated process, is done manually outside of IFHRMS, which defeats its objectives.

Government replied (January 2023) that MTC 70 report would be revisited and the parameter for generating reports would be reconsidered as suggested by Audit.

CHAPTER IV

PROCESSING OF BILLS

CHAPTER IV

PROCESSING OF BILLS

Bill processing, a critical module of IFHRMS that handles the entire Government disbursement, had deficiencies like absence of provision to prevent double payment for same claim and to ensure that bills are processed within stipulated timeline, which in turn affected the beneficiaries (employees/service providers/citizens) as payment was delayed. Bills could be generated under wrong HoAs without verification of check points leading to misclassification of accounts. Even after two years of IFHRMS rollout, PAO/Treasury rely only on physical copies of sanction orders, vouchers, etc., as bills could be presented online without attaching the soft copies of supporting documents. Bills could be rejected by PAO/Treasury without recording any reasons and DDOs had to depend on physical copies of the returned bills to take corrective action.

4.1 Bill Module

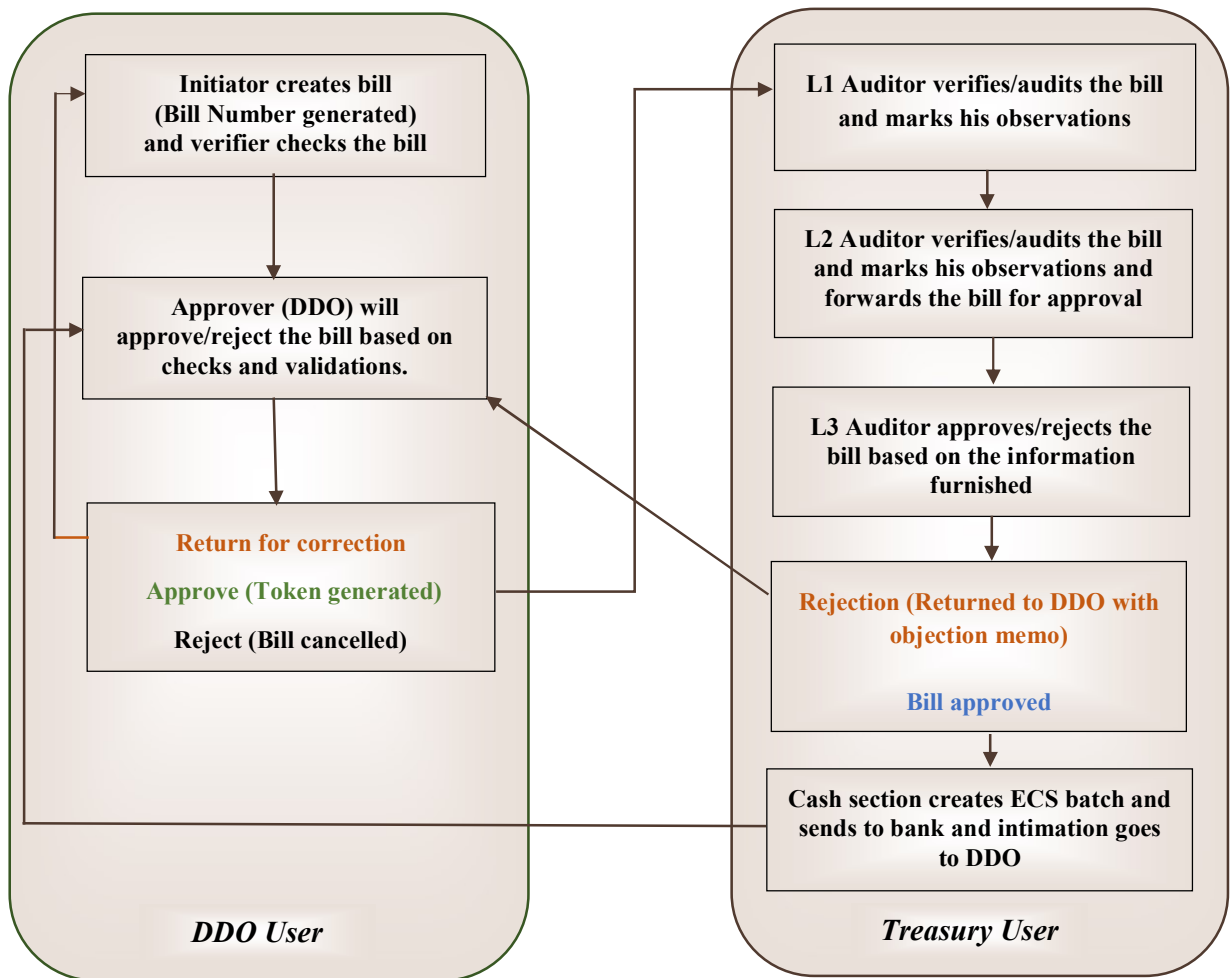
4.1.1 Introduction

Disbursement process is an integral part of PAO/Treasury offices and mission critical module of IFHRMS which handles the processes from Bill creation to payment to beneficiary, after necessary checks and verification, for the State as a whole. The following outcomes in bill processing were expected once IFHRMS was implemented:

- Bill processing to be completely integrated with other applications like e-pension, budget, etc.
- Facility for online submission of bill.
- Generate alerts for next level official after submission of bill by the subordinate officer.
- Provision of dual factor authentication, digital signature validation/ authentication.
- Ensure that the bills are processed within the prescribed time frame and audit trail was maintained.

The process of bill creation, bill processing and bill payment in IFHRMS is shown in **Exhibit 4.1**.

Exhibit 4.1: Bill creation, processing and payment process



Work flow analysis of Bill processing, a mission critical module handling Government transactions, revealed deficiencies *viz.*, double payment for same claim, delay in processing bills, generation of bills under wrong Heads of Accounts, continued dependency on physical copies of the supporting vouchers, etc., which are discussed in the succeeding paragraphs.

Bill creation

4.1.2 Processing of bills under wrong HoA

During bill preparation, the ‘Initiator’ in DDOs office must select the HoA for accounting of expenditure. The system, however, does not alert the user, if ‘Initiator’ selects an unrelated HoA. Thus, bill could be generated successfully if sufficient budget is available under the wrongly selected HoA. As a result, DDOs tend to generate and submit bills to PAOs/Treasuries under unrelated HoAs as illustrated below:

Illustrative case:

In Erode District Treasury office, two bills were submitted by DDO for same claim of rent reimbursement (₹44,400) in two token numbers viz., 0501011621050001 and 0501011621050002. While in first token number 0501011621050001, a rental reimbursement claim was made under wrong expense type i.e. 'Medical reimbursement', in the second token number 0501011621050002, the same amount was claimed as rental reimbursement under correct expense type i.e. 'rent'. The treasury rejected the wrong claim and returned the bill.

The above case highlights the shortcoming in the system due to which a bill with wrong HoA classification can be submitted, by oversight, for payment by DDO.

Such instances, as and when detected, are rectified through Alteration Memorandums (AMs) /Transfer Entries (TEs) as revealed in data analysis wherein AMs impacting 422 HoAs and involving ₹465.41 crore were proposed by 23 District Treasuries (DTs) during 2021-22, apart from AMs through *pen corrections*, which could not be quantified by Audit. Apart from the AMs commented above, TEs to correct misclassifications were also proposed. A comparative analysis of TEs proposed during 2020-21 (pre Go-live) and 2021-22 (post Go-live) is given in **Table 4.1**.

Table 4.1: Comparative analysis of TEs (pre Go-live and post Go-live)

Sl.No.	Details	2020-21	2021-22	Percentage of decrease
1	Number of transfer entries	5,334	3,981	25

(Source: AG (A&E) data)

The above numbers indicate that despite TE incidences coming down in 2021-22, the persisting need for significant number of TEs reinforces the Audit observation about lack of HoA validation in IFHRMS.

IFHRMS has check points to ensure correctness of bills prepared by DDOs. Though DDOs could see the check points on-screen while creating bills, there is no suitable mechanism viz., 'check box' to ensure compliance/non-compliance by DDO for each check point. It is suggested that a 'check box' feature for check points may be provided to DDOs to prevent wrong selection of HoA.

The Government agreed (January 2023) to implement the suggestion of Audit to make check points mandatory to minimise such occurrences.

Recommendation 9:

Government should strengthen IFHRMS to prevent generation of bills under wrong Head of Account.

4.1.3 Multiple beneficiary IDs

Non-salary bills are processed in IFHRMS for settling third party beneficiaries including persons and organisations for services rendered. The bill 'Initiator', after entering the basic bill details viz., 'Bill Type', 'Expense Type', 'HoA' and 'Beneficiary Type', selects the payee from among the beneficiaries registered in IFHRMS with unique beneficiary code. If the payee is a new beneficiary, his details (i.e. name, bank account number, IFSC code, etc.) are captured in the system and he is allotted a unique beneficiary code automatically.

Data analysis revealed that out of the 1.02 crore beneficiaries (i.e. third party person/organisation registered by DDOs) registered in IFHRMS, 13.16 lakh beneficiaries had more than one beneficiary ID assigned to them indicating duplication of beneficiaries in the system. Similarly, 4.77 lakh Government employees/pensioners were also registered as third party beneficiaries.

The third party beneficiary duplication was due to system assigning unique beneficiary ID at DDO level instead of at State level and the presence of Government employee in Beneficiary Table was due to registering them as third party beneficiary for making non-salary payments viz., overtime allowance, TA bills, contingencies, etc.

The presence of duplicate beneficiaries in the system indicated likely scope for adding a blacklisted third party beneficiary as a new beneficiary. Provision for including beneficiary Aadhaar/PAN details and a validation check based on such details would not only prevent duplication but also curtail tax evasion by third party beneficiaries for services rendered to Government.

Government replied (January 2023) that to avoid duplicates in beneficiary master, Global Beneficiary Master in IFHRMS is being developed and valid employee ID would be mandated to ensure that employees are not included as third party beneficiary.

4.1.4 Lack of validation controls in bill creation

SRS envisages various types of validations in IFHRMS to make it more efficient by reducing human errors. Workflow analysis of IFHRMS bill module, however, showed that certain validations for Non-Salary bills, though a part of SRS, were not incorporated as brought out below:

- As per SRS, late fee/penalty for belated payment of telephone/electricity bills should be disallowed. However, the related bill forms in IFHRMS had a field to capture only bill invoice value. There was no field for inputting late fee/penalty. If the invoice value fed into the system was inclusive of fine/penalty, the bill would be passed for payment as the system would not be able to identify the late fee/penalty amount included in the bill.
- The onus is therefore on DDO users, who generate the bill and PAO/Treasury users who scrutinise the physical bill to disallow the

late fee/penalty. Though data analysis revealed rejection of 208 bills as they included late fee/penalty, in the absence of a separate field for capturing late fee/penalty, Audit could not ensure the number of telephone/electricity bills passed for payment that included late fee/penalty.

- For medical reimbursement bills not submitted within three months from date of cash memo, a 15 *per cent* cut has to be imposed on bill amount. However, there is no provision in IFHRMS to deduct the 15 *per cent* for medical bills submitted after three months.
- Prize/award of ₹2,000 is given to employees, who complete 25 years of unblemished service. An employee becomes ineligible even if punished with censure. However, there was no validation in IFHRMS to check and restrict award of prize money to ineligible employees.
- In purchase of machinery and supplies, SRS mandates uploading of sanction proceedings from competent authority and certificate for receipt of goods before payment. Audit noticed that there was no provision in IFHRMS for certifying receipt of goods.

The absence of above validations in IFHRMS, points out flaws while mapping the business rules properly during system development providing scope for inadvertent payment of late fees, awards to ineligible employees, etc.

Government while accepting the above observations stated (January 2023) that integration with TANGEDCO has been developed to get the bills directly in the system to avoid late fee. It was also stated that validations would be provided to prevent award of prizes to ineligible persons and check box for certificate is provided now for receipt of goods.

4.1.5 Lack of provision to automatically calculate Tax Deducted at Source

FRS contemplates that system should provide bill forms pre-populated with relevant data e.g. calculation of amount, fee to be paid, etc., based on type of service and should minimise occurrence of data re-entry throughout the form.

Government departments avail services of various contractors/suppliers for executing works/purchase of stationery, etc. IFHRMS has inbuilt provision for listing out various sections of IT rules, based on which Tax Deducted at Source (TDS) at specified rates should be deducted from bills raised by contractors/suppliers. Workflow analysis of bill generation screen for payments including TDS deduction revealed the following:

- The bill amount, on which TDS has to be calculated, has to be entered manually in a separate field under 'bill recovery line'. Due to lack of input control this field accepts any amount even if it exceeds budget available in the HoA.

- The 'bill recovery line' field does not automatically calculate TDS amount based on selected TDS code, instead bill 'Initiator' has to manually calculate and input the TDS amount. Here too, an incorrect input, with no relation to TDS percentage, is accepted by the System.

Data analysis revealed that DDOs skipped selection of correct TDS code from the drop-down box for 65,875 bills and input the manually calculated TDS amount in 'bill recovery line' field. Audit observed that the lack of provision in 'bill recovery line' field for automatic calculation of TDS amount based on selected TDS code violates FRS and would likely lead to wrong booking of expenditure.

The Government admitted (January 2023) that TDS calculation was not happening due to bugs in the calculation field, which have been rectified now by the SI.

4.1.6 Processing of bills without attachments like sanction orders/proceedings

One of the main objectives of IFHRMS is to move towards paperless office. SRS provides that DDO should submit bills to PAO/Treasury for further processing along with scanned copies of sanction order, proceedings etc. During 2021-22, 20.71 lakh non-salary bills (i.e. 53 *per cent* of the total bills generated in IFHRMS) were generated through IFHRMS. Following deficiencies were, however, noticed in this bill generation process.

- Though IFHRMS has provisions for attaching scanned copies of sanction orders and proceedings, it is not a mandatory facility. Thus, the non-salary bills were presented online mostly without attaching the required scanned documents and PAOs/DTs cannot process the presented bills until the hard copies of sanction order, proceedings etc., are submitted by the DDOs.
- Attachments could be made without proper name/logical sequence in IFHRMS. To locate required sanction order, proceeding and voucher, the PAO/Treasury users have to open attachments on trial and error basis. This was also supported by the fact that in 60 *per cent* of the sampled districts, the PAOs/DTs had to rely only on physical vouchers.

Commissioner of Treasuries and Accounts (CTA) instructed (April 2022) to insist for hard copies of bills and directed PAOs/Treasuries to return bills presented online without hard copies. The instructions proved counterproductive as DDOs/DTs concentrated more on submitting/processing physical copies.

As such, bills presented online are processed in IFHRMS mainly based on physical copies submitted by DDOs. Continued dependency on physical copies for passing bills ignoring soft copies attached to bills presented online, defeats IFHRMS objective of moving towards a paperless working environment.

Government replied (January 2023) that action to dispense with physical vouchers would commence and naming convention for sub-voucher category would be explored.

Recommendation 10:

Government should strengthen IFHRMS to ensure that bills are presented/returned online along with the required supporting documents to avoid continued dependency on physical bills.

4.1.7 Duplicate Bill number/Token number

In IFHRMS, once 'Initiator' creates a bill, Bill number (16 digit) and on its approval Token number (16 digit) is automatically generated by the system. Each bill should, therefore, have a unique Bill number and a unique Token number.

Data analysis, however, disclosed that 3,456 bills generated in IFHRMS had the same bill number for two different bills. Similarly, 860 bills submitted during this period had the same token number for two different bills. This affects credibility of data generated through IFHRMS.

The Government while accepting the observation stated (January 2023) that bill/token numbers gets duplicated in some instances due to occasional server slowness. To resolve this issue system has been updated to handle one bill at a time for one DDO with validation of last bill number plus one.

Recommendation 11:

Government should address the Server performance issues so that uniqueness of each bill generated in the system is maintained.

Bill Processing

4.1.8 Delay in processing bills

The CTA instructed (September 1997) all PAOs/Treasuries/Sub-Treasuries to ensure that all bills presented at their office on a day are thoroughly checked in all aspects and disposed-off within two days from the date of receipt. However, an analysis of bill data revealed that the time taken to process 20.71 lakh bills (except regular pay bills) during 2021-22 varied from 'the same day' to 'more than 100 days'. The age-wise details are given in **Table 4.2**.

Table 4.2: Delays in processing bills

Bill processing time (in days)	Number of bills processed between 1 April 2021 to 31 March 2022
0 -2 days	6,33,291
3 - 10 days	11,68,060
11 -25 days	2,34,011
26 -50 days	29,967
51 -100 days	4,907
more than 100 days	1,005
Total	20,71,241

(Source: IFHRMS data dump)

It is seen from **Table 4.2** that nearly 70 *per cent* of bills processed in IFHRMS during 2021-22 exceeded the stipulated processing time of two days. These bills mainly consisted of retirement benefits, payment advices, loans and advances, grants, work bills, temporary advances and related adjustment bills, etc. Further analysis of 2.70 lakh bills which were processed with delay of more than 10 days disclosed that 55 *per cent* were personal claims (retirement benefit and loans & advances, etc.) indicating employee and retired pensioners were made to wait to get their due benefits as no flags were generated in the system to indicate that bills were pending beyond the stipulated time for processing. Thus, there was no effective monitoring mechanism to watch prompt disposal of bills in IFHRMS.

Government replied (January 2023) that dashboard for monitoring the pendency of bills would be provided in the Business Intelligence tool, which is under development.

Recommendation 12:

Government should strengthen IFHRMS to ensure that bills are processed within stipulated timeframe so that beneficiaries get their due payments without any delay.

4.1.9 Lack of provision to avoid double payments

GoTN sanctions ex-gratia of ₹50,000 from State Disaster Response Fund to next of kin of those deceased due to Covid-19. For this, Tahsildar submits bills online with proceedings containing names of the deceased and the beneficiary eligible for ex-gratia. Based on the details, PAO/Treasury authorises payment to beneficiary.

Analysis of bill data of PAO (North) revealed that 10 beneficiaries were paid ex-gratia payment twice during the same month and in some cases on the same day itself, as there was no provision in IFHRMS to ensure that the beneficiary is not paid for the same claim more than once. When this was pointed out by Resident Audit unit of the PAO, the PAO addressed respective Tahsildars and the amount was recovered from the beneficiaries and remitted into Government Account. However, the issue was not taken up with CTA for including specific check points/audit points for Covid-19 ex-gratia bills. As a result, these bills were continued to be processed in the system without a provision¹ to ensure that beneficiaries are not paid twice. Analysis of State wide data revealed that there were 389 double Covid-19 payment cases involving ₹1.98 crore.

Due to absence of specific controls in IFHRMS and lack of any system in place to watch and alert the user about the possibility of double payment for the same claim, treasury staff (PAO North) now maintain a master database in MS Excel for Covid-19 ex-gratia payment which is cross checked to avoid double payments.

¹ To check beneficiary name, expense type, bank account number and payment month.

When pointed out by the Audit, the Government replied (January 2023) that alert message for verifying the duplication of the beneficiary in the same type of bill, a feature which is under development, would be provided at all levels i.e. TOs and DDOs.

Recommendation 13:

Government should direct the System Integrator (M/s Wipro) to incorporate appropriate coding in IFHRMS software to prevent double payment for same claim. Government should also put in place an alternative mechanism to avoid double payments until such coding is made available in IFHRMS.

4.1.10 Lapses in sanctioning/watching closure of Temporary Advances

According to Article 99 of Tamil Nadu Financial Code Volume I, Temporary Advances (TAs) could be sanctioned for a specific purpose with approval of Government. TAs drawn by DDOs shall normally be adjusted within two months from date of drawal. If two TAs are pending with DDOs for more than two months, a third advance could not be drawn for any other purpose, unless DDO provides an undertaking to adjust the advance with detailed bills and vouchers within a month. Apart from Article 99, advances were also drawn for other purposes *viz.*, Travelling Allowances on tour, fuel, etc.

Workflow study of 'Temporary Advance' Bill screen revealed the following:

- As per SRS, a drop down box should be provided in 'Temporary Advance' bill form for inputting the detail 'Article 99' mentioned in sanction order to distinguish it from other advances. However, there is no drop down box and all TAs were sanctioned without distinction.
- Due to lack of validation control, to check whether the respective DDOs already have two TAs pending adjustment, IFHRMS allows passing of additional TAs. This defect in IFHRMS is widely exploited during March, when a number of TAs is sanctioned irrespective of TAs pending closure.
- During March 2022, 2,500 TAs (24 *per cent* of 10,318 TAs sanctioned during 2021-22) were sanctioned for ₹184.10 crore in respect of 783 DDOs. Of this, 56 DDOs had more than two TAs each that were pending closure.
- TAs drawn before implementation of IFHRMS and pending closure were not completely migrated to IFHRMS for follow up and closure. As of now, the pre-IFHRMS TAs are being settled on a case by case basis.
- No alerts/notifications were generated in respect of TAs pending closure after two months and data analysis revealed that as of March 2022, 1,655 TAs totalling ₹150.16 crore were pending closure even after three months.

Thus, incomplete mapping of TA related business rule in IFHRMS allowed sanction of multiple TAs irrespective of TAs pending adjustment.

Government replied (January 2023) that a separate dropdown box for selecting Temporary Advances (Article 99) and other types of Temporary Advances is under development. Further, through provision of appropriate 'Reports' the settlement of pending Temporary Advances would be monitored.

4.1.11 Reassignment of notifications in case of transferred L1 auditor

Each Bill Audit Section in PAO/Treasury has three levels of Auditors viz., L1, L2 and L3. Bills submitted by DDOs lands in L1 notification page to be processed for payment. Thus, bill processing commences with L1 in PAO/Treasury. In event of L1's transfer/ promotion, his pending bill notifications have to be reassigned to incoming L1.

Study of reassignment process in IFHRMS revealed that incoming notifications from DDOs are mapped to L1 'employee ID' instead of L1 'post' in an approver group, though SRS had mentioned only the post. Therefore, when an L1 is transferred / promoted / moved to another approver group, his pending notifications are not automatically transferred to the incoming L1 by the system.

To overcome this, HR Administrator in PAO/Treasury reassigns pending notifications to incoming L1. Despite this only closed / cancelled notifications are reassigned. As pending bills notifications, which require further processing, are not reassigned, incoming L1 remains unaware of them. Therefore, a ticket is raised with Help Desk seeking access to pending notifications for new L1. Help Desk brings the pending bill token numbers into notification page of incoming L1 via a 'triggering' process enabling him to process pending bills successfully.

Due to this circuitous process for reassigning pending bill notifications, though physical transfer of the L1 official is effected, the PAO/Treasuries delayed the related entry of L1 transfer in IFHRMS and cleared the transferred L1's pending bills using his/her User ID and password. Once all pending bills are cleared, transfer of L1 is given effect in IFHRMS and user ID is added at the new office for assignement of role and drawal of salary at the new office.

As a result, the audit trail (action history) of those bills which were processed and cleared, using the user ID and password of the transferred L1, depicts misleading information about the user who processed the bills, thus impacting the credibility of IFHRMS data.

Government replied (January 2023) that bugs reported by Audit are rectified now and notifications would be automatically transferred to new user upon assigning roles.

4.1.12 Issues in Rejection of bills

Bills presented online by DDOs are checked against the audit points in PAOs/Treasuries at three levels (i.e. L1, L2 and L3) before being approved for payment. If a bill is fit for rejection, L1 notes the objection in remarks field and forwards the bill to L2 and further to L3, who can either overrule the objections raised and pass the bill for payment or can reject the bill after recording his reasons in remarks column. Once the bill is rejected, DDO is

intimated the reasons for rejection in TNTC 'Form 69' along with copy of printed rejected bill carrying rejection remarks of L1, L2 and L3.

Audit observed the following shortcomings in rejection of bills:

- IFHRMS did not generate TNTC 'Form 69' listing the audit points which the bill failed to satisfy. Instead, audit points were manually written in physical 'Form 69' and enclosed with hard copy of rejected bill sent to DDO.
- Bills could be rejected even if L1, L2 and L3 auditors do not record any reasons in their respective remarks field as it was not made mandatory. Data analysis revealed that 26,153 bills, rejected during 2021-22, did not carry any remarks.
- Due to lack of a standardised list of reasons for rejecting a bill, L1, L2 and L3 auditors record meaningless reasons in their remarks field viz., 'l', 'j', 'k', audit, reject, etc. This did not help DDOs to readily understand rejection reasons and take remedial action.
- Non-recording of rejection reasons by L1 and/or L2 meant that L2/L3 could not take appropriate action within the system itself and must rely on physical bills.
- In 555 bills, despite L1 remarks rejecting the bills, L2/L3 auditors overruled L1 remarks and passed bills for payment, without recording their remarks, as it was not mandatory. Thus, in 555 cases reasons for overruling L1 remarks were not recorded in the system.

Non-generation of 'Form 69' in IFHRMS and non-mandatory remarks field for recording bill rejection reasons meant that DDOs had to wait for physical copies of bills and enclosures from PAOs/Treasuries to know the reason for bill rejection and take corrective action, which defeats the goal of paperless environment.

Government while accepting the observations stated (January 2023) that generation of 'Form 69' is under development and remarks columns would be made mandatory.

4.1.13 No provision to identify re-submitted rejected bills

According to SRS once a bill is rejected, DDO must raise a new bill for re-submission of same claim, after rectifying objections raised by PAO/Treasury. SRS was however silent about cross linking rejected bill and new bill.

As such, there is no provision in IFHRMS for DDO to resubmit the rejected bill with required modification and explanation and DDOs must prepare a new bill and submit it afresh. The resubmitted bill, however, is not cross referenced to the rejected bill as there is no provision for it in IFHRMS. Without recourse to rejection reasons in case of a resubmitted bill, PAO/Treasury do not know if a bill presented by DDO is a bill rejected earlier and process all bills afresh.

Non-linking of rejected bill with resubmitted bill is a gap in business rule mapping, as section (e) of SR 32 B of Treasury Rule 16 provides that Drawing Officer should furnish his explanation or reply, as Treasury officer would not know that same claim was rejected earlier. This gives rise to a situation where a wrong claim, rejected earlier, could be passed for payment, when submitted as a new bill without the reasons for rejection being rectified by DDOs.

Data analysis revealed that during 2021-22, 347 bills totalling ₹4.84 crore were rejected for reasons like wrong/excess/duplicate/double claims. In the absence of details to identify rejected and re-submitted bills, it could not be ensured whether the resubmitted bills were passed for payment correctly.

Government replied (January 2023) that cross linking of rejected bill and new bill would be incorporated in the system.

4.1.14 Settlement date not reflecting actual event

In IFHRMS, in all three levels of bill processing at PAO/Treasury viz., L1, L2 and L3 a 'Settlement date' field is provided. This field is populated by default with system date i.e. the date on which L1, L2 and L3 open bill notifications for processing. This field is important as e-payment batch for a bill is generated based on it. The system date in this field can be replaced either by L1, L2, L3 or by cash section with a specific date before which payment cannot be made. Audit noticed following deficiencies in this regard:

- For pay bills, settlement date is by default last working day of the month. However, unless 'Settlement date' field is manually changed every month to last day of the month, e-payment batch for salary payment will get generated on the captured system date itself.
- No field is available in the system to record date of rejection/cancellation of a bill. Instead, the system date captured on the day of rejection/ cancellation of a bill is shown as 'Settlement date' for the bill. This was noticed in respect of 1.42 lakh bills rejected/cancelled during 2021-22.

Thus, not having settlement date for salary bills as last date of the month by default gives likely scope for payment of salary to employees earlier than last day of the month. Also, using 'Settlement date' field for capturing bill rejection date instead of having a dedicated field gives rise to misleading data in the system.

Government replied (January 2023) that necessary provision would be incorporated in the monthly salary bill from January/February 2023 onwards and rejection date will be displayed separately for the audited /returned bills.

4.1.15 Multiple workflow roles assigned to same official in IFHRMS

An effective IT system should enforce segregation of duties using pre-programmed user and group security profiles, so that proper checks and balances on the activities of officials involved is maintained.

Based on analysis of IFHRMS data, it was seen that multiple roles were assigned to 5,580 users i.e. same official is assigned multiple roles viz., L1 and L2 auditor roles or L2 and L3 auditor role, which vitiates the principle of segregation of duties as shown in the examples below:

- In District Treasury, Madurai, a Superintendent (Employee ID 16xxxxxxx89) is assigned with L1 and L2 auditor roles from July 2022.
- In District Treasury, Erode, a Superintendent (Employee ID 16xxxxxxx24) is assigned with L1 and L2 auditor roles from June 2020.

The 5,580 users constitute nearly seven *per cent* of the total IFHRMS users (83,403). District-wise break-up details of instances of 5,580 users being assigned multiple roles is given in **Appendix 4.1**. Details of bills processed (i.e. prepared, verified, approved, passed for payment) by the officials in their dual role capacity could not be compiled in Audit, as the requested data in '*WF_item_attribute_values*' table was not furnished by the Department.

Segregation of duties is a fundamental control requirement as it reduces the risk of error and fraud. The lack of adequate restrictive controls in IFHRMS to enforce separation of duties increases the risk of errors occurring and remaining undetected and also adoption of inappropriate working practices.

Government admitted that (January 2023) whenever office is having shortage of manpower/posts, the additional roles are assigned to same person officially. The officials are being sensitised to avoid assigning the Initiator and Approver Level roles (L1 and L3) to the same person.

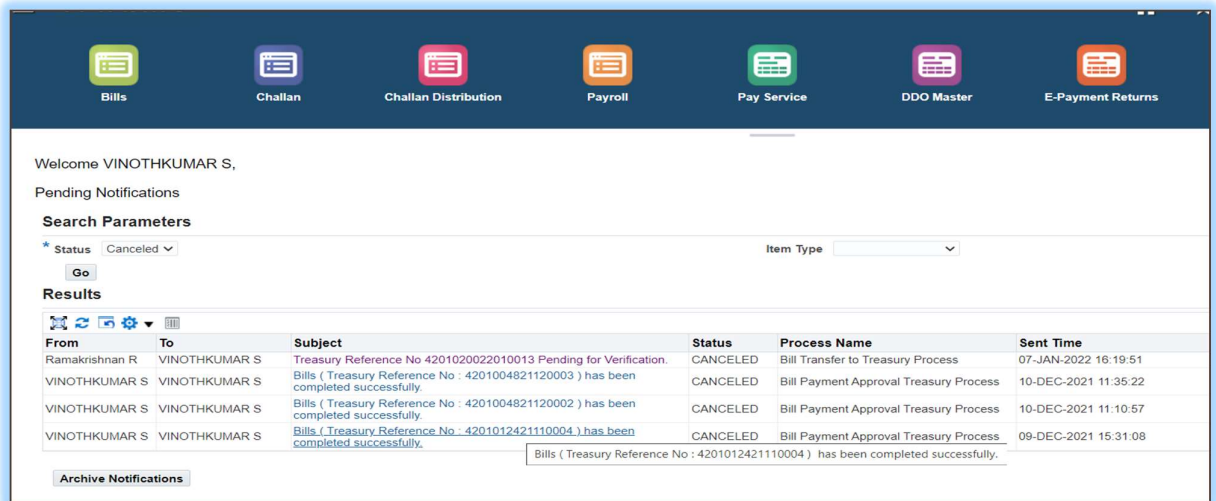
4.1.16 Gaps in notification page of treasury staff

According to FRS, system should generate alert for L1, L2 and L3 auditors in PAO/Treasury, when a bill is submitted online by DDOs. For this a notification screen is included in the landing page of L1, L2 and L3 auditors to enable them to take appropriate action on notifications received. Each notification relates to an individual bill with details of treasury token number, status of bill (i.e. open, pending, closed etc.) and time of receipt of notification. In general, the notification page is the mainstay of IFHRMS as it displays overall work status of each workflow user.

Workflow study of notification page revealed the following shortcomings:

- Under the 'Subject' column in notification page, 'Treasury Reference Number' is blank for approved and settled (e-payment batch generated) bills.
- There is no provision in notification page to identify (i) rejected bills, (ii) bill type/expense type and (iii) bill group of a bill. The user must open each and every notification to find the details which is tedious and non-user friendly.
- Status of processed and paid bills were shown as 'cancelled' in notification page. (**Exhibit 4.2**).

Exhibit 4.2: Notification page shows cancelled status for bills passed for payment



- During bill processing a notification moves from L1 to L2 and then from L2 to L3. Audit came across instances where notifications were missing in L2 or L3 notification page. Bills associated with missing notifications could not be processed till they are found and restored.
- Notification meant for one user is displayed in the screen of unrelated user. This is a system deficiency wherein IFHRMS transactions get mixed up and display under unrelated user screens.
- Notification for e-payment returns is not displayed in notification page of user and is available only under 'e-payment return' sub menu. Access to this information is possible only on selection of a particular beneficiary type and not all return notifications are displayed.

It is evident from the above that notification page was not developed properly. Displaying correct bill status, option to identify rejected bills/pay bill group/expense/bill type, displaying treasury reference number instead of blanks, preventing display of unrelated notifications and having e-payment returns notified in notification page itself so that it does not inadvertently escape scrutiny, would optimise IFHRMS workflow and make it more user friendly.

Government replied (January 2023) that all the issues in notification pages as observed by Audit have been fixed and triggering of e-payment return in the main notification page would be explored as an additional feature.

4.1.17 Shortcomings in e-Vouchers

IFHRMS aimed at paperless and hassle free environment for carrying out Government transactions. Submission of e-vouchers in lieu of physical vouchers would help achieve this to a large extent. Analysis of e-vouchers generated online through IFHRMS revealed the following:

- e-vouchers did not carry digital signature for testifying its authenticity and for non-repudiation. All DDOs were required to manually sign the printouts of bills generated in IFHRMS before submission to PAO/Treasury.
- e-vouchers and related sub-vouchers were not dated and time stamped by DDOs and did not contain all information² as in physical vouchers.
- Scanned copies of all supporting documents viz., sub-vouchers, sanction orders, etc., were not available for all e-vouchers, as most DDOs did not scan them while submitting bills online in IFHRMS.

Thus, e-vouchers did not meet all legal requirements for acceptance and Department has a long way to go to reach its goal of moving to paperless and hassle free environment for carrying out Government transactions.

Government replied (January 2023) that printing the details of Digital Signature in the bills would be enabled at the earliest and on stabilization of the system the physical copies would be dispensed with in a phased manner and that instructions have been issued to ensure attachment of scanned copies of all sub-vouchers.

4.2 Pension Management System

Pension Management System had inaccurate date of birth details which delayed sanction of additional pension to eligible pensioners and allowed creation of multiple pensioner IDs for the same pensioner leading to double pension payment. Further, incorrect mapping of pensioner ID to pension pay order prevented pensioners from logging into IFHRMS for updating basic personal information like bank details, address, etc.

In pre-IFHRMS scenario, e-Pension software, a web based application, was used for generating monthly pension after processing pension payment orders received physically from AG (A&E). It had provision for pensioner's Master Card preparation and updation, change of address, bank details updation, stoppage of pension, etc. e-Pension software had following short comings:

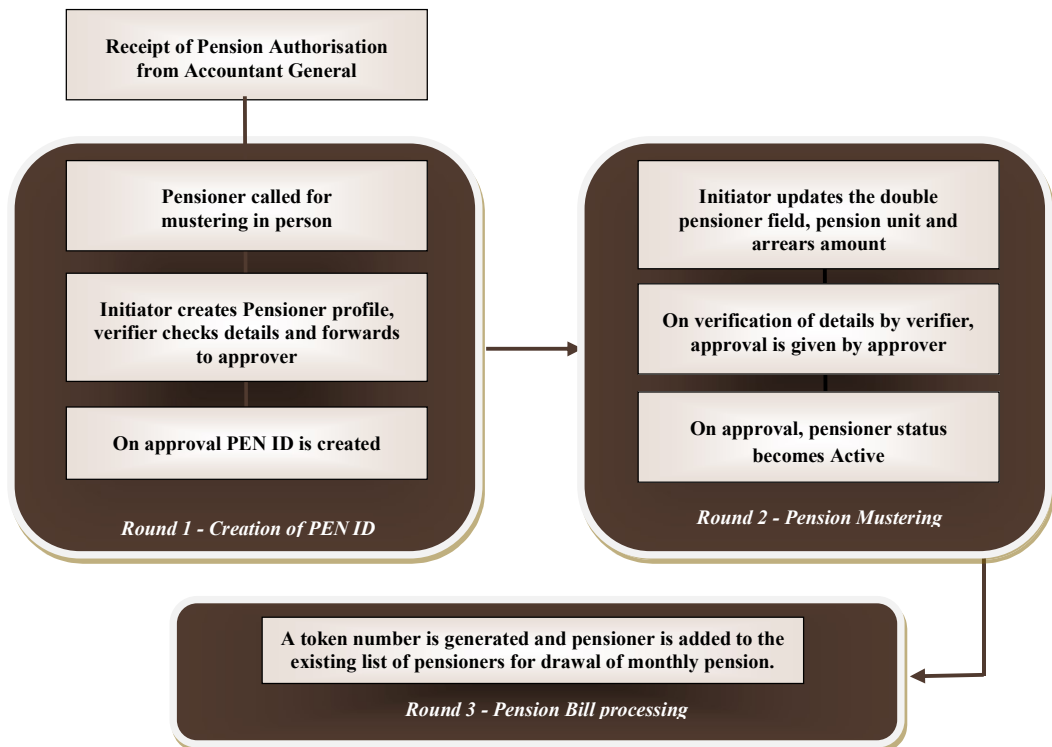
- Not integrated with ATBPS
- Not capable of automatically calculating pension details
- No provision for pension bill preparation
- No internal audit mechanism or in-built audit checks.

² Sample pay bill e-voucher submitted in July 2022 did not contain Form Number, DDO Name, Gross Amount, Net Amount, Head of Account for both payment and recoveries.

In IFHRMS, Pension Management System was envisaged to be a centralised pensioner database, accessed over internet by authorised users. It is an important citizen centric system as it caters to pensioners, who are entirely dependent on timely disbursement of pension.

Pension Module is yet to be integrated with AG (A&E) office and pension proposals are prepared manually by Heads of Office and sent to AG (A&E) office for authorisation. After pension authorisation by AG (A&E) office, it is processed and disbursed through IFHRMS by Pension Pay Office, Chennai, District Treasuries and Sub-Treasuries in the State. The workflow process of pension disbursement is given in **Exhibit 4.3**.

Exhibit 4.3: Workflow process of pension disbursement



Workflow analysis of Pension Management System at Pension Pay Office³, Chennai revealed that the system had duplicate Pensioner IDs for same person leading to double payment of pension, wrong date of birth in pensioner database delaying sanction of additional pension to pensioners attaining the age of 80 and above, incorrect mapping of Pensioner ID with Pension Payment Order (PPO) due to which pensioner could not login into the system, etc., as discussed in the succeeding paragraphs.

4.2.1 Issues in processing new pensioners

On receipt of authorisation, pensioner is intimated to report for mustering at Pension Pay Office, Chennai along with required documents *viz.*, pensioner authorisation copy, bank details, etc. After mustering, pension proposal is

³ Which handles 88,137 active Civil, Teacher and Family pensioners

taken up for processing in IFHRMS. New pension cases are processed in three rounds in IFHRMS viz., first round for 'creation of Pension ID', second for 'pension mustering' and third for 'bill passing'. The first two rounds involved three officials each viz., 'Initiator', 'Verifier' and 'Approver' and the last round only the 'Initiator'.

As Pension Pay Office, Chennai processed new pension case only after pensioner reported for mustering, a separate round under 'Pension mustering' sub-module in IFHRMS involving three workflow officials is unnecessary as it increased work drudgery and slowed down processing. Instead 'Pension mustering' may be made a part of the first round itself viz., 'creation of Pension ID'.

The new pensioner registration process in IFHRMS had the following shortcomings indicating lack of validation controls in Pension module:

- Enhanced family pension is equal to original pension and is valid till 7 years after retirement or till pensioner attains 65 years of age (67 years in cases of judicial category) whichever is earlier. The field for enhanced family pension however accepted any input value.
- Normal family pension is 30 *per cent* of original pension. However, instead of getting auto filled based on original pension, this field accepted any input value.
- Only Group C and D pensioners are eligible for certain benefits such as Festival Advances. However, Pension module did not have 'list of values' with group codes A, B, C and D mapped to corresponding pay levels for auto-populating group code based on employee pay. Instead 'Initiator' had to input the group code by referring to a manual register.

The above gaps are likely to lead to errors in pension sanctioning process.

Government replied (January 2023) that the present multiple rounds in processing new pensioner, input entry for family pension and enhanced family pension, group mapping of pensioners would be addressed when AG integration of pension authorisation process is completed.

4.2.2 Absence of 'concurrence form' for processing new pensioner

As discussed in **Paragraph 3.3.1** a new pensioner must appear in person along with required documents for mustering. One of the documents was the 'concurrence form' signed by the manager of pensioner's bank. The 'concurrence form' was neither enclosed with intimation letter sent to pensioner nor available in IFHRMS portal. As new pension process commences only on submission of all required documents, pensioner had to visit the Pension Pay Office, Chennai twice, once to collect the concurrence form and again for submitting it.

Government replied (January 2023) that orders would be issued to stop the practice of collecting concurrence form as bank details were captured in pension proposal itself.

4.2.3 Commutation of pension process

Commutation is a method in which a pensioner can commute a part of his pension. Commutation of pension process commences after sanction of first pension provided, pensioner had opted for it along with first pension. Audit observed that there is no flag in pensioner profile to capture pensioner's option for commutation, to trigger commutation process automatically as soon as first pension sanction process is completed. A simple alert/notification is not provided in IFHRMS, to alert 'Initiator' to start the commutation process. Provision to link commutation process with first pension sanction process would ensure that pensioner does not miss out on commutation benefits and gets it without delay. Pension Pay Officer accepted that both are separate processes and should be initiated separately.

Government replied (January 2023) that post integration with AG, the commutation process would be triggered automatically.

4.2.4 Double payment of pension

Analysis of IFHRMS database revealed that in certain cases pension pay orders were linked with two different PEN IDs each, one of them being duplicate (**Table 4.3**). It was found that pension was paid to both PEN IDs leading to excess payment of pension for varying periods during 2020-22 as shown below:

Table 4.3: Double pension paid based on duplicate PEN ID

Sl. No.	PPO number	Correct PEN ID	Duplicate PEN ID	Pension paid for Duplicate PEN ID (₹)	Remarks
1	Rxxxxxx7	PENxxxxxx80	PENxxxxxx81	2,19,958	Excess pension to Duplicate PEN ID in the name of pensioner
2	Fxxxxxx2	PENxxxxxx41	PENxxxxxx64	2,41,043	Excess pension to Duplicate PEN ID in the name of family pensioner
3	Cxxxxxx9	PENxxxxxx08	PENxxxxxx00	2,12,017	
4	Cxxxxxx8	PENxxxxxx42	PENxxxxxx78	10,31,243	Excess family pension paid to the PEN ID of deceased pensioner
5	NIL3xxxx7	PENxxxxxx78	PENxxxxxx66	6,61,436	
6	Cxxxxxx4	PENxxxxxx80	PENxxxxxx75	2,06,904	Excess pension to Duplicate PEN ID in the name of unrelated family pensioner
Total				25,72,601	

(Source: IFHRMS data)

Audit observed that there is no validation in IFHRMS to ensure uniqueness in pension IDs prevent generation of duplicate PEN IDs for same pension pay order. Hence, PEN IDs were generated without any distinction regarding pensioners/family pensioners/ deceased pensioners and pension was paid in excess against those duplicate PEN IDs.

The Department apart from cleansing Pensioner ID data during October to December 2022, replied (January 2023) that uniqueness of PEN ID would be

incorporated in the system based on PPO number, Aadhaar, bank account and PAN number to arrest creation of duplicate PEN IDs. It was further stated that analysis of double/multiple payment to same bank account is being done from December 2022 to avoid wrong payments. Recovery of double pension had also been initiated and so far ₹13.50 lakh was recovered from the pensioners.

Recommendation 14:

Government should maintain uniqueness in creation of Pensioner ID to avoid payment of double pension to the same pensioner.

4.2.5 Pensioners IFHRMS login issues

Each pensioner is assigned a unique Pension Payment Order (PPO) number in AG (A&E) authorisation. In IFHRMS, pensioner is identified by a PEN ID. As pensioners were familiar with PPO number, to make it user friendly, Pension Payment Order number was mapped with PEN ID.

In IFHRMS pensioners can update their basic details like residential address, bank details or nomination and view the updated details. To submit such requests, pensioner logs into IFHRMS portal by inputting his PPO number which automatically loads their PEN ID into the login portal⁴. Thereafter, pensioner can enter the password to login successfully. Test check of 2,000 cases in Pension Pay Office, Chennai revealed that in 30 cases pensioners faced difficulties while logging into IFHRMS due to:

- Incorrect mapping of PPO numbers with PEN ID (**Appendix 4.2**).
- PEN IDs were incorrectly mapped to Employee login (**Appendix 4.3**) instead of Pensioner login.

Government replied (January 2023) that observations of Audit would be addressed by incorporating validation for generation of unique PEN ID in the system.

Recommendation 15:

Government should correctly map the Pensioner ID with pension pay order to ensure that pensioners have hassle free access to IFHRMS portal.

4.2.6 Inaccuracies in pensioner database

Analysis of pensioner database of Pension Pay Office, Chennai revealed the following:

- Nine active pensioners (**Appendix 4.4**) in Pension Pay Office, Chennai did not have PPO numbers. To an Audit enquiry, Pension Pay Officer replied (October 2022) that the issue was raised with SI for rectification.
- Out of 88,137 active pensioners/family pensioners in Pension Pay Office, Chennai (as on 01/04/2022), 11,291 (13 *per cent*) records had Date of Birth (DoB) as 01/01/1951.

⁴ Separate from user ID field input for 'Employee login'.

- The DoB field is a key field for calculating additional pension to pensioners on attaining the age of 80/85/90/95/100. Due to incorrect DoB, eligible pensioners were deprived of timely additional pension. A sample check of 100 PPOs in test-checked field units revealed that in seven cases pensioners were deprived of their eligible Additional Pension for a period of one to five years due to wrong DoB (**Appendix 4.5**).

Due to incorrect DoB details the database is incomplete and points to deficient data cleansing work during data migration from e-pension software to IFHRMS. Eligible pensioners were also deprived of timely additional pension.

Government replied (January 2023) that it planned to carry out a one-time data cleansing exercise for correction and updation of pensioner date of birth details and once the work is completed the process of sanction of additional pension would be triggered automatically to avoid the delay. Further, the errors in respect of pensioners pointed out by Audit have been rectified and additional pension has been sanctioned.

Recommendation 16:

Government should ensure timely delivery of additional pension benefits to eligible pensioners by ensuring that pensioner date of birth details in the system are correct.

4.2.7 Other issues

- In 4,806 instances the PPO number was incorrectly captured in the IFHRMS database when compared with the AG (A&E) pensioner database⁵ indicating poor data quality in IFHRMS.
- When pension is revised, family pension also gets revised. However, this provision was not provided in Pension module. If revised family pension details are required at a later date, users have to depend on hardcopies of AG (A&E) authorisation.

Government replied (January 2023) that data analysis would be done and necessary correction would be made and fields would be made visible for user to process revised family pension.

⁵ AG (A&E) pensioner data from 2008 onwards was compared with IFHRMS data using PPO number.

CHAPTER V

**Human Resource
Management System**

CHAPTER V

HUMAN RESOURCE MANAGEMENT SYSTEM

Human Resource Management System had deficiencies in automatic updation of employee's e-SR as integration between HR and e-SR was incomplete leading to discrepancies in data captured in e-SR. As e-SR lacked reliability, there was continued dependence on manual service registers which defeats the objective of digitising employee Service Registers. Even after two years of project Go-live there were deficiencies in HRMS module while creating employee profile and users continued to depend on System Integrator for updating employee profile. There were many instances of non-mapping of service regulations and absence of validation controls to ensure that employee status, increment, leave details and date of retirement are correctly captured in the System.

5.1 Introduction

In pre-IFHRMS, there was no application for handling Human Resource (HR) activities across all departments. A few departments like Health and Police had their own software applications for handling HR activities. However, these applications were not full-fledged Human Resource Management System and had shortcomings in capturing employee details.

Government decided to have an integrated framework for financial and human resource management system through a transparent and efficient comprehensive automated solution viz., IFHRMS. The aim was to (i) Digitise the Service Records (SR) of employees and (ii) automate SRs and employee service related processes/attributes/functions such as employee on-boarding, transfer, increment, leave management, etc., for a truly integrated Human Resource Management System (HRMS).

Audit observed that integration between HR and e-SR was incomplete due to which there was continued dependence on manual service registers. Further, analysis of various processes in HRMS module revealed non-mapping of service regulations and other deficiencies like creation of employee profile without attaching mandatory documents, as discussed in the succeeding paragraphs.

5.2 Human Resource Management

Employee on-boarding process

5.2.1 Deficiency in employee ‘profile creation’ sub-module

In pre-IFHRMS scenario, when an individual joins Government service, a physical SR is opened and mandatory details such as Date of Birth (DoB), educational qualification, mode/date of appointment, personal identification marks, family details, nomination particulars etc., is recorded.

In IFHRMS environment, creation of e-SR for new recruit is mandatory. Audit observed that though there were fields to capture basic details of new employee, all fields were not mandatory for generation of employee ID.

It was further noticed that except for particulars like (i) Address, (ii) Phone number, (iii) Qualification, (iv) Family members, (v) Bank details and (vi) Office details in the employee profile, other employee details¹ could not be updated by HR user once employee ID is generated. Since access to update employee profile is limited, rest of the details could be updated only through the aid of Help Desk. Thus, Head of Office (HoO) could not carry out corrections in employee details based on employee’s request. This was contrary to SRS/FRS provisions and perpetuated dependence on physical SRs for reference and delayed the objective of moving to paperless environment.

Government replied (January 2023) that based on the suggestion of Module Improvement Committee, formed in October 2022 to analyse and improve the HR module, the feature to make the identified fields mandatory and editable is under development and would be deployed shortly. It was further stated that a tool was also being developed to enable DDOs to carry out corrections after due verification of relevant records by DDOs.

5.2.2 Employee ID generated without uploading documents

SRS specifies uploading of appointment order, joining order and medical fitness certificate in the System. However, provision to attach files in IFHRMS was not mandatory. Therefore, employee ID could be created without uploading above documents and those relating to educational qualification, date of birth, disability certificate with percentage of disability, caste certificate, etc.

Since the System lacks provision for mandatory uploading of documents while creation of employee ID, Audit could not cross verify and derive assurance on the correctness of employee details captured in e-SR.

The Government stated (January 2023) that uploading of documents would be made mandatory.

¹ Personal ID information, State, mother tongue, nationality, religion, height, weight, physical fitness certificate, personal identification marks, etc.

5.2.3 Deficiency in capturing mandatory particulars

(i) Genuineness of educational qualification certificate of an employee joining Government service is ensured based on certificate obtained from Boards/Universities concerned. After recording the genuineness certificate details in SR, the employee is accorded 'probationer' status. IFHRMS did not have an input field to capture details of genuineness certificate received from Boards/Universities though SRS stipulated it.

(ii) According to SRS, System should provide information about training undergone by employees on demand and store results/outcomes of Departmental/Professional training. An employee becomes eligible for 'declaration of probation' by HoO and for his second increment only on successful completion of compulsory training at Civil Service Training Institute, Bhavani Sagar followed by an assessment.

Audit observed that though employee training details can be captured along with attachments, none of the fields were mandatory². Thus, 'declaration of probation' process could be completed even without capturing required information in the System.

Government replied (January 2023) that an input field to capture details of genuineness certificate would be provided and necessary provision to verify employee training details for declaration of probation would be explored.

5.2.4 No provision for HoOs to change employee status

SRS describes employee status as 'Temporary', 'Probationer' and 'Approved Probationer'. Employee status had to be updated by HoO at every stage till employee attains 'Approved Probationer' status. However, IFHRMS did not have a provision for HoO to update the employee status. Data analysis revealed that out of 9,76,122 active employees as of June 2022, 4,21,273 employees³ who joined service up to the year 2018⁴ who would have completed probation were categorised as 'Temporary'.

Also, employees who joined service between January 2021 and June 2022 should be categorised either as 'Temporary' or 'Probationer' as they would not have completed two years of continuous service as of June 2022. Data analysis, however, revealed that 87 employees who joined service between January 2021 and June 2022 were assigned 'Approved Probationer' status. Permissions to ensure depiction of correct employee status may be provided to HoOs for real time updation in IFHRMS.

² Though a note given under 'Training details - Entry in eSR' as 'TIP fields marked with asterisk (*) are mandatory'.

³ Joined between 1980 and 2018. As database was obtained up to June 2022, the probable date of joining of employees was taken as 1980 since an employee born in the year 1962 would have become eligible to join Government service on attaining 18 years of age in the year 1980.

⁴ Those who joined up to the year 2018 should have completed probation period of two years on duty within continuous period of three years

Government replied (January 2023) that action has been initiated to rectify the discrepancies in the legacy data and to sensitise the HoOs to correct the employee status mentioned erroneously for the recently joined employees. The reply was, however, silent about giving access to HoOs to change the employee status as envisaged in SRS.

5.2.5 Date of retirement not automatically calculated

The '*basic details*' section of employee profile sub-module includes DoB and date of retirement fields. As maximum age at retirement of a Government employee in the State is 60 years, the System should suggest a calculated retirement date once DoB is entered. It was, however, seen that user has to calculate and input the retirement date giving scope for erroneous data entry.

Data analysis revealed discrepancies in '*Date of retirement*' of 14,077 out of 9,76,122 Government employees. The discrepancy noticed included variation in '*year*' or '*month*' or '*date*' or was a combination of these elements. Such data inaccuracies would negatively impact the envisaged automatic pension workflow as pension calculation depended upon the date of retirement.

Government replied (January 2023) that a provision to auto calculate date of retirement has been made available and displayed in the employee profile page.

Recommendation 17:

Government should fix a timeline to achieve complete integration of Human Resource and e-Service Record to ensure that correct employee information is captured in e-Service Record in real-time environment. Government should authenticate correctness of e-Service Records using Digital Signature Certificates (DSCs).

Pay roll Processing

5.2.6 Cumbersome salary bill process after 'Payroll run' by SI

SRS states that cut-off date for payroll process for DDOs is twenty seventh of every month. However, SI conducts a 'Payroll run'⁵ during third weekend of the month and DDOs were asked to complete HR activities before the 'Payroll run' date. Any HR event impacting salary bill that arises after 'Payroll run' is updated in the Server using '*mark for re-calculation*' option. This updation takes a minimum of 24 hours and pay bill could not be drawn till then.

In an automated environment, all HR entries are to be updated in the Server dynamically. So, whenever an HR event arises after completion of monthly 'Payroll run', the System should have been designed to make necessary updation in the relevant tables and the same has to be reflected in the pay roll data instantly. Instead '*mark for re-calculation*', a time consuming process is the only option available for updating any HR entry subsequent to pay roll runs. As '*mark for re-calculation*' option holds up pay bill process, events like

⁵ Payroll run date indicates the processing date of the payroll. Every month on twenty seventh, DDOs should start processing payroll of their employees.

new hire, termination, transfers, absence on duty, loan recovery, advances or leave that happen after 'Payroll run' tend to be carried over to the following month.

In an online survey conducted by Audit, 655 (93 *per cent*) out of 708 DDOs responded that '*mark for re-calculation*' option delayed the monthly pay bill process. This also led to belated drawal of salary ranging from 14 to 91 days in respect of 27 officials, who joined on transfer after payroll run, as noticed in seven⁶ test-checked field units.

Government replied (January 2023) that augmentation of System capacity was underway and on achieving it, the decentralised pay roll run by DDOs would be explored.

5.2.7 Non-updation of increment details in e-SR

Annual increment is normally awarded to Government employees on 1 January/1 April/1 July/1 October every year. In IFHRMS, the list of employees eligible for increment is generated using 'Annual Increment Programme' under GTN Pay Services sub-module. After this, the transaction is pushed to Bills section *via* payroll module and the pay of the employees gets revised automatically to the next stage in the pay band.

SRS contemplates that System should facilitate auto updation of SRs including grant of annual increments but Audit observed that though pay was revised on account of annual increment, the increment entry was not auto updated in e-SR. The e-SR, however, could only be updated on individual employee basis by using 'Update Salary' option⁷ and to that extent, the design of e-SR was deficient and not in consonance with SRS provisions. Data analysis also revealed that out of 9,76,122 active employees as per IFHRMS database, increment entry for the year 2021 was available in e-SR for 3,39,314 employees only.

5.2.8 Conditions for grant of annual increment not mapped

For a fresh recruit, the period of probation is two years. Pending declaration of probation, annual increment on completion of second year of service is awarded as an arrear after declaration of probation. SRS contemplates that for employee training and assessment tracking during probation, increment and leave should be linked. However, on execution of Annual Increment Programme, the System does not correlate with entries relating to mandatory provisions like successful completion of training, declaration of probation etc., before granting second increment.

Instead, the programme fetches details of all employees who have completed 12 months of service from date of previous increment. After this, HR initiator manually deselects ineligible employees and processes for the remaining

⁶ PAO (East)-6, PAO (North)-2, and District Treasuries at Cuddalore-2, Erode-7, Kanyakumari-1, Madurai-2 and Salem-7.

⁷ Using '*Employee Search*' feature by inputting '*Employee ID*'.

eligible employees. Thus, ineligible employees being granted increment due to oversight could not be ruled out as shown below.

Illustration

To demonstrate that System fails to correlate and check all conditions for grant of annual increment, during field visit (August 2022), Audit identified two employees in one sample unit who had not completed mandatory training. The ‘Annual Increment Programme’ was executed in the presence of Audit, without removing their names from the generated report. The transaction was completed without any error message and notification was pushed to Bill unit initiator for grant of increment.

The above System deficiency defeats the objective of automation.

Government replied (January 2023) that validations relating to completion of probation were temporarily disabled to handle the legacy discrepancies and the same would be restored by April 2023. However, the reply was silent about possibility of ineligible employees being granted increment due to oversight until validations were restored.

Transfer Process

5.2.9 Un-availed joining time not added to EL account

When an employee’s transfer involves change of station, he is eligible for joining time. The un-availed joining time is credited⁸ to employee’s earned leave account subject to a maximum credit of 240 days.

During field visit to District Treasury Office, Kancheepuram it was seen that an employee transferred from District Treasury Office, Chennai in September 2021 did not avail joining time. Though the un-availed joining time was added to the employee’s EL account in physical SR, it was not reflected in e-SR. When entry for the un-availed joining time was processed by HR user, in the presence of Audit, employee’s e-SR displayed ‘No’ in the ‘transit availed’ field but did not populate number of days in ‘un-availed joining time’ field for updating employee’s EL account. This shows that HR and e-SR were not fully integrated thereby defeating the purpose of IFHRMS.

Government accepted the observation and stated (January 2023) that action would be taken to mandate the capturing of unavailed joining time whenever ‘transit availed’ field is marked as ‘No’.

Leave Management

Every Government employee is entitled to various types of leave. Sanction of each type of leave is governed by certain conditions. Entries relating to all types of leave other than casual leave have to be recorded in employee’s SR as it impacts pay and allowances and leave encashment at the time of retirement. Leave management process in HRMS had the following shortcomings:

⁸ Though this business rule was factored into SRS, it was included as change request.

5.2.10 Deficiencies in 'leave process' sub-module

Leave of any kind for an employee is sanctioned by competent authority through 'leave process' sub-module of HRMS and employee's Leave Balance Report (LBR) is updated. Workflow analysis showed that:

(a) The 'leave process' sub-module did not contain the following kinds of leave and therefore cannot process them in the System.

- | | |
|-------------------|--|
| ✓ Half pay leave | ✓ Special leave for Medical Department |
| ✓ Hospital leave | ✓ Leave on full allowance |
| ✓ Paternity leave | ✓ Leave on half allowance |
| ✓ Study leave AIS | |

(b) Unregularised leave and unauthorised leave, though available in 'leave process' sub-module, did not have corresponding columns in LBR to facilitate updation as and when such an event arises. There is, thus a high probability of wrong depiction of employee leave details.

5.2.11 Problems in updating Leave Balance Report

Employee's Leave Balance Report (LBR) in HRMS should get updated automatically. For e.g., EL balance of an approved probationer should automatically increase by 15 days due to advance credit on 1 January/1 July every year. It was, however, seen that EL balance of each employee must be updated manually in LBR which defeats the purpose of automation. As manual updation of leave balance does not require verification or approval, it escapes supervisory control and gives scope for modifying/altering employee leave balance. Though physical service registers are currently relied on for EL encashment at the time of retirement, in future, when e-SR becomes the *status quo* for EL encashment, manual updation of LBR without appropriate checks poses a risk.

In reply, the Government stated (January 2023) that the point raised by Audit would be reviewed for provision of necessary controls and validation. It was further stated that to have supervisory control, necessary provisions would be made in the System for verifier and approver to check the correctness of EL balance with reference to physical SR when uploaded by HR initiator at the first instance.

5.2.12 Leave Balance Report for EL accepts any value beyond maximum credit

As per extant rules, maximum accumulation of EL cannot exceed 240 days. However, 15 days of advance credit, given on 1 January/1 July every year beyond the maximum of 240 days, lapses if not availed within ensuing six-month period. Leave up to 15 days applied during this period is debited from additional 15 days. Audit observed that LBR had no separate field to input the 15 days of advance credit granted to employees with EL balance of 240 days. As a result, the EL field in LBR, which should not exceed 240 days, accepts

255 days or even more than this when updated manually without restricting it to 240 (**Exhibit 5.1**). Also, EL field does not automatically reset to 240 days at the end of six months. This indicates absence of controls to restrict and depict the maximum eligible leave in the LBR.

Exhibit 5.1: LBR accepting a balance of more than 240 days under EL

Employee Leave Balance Report as on 28-Jul-2022						
S.NO	Employee Number	Employee Name	Head of the Department	Office Name	Casual Leave	Earned leave
1	1E...12 S...	G.	Directorate of Treasuries and Accounts	DT Vellore	12	400

Government replied (January 2023) that necessary validation has been provided as pointed out by Audit.

5.2.13 Non-inclusion of compulsory leave in Leave Type

SRS states that compulsory leave of one month (30 days) - termed as ‘Special Leave for Medical Department’ - could be availed by Radiologists/Radiographers (X-Ray technicians) working in Government health care institutions after continuous service of 11 months in a year. Though test checked physical SRs of Radiologists/Radiographers carried the compulsory leave entries availed, e-SRs did not have the corresponding entries. This was due to non-inclusion of compulsory leave type in ‘leave process’ sub-module. ‘Change request’ for including this leave type in IFHRMS, approved by the Department, was also not implemented. As a result, eligible employees could not avail compulsory leave through the System.

Government replied (January 2023) that Special leave for Medical Department (Compulsory leave) option has been enabled for Medical Department users.

5.2.14 Non-mapping of business rules for grant of Special Casual Leave

Special Casual Leave (SCL) is granted to employees on different occasions. The number of days permissible differs based on reasons for grant of SCL. SRS details probable reasons for grant of SCL and corresponding number of days permissible. It was however seen that reason for SCL is not mapped with their respective permissible number of days in HRMS. Also, ‘Leave Reason’ input text box is not designed to display ‘list of values’ containing all probable reasons for granting SCL which would prevent eligible employees from availing SCL through the System.

Government replied (January 2023) that permissible number of days and the ‘list of values’ for leave reasons would be incorporated in accordance with SRS and necessary orders in force.

5.2.15 Non-mapping of business rules for availing compensatory leave

When a Government servant is called to work on holidays, he/she will be granted compensatory leave to be availed within six months. Compensatory leave can be combined with casual leave or authorised public holidays,

suffixed or prefixed with EL or unearned leave subject to the condition that the total period of absence shall not exceed 10 days.

Despite being detailed in SRS, Audit observed that the System did not have checks to ensure that the total leave of absence of an employee prefixing/suffixing compensatory leave does not exceed 10 days.

The Government assured (January 2023) that the shortcomings observed by Audit relating to compensatory leave would be fixed in due course.

5.2.16 Non-assigning of reasons for different types of leave

While processing casual leave, compensatory leave, earned leave and Restricted Holidays through 'leave process' sub-module, 'Leave Travel Concession' is the default and only reason displayed (**Exhibit 5.2**). Thus leave could be sanctioned either without capturing reason or by accepting the default reason rendering the details of leave reasons captured and stored in the System meaningless.

Exhibit 5.2: Restricted Holiday with Leave Travel concession as default reason

The screenshot displays the 'Create Leave' form in the HRMS system. The form is divided into two main sections: 'Employee Details' and 'Enter Leave Details'.

Employee Details:

- Employee ID: 1XXXXXX10
- Office: DT Kancheepuram
- Post: Accountant (299722)
- Employee Type: TN Government Servant
- Retirement Date: 30-Jun-2033
- Employee Name: SXXXXXX R
- Category: Accountant
- Joining Date: 05-Dec-2012
- Grade: TNGS Time Scale Level 10 (20600 - 75900)
- Date of Birth: 12-Jun-1973

Enter Leave Details:

- Leave Status: Permission To Go
- Leave Type: Restricted Holiday
- Leave Reason: Leave Travel Concession (selected from dropdown)
- Leave Start Date: [blank]
- Leave End Date: [blank]
- Total Days: [blank]
- Address During the Leave: [blank]
- In case of UEL/EOL on MC whether certificate attached?: [blank]
- Consider Holidays Prefixed/Affixed/Sandwiched?: [blank]

The form also includes a 'Calculate Duration' button and a 'Cancel' button. The bottom of the form has a note: 'TIP Fields marked with asterisk (*) are mandatory.'

The Government stated (January 2023) that in view of the observation made by Audit, a new option 'other reasons' has been enabled to capture the detailed reason in remarks column for all types of leave.

5.2.17 Deficiencies in casual leave process

When an employee applies for Casual Leave (CL), any holiday/Saturday/Sunday either prefixed/suffixed or coming in between start date/end date of CL should not affect duration of leave (i.e. the actual leave of absence). Workflow analysis, however, revealed the following gaps in CL process.

- CL for one day with option 'Yes' to consider prefix/suffix of holidays, returned -1 (*minus 1*) as total leave duration (**Exhibit 5.3**).

Exhibit 5.3: CL applied for one day returns (-1) as leave duration

The screenshot displays the HRMS interface for a leave application. The top navigation bar includes icons for Process, Employee Bills and..., GTN Pay Service, Advances, Claims, Schemes, Pre-retirement, and Rep. The main menu on the left lists options like Update Web ADI, Leave Process, Surrender leave, Encashment of Leave, and EL Proceedings. The 'Leave Process' tab is active, showing a form for Employee Details and Leave Details.

Employee Details

Employee ID	XXXXXX00066475	Employee Name	XXXXXX Ravind R
Office	DT Erode	Category	Class III
Post	Accountant (1809309)	Joining Date	15-Oct-2014
Employee Type	TN Government Servant	Grade	TNGS Time Scale Level 10 (20500 - 75900)
Retirement Date	31-Mar-2050	Date of Birth	01-Apr-1990

Leave Details

Leave Status	Permission To Go	Pay
Leave Type	Casual Leave	Address During the Leave
Leave Reason	LTC	In case of UEL/EOL on MC whether certificate attached?
Start Date	08-Aug-2022	Half Day/Full Day
End Date	08-Aug-2022	Half Day
Days	-1	Consider Holidays Prefixed/Affixed/Sandwiched?
Comments		Yes

Approval Hierarchy

Initiator/Verifier/Approver Group

- CL for two days by inputting first date as start date and next date as end date with option 'Yes' against 'Consider Holidays Prefixed/Affixed/Sandwiched', total leave duration is taken as '0' instead of as '2' days. In this case leave would not be debited for the employee.
- When an employee applies for two days of CL sandwiching a public holiday that falls in between and selects 'Yes' against 'Consider Holidays Prefixed/Affixed/Sandwiched', total duration of CL is shown as '1' instead of '2' days.
- System does not have field input for selecting forenoon/afternoon when employee applies for half-a-day CL.
- CL applied for Sunday/holiday, was accepted by System due to lack of validation controls to check date/day and declared public holidays.
- Employee's CL balance not availed as on 31 December every year would lapse. However, System accepted any date from previous year in 'Start date' and 'End date' fields without alerting the user that 'CL cannot be applied for dates in previous years'.

The above shortcomings impacted the process of CL application, sanction and leave balance reporting through HRMS.

The Government assured (January 2023) that the shortcomings observed by Audit relating to CL would be fixed in due course.

5.2.18 No provision to attach certificates for certain kinds of leave

The System had no provision to attach copies of certificates for availing certain kinds of leave.

- Medical Certificate in case of Extra Ordinary Leave on Medical Certificate, unearned leave on Medical Certificate, Special Disability Leave, etc.

- Certificates in respect of Study Leave.
- Legal adoption certificate and birth certificate/age certificate of child in case of child adoption leave granted until the child is one year old.
- Proof for natural abortion or medical termination of pregnancy at Government health care institutions for maternity leave of 42 days.

Government replied (January 2023) that necessary provision for attachment of scanned copies of certificates is available in the System. The reply is not acceptable as this provision was not made mandatory.

Recommendation 18:

Government should ensure that all service regulations are correctly mapped in Human Resource module so that all service particulars of employees are captured with proper validation controls.

Other points of interest

5.2.19 Non-mapping of posts for sanctioning specific allowances

Uniform allowance is payable to State Government employees viz., Police/Traffic Police, Fire and Rescue Services, Prison, etc. It was, however, noticed that in '*Employees Bills and other processes*' sub-module, Government employee other than the above mentioned categories could be considered for grant of uniform allowance. The System thus lacks suitable validation control to restrict grant of uniform allowance to eligible employees.

The Government admitted (January 2023) that the current version of IFHRMS has not envisaged the validation to restrict this feature only to those employees who are eligible for uniform allowance based on employee ID/post.

5.2.20 Deficiencies in Employee Search feature

'*Employee Search*' facility in HRMS has no option to select multiple 'Employee ID' to initiate same type of process for more than one employee. To overcome this when '*Add Another employee*' feature was used to fetch details of another employee, the result retrieved for the first employee disappeared and the message '*No results found*' was returned. Thus, for initiating the same process for multiple employees, HR initiator has to carry it out multiple times.

5.2.21 Incomplete development of HR Reports sub-module

'Reports' sub-module of HRMS module lists 54 types of Reports. Audit however observed that 37 of the 54 Reports (**Appendix 5.1**) could not be generated as value required for mandatory fields had not been set for '*Administrative Department*', '*Functional Department*' and '*Head of the Department*'.

Government replied (January 2023) that following the Audit remarks, necessary validations have been provided in the System.

5.2.22 Poor quality of e-SR data capture rendered the e-SR unreliable

The success of HRMS module rested largely on complete and error free digitisation of employee's personal and service details. According to RFP, for digitising employee SRs, SI had to go through all physical copies/volumes of employee SRs before carrying out data entry. SI had to capture legacy data of all Government employees as e-SR Part-I. From IFHRMS Go-live, day to day SR related activities are stored in the Server and retrieved as e-SR Part-II. Test check of employee physical service books with corresponding e-SRs, was carried out in sampled units to ensure that all particulars recorded in physical SRs were correctly and completely captured in e-SRs.

Audit check revealed the following deficiencies in e-SR:

- Nomination details available in physical SR were not captured.
- Particulars of probation declaration in promoted post not captured.
- Employee profile details were incomplete.
- HR events viz., transfers, promotion, increments, penalty were not updated automatically and required manual intervention.

The quality of digitisation was thus poor and the purpose of automation was lost as departmental staff had to manually update employee details to rectify errors.

Government replied (January 2023) that it was planning to give edit option to DDOs for updation of missing information in e-SR.

Recommendation 19:

Government should fix a timeline to cleanse e-Service Record data captured so far to ensure that employees are not subjected to any hardship at a later date due to missing/wrong information in their respective e-Service Records.

5.2.23 Inaccuracies in e-SR database

Data analysis revealed that lack of proper input / validation / process controls in IFHRMS, resulted in following discrepancies in data:

- (a) 2,567 GPF/CPS numbers were linked to 5,945 employee IDs indicating duplication of GPF/CPS numbers in the System. Similarly 1,984 PAN were linked to 4,198 employee IDs indicating duplication of PAN in the System.
- (b) Permanent Account Number for 4,040 employees/pensioners was not in standard format⁹ and was blank for 2,83,751 employees.

⁹ Standardised format of PAN card number is 'ABCDE1234Z', where, first five digits are alphabets, next four digits are numbers and last digit is alphabet.

(c) Town name (i.e. employee's town of birth detail) had several spelling versions rendering information in the System redundant and unusable as users were required to input town name in absence of a provision to select town name from a drop down 'list of values'. Illustrative case for town name 'Coimbatore' is given in **Table 5.1**.

Table 5.1: Field for town name containing redundant data

Sl. No.	Name of the Town	Number of records
1	Coimabtores	58
2	Coimbator	22
3	Coimbatore	7,004
4	Coimbatore District	27
5	Coimbatore Tamil Nadu	60
6	Coimbatore Tamilnadu	142
7	Coimbatore, Tamilnadu	55
8	Coimbatore,Tamil Nadu	24
9	Coimbatore,Tamilnadu	124
10	Coimbature	46
11	Coimpatore	38
Total		7,600

(Source: IFHRMS data dump)

Government replied (January 2023) that GPF/CPS duplication have been rectified by synchronising with the master data of AG/Government Data Centre. It was stated that standardisation of PAN Number format has been enabled in IFHRMS application at the instance of Audit and data cleansing with respect to duplicate in various elements like Aadhaar, Bank Account Number and PAN was under process.

CHAPTER VI

SECURITY MANAGEMENT

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SECURITY MANAGEMENT

The Department did not ensure that a mission-critical system such as IFHRMS had robust security measures like biometric access, machine-based access rights and protection of user credentials leading to theft of Government money. The System allowed transactions by ‘anonymous user’, which, indicated vulnerabilities in the System and inadequate security management by the Department. Lack of periodic disaster recovery trials by the SI exposes the entire System to likely higher downtime and loss of confidential data.

6.1 Introduction

Security of a software system includes data integrity, confidentiality, authorisation, authentication, control, non-repudiation, and audit monitoring. Security management involves identity and access management, vulnerability management and data protection.

IFHRMS, being an internet-based application running from a centralised location, envisaged in-built security checks, controls at application software/database level including user rights and privileges, processing controls, authorisation controls and data integrity controls. However, Audit observed gaps in security features of IFHRMS such as lack of biometric access and machine based access rights leading to theft of Government money, transactions by anonymous users and ex-employees, unrestricted access to employee’s e-SR, etc., and are discussed in succeeding paragraphs.

6.2 Identity and access management

Identity Management involves establishment and maintenance of user identities, associated authentication and authorisation of users accessing the application portal. Unique user identity ensures that no user can repudiate a past transaction, i.e., the individual assigned to a particular user ID can be held accountable for the activity performed with that ID. IFHRMS also uses Role Based Access Control mechanism for permitting access to different classes of users. This involves setting permissions and privileges to defined roles and limiting access to specific resources or tasks.

6.2.1 Non implementation of biometric access

IFHRMS envisages biometric based authentication over internet from UID and digital signature-based authentication. Digital certificates were to be procured by SI and biometric devices by Department. It was, however, observed that department users of IFHRMS were not covered under biometric identification process.

Government replied (January 2023) that due complexity such as capturing, storing and authenticating of thumb impression and the huge task process of purchasing biometric devices to all 20,000 DDOs, higher secured Digital Signature Certificate¹ has been implemented at the approver level. It was further stated that Government was in the process of adopting Aadhaar based e-Sign for further higher secured environment.

The reply is not acceptable as failure to procure biometric devices till now had resulted in security gap in envisaged authorisation procedures.

6.2.2 Sharing of user credentials by Help Desk with other users

IFHRMS employs Single Sign On (SSO) as an authentication method. SSO allows users to use a single ID and password to access multiple software application services at the same time. In such an environment, it is important that practice of password sharing among IFHRMS users and with Help Desk is discouraged to avoid exposure to security vulnerabilities.

Data analysis revealed that out of 2,66,419 tickets raised by IFHRMS departmental users (PAOs, DTs, DDOs, etc.) during 2021-22, password change/reset request was made in 6,514 cases by logging into the System with another user's login. Help Desk, while resetting the password shared the new password with the user who raised the ticket. Thus, sensitive information of one user was shared with other users despite availability of 'Forgot Password' mechanism for resetting a user's password. This shows lack of awareness among IFHRMS users and Help Desk personnel about risks of sharing login password.

Disclosing user credentials undermines the fundamental principles of identity management and non-repudiation and is fraught with high risk in a financial management system. Considering the sensitive nature of user credentials, Department needs to create awareness among users and Help Desk team as above incidents increase risk of unauthorised access, which impacts authenticity and non-repudiation of data.

Government replied (January 2023) that the Help Desk officials have been instructed not to entertain tickets for changing user's passwords and that henceforth, the password can be changed only through registered mobile number/email ID of the individual.

Recommendation 20:

Government should strengthen user access controls and create awareness about the risks in sharing of user credentials.

¹ DSC is the digital equivalent of physical paper-based certificate and documents are signed digitally. It protects the data by using encryption-decryption mechanisms.

6.2.3 Transactions by retired employees

In IFHRMS, users access the System with user ID and password and modules/sub modules are displayed as per user profile, access rights and authority.

IFHRMS captures employee categorisation details viz., ‘temporary employee’, ‘probationer’ and ‘ex-employee’ along with their respective User ID and password. On attaining retirement age, employee should be categorised as ‘ex-employee’ and System should automatically disable their user ID and assigned roles.

Audit analysis showed that user IDs of 567 employees who had superannuated, were active in IFHRMS. It was observed that user ID of 49 retired employees were used to create 1,418 bills. An illustrative case is given below:

Illustration

An Office Assistant (Employee ID: 04xxxxxxx41), Adi Dravidar and Tribal Welfare Department retired from service on 30 April 2020. Status changed as ex-employee from 01 May 2020, however 68 bills were created and passed with this employee ID between October 2020 and January 2022 (14 months) for ₹1.53 crore.

Of the 1,418 bills, 916 bills were passed for payment of ₹23.87 crore. This, included 53 bills passed for payment of ₹70.84 lakh, which related to their own salary, retirement benefits, etc. Reasons for transactions by retired employees are:

- (a) though category status of retired employees was updated in IFHRMS, employee’s user ID was not automatically disabled and roles assigned to employee was not automatically de-mapped.
- (b) all master tables were not updated due to non-integration of HRMS module with other modules.

Government should ensure that IFHRMS automates controls over predictable events such as superannuation and institute standard procedures for timely updation of information.

Government replied (January 2023) that SI has been advised to disable all roles for ex-employees at Enterprise Business Suite level to prevent them from performing any activities.

6.3 Security vulnerabilities

Enterprise Security has become increasingly vital for organisations and is critical for financial and accounting information systems. RFP contemplates that IFHRMS will have security features based on ISO 27001/BS 7799 standards to ensure (i) securing the network and servers from external as well as internal users, (ii) only authorised user access to resources (network, servers, databases, etc.), (iii) mechanism for detecting and monitoring intentional security breach and (iv) secure internet access. Audit noticed security vulnerabilities as discussed below:

6.3.1 Non-implementation of ‘machine based access rights’ for treasury functions

RFP contemplates the concept of machine-based access rights i.e. Finance and Treasury functions should be done using intranet and only through specific devices (Desktop/Laptop) as one of the security components. MAC² ID of these devices must be authenticated using the central server.

However, it was found that a bill processing treasury official can log into IFHRMS using any network connected mobile phone indicating that application does not prevent PAO/Treasury staff from accessing IFHRMS using personal devices through personal internet.

Government replied (January 2023) that machine based access right was not implemented as users were asked to work from home during COVID period. However, Static internet protocol³ validation which is already available in IFHRMS would be enabled once System stabilises.

Audit observed that the ‘machine based access rights’ envisaged as a project security feature was not enforced, which was also a cause for theft of public money as discussed in **Paragraph 6.4.3**.

6.3.2 Security features for user credentials not implemented

IFHRMS security features provide that System should allow users to change their password periodically and have the option to change password any time. The System should also disable the user profile after three unsuccessful login attempts.

To an Audit enquiry, Department stated (September 2022) that user password will expire after 180 days and thus force users to change their password every 180 days and that System allows users to change the password anytime.

Walkthrough of IFHRMS front-end screen however, showed that:

- IFHRMS does not have an option for changing password inside the user profile which is accessed through user login. To change the password, user must resort to ‘*Forgot Password*’ option or raise a ticket with Help Desk.
- Contrary to the claim of the Department, it was also found that users could log into IFHRMS successfully after more than three unsuccessful login attempts. Thus, user was not locked out of the System even after multiple failed login attempts.

Absence of envisaged security features for user credentials gives scope for security risks as unauthorised users will have unlimited attempts to break into IFHRMS.

² MAC ID is an acronym for Media Access Control ID which is a unique identifier that is assigned by the manufacturer to a IT hardware like desktop, laptop, etc.

³ IP address is a numeric value assigned to a network device, and it is used for identification and location of a network device.

Government while accepting (January 2023) that password change option was available under ‘forgot password’ only, stated that users have been sensitised to use the ‘forgot password’ option instead of raising a ticket for changing the password. It was further stated that user ID is locked after five unsuccessful continuous login attempts with a lock-in period of one hour.

Reply is not acceptable, as the System will reflect all ‘password change’ incidences without distinction between ‘forgot password’ and ‘change password’. Further, Audit noticed that user was not locked out of the System even after five unsuccessful attempts.

6.4 Data protection

Data protection is the process of safeguarding important information from corruption, compromise or loss. It is a set of strategies and processes used to secure privacy, availability and integrity of data. An effective data protection strategy can help prevent data loss, theft, or corruption and can help minimise damage caused in the event of a breach or disaster. Audit noticed lapses in data protection as discussed below:

6.4.1 Presence of ‘Anonymous User’ in transactions

RFP contemplates that IFHRMS should allow only authorised users to make any changes to transaction details after submission of records. Audit analysis revealed that several transactions were recorded in the database as initiated and updated by ‘Anonymous user’ as detailed in **Table 6.1**.

Table 6.1: Instances of transactions recorded as Anonymous user during 2021-22

Sl. No.	Table name	Number of transactions initiated by Anonymous user		Number of transactions ‘last updated’ by Anonymous user	
		During the financial year	During the month of March	During the financial year	During the month of March
1	Bill Details Table	43	4	1,78,635	65,961
2	Beneficiary Details Table	4,67,173	2,07,379	4,12,017	1,79,747
3	Workflow Official Details Table	204	195	38,245	1,576
Total		4,67,420	2,07,578	6,28,897	2,47,284

(Source: IFHRMS data dump)

It is seen from **Table 6.1** that the above transactions - which related to updation of data in beneficiary table, bill table and data of employees - were initiated/updated by ‘Anonymous user’ particularly at the end of financial year i.e. in March 2022 and was 44 *per cent* of the total such transactions made during the year. In all the above cases, audit trail and transaction type are not available. Masking of transactions is a major security risk as transactions of this nature circumvent frontend workflow access rights and authority.

Government replied (January 2023) that when users raise tickets to rectify certain erroneous transactions mistakenly done by them, the backend team of

SI has corrected the errors. However, as they are not part of workflow, such transactions are marked as done by anonymous users. It was also stated that these instances would be brought down by sensitising users and stopping back end operations to maintain audit trail in the System.

Recommendation 21:

Government should disable anonymous users in IFHRMS transactions to ensure audit trail.

6.4.2 Security requirement not accomplished as envisaged

SRS envisaged that employee records could be accessed only by HoO/HoD of respective departments/office as part of data security in the System. However, System allows any person assigned HR role to download e-SR Part-I and Part- II of employee of any office using ‘Employee ID’. Since SR contains employee’s personal and service details, unregulated access to employee SR indicates system failure to secure confidential employee information.

Government replied (January 2023) that from December 2022 search option using Employee ID has been restricted to concerned office.

6.4.3 Gaps in security features led to theft of Government money

On 12 November 2021, miscreants, using the username and password of Initiator, Verifier, and Approver of Block Development Office (BDO), Katpadi raised a payment advice of ₹70 lakh (Noon meal salary) and submitted it online to Katpadi Sub-Treasury for approval. Again, using login credentials of L1 and L2 Auditors of Katpadi Sub-Treasury, they approved the payment advice and withdrew the amount from Local Fund Deposit (LFD) account of BDO, Katpadi Panchayat Union⁴. The fraudulent payment advice bill was initiated on 12 November 2021 at 13.31 hours and payment was approved at 14.03 hours. Thus, the entire fraudulent activity was completed in about 30 minutes.

The crime was discovered on 15 November 2021, (13 and 14 November 2021 was Saturday and Sunday), when initiator at BDO checked the balance in the LFD account for raising a bill. A complaint was filed with cyber-crime branch, Police Department and the culprits were arrested. The money was recovered in full and remitted back to the LFD account of Katpadi BDO. The matter is currently under investigation.

The following lacunae in IFHRMS led to the above incident.

- Login credentials of IFHRMS workflow officials falling into the hands of miscreants indicate lack of adequate data protection of confidential Government information in IFHRMS.
- Non implementation of ‘two factor authentication’ for logging into IFHRMS portal and ‘biometric authentication’ for treasury staff as

⁴ Panchayat Union is the third tier of Local Government in Tamil Nadu. They operate LFD account to meet expenditure on various development works.

envisaged in RFP, allowed miscreants to log into the System without alerting officials concerned.

- Approving officials in DDO and Treasury can approve/pass for payment only by using E-Mudra Digital Signature Certificate. However, miscreants were able to submit and pass the payment advice bill indicating that DSC security feature was disabled at the time of the incident.
- There is no provision in IFHRMS to alert officials concerned about high value transaction notifications being generated with their User ID.
- Creation of payment advice bill and passing it for payment using computers outside office premises indicated that access to IFHRMS was not limited to specific computers within the office. This exposed the System to hacking/penetration.
- To an audit query, it was informed that IP address of IFHRMS users are not stored in the System. IP addresses are unique to a network connected device and very useful for detecting intruders.
- As per MSA, System Integrator shall endeavour to report immediately to Department all identified attempts (whether successful or not) by unauthorised persons either to gain access to or interfere with the Department data, facilities, or confidential information. In the instant case, the siphoning of Government money was accidentally discovered by Initiator in BDO office. This highlights deficiency in service as SI did not identify and report it.

As such, IFHRMS failed in the above security aspects and process controls resulting in theft of Government money.

Government replied (January 2023) that all Treasury Offices/PAOs have been sensitised in this regard and that all Treasury Offices/PAOs have been instructed to sensitise the DDOs through appropriate authorities with regard to DSC operations. It was also stated that static IP, e-sign, alert messages to users in case of high value transactions would also be considered for implementation to avoid such incidents in future.

Recommendation 22:

Government should provide envisaged security features in IFHRMS to safeguard Government money.

6.5 Business Continuity and Disaster Recovery

IFHRMS being a mission critical system, it is mandatory to have a Business Continuity Plan and Disaster Recovery Plan. SI should design and implement adequate data backup, business continuity and restoration procedures for departmental data. Replication between Data Centre (DC) and Disaster Recovery (DR) site as well as change-over during disaster should be automatic and real-time for minimal impact on user experience. To ensure that all

replication and data synchronisation procedures are in place, periodic testing should be done.

It was however noticed that DR drill was conducted only during November 2019 i.e. prior to project Go-live (January 2021). Thereafter no DR drill was conducted to see if System meets Recovery Point Objective and Recovery Time Objective targets during real time operations. In the absence of periodic testing to ensure data replication, synchronisation and DR drill, Audit could not ensure the robustness of Business Continuity Plan and Disaster Recovery Plan of IFHRMS.

Government while acknowledging that DC/DR drill had not been conducted after Go-live, replied (January 2023) that proper DC/DR drill will be conducted after tech refresh is completed which has been currently taken up.

Recommendation 23:

Government should conduct periodic disaster recovery drill in real-time environment.

6.6 Obsolescence Management

IT assets are characterised by rapid obsolescence. An Obsolescence Management plan will include a variety of different elements such as technology roadmap, identification of criticality of components, monitoring all components *etc.* Use of outdated or obsolete technology in critical systems was to be avoided as far as possible.

Government replied (January 2023) that as part of obsolescence management process it has been proposed for Tech fresh of IFHRMS hardware and Software items now. The reply is not acceptable as there was no plan to monitor the obsolescence of various assets procured so far.

6.7 Exit management

Government of India guidelines on Strategic Control over e-Governance Projects considers 'Exit Management Plan' as one of the measures to achieve strategic control over e-governance projects. Every project should have an Exit Management Plan to facilitate smooth and effective transition of service delivery, minimum disruption of ongoing delivery, and efficient completion of all agreement obligations in case of premature/planned exit of vendor.

MSA provided for an 'Exit Management Plan' to be furnished in writing to Department by SI within 90 days from Agreement date, with the condition that it can be re-drafted annually to ensure that it is kept relevant and up to date. Audit observed that though an Exit Plan was initiated for IFHRMS (November 2015), it is awaiting review by Third Party Audit Agency (TPAA) and Exit Plan was yet to be formally approved and adopted.

Government stated (January 2023) that Exit management prepared by SI was pending approval with TPAA and will be approved at the earliest.

CHAPTER VII
MONITORING AND
EVALUATION

CHAPTER VII

MONITORING AND EVALUATION

The Monitoring Committee did not meet periodically to ensure that the project was completed as per the agreed timelines. Project e-Mission Team was not established to monitor the project during development, implementation and post Go-live of IFHRMS. The complaints raised by the IFHRMS users were not analysed to resolve the recurring issues raised from multiple offices. Shortfall was noticed in achieving performance indicators by System Integrator as per the Service level agreement.

7.1 Introduction

The success of a project depends on continuous monitoring of its implementation and operation. Quality of monitoring is important to achieve project objectives and to safeguard interests of the organisation in the long run.

Gaps in monitoring the implementation of IFHRMS such as lack of periodical review by Monitoring committee, failure to use ticket data (complaints raised by users with Help Desk) for improving the system and failure to achieve performance indicators as envisaged in the service level agreement, etc., are discussed in succeeding paragraphs.

7.2 Performance of Monitoring Committee

GoTN constituted (July 2015) a Monitoring Committee (MC) with Principal Secretary to Government (Finance Department) as Chairman. The Principal Secretary to Government (Personnel and Administrative Reforms), Principal Secretary to Government (Information Technology), Secretary to Government (Expenditure), Additional Secretary to Government (Finance), Director of Treasury and Accounts and Principal Accountant General (A&E) were members of the MC. The major roles and responsibilities of MC were:

- To take necessary policy decision and render guidance to the Project;
- To decide on matters relating to scope, time and deliverables;
- To ensure the project met the goals and milestones through periodic review meetings and
- To co-ordinate and consult with key stake holders.

The Monitoring Committee should meet once a month to give guidance and directions and ensure that project timelines are met. However, there was shortfall in achieving the above parameter as shown below:

- Against the requirement of 86 meetings in the seven years since its constitution, MC met 12 times. The shortfall was 86 *per cent*.
- The last MC meeting was conducted on 22 April 2022, after a gap of 15 months from the 11th MC meeting held on 15 December 2020.

Audit observed that inadequate periodical monitoring by the MC largely contributed to the delay in implementing the project and in not ensuring IFHRMS was developed with proper controls and security features as discussed in the preceding chapters.

Government replied (January 2023) that for IFHRMS review, several internal meetings are being conducted by HODs and on timely manner and that as periodical IFHRMS reviews are mostly pertaining to functional aspects, it may not require review by external Departmental officials. Hence, there may be short fall in number of MC meetings held. Reply is not acceptable as MC meetings were envisaged as an important monitoring aspect for achieving project goals and milestones which has a bearing on project management.

Recommendation 24:

Government should ensure that the Monitoring Committee meets periodically to review IFHRMS.

7.3 Web-based Project Monitoring Tool

System Integrator was required to deploy a web-based Project monitoring tool within three months from date of signing the Contract. The tool, which was to be available till the end of contract period, had to allow the Government/Department to view and monitor progress of various activities, tasks, resource deployment etc. at various locations against planned timelines and targets. The SI was also responsible for updating the tool daily so that Department was able to view the latest developments in various activities.

The SI held a demonstration of Web Monitoring tool in the second MC meeting held on 11 January 2016 with provisions for Principal Secretary (Finance), Secretary (Expenditure) and Department to use the tool for online monitoring. However, as Department did not furnish details regarding operation of web monitoring tool and its utilisation for monitoring the Project, Audit could not derive assurance on the effective use of the tool.

Government replied (January 2023) that due to shortage of technically qualified personnel in the Department it was not used effectively.

As technically qualified System Administrators have been appointed now (November 2022), the Web Monitoring tool will be used effectively.

7.4 Non-establishment of Project e-Mission Team

The Project Management Consultant (PMC) had to establish Project e-Mission Team (PeMT) or e-Governance Cell as an institutional structure within the Department consisting of domain specialists and Information Technology (IT) specialists. Setting up of PeMT was one of the key deliverables of PMC. The role of PeMT was:

- To participate and add value in the SRS review;
- To support the development and deployment of e-governance solution.

Scrutiny of records revealed the following:

(i) PeMT was established in July 2015 and ₹9.68 lakh was paid to PMC in February 2017 for setting up PeMT. It was, however, observed that only Monitoring Committee and Technical Committee were constituted where PMC had no role. Further, the roles of Monitoring Committee and Technical Committee were limited to taking policy decision and monitoring and did not include the scope of work envisaged for PeMT. As the Department did not furnish details of deliberations and minutes of PeMT meetings held, it may be concluded that PeMT was not formed despite incurring expenditure of ₹9.68 lakh.

(ii) The agreement with PMC stipulated that on completion of State-wide rollout, the project management would come to an end. PMC, however, based on Monitoring Committee's advice (September 2019), submitted a proposal (19 March 2020) to Department, seeking to continue its support for a minimum of six months beyond Go-live to ensure project stabilisation citing the expertise and knowledge capital they held because of their involvement in the project from inception. For the extended period of support, PMC quoted monthly contractual rate as ₹11.86 lakh. The proposal was accepted, and PMC was paid ₹67.99 lakh for the period January to May 2021. No payments were made thereafter.

Audit observed that Consultant's reasoning for their continued retention even after completion of the contract period was not justified as establishment of PeMT for capacity building and monitoring the project as envisaged would have done away with the need for PMC's services after the contract period. Further, retention of PMC beyond the contract period was due to failure of Department to be in a state of readiness to take the project forward on its own. This resulted in dependence on PMC and avoidable expenditure to Government exchequer. Thus, the failure of Project Monitoring Consultant (M/s Accenture) to establish a Project e-Mission Team, despite payment for

the same by Government also contributed to gaps in project monitoring leading to delay in Go-live of IFHRMS.

Government replied (January 2023) that three system analysts have been deployed through outsourcing for this purpose from November 2022.

7.5 Performance of Help Desk

According to RFP there should be a central Help Desk for IFHRMS users as a one-stop solution for resolution of all IT and business process related queries/grievances. Help Desk was to be operated on all calendar days and operators had to provide information / clarification on the spot in case of an informational query or provide necessary troubleshooting assistance in case of tickets logged for application, hardware, network issues, etc.

Help Desk ticket data is a valuable resource to assess the effectiveness and efficiency of IFHRMS at ground level and for course correction and improvement of application software. During 2021-22, 2,66,419 tickets were raised through web, email and phone by users for various reasons. However, Department failed to analyse the ticket data and take corrective steps on issues as discussed in the following paragraphs:

7.5.1 Refreshing of user IDs by Help Desk

Every time an employee is newly added to a 'bill approver group' in IFHRMS, user ID of Initiator in that bill group had to be refreshed. For this, users must raise a ticket with Help Desk. Until the Initiator's user ID is refreshed, any further transaction for the newly added employee could not be carried out in IFHRMS. Non-refreshing of IDs in real-time was a system deficiency. Ticket data analysis revealed that 5,235 such requests were received during 2021-22. Delay in resolving the tickets ranged from one day to 77 days in nearly 35 per cent of cases (**Table 7.1**).

Table 7.1: Delay in resolving tickets pertaining to refreshing IDs

Sl. No	Resolution time	Count of Ticket IDs
1	Within an hour	2,516
2	1 to 17 hours	909
3	1 to 5 days	1,623
4	6 to 77 days	187
Total		5,235

(Source: IFHRMS ticket data)

7.5.2 Issues in Notifications

In IFHRMS, whenever an event initiated by one user requires the attention of another user, a notification appears on the home screen of the other user. This mechanism ensures that required information flows uninterrupted to the next

level. In the event of any failure in this mechanism, next level user in the workflow would be unaware about tasks requiring his attention and consequently tasks lie unattended. Analysis of ticket data revealed that 1,977 requests viz., ‘Missing Notification’; ‘next level notification not shown’; ‘next level notification not display’; etc., were raised by users with Help Desk. The need for raising tickets to push notifications in IFHRMS, was a system deficiency, which hampered the workflow.

Government while acknowledging (January 2023) the improper role assignments, role assignments not done in time by users and instances of missing notifications from one level to next level, stated that automation process of role mapping has been done as part of approval group changes from December 2022 which will reduce the notification/refresh ID issues.

7.5.3 Help Desk intervention in bill process and missing audit trail

IFHRMS has three levels of bill processing in DDO unit i.e. bill creation, bill verification and bill approval. On approval, the bill is presented to PAO/Treasury which also has three levels of checks for passing a bill. This defined role hierarchy in bill processing is there to ensure that control over a bill is transferred automatically to the next level when the bill moves to that level.

However, ticket data analysis revealed that 639 tickets were raised by IFHRMS users with Help Desk to move bills to a lower level. Help Desk resolved the tickets by promptly moving the bills as requested. This action of Help Desk, tantamount to backend manipulation of Server data bypassing ‘hierarchy of roles’ in IFHRMS. This was a violation of Government checks and balances.

Moreover, the audit trail was missing for the bills where Help Desk intervened and moved bills to a lower level. Audit trail helps in fixing accountability for an action done by a user in the system and absence of audit trail reduces the legitimacy of the transaction making fraud detection difficult.

Government replied (January 2023) that suitable restrictions would be explored and incorporated in consultation with SI, so that audit trail will not be missed.

7.5.4 Incorrect classification of severity level and non-review of issues

According to Master Services Agreement, issues raised with Help Desk were to be categorised as Severity Levels 1 (High¹), 2 (Medium²) or 3 (Low³) based on three parameters viz., ‘number of locations’, ‘number of users’ and ‘call description’. Though information about users and location was captured and

¹ Same issue in more than one location.

² More than five users at same location reporting same issue.

³ Less than five users at the same location reporting same issue.

stored in ticket database, the data field ‘call description’ is designed for user input only. The user-based input, information captured varied widely for the same type of issue. Due to lack of uniformity in one of the parameters, system could not automatically assign severity level for an issue. Audit also noticed incorrect assigning of severity level to issues as shown in **Table 7.2**.

Table 7.2: Details of same issues being raised repeatedly

Sl. No.	Issue	Total number. of tickets	Number of locations reported	Average tickets per month in 2021-22	Severity level assigned (number of cases)	Actual severity level to be assigned
1	Notification	1,977	247	164.75	1 (1 case) 2 (3 cases) 3 (1,973 cases)	1 (High)
2	Refresh	5,235	221	436.25	3 (5,235 cases)	1 (High)
Total		7,212			7,212 cases	

(Source: IFHRMS ticket data)

It is seen from **Table 7.2** though all 7,212 cases (except one) merited classification as ‘Severity Level 1’, three cases were incorrectly classified as ‘Severity Level 2’ and the remaining 7,208 cases as ‘Severity Level 3’ despite being raised by multiple users in multiple locations.

Further, as seen from **Table 7.2** the same type of issue was raised time and again by IFHRMS users throughout the year. This not only points to *ad hoc* handling of issues but also inadequate monitoring of tickets to permanently resolve issues to prevent their recurrence.

Government replied (January 2023) that both missing notification and refresh ID issues have been sorted out by automating the role assignment process and that these issues would not occur in future. It was also stated that, proper care would be taken to assign the severity level as per the Service Level Agreement.

Recommendation 25:

Government should ensure that the Department analyses the complaints raised by users through Help Desk to resolve recurring system issues.

7.6 Service Level Agreement performance indicators

Service Level Agreement (SLA) specified certain indicators to be ensured by SI. The performance of IFHRMS against those indicators is discussed below:

7.6.1 Average System Uptime and Minimum average System Uptime at each location

Average System Uptime is the period for which the specified application, portal and other IT Components are available to the internal and external users of the system averaged for all Project locations. The base line parameter is *99 per cent* system up time as per SLA.

Minimum average System Uptime is period for which the specified application, portal and other IT components are available to the internal and external users of the system at every Project location. The base line parameter is *98 per cent* average system up time as per SLA.

As per Third Party Audit Agency SLA Audit report (TPAA report), while the system server uptime and network uptime ranged between *99 to 100 per cent*, the minimum average system uptime was *100 per cent*, thus satisfying the SLA requirements.

However, it was observed that server was not available on a regular basis, the latest being on 24 August 2022, where users were allowed to access the IFHRMS server only in batches as detailed below:

- **From 3 PM to 5 PM:** Finance and budget users, all Treasuries, PAOs, DDOs of Chennai, Tiruchirappalli and Vellore regions.
- **From 5 PM to 7 PM:** Finance and budget users, all Treasuries, PAOs, DDOs of Coimbatore, Madurai and Tirunelveli regions.
- **After 7 PM till early morning hours:** access enabled for all users.

This situation continued on the following day too indicating non-availability of the Server simultaneously to all users in the State. Thus, bills were processed even during night hours. This can also be correlated through the online survey conducted by Audit. Nearly *90 per cent* (637) of 708 DDOs/DTs/Sub-Treasuries who took part in the survey, stated that bills were generated and approved during night hours due to non-availability of IFHRMS server during normal working hours. Bill data analysis also showed that during 2021-22, *47 per cent* of the bills were prepared during night i.e. between 1 AM and 7.30 AM.

Government replied (January 2023) that depending on the number of users in the region, region-wise time slicing was introduced in the business hours for using IFHRMS due to server slowness during month end. However, once the recently initiated tech refresh is completed, this issue would be addressed permanently and the SLA parameters would be met without any difficulty.

7.6.2 Help Desk operator availability

Baseline for average availability time of all Help Desk operators was fixed as 100 *per cent* in SLA. Help Desk should be available from 06:00 hours to 22:00 hours on calendar days. SI had deployed seven Help Desk operators. Once the operator logged into the system time stamp was captured along with percentage of availability. Though Third Party Audit Agency (TPAA) audit report was inconclusive about this indicator, 311 (43 *per cent*) out of 708 respondents in the online survey conducted by Audit stated that Help Desk did not respond to calls indicating that Help Desk performance fell short of SLA requirements.

Government replied (January 2023) that users would be educated to use the option of raising the tickets in portal itself, which would save time for the users to get their tickets resolved at the earliest and that augmentation of resources would also be considered to resolve the issue.

7.6.3 Help Desk average resolution time

Resolution time is the time taken from generation of call to closure of call. Resolution time is reported by the Help Desk application deployed and maintained by SI. Baseline for this parameter as per SLA was as below:

- Severity Level 1 ticket: 4 working hours for that location
- Severity Level 2 ticket: 8 working hours for that location
- Severity Level 3 ticket: 16 working hours for that location

Sample check by TPAA indicated that resolution for all three levels was reached on an average of 0.33 hours, thus meeting SLA requirement.

Ticket data analysis however, revealed that 1.81 lakh tickets (68 *per cent*) relating to 'application' / 'hardware' / 'e-SR' / 'clarification' were not closed within the SLA requirement. They were resolved belatedly, and the delays ranged from more than 16 hours to 361 days irrespective of their Severity Level. Further, 125 tickets relating to application/ hardware raised during 2021-22 were still pending resolution for periods ranging from 36 to 367 days. Thus, ticket resolution time did not meet SLA requirements. According to the agreement provision, penalty for not closing tickets within stipulated time could be levied, subject to a maximum of ₹1.26⁴ crore per quarterly period of three months. Despite this, Department failed to levy and collect penalty from SI.

In the online survey by Audit, while 26 *per cent* of the users (182 of 708 users) stated that their tickets were not resolved with proper solution, 54 *per cent* of the users (384 of 708 users) stated that they had to raise tickets repeatedly to resolve an issue.

⁴ 20 *per cent* of quarterly payments (₹6.29 crore) made to SI for operation and maintenance of IFHRMS during 2021-22.

This indicated that the SI (M/s Wipro) failed to achieve the performance indicators. Further, the Third Party Audit Agency's (M/s PricewaterhouseCoopers) assessment that SI (M/s Wipro) had achieved the performance indicators was also not correct.

Government replied (January 2023) that action would be taken to resolve the long pending 125 tickets relating to application/software issues and SI would be directed to strictly adhere to the SLA requirements in resolving the tickets pertaining to application / hardware, failing which penalty would be levied as per SLA.

Recommendation 26:

Government should consider levying penalty if SI fails to meet the performance indicators envisaged in the Service Level Agreement.

7.7 Training and user Feed Back

7.7.1 Training

Para 3.4 of RFP required that users of IFHRMS had to be trained by SI (M/s Wipro) to achieve the envisaged outcomes of IFHRMS. The SI (M/s Wipro) commenced training programmes from the year 2017-18 covering Treasury staff and DDOs. However, as Go-live was achieved only in January 2021 after a delay of four years, knowledge transfer between the trained employees and new employees who replaced them during 2018-2021 did not take place. In a sample survey conducted by Audit, 51 *per cent* of users also expressed that the training given was not sufficient. This was also supported by the fact that in four⁵ sampled districts, the Treasury officers expressed the requirement of additional training for their staff. In the above circumstances, dependence on the technical support staff deployed by SI (M/s Wipro) in the district treasuries and sub-treasuries became inevitable for getting clarifications during day-to-day use of IFHRMS.

Recommendation 27:

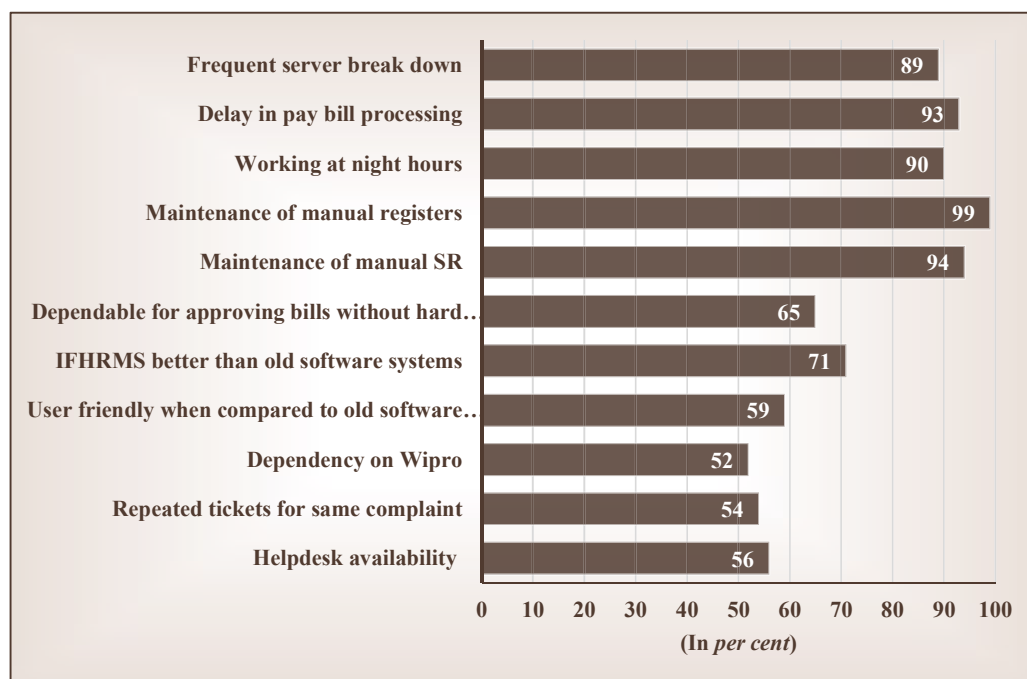
As training is a continuous process, Government should ensure periodical refresher courses to all the users so as to enable them to understand the application and reduce dependence on the SI (M/s Wipro).

7.7.2 User Feed back

An online survey was conducted among IFHRMS users to assess their satisfaction level. The results of online survey based on the response of 708 users are shown in the **Exhibit 7.1**.

⁵ Cuddalore, Kanchipuram, Madurai and PAO (East).

Exhibit 7.1 – IFHRMS user feed back



(Source: Compiled from Audit survey questionnaire)

- Eighty nine *per cent* of users reported frequent server breakdowns during month end and non-availability of server during office hours (90 *per cent*), requiring working at night hours.
- Ninety three *per cent* of users felt that ‘*mark for re-calculation*’ in pay bill processing delayed pay bill generation.
- Ninety nine *per cent* reported that manual registers like MTC 70 are still being maintained, despite introduction of IFHRMS, while 94 *per cent* maintained manual SRs even for newly recruited employees, despite availability of e-SR in IFHRMS.
- While 56 *per cent* of users reported the availability of Help Desk services over phone, 52 *per cent* users felt that WIPRO staff at their location is necessary to resolve issues as otherwise tickets had to be raised to resolve same complaint.
- Seventy one *per cent* users expressed their satisfaction on IFHRMS when compared to old software, while 59 *per cent* expressed their satisfaction regarding user friendliness of IFHRMS.
- Sixty five *per cent* users also expressed that IFHRMS is dependable for generation and processing of bills without hard copies of supporting documents.

Government replied (January 2023) that user feedback compiled by Audit will be taken into consideration and steps will be taken to address the issues and make the System robust.



(C. NEDUNCHEZHIAN)

Principal Accountant General (Audit-I),
Tamil Nadu

Chennai
The 10 May 2023

Countersigned



(GIRISH CHANDRA MURMU)

Comptroller and Auditor General of India

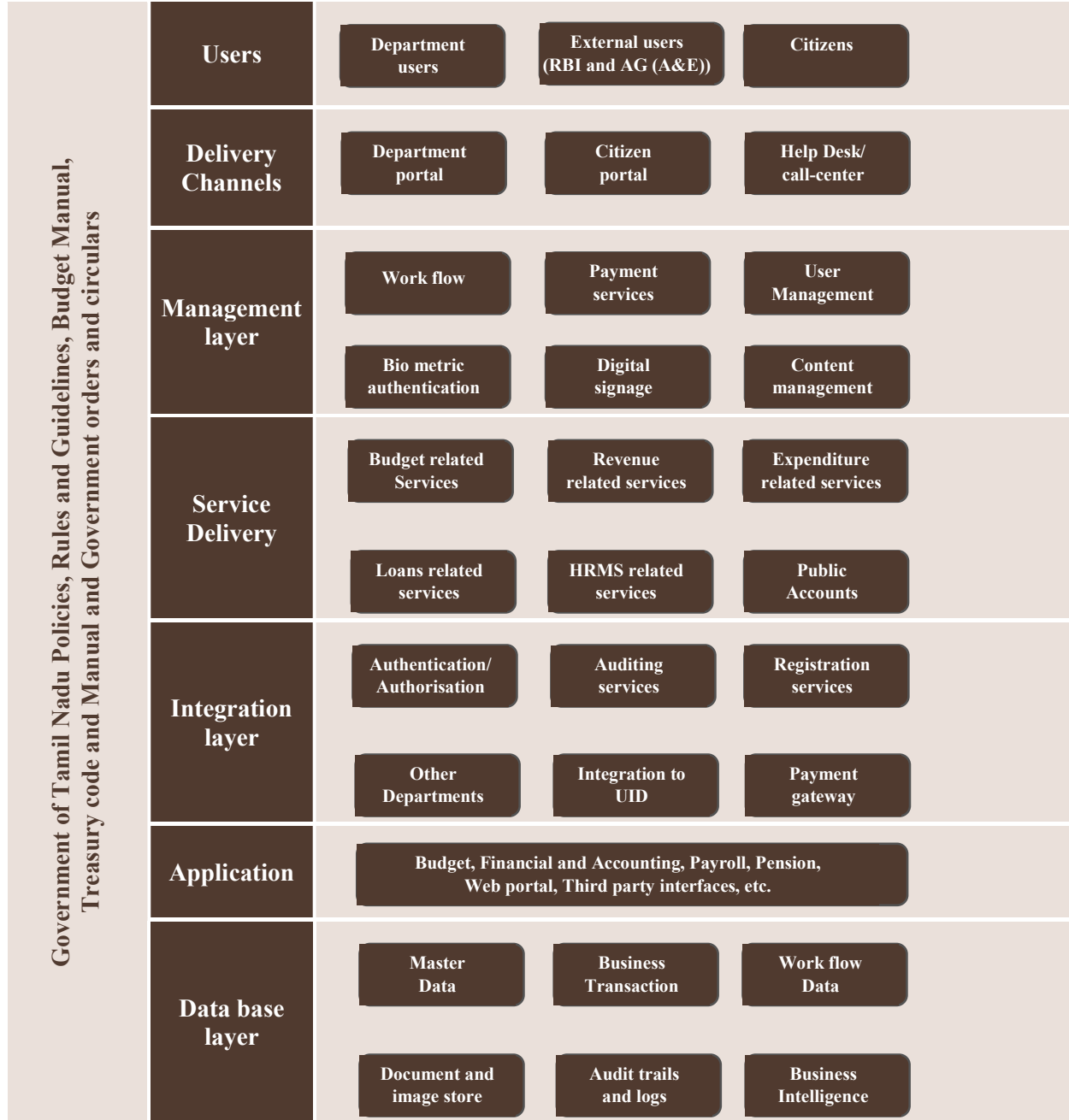
New Delhi
The 11 May 2023

APPENDICES

Appendix 1.1

(Reference: Paragraph 1.2; Page 1)

System architecture of IFHRMS



Appendix 3.1

(Reference: Paragraph 3.3.1 (i); Page 24)

Transactions of Charged nature booked in detailed head meant for Voted items

(In ₹)

Sl. No.	Detailed Head No.	Debit transactions	Credit transactions
1	30801	1,48,83,132	0
2	30809	1,11,274	0
3	30909	5,00,00,000	0
4	31009	9,00,00,000	0
5	31301	73,40,714	0
6	31401	2,05,86,514	0
7	31801	95,63,971	0
8	31809	28,79,644	0
9	31901	1,14,46,877	0
10	31902	4,36,190	0
11	31903	13,18,818	0
12	32101	10,09,229	0
13	32102	88,26,241	17,010
14	32103	11,07,225	0
15	32401	94,366	0
16	32501	22,18,71,72,990	13,02,433
17	33301	46,95,200	0
18	33302	25,64,85,018	0
19	33303	1,30,07,099	0
20	33304	6,66,26,580	0
21	33401	50,000	0
22	33402	20,99,764	0
23	34501	2,72,63,853	0
24	34601	8,00,000	0
25	34901	2,08,70,000	0
26	34902	7,41,000	1,88,25,000
27	35102	21,22,652	0
28	35901	96,000	0
29	36601	20,49,269	0
30	36801	67,61,789	0
31	37101	9,34,219	0
32	37201	27,10,540	0
33	37601	3,01,94,457	0
34	37602	1,50,56,779	0
35	37603	1,18,68,248	0
36	37702	4,00,386	43,69,426
37	38102	4,88,360	0
Sub Total		22,87,20,98,398	2,45,13,869
Grand Total		2,289.66 crore	

Appendix 3.2

(Reference: Paragraph 3.3.1 (i); Page 24)

Transactions of Voted nature booked in detailed head meant for Charged items

(In ₹)

Sl. No.	Detailed	Debit transactions	Credit transactions
1	32551	0	9,409
2	33359	0	1,000
3	34752	0	9,000
4	35152	48,25,538	19,663
5	36451	0	70
6	37752	0	2,04,05,848
7	46451	1,38,37,275	0
8	46475	0	1,41,301
Sub Total		1,86,62,813	2,05,86,291
Grand Total		3,92,49,104	

Appendix 3.3

(Reference: Paragraph 3.3.2 (ii); Page 26)

Booking of expenditure in '8005' Major Head removed from LMMH

Sl. No.	Head of Account	Detailed Head	Amount (in ₹)
1	800501101AA	80101	57,000
2	800501101AA	80102	21,000
3	800501101AA	80102	57,000
4	800501101AA	80101	1,06,700
5	800501101AA	80202	21,000
6	800501101AA	80101	5,000
7	800501101AA	80102	21,000
8	800501101AA	80101	1,10,000
9	800501101AA	80101	15,000
10	800501101AA	80101	13,000
11	800501101AA	80101	10,000
12	800501101AA	80101	1,05,000
13	800501101AA	80101	62,000
14	800501101AA	80101	93,300
15	800501101AA	80101	15,000
16	800560103AG	80102	1,680
17	800560103AG	80101	3,850
18	800501101AA	80101	75,000
19	800501101AA	80101	25,200
Total			8,17,730

Appendix 3.4

(Reference: Paragraph 3.3.4; Page 28)

Booking of expenditure with unrelated HoD code

Sl. No	Major Head	Debit (in ₹)	Credit (in ₹)
1	0043	0	12,78,383
2	0049	0	19,87,436
3	0055	0	9,666
4	0059	0	1,43,03,719
5	0070	0	41,590
6	0071	0	54,10,767
7	0075	0	16,23,638
8	0202	0	2,21,50,372
9	0216	0	11,440
10	0235	0	21,924
11	0406	0	1,650
12	0701	0	9,35,459
13	1054	10,10,468	1,53,03,164
14	2014	0	3,13,122
15	2053	0	1,000
16	2055	0	9,000
17	2202	0	64,190
18	2210	20,000	0
19	2401	0	1,000
20	2515	0	26,607
21	7610	0	99,060
Sub Total		10,30,468	6,35,93,187
Grand Total		6,46,23,655	

Appendix 3.5

(Reference: Paragraph 3.3.5; Page 28)

Preparation of Accounts with wrong Sub-account codes

Sl. No.	Sub-account code	Expenditure (in ₹)	Receipts (in ₹)
1	SA-02	0	1,450
2	SA-11	0	25,302
3	SA-12	8,36,760	0
4	SA-18A	72,33,724	0
5	SA-18B	0	38,000
6	SA-18C	16,11,60,000	0
7	SA-18D	4,00,06,110	0
8	SA-18F	1,46,53,85,501	0
9	SA-20A	0	550
10	SA-20B	0	1,95,518
11	SA-27D	0	46,985
Total		1,67,46,22,095	3,07,805

Appendix 4.1

(Reference: Paragraph 4.1.15; Page 45)

Number of users assigned multiple roles in IFHRMS

Sl. No.	District/PAOs/DTs	Total users in IFHRMS (as of July 2022)	District wise users assigned multiple roles	Multiple roles assigned in IFHRMS (as of July 2022)									Total instances
				Billing activity			Audit activity			HRMS activity			
				Initiator/ Verifier	Verifier/ Approver	Initiator/ Approver	L1/L2	L2/L3	L1/L3	Initiator/ Verifier	Verifier/ Approver	Initiator/ Approver	
1	Ariyalur	1,045	68	117	222	24	0	17	0	113	247	53	793
2	Chengalpattu	1,661	109	209	122	83	0	9	4	203	152	99	881
3	Coimbatore	3,661	275	467	741	177	8	40	1	419	723	192	2,768
4	Cuddalore	2,905	213	399	326	71	1	74	1	387	396	123	1,778
5	Dharmapuri	1,905	80	169	174	31	0	27	0	168	205	55	829
6	Dindigul	2,562	177	326	371	71	0	17	0	323	406	115	1,629
7	Erode	2,054	108	364	207	53	4	59	0	350	248	100	1,385
8	Kallakurichi	1,387	118	315	214	85	3	40	0	316	289	158	1,420
9	Kanchipuram	1,216	72	104	53	60	2	9	1	114	73	100	516
10	Kanyakumari	1,970	171	301	191	94	1	18	0	293	221	143	1,262
11	Karur	1,579	86	187	112	39	3	8	0	174	133	58	714
12	Krishnagiri	2,052	85	255	299	78	0	20	0	260	334	113	1,359
13	Madurai	1,566	155	252	334	69	1	23	1	258	347	94	1,379
14	Nagapattinam	1,887	155	257	195	94	0	11	0	244	266	160	1,227
15	Namakkal	1,725	97	273	76	50	0	18	0	283	103	82	885
16	The Nilgiris	1,172	145	174	295	52	0	22	1	160	272	68	1,044
17	PAO (East)	1,828	72	82	66	29	9	0	0	78	80	30	374
18	PAO (High court)	459	36	38	22	4	0	1	0	35	36	4	140
19	PAO (Madurai)	2,019	105	142	136	58	3	2	0	144	168	68	721
20	PAO (North)	1,236	69	139	196	61	1	1	0	138	217	71	824
21	PAO (Sectt)	707	62	58	67	27	0	0	1	25	35	12	225
22	PAO (South)	2,901	164	202	142	120	8	0	0	194	153	131	950
23	Perambalur	890	54	116	113	40	0	15	0	116	118	47	565

Performance Audit on Integrated Financial and Human Resource Management System in Tamil Nadu

Sl. No.	District/PAOs/DTs	Total No. of users in IFHRMS (as of July 2022)	District wise no. of users in assigned Multiple roles	Multiple roles* assigned in IFHRMS (as of July 2022)									Total instances
				Billing activity			Audit activity			HRMS activity			
				Initiator/ Verifier	Verifier/ Approver	Initiator/ Approver	L1/L2	L2/L3	L1/L3	Initiator/ Verifier	Verifier/ Approver	Initiator/ Approver	
24	Pudukkottai	1,976	165	338	278	100	1	43	1	331	324	149	1,565
25	Ramanathapuram	1,898	183	274	244	78	0	32	0	266	254	112	1,260
26	Ranipet	1,048	87	147	139	52	0	9	0	173	146	84	750
27	Salem	3,424	228	502	410	129	2	45	1	490	446	177	2,202
28	Sivagangai	2,032	115	261	224	96	0	30	0	258	275	150	1,294
29	SPAO (Corp'n)	443	15	23	21	2	0	0	0	22	25	4	97
30	SPAO (New Delhi)	34	3	1	2	2	1	2	1	2	3	2	16
31	SPAO(HC Bench) Madurai	246	12	33	4	0	0	0	0	32	16	4	89
32	Tenkasi	1,745	120	202	176	67	0	12	0	177	196	91	921
33	Thanjavur	2,680	161	297	334	87	0	46	0	277	349	93	1,483
34	Theni	1,611	120	215	134	36	0	27	1	218	187	95	913
35	Tiruchirappalli	3,334	205	397	239	112	1	22	0	399	285	140	1,595
36	Tirunelveli	2,919	175	238	168	95	0	7	0	230	186	128	1,052
37	Tirupathur	816	74	125	102	42	3	8	3	129	110	61	583
38	Tirupur	2,158	180	334	195	68	1	22	1	329	252	117	1,319
39	Tiruvallur	2,901	148	343	199	119	1	3	1	321	217	146	1,350
40	Tiruvannamalai	2,787	165	305	387	78	1	55	1	282	417	107	1,633
41	Tiruvarur	1,535	118	210	227	78	0	26	0	210	242	109	1,102
42	Thoothukudi	2,754	225	222	85	92	2	20	1	238	148	114	922
43	Vellore	1,715	86	234	173	63	0	8	0	230	180	72	960
44	Villuppuram	2,228	159	361	87	57	1	3	0	340	140	110	1,099
45	Virudhunagar	2,711	160	243	380	61	2	29	0	241	430	83	1,469
46	Blank	21	0	1	2	1	0	0	0	2	3	2	11
Total		83,403	5,580	10,252	8,884	2,985	60	880	21	9,992	10,053	4,226	47,353

* Either as Initiator/Verifier or as Verifier & Approver or as Initiator/Approver

Appendix 4.2

(Reference: Paragraph 4.2.5; Page 51)

Mapping of PPO number with wrong PEN ID

Sl. No.	Pensioner ID	PPO Number	Status	Type of error in PEN ID field
1	PENxxxxx28	Axxxxx3	Active Pensioner	Wrong
2	PENxxxxx66	Axxxxx5	Active Pensioner	Wrong
3	PENxxxxx67	Cxxxxx0	Active Pensioner	Wrong
4	PENxxxxx67	Cxxxx2	Active Pensioner	Wrong

Appendix 4.3

(Reference: Paragraph 4.2.5; Page 51)

PEN ID mapped to Employee login instead of Pensioner login

Sl. No.	Pensioner ID	PPO Number	Status	Type of error in Pensioner ID field
1	PENxxxxx60	Axxxxx3	Active Pensioner	Blank
2	PENxxxxx44	Axxxxx4	Active Pensioner	Blank
3	PENxxxxx30	Axxxxx2	Active Pensioner	Blank
4	PENxxxxx81	Axxxxx5	Active Pensioner	Blank
5	PENxxxxx28	Axxxx3	Active Pensioner	Blank
6	PENxxxxx45	Cxxxxx5	Active Pensioner	Blank
7	PENxxxxx64	Cxxxxx1	Active Pensioner	Blank
8	PENxxxxx42	Rxxxxxx1	Active Pensioner	Blank
9	PENxxxxx64	Rxxxxxx8	Active Pensioner	Blank
10	PENxxxxx66	Cxxxxx5	Active Pensioner	Blank
11	PENxxxxx63	Cxxxx5	Active Pensioner	Blank
12	PENxxxxx62	Cxxxxx1	Active Pensioner	Blank
13	PENxxxxx42	Rxxxxxx0	Active Pensioner	Blank
14	PENxxxxx40	Cxxxxx9	Active Pensioner	Blank
15	PENxxxxx39	Axxxxx1	Active Pensioner	Blank
16	PENxxxxx12	Dxxxxxx6	Active Pensioner	Blank
17	PENxxxxx66	Fxxxxxx6	Active Pensioner	Blank
18	PENxxxxx08	Rxxxxxx9	Active Pensioner	Blank
19	PENxxxxx07	Rxxxxxx2	Active Pensioner	Blank
20	PENxxxxx06	Axxxx0	Active Pensioner	Blank
21	PENxxxxx05	Axxxxx2	Active Pensioner	Blank
22	PENxxxxx04	Axxxxx7	Active Pensioner	Blank
23	PENxxxxx94	Fxxxxxx2	Active Pensioner	Blank
24	PENxxxxx12	Rxxxxxx0	Active Pensioner	Blank
25	PENxxxxx11	Rxxxxxx3	Active Pensioner	Blank
26	PENxxxxx03	Fxxxxxx0	Active Pensioner	Blank

Appendix 4.4

(Reference: Paragraph 4.2.6; Page 51)
Active pensioners with missing PPO numbers

Sl. No.	PEN ID	Status	Category
1	PENxxxxx63	Active Pensioner	Civil Family Pension
2	PENxxxxx12	Active Pensioner	Civil Family Pension
3	PENxxxxx77	Active Pensioner	Civil Family Pension
4	PENxxxxx00	Active Pensioner	Civil Family Pension
5	PENxxxxx69	Active Pensioner	Civil Family Pension
6	PENxxxxx97	Active Pensioner	Civil Family Pension
7	PENxxxxx40	Active Pensioner	Civil Family Pension
8	PENxxxxx97	Active Pensioner	Village Office Assistant Family Pension
9	PENxxxxx09	Active Pensioner	Village Office Assistant Family Pension

Appendix 4.5

(Reference: Paragraph 4.2.6; Page 52)

Pensioners deprived of timely sanction of additional pension

Sl. No.	Pensioner ID	Date of Birth		Eligible for additional pension from	
		As per IFHRMS	As per Disburser's Half copy	As per IFHRMS	As per actual DoB
1	PENxxxxx57	01-01-1951	30-08-1939	01-01-2031	01-08-2019
2	PENxxxxx25	01-01-1951	31-10-1937	01-01-2031	01-10-2017
3	PENxxxxx44	01-01-1951	01-01-1941	01-01-2031	01-01-2021
4	PENxxxxx59	01-01-1951	10-08-1941	01-01-2031	01-08-2021
5	PENxxxxx15	01-01-1951	01-06-1934	01-01-2031	01-06-2014
6	PENxxxxx70	01-01-1951	02-01-1941	01-01-2031	01-01-2021
7	PENxxxxx69	01-01-1951	01-06-1942	01-01-2031	01-06-2022

Appendix 5.1

(Reference: Paragraph 5.2.21; Page 63)

List of Reports could not be generated in HRMS Module

Sl. No.	Nomenclature of Reports
1	Adi Dravidar and Tribal Welfare Representation SC/ST Annual Return Report
2	Annual Confidential Report
3	Annual Return on Representation of Community
4	Awards - Ashoka Chakara, Kirti Chakara-Recommendation For Gallantry Award
5	Compassionate Ground Appointment Report
6	Compulsory Retirement Review Cases
7	Compulsory Retirement of Employee Report
8	Compulsory Wait Report
9	Continuation/Conversion of Temporary Post
10	Conversion of 17(b) to 17(a)
11	Disciplinary Cases Pending Against The Government Servants Report
12	Disciplinary Proceedings Review Report
13	Employee Foreign Service Card Report
14	Employee Qualification For Selection Grade or Special Grade or Stagnation Increment Report
15	Employees Deputed to Foreign Service Report
16	Ex-Servicemen Welfare – Reservation of Post to Ex-Servicemen
17	Foundational Course Training to be given for staff at Bhavani Sagar
18	Group A and B Vacant For Long Time
19	Husband and Wife In Service Report
20	Last Pay Certificate Report
21	List of Pending Non Vigilance Cases Report
22	New Joinee of This Week Report
23	Particulars of Employee Under Suspension Data
24	Probation Declaration Report
25	Regularisation Probation Report
26	Regularisation of Temporary Appointment Report
27	Regularisation of Temporary Appointment-Avoidance Of Delay Report
28	Remittance of Pension Contribution and Leave Salary Contribution
29	Review of Govt. Servants Who Have Lien In Another Service
30	Review of Long Absence of Government Servants
31	Temporary Appointment Report to TNPSC
32	Training Details Report
33	Training Test Details Report
34	Transfer Request Seniority Report
35	Transfer and Posting of Senior Officials
36	Verification of Qualifying Service Either 28 Years of Service or 53 Years of Age
37	Without Adequate Knowledge in Tamil Report

Glossary of abbreviations

Abbreviations	Full Form
AM	Alteration Memorandum
ASL	Additional Sanction Ledger
ATBPS	Automated Treasury Bill Passing System
BCOs	Budget Control Officers
BDO	Block Development Office
CF	Contingency Fund
CF GO	CF Government Order
CFA	Contingency Fund Advance
CL	Casual Leave
CRP	Conference Room Pilot
CRs	Change Requests
CSTI	Civil Service Training Institute
CTA	Commissioner of Treasuries and Accounts
DoB	Date of Birth
DoF	Department of Finance
DPR	Detailed Project Report
DR	Disaster Recovery
DSC	Digital Signature Certificate
DTA	Department of Treasuries and Accounts
DTs	District Treasuries
ECS	Electronic Clearing System
FMA	Final Modified Appropriation
FRS	Functional Requirement Specification
GoTN	Government of Tamil Nadu
HoA	Head of Account
HoDs	Heads of Departments
HoO	Head of Office
HR	Human Resource
HRMS	Human Resource Management System

Abbreviations	Full Form
IFHRMS	Integrated Financial and Human Resource Management System
IP	Internet Protocol
IT	Information Technology
KUT	Key User Training
LBR	Leave Balance Report
LFD	Local Fund Deposit
LMMH	List of Major and Minor Head
MC	Monitoring Committee
MSA	Master Service Agreement
NIS	New Instrument of Service
NS	New Service
PeMT	Project e-Mission Team
PMC	Project Management Consultant
PPO	Pension Payment Order
RPO	Recovery Point Objective
RTO	Recovery Time Objective
SBI	State Bank of India
SCL	Special Casual Leave
SI	System Integrator
SLA	Service Level Agreement
SR	Service Register
SRS	System Requirement Specification
SSO	Single Sign On
TAs	Temporary Advances
TDS	Tax Deducted at Source
TEs	Transfer Entries
TPAA	Third Party Audit Agency
TPAA report	Third Party Audit Agency SLA Audit report
UAT	User Acceptance Test

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