Chapter 2 Project Management

2 Project Management

2.1 Management/Organisational Structure

In the IFMS project, the roles and responsibilities of all stakeholders were defined for transparency, accountability, manageability and efficiency.

The Project Management Organisation Structure for IFMS implementation, as envisaged in the DPR, is depicted in **Chart 2.1**.

Chart 2.1: Project Management Organisation Structure					
Project (Chief Secretary, Pri Development Commi Development), State	Inter-Departmental Committee ⁷ (IDC)				
Project Management Group					
Project Director (Additional Finance Commissioner)					
IT team (NIC Finance Team)	Transformation Team (Inter-departmental Team- Finance, AG, Treasury and others)	Project Management (JAP-IT & PMU)			
Implementation Agency/ Partner					

The Project Leadership Team (PLT) is an apex level committee for providing tactical and strategic direction for the overall project. The Inter-Departmental Committee⁸ also provides leadership to the Project. The Project Management Group (PMG)⁹ would be responsible for ensuring the overall effectiveness of the IFMS project implementation. Under PMG, a Transformation Team was to be constituted to bring in the domain knowledge specific to each functional aspect covered in the IFMS.

However, Audit observed that no such teams had been constituted during implementation of the IFMS, except IDC, which was constituted (March 2004) for implementation and monitoring of the project. The entire project implementation *i.e.*, development as well as monitoring, was done by the

Chairman: Commissioner and Secretary, Information Technology Department, Co-Chairman: Finance Commissioner or a Senior Officer nominated by Finance Commissioner, Member Secretary: Officer of Finance Department In-charge of Treasury, Member: Director of Provident Fund, Member: S.I.O., NIC, Member: Assistant Director, Information Technology Department

Constituting members from Finance Department, Information Technology Department and NIC, Jharkhand State Unit

⁹ PMG works under the direction of a Project Director and has three units *viz.*, the IT team, Transformation team and Project Management team

Project Monitoring Unit (PMU) under the technical guidance of NIC and the administrative leadership of IDC. The IDC convened 10 meetings between January 2008 and March 2022 to discuss the need of modules, requirement of hardware/software, hurdles/pros and cons faced during implementation, and took all the strategic decisions regarding the project.

2.2 Establishment of Project Monitoring Unit (PMU) under Finance Department

To transfer the ownership of the Treasury Computerization Project to the Finance Department from DoIT, it was required to be technically strengthened so that the project could be implemented without hindrance. Therefore, a Project Monitoring Unit (PMU) was constituted (October 2009) under the Finance Department by outsourcing high-end developers¹⁰ recommended by NIC, for implementation of the project in the State. The PMU was responsible for application development work, its operations and change management under the technical guidance of NIC. Further, the strength of PMU was enhanced (October 2017) to 37 personnel consisting of 14 Programmers, 19 Assistant Programmers and four Data Entry Operators. However, 37 new posts¹¹ were created (December 2021) by surrendering the existing 37 posts of Programmers/ Assistant Programmers/ Data Entry Operators and since then, PMU has been functioning with the newly created manpower.

2.3 Delay in preparation of Detailed Project Report (DPR) and Action Plan

Under the GoI scheme (MMP), States/ UTs were required to prepare project proposals (DPRs), including an Action Plan, based on the current level of treasury computerisation in the State/ UT and the desired level to be achieved. Further, the DPR and the Action Plan were required to be submitted to the Department of Expenditure (DoE), Ministry of Finance, GoI, for its scrutiny for technical and financial soundness, before approval by the Empowered Committee (EC) for release of Central Assistance. The project was to be completed in three years *i.e.* by June 2013 with the residual components spilling over into the fourth year.

The financial support for the State project was to be up to 75 *per cent* of the individual project cost of admissible components, limited to ₹ 75 lakh per district, as on 1 April 2010. Funds were to be released as Central Assistance

Programmers- 02, Assistant Programmers- 04 and Data Entry Operators- 02

Jr. Software Developer/ Asstt. Programmer (Open Source): 03; Help Desk Manager: 01; Content Writer: 01; Software Trainer: 02; Software Developer/ Programmer (.NET): 03; Quality Analyst-cum-Software Tester: 01; Software Developer/ Programmer (Open Source): 02; Mobile App. Developer: 02; Software Developer/Programmer (JAVA): 03; DBA: 01; Sr. Software Developer/ Sr. Programmer (.NET): 05; Sr. Software Developer/ Sr. Programmer (Open Source): 09; Sr. Database Administrator: 02; and Manager (IT): 02

(100 per cent Central grant in respect of Central share) to the State Designated Agency in three instalments (i.e. 40:30:30 per cent each), subject to the satisfactory receipt of utilisation certificates.

Audit observed that a Consultant¹² was engaged (June 2013) by the FD, GoJ, for preparation of DPR on IFMS. A detailed assessment of the existing system in terms of functions, processes, people and technology was carried out to identify key gaps, and a DPR including an Action Plan was prepared (June 2014) by the Consultant. Based on As-Is Assessment and gap analysis of the existing KUBER (version-1), KUBER (IFMS-2.0) with 10 modules was proposed in the DPR, as detailed in **Table 2.1**.

Table 2.1: Proposed Modules and their functionalities					
Planning module	This module would allow the Department officials at the field level to plan projects through the System. The System would capture the planned project timelines, resources, expenditure, outcomes and output of the plan and other project details.				
Budget module	This module would be used for preparation and estimation of revenue, expenditure and the overall budget at the office, department and State level. It would facilitate approval of the budget by the Finance/Planning & Development Department based on budget discussions.				
Receipt Management module	This module would allow the departments to collect, deposit, record, reconcile and analyse receipts collected and refund of receipts.				
Accounts module	The System would facilitate online preparation of accounts in the treasuries based on comprehensive receipt and expenditure data captured from its source. It would also facilitate online submission/updating of all accounting information to AG for preparation of the monthly/annual accounts.				
Fund & Debt Management module	The System would record all the loans, guarantees and other liabilities of the Government. It would also record the investments and advances given by the Government to enable them to have a full view of their liabilities and plan fund management accordingly, to minimize the financial cost of borrowings.				
Audit module	Both the external (audit by AG) and internal audit would be facilitated through the System. All the audit guaries and the				
Expenditure Management module	This module would allow the departments to initiate the expenditure (procurement of goods/services), contract management, bill preparation, approval of the bills by treasuries and making payment through the System.				
Payroll & Employees Claim module	This module would allow pay bills to be generated, submitted, reviewed, approved or rejected through the System. The System would have interface with HRMIS to facilitate the generation of pay bills including schedules of GPF contribution, CPF, taxes, insurance <i>etc</i> .				
Pension module	This module would allow submission of the pension application with required documents/forms by the employee or his nominee (in case of employee's death) for availing regular pension or for commutation of pension through the System.				
Data Warehouse and Reporting module	This module will allow users to access and analyse the budget and get actual information in real time. Users can also generate customised reports for trend analysis, future projections <i>etc</i> .				

M/s Ernest & Young, an empanelled consultant of National Informatics Centre Services Inc. (NICSI)

Against a timeline of June 2013 set by GoI, the DPR was submitted only in January 2015 to DoE for approval and release of funds, i.e. after completion of the project period. As a result, no Central assistance was released by the DoE, GoI, to the State under MMP.

Subsequently, the DPR (revised) was submitted (August 2015) by the State Government to the Department of Economic Affairs (DEA), GoI, for exploring the possibility of funding the project through the World Bank (WB) and also to the Ministry of Electronics and Information Technology (MeITY), GoI, for funding the project under the Digital India Program. Though MeITY got the DPR reviewed through NIC¹³ and had the DPR modified, it conveyed (March 2016) its inability to fund the Project.

2.4 **Project Implementation**

GoJ decided (August 2015) to implement the Project (IFMS 2.0) in a phased manner on its own with the assistance of NIC, Jharkhand State Unit, by upgrading the existing system.

IFMS 2.0 (KUBER), designed and developed by NIC based on the DPR, is a custom-made IT System that bundles different financial management functions viz. budgeting, payment processing, accounting, audit and reporting to the government and other stakeholders through a single integrated software solution.

Presently, 12 modules¹⁴ consisting of six functional and six other modules (Pictograph 1.1 in Paragraph 1.3) were implemented under IFMS after incurring an expenditure of ₹ 21.65 crore¹⁵ during 2011-22.

NIC Headquarters, New Delhi and NIC IFMS team, Pune

⁽¹⁾ Financial Portal (2) COBT (e-Budget) (3) Integrated Fund Management System (e-Allotment) (4) DDO Level Bill Management System (e-Bill) (5) Treasury Application (e-Treasury) (6) Treasury MIS (e-Dashboard) (7) Jharkhand e-GRAS (e-Challan) (8) GPF Accounting System (e-GPF) (9) Employee Portal (10) e-Pension (11) Kuber Pay Slip (e-Pay Slip) and (12) Hamar Apan Budget

Purchase of hardware and software, Annual Technical Support and License charges: ₹ 16.49 crore; and Establishment charges: ₹ 5.16 crore

Integrated Financial Management System Government of Jharkhand ~ ne Budget COBT Integrated Fund uber Treasury MIS Kuber Pay Slip Primary Secondar

WO.

Finance Porta

ber Employee

System (e-GPF

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DDO Level Bill

Chart 2.2: IFMS 2.0 (KUBER)

Kuber

E

reasury Application

C e-Gazette

Digital India Data.Gov.In

NIC E-mail

Jharkhand Govt. Porta

Public Financial Management System - PFMS

O Download PFMS Scheme Mapping For

Delay and non-implementation of the IFMS modules

2.5.1 Non-implementation of IFMS modules stipulated in DPR

Against 10 modules proposed in the DPR of IFMS, three modules viz. (i) Planning; (ii) Fund & Debt Management; and (iii) Audit Module could not be developed (as of July 2023). Implications of non-implementation of two modules of the proposed IFMS are discussed in the following paragraphs.

(i)Non-development of Fund & Debt Management module

The DPR envisaged that the Fund & Debt Management module of IFMS would:

- Capture the details¹⁶ of each loan raised by the State Government.
- Trigger loan repayment alerts to the concerned users based on due dates and allow users to generate debt repayment bills through the System.
- Process, verify, approve and pay debt repayment bills through the System.
- Record and reconcile loan repayment details by interfacing with Central Bank loan database, treasury accounts and agency bank scrolls.

Amount borrowed, Source of borrowing, Date of Borrowing, Details of borrowing (coupon rate, discount offered, rate of interest, face value etc.), terms of reference of borrowing, duration of borrowing and repayment schedule

Audit examination revealed the following:

- ✓ Though AG's assistance was sought (May 2017) by the FD, the Fund & Debt Management module has not been taken up (July 2023) for development.
- ✓ AG, being an external stakeholder, was unable to access IFMS for feeding data of Internal Debt of the State Government (Major Head 6003)¹⁷ and Loans and Advances from the Central Government.
- ✓ In the absence of the Fund & Debt Management module, transactions relating to loans were not being captured in the System and real time updates of the fiscal position of the State Government could not be monitored through IFMS.
- ✓ The State Government was not able to better manage Ways and Means advances.
- ✓ The System could not facilitate preparation of borrowing and debt management plans in the absence of cash flow projections and commitment projections based on loan data.

As a result, it was noticed that a discrepancy¹⁸ of ₹ 8,064.12 crore in the figures of repayment of Internal Debt (Major Head 6003) obtained from IFMS data (₹ 4,222.50 crore) and Finance Accounts (₹ 12,286.62 crore) arose, which was due to non-capturing of repayment amount in respect of four minor heads¹⁹ in the IFMS database. In reply, the Department stated (November 2023) that IFMS captured only those transactions which are made through treasuries and AG is maintaining accounts for all other non-treasury transactions.

In the absence of Fund & Debt Management module, the State Government is unable to (i) have a full view of its liabilities; (ii) plan its fund management to minimise financial cost of borrowing.

Thus, the very objective of meeting the needs of effective fiscal management could not be achieved.

In the Exit conference (March 2024), the Special Secretary accepted the audit observation and stated that development of this module has already been taken up in consultation with AG (A&E).

Recommendation 1: State Government may prioritise development of the Fund & Debt Management module for better fiscal management.

Market loans (101); Compensation and other bonds (106); Ways and Means Advances from the RBI (110); and Special Securities issued to National Small Savings Fund (NSSF) of the Central Government (111)

Data analysis of IFMS database are elaborated in paragraph 3.2.8

^{101 (}Market Loans); 106 (Compensation and other Bonds); 110 (Ways and Mean Advances); and 111 (Special Securities issued to NSSF of Central Government)

(ii) Non-development of Audit module

The DPR envisaged that the Audit module of IFMS would facilitate both External (AG Audit) and Internal Audit. This Module was to facilitate uploading of internal audit plan, system-based transaction audit, raising of audit queries, response and review of audit queries through the System. Further, all the audit queries of AG Audit and their response were to be logged into the System thereby allowing easy monitoring of audit paras/comments and necessary follow-up action.

Audit observed that the Audit module has not been developed (July 2023), which impeded uploading of internal audit plan, system-based transaction audit and raising of audit queries through IFMS. Further, the State Government also lost the opportunity to monitor, through IFMS, the follow-up action on audit paras issued by AG (Audit) through Inspection Reports.

In the Exit conference (March 2024), the Special Secretary accepted the audit observation and stated that the e-Audit module is also under development.

Recommendation 2: State Government may develop the Audit module on priority to enable the monitoring of follow up action on audit paras.

2.6 Monitoring and Evaluation

According to the DPR, the overall responsibility of ensuring adequate Monitoring and Evaluation (M&E) of the IFMS project through predefined indicators and indices would lie with the Project Management Group (PMG) which would be facilitated by key resources at the departmental level.

Further, a detailed M&E framework was required to be prepared to monitor the output, outcomes and milestone of the project besides, evaluating the project outcomes. The M&E plan also envisaged use of a monitoring tool that would enable creation of a dashboard on project progress and improvement in the service level. The key indicators for monitoring of the project progress were broadly categorised as (i) Goals and outcome indicators for Project outcomes and (ii) Output and Process indicators for Project Implementation.

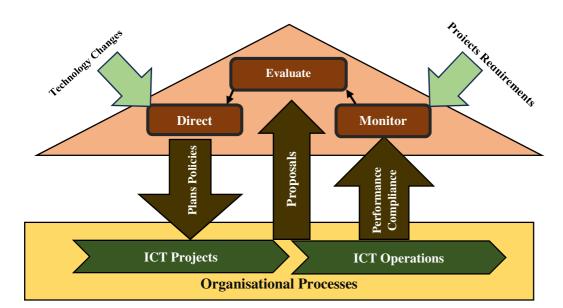


Chart 2.3: Governance of Information & Communication Technology

Audit observed that the PMG, as envisaged in the DPR, had not been established and assessment of the measures/activities for Goals and Outcome indicators had not been undertaken. The Output and Process Indicators of project implementation were being monitored and evaluated through an Inter Departmental Committee (IDC) headed by Commissioner & Secretary, Information and Technology Department. Though IDC discussed project implementation in its meetings, the goals and outcomes of IFMS could not be achieved optimally till September 2023, as key indicators prescribed in the monitoring tool were not adopted. Thus, monitoring of the progress of the project and improvement in the service level was deficient.

In reply, the Department stated (November 2023) that various modules of IFMS were developed under the guidance of NIC as per the instructions and requirements of the FD. It was further stated that FD has a dedicated PMU headed by Principal Secretary, having a team of 37 technical persons, designated to work under the supervision of NIC.

The reply of the Department did not address how goals and outcome indicators for Project outcomes were being assessed, in absence of the Project Management Group. Thus, monitoring and evaluation of the IFMS project remained deficient to that extent.

2.7 Acquisition Controls

Delay in procurement of Servers

Audit observed that hardware infrastructure²⁰ for the treasury computerisation project was procured (2007 and 2010) by DoIT and installed at JAP-IT Data Centre in which six²¹ Application Software were hosted. Subsequently, new modules were added (between 2013-14 and 2017-18) and integrated with external applications²² to meet the objectives of IFMS. The application servers therefore became obsolete and slow during peak hours and at the fag end of the financial year. To meet the objective of smooth functioning of IFMS, these servers were required to be upgraded and new servers procured.

Audit observed that a request for proposal (RFP) for supply, installation and commissioning of the hardware and software²³ for the IFMS project was invited (May 2014) by JAP-IT, through e-procurement system, with last date of receipt of online bids by 20 June 2014. However, not a single bid was received online and hence IDC recommended (July 2014) cancellation of the tender. NIC suggested (February 2015) using "Oracle Exadata"²⁴ as this includes hardware components²⁵. Based on a comparative study²⁶ conducted by NIC (March 2015), IDC instructed (August 2015) FD to procure Oracle Exadata through JAP-IT by September 2015.

Audit noticed that sanction of ≥ 9.83 crore²⁷ for purchase of Oracle Exadata was accorded by DoIT after a gap of six months *i.e.*, in March 2016 for reasons not available on record. As such, the procurement could be done only during 2015-17 leading to delay in project implementation.

Audit further observed that despite initial RFP being floated in 2015, the procurement of the required hardware & software was delayed. FD procured five additional Application Servers²⁸ only in February 2019 at a cost of ₹ 45.26 lakh with five year onsite comprehensive warranty.

(i) Treasury Application; (ii) DDO Bill Preparation Application; (iii) Treasury MIS; (iv) Budget Application; (v) NSDL Activities; and (vi) GPF Application Database

Application Server-02; Database Server-03; Redhat Enterprise Linux operating system (OS) licence for server- 03; and Rack Mountable Switch, Keyboard, Mouse *etc*.

²⁵ Database Servers (02), Storage Servers and high-speed Network for exchange of data

²⁸ (i) 8 Core: 01; (ii) 10 Core: 02; and (iii) 12 Core: 02

²⁰ Application Servers: 04; and Database Servers: 02

^{22 (}i) PFMS; (ii) SBI server for e-Payment; (iii) RBI e-Kuber; (iv) GSTN portal; (v) WAMIS; (vi) e-GRAS; and (vii) e-Payment from Treasury

An integrated solution pre-configured by Oracle Experts (OEM) directly and has a single point support directly from OEM. Further, the solution would cost less than the traditional way of configuring the servers for meeting the objective of high availability

Cost involved in purchasing the complete box of Exa data with configuration of Oracle DB on traditional servers

Hardware: ₹ 2.56 crore; License: ₹ 2.94 crore; Advance Customer Support: ₹ 66.47 lakh; Support Services 1st Year: ₹ 40.23 lakh; Annual Technical Support 2nd Year: ₹ 1.01 crore; Annual Technical Support 3rd Year: ₹ 1.03 crore; and Tax, Freight etc.: ₹ 1.22 crore

Thus, the procurement of the required infrastructure in phases was instrumental in the overall delay in implementation of IFMS in the State.

In reply, the Department stated (November 2023) that major procurement for the IFMS project was done by IT Department. It was further stated that the Department has requested the IT Department to provide reasons for delay in procurement of infrastructure. The reply of IT Department is awaited (January 2025).