Ministry of Finance Public Expenditure and Financial Accountability (PEFA) Secretariat Anamnagar, Kathmandu, Nepal

Request for Expressions of Interest

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Country: Nepal

Project: Integrated Public Financial Management Reform Project (IPFMRP)

Grant No.: TFA 07474 and TFA 07475

Assignment Title: "Develop an action plan for Assortment, Up gradation and Enhancement of the Existing IT based Public Financial Management (PFM) Systems in transition to Complete Integrated Financial Management Information System (IFMIS)"

Reference No.: IPFMRP/PEFA/CS/QCBS-01

The Government of Nepal has received a grant from the Multi Donor Trust Fund through International Development Association toward the cost of Integrated Public Financial Management Reform Project (IPFMRP), and it intends to apply part of the proceeds of this grant for Consulting Services for "Develop an action plan for Assortment, Up Gradation and Enhancement of the Existing IT based Public Financial Management (PFM) Systems in transition to Complete Integrated Financial Management Information System (IFMIS)" (Contract ID No.: IPFMRP/PEFA/CS/QCBS-01).

Government of Nepal (GoN) has been engaged for last many years in the process of PFM reform activities. Strengthening the PFM framework is a major priority for the GoN in order to improve overall governance, optimize outputs from public resources, and ensure inclusive, broad based as well as sustainable development. The government is committed to improve and mainstream PFM systems, processes and institutions of the country through various policies, projects and programs. The government has already approved its Public Financial Management Reform Strategy/Program (PFMRP) Phase II (2016/17-2025/26) to strengthen the PFM practices and systems throughout the country. The Consultants (firm) have to work closely with MoF, FCGO, PEFA Secretariat and other concerned offices and officials to undertake a thorough study of the PFM business processes, IT based PFM systems and ICT infrastructure, and to develop an action plan with the roadmap for the design and implementation of new IFMIS and support mid-term activities. The new Constitution of Nepal and other relevant regulations should be taken in to consideration for transformation of all the PFM system and process in new structure of government. Member Secretariat

The scope of the consulting services are to (i) review PFM Processes & existing IT based PFM Systems, (ii) develop an Implementable Comprehensive Action Plan with Detail Terms of Reference (ToR), Cost Estimates, and Request for Proposal (RFP) for Assortment, Up-gradation & Enhancement of the Existing IT based PFM Systems in order to establish an Intermediate or Reporting Integrated Financial Management Information System (IFMIS), (iii) carryout Gap Assessment between IPSAS (Cash basis) 2017 and the current NPSAS and recommend the Implementable Action, (iv) prepare an Implementable Roadmap for Development of a Complete or Transaction Level Integrated Financial Management Information System (IFMIS) with necessary ToR, Cost Estimates, RFP, and (v) recommend for Institutional Capacity Enhancement.

The proposed IFMIS will be used by all three tiers of the Governments.

IPFMRP Project, PEFA Secretariat, Ministry of Finance, Nepal now invites eligible International Consulting firms to express their interest in providing the above-mentioned services. Interested firms must provide information demonstrating that they are qualified to perform the required services. The short listing will be carried out based on the following criteria:

- General experiences of the firm
- Specific experiences of the firm
- Availability of professional staffs in the firm
- Financial information of last 3 years

The attention of interested Consultants is drawn to paragraphs 3.14, 3.16 and 3.17 of The World Bank Procurement Regulations for IPF Borrowers, July 2016 Revised November 2017 and August 2018 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

Consulting firms may associate with other firms in the form of a joint venture or a sub consultancy to enhance their qualifications.

A consulting firm will be selected in accordance with the Quality and Cost Based Selection (QCBS) Method set out in the Procurement Regulations.

This REoI notice and ToR can be downloaded from our websites: www.fcgo.gov.np & www.pefa.gov.np. Interested consulting firms may obtain further information by sending email to the address below or visiting during office hours. Only the shortlisted firms will be provided with the Request for Proposal (RFP) to submit detailed technical and financial proposals.

Expressions of interest must be delivered in a written form in person or by mail or by e-mail to the address below no later than 12:00 hours, January 2, 2019.

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Develop an action plan for Assortment, Up Gradation and Enhancement of the Existing IT based Public Financial Management (PFM) Systems in transition to

Complete Integrated Financial Management Information System (IFMIS)

Government of Nepal Ministry of Finance

Public Expenditure and Financial Accountability (PEFA) Secretariat

Anamnagar, Kathmandu

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1. Introduction and Contextual Bac Ministry of

1.1. Introduction

In general, PFM includes all phases of the budget cycle, including the preparation of the budget, internal control and audit, procurement, monitoring and reporting arrangements, and external audit. The broad objectives of PFM are to achieve overall fiscal discipline, allocation of resources to priority needs, and efficient and effective allocation of public services. Every public entity needs financial means in order to provide its services and to ensuring performance according to its role and mandate in the institutional landscape of a state - ideally for the welfare of the people. In this regard, PFM encompasses:

Formal Action of Financial Action

- i. Collection of revenues.
- Allocation of funds through the budgetary process, and ii.
- iii. Utilization of public revenues,
- iv. Internal and external auditing and scrutiny of public spending and performance of state institutions.

PFM includes: instruments and measures for budget formulation; revenue administration; commitment and payment of expenditures; internal control and audit; debt management; accounting and reporting; external audit; legislative oversight; and fiscal decentralization. PFM is also concerned with certain cross-cutting themes such as budget comprehensiveness, transparency, fiscal discipline, and efficient resource allocation to priority needs.

Good PFM systems are important for democratic governance, effective use of resources available and poverty reduction. Effective PFM secures macro-economic stability and reflects a national poverty reduction strategy. Good PFM systems can also help prevent corruption and foster aid effectiveness. A sound PFM system is a precondition for making it possible to effectively channel resources to service delivery like e.g. basic education and health services. Ineffective PFM systems, on the other hand, can hamper development and increase the risk of corruption.

The FCGO has launched the Financial Management Information System (FMIS) initially in 2005 mainly as a reporting platform to produce periodic consolidated financial statements by aggregating the District Treasury Comptroller Offices' (DTCOs) budget release and expenditure data. DTCOs have been utilizing Treasury Single Account (TSA) system for this purpose as a Transaction Processing System. For revenue collection and recording functions, Revenue Management Information System (RMIS) has been operated. Moreover, the government has been using FMIS as a means of Management Information System and Data Repository. The input for consolidation is done through internet to the central servers of the FCGO. Since then, the system capabilities have been enhanced through gradual software advancement, and by developing system management, help desk, and maintenance capabilities to ensure effective technical

support for TSA operations and RMIS. The FMIS has been substantially expanded during 2009-2015 after complete implementation of TSA across the entire country. The significant contribution of FMIS is transparency and comprehensiveness of the PFM systems paving the way for the implementation of remaining PFM reforms and integration of such systems. The existing FMIS capabilities are expected to be expanded further to provide secure on-line access to a broader group of authorized budget users, policy makers, oversight agencies, auditors and other stakeholders, mainly for reporting needs.

PFM Systems deployment has become even more challenging in implementing Fiscal Federalism in all three levels of Governments. At present there is PFM system need for Federal Government, 7 State Governments and 753 Local Governments along with whole-of-nation consolidation. Also, organizing the existing PFM systems to comply with the Government's Unified Economic Codes & Classification or Charts of Accounts (COAs), 2017 is new challenge. The PFM Systems must also support 'National Natural Resources and Fiscal Commission' and incorporate fiscal transfer provisions and reporting of income and expenditures of Local and State Governments to the Ministry of Finance as per 'Intergovernmental Fiscal Arrangement Act, 2017'. Moreover, FCGO is responsible for preparation of Consolidated Financial Statements of all three tiers of Governments as per various prevailing Acts & Regulations on behalf of the GoN.

The PFM reforms of Nepal can benefit from Technology intervention, especial IT. IT can be harnessed for transformation of the PFM capabilities of Nepal enabling better information, systems and policies contributing to reduce fiduciary risks, and improve fiscal discipline, transparency and accountability. However, the challenges of the existing IT based PFM Systems are functional completeness, performance, compatibility, reliability, and redundancy. Also, the systems developed in silos has made data exchange and services integration difficult and challenging in absence of coherent guidelines, principles or metrics that provides a platform for service integration.

In this context, the Government of Nepal (GoN) has been engaged for last many years in the process of PFM reform activities. Strengthening the PFM framework is a major priority for the GoN in order to improve overall governance, optimize outputs from public resources, and ensure inclusive, broad based as well as sustainable development. The government is committed to improve and mainstream PFM systems, processes and institutions of the country through various policies, projects and programs. The government has already approved its Public Financial Management Reform Strategy/Program (PFMRP) Phase II (2016/17-2025/26) to strengthen the PFM practices and systems throughout the country. To achieve that milestone, PFMRP focuses on two major actions:

 Preparation and implementation of an action plan to upgrade, strengthen and optimize the utilization of existing PFM Information System, and develop interfaces to exchange timely information with other federal and sub-national government systems; and Assessment of the feasibility of developing an Integrated Financial Management Information System (IFMIS) for the federal government through a comprehensive ICT policy, strategy and action plan for the Ministry of Finance (MoF) and Financial Comptroller General Office (FCGO).

The GoN is focused on digitization of core PFM functions, including budget formulation, execution, accounting and reporting, linked with other PFM information systems (e.g. tax, custom, public debt, procurement, payroll, pension, public assets and liabilities etc.) with modern web-based platform, supporting daily operations having standard features like online transaction processing (OLTP) capabilities with a Data Warehouse (DW) / Management Information System (MIS) for online analytical processing (OLAP). IFMIS is expected to provide valuable feedback for budget performance monitoring, economic policy formulation, web publishing, and additional PFM needs as well.

The second Public Expenditure and Financial Accountability (PEFA) assessment report (2015) underlines most of these achievements, together with possible improvements areas for a more comprehensive PFM system in which Integrated Financial Management Information System (IFMIS) is now considered to be a main milestone.

1.2. Basis for IFMIS development

In the early phases, various information systems were developed to capture day to day PFM operations. Such systems were initiated from MoF, FCGO, Inland Revenue Department (IRD) and other agencies as in-house application for their own use and simplification of works. Such in-house applications/systems were improved in line with the requirement of PFM reform. The different system currently in operations in federal, state and local governments for the Budget Formulation & Control, Budget Execution, Accounting & Reporting and Others are briefly described in Annex A I.

Through the Nepal's "Public Financial Management Reform Strategy/Program (PFMRP) Phase II" the Government of Nepal has initiated to integrate all these systems for effective and efficient PFM performance. A brief description of such IT based PFM systems is presented below:

1.2.1 Systems Developed and Operated by MoF

a. Budget Management Information System (BMIS)

BMIS is a system designed for the preparation and execution of the annual budget of GoN. It is developed and operated by Program and Budget Implementation Division of MOF. BMIS produces required budgetary documents such as Red Book and Source Book. It acquires data from LMBIS and is linked with FMIS and TSA of FCGO. The budget of fiscal year 2012/13 and onwards budgets have been published based on the updated BMIS using GFS 2001 codes.

b. Line Ministry Budget Information System (LMBIS)

The LMBIS is the system used for preparing program and budget from all the budget executing ministries. The system is designed to support programming at the activity

level with proper budgeting relating to Medium Term Expenditure Framework (MTEF). Users from ministries have to enter their proposed program and budget for every upcoming fiscal year. LMBIS facilitates to transfer budgetary data to the BMIS. Budget for fiscal year 2072/73 and 2073/74 have been prepared through this system.

c. Aid Management Information System (AMIS)

AMIS is a system designed to support the Government for tracking and managing aid flow and incorporating such aid with national budgeting. This system is administered by International Economic Cooperation Coordination Division [IECCD] of MoF. AMIS consists of key information on aid commitments, disbursements & other activities and a mechanism for regular update of such activities including off budgeted aid.

1.2.2 Systems Developed and Operated by FCGO.

a. Financial Management Information System (FMIS)

The FMIS is a centralized financial reporting system developed by FCGO to consolidate and share government's financial information relating to budget execution and other financial transactions. FMIS is used for compiling entire data related to budget releases, virements, expenditure, balance of annual budget, details of revenue collection and for compiling transaction of retention money. It provides consolidated information based on charts of accounts, GFS coding, functional and economic classification of each paying office, district, and ministries, and of country as a whole. It is a useful tool by which FCGO exercises control over the DTCOs and ensures that the data are accurate and complete. It is the main source for preparing consolidated statement of budget execution, revenue collection and retention money which is presented to the Office of the Auditor General (OAG) for auditing purpose. Access of FMIS has been provided to staffs of FCGO and DTCOs and planning division chiefs and account chiefs of the ministries and other central entities. On the basis of comparative reports of FMIS, these officials make necessary correction of their transactions and prepare consolidated financial statements and use for evaluation of financial progress of the entities.

b. Treasury Single Account (TSA)

TSA is a web-based OLTP system designed for disbursement/release of budget through a treasury single account upon the request of Paying Offices to the concerned payee. It also records the receipt and payments of retention and other operational funds created out of the treasury. TSA also includes the revenue recording system in line with the revenue heads when it is received through the bank. This system is compatible with BMIS of MoF and provides detail transaction level financial information to FMIS of FCGO. It also incorporates other sub systems such as Commitment Recording, Cash Planning, Internal Audit Reporting and Irregularities. The main benefit of this system is producing real time expenditure.

data and revenue receipt for all central budget operations on real time basis. It has helped to reduce the number of bank accounts which indulges in government transaction to few (say 5 or 6) in a district and this reduction has not only made easier for the bank reconciliation process but also made monitoring of financial performance and for new policy decision by FCGO, MoF, National Planning Commission (NPC) and other GoN's agencies easier. A module of Electronic Fund Transfer to make expenditure payments directly to the payee's bank account has just been developed and lived on a pilot basis.

c. Revenue Management Information System (RMIS)

RMIS is a system designed for managing revenue receipt by the concerned entities of the government in a single platform. It is a web based OLTP system for revenue collection and administration. The system is developed and hosted by FCGO centrally. The receiving bank designated for revenue collection inputs the basic information and other requirements through RMIS, in order to reflect the collection details to the concerned service provider offices, Inland Revenue Offices, DTCOs, FCGO, central office of the authorized bank and Nepal Rastra Bank NRB). The concerned offices provide their service with the online information received through RMIS and once the revenue is realized through the system it cannot be altered or removed. There are certain provisions and processes regarding error rectification. This system is also associated with TSA, FMIS and RAS by which reporting and monitoring have become more convenient now. This is more effective and successful system for managing revenue information smoothly by all concerned stakeholders. There is a separate module of RMIS for foreign missions abroad that records revenue income in the time of service delivery and provides live data for necessary supervision and reporting via Ministry of Foreign Affairs.

d. Computerized Government Accounting System (CGAS)

In order to maintain uniformity in accounting of transactions throughout the government organizations, FCGO has initiated execution of a single web based CGAS since 2013/14. Currently CGAS captures accounting transactions of expenditures, revenues, retention money, and operational funds paying office, budget heads, economic codes and revenue heads wise.

e. Public Assets Information System (PAIS)

Public Assets Information System is another system developed by FCGO for recording the public assets of government offices. PAIS is analogous to inventory management system as it is developed to manage inventory of public assets and make it transparent to the concerned stakeholders. This system currently includes

only buildings and vehicles recording provisions. The PAIS is operated by DTCOs in the field level, and DTCOs are completely based on the information provided by the paying offices located at the districts.

f. Debt Management Information System

A debt management information system has been architected for accounting and reporting of external and internal debt of the Government of Nepal. This system is assessed with the feature of maintaining the accounts of all repayments, debt servicing, outstanding balance of debt and amortization schedule for individual debt. MoF is in the final stage to establish a separate "Public Debt Management Office (PDMO)" to look and manage all the public debt and government investment management and has almost developed a system called Debt Operation and Management System (DOMS) for this purpose.

g. Pension Management System (PMS)

PMS has been developed by Pension Management Office and used for overall management of pension for retired employees of the GoN. PMS manages the records of all retired employees (Civil, Police, Army and Teacher) and is designed for payment of their monthly pension. This system is accessed for all designated commercial banks to make payments. PMS helps in timely settlement of pension with the central bank of Nepal, i.e., NRB and parental office, i.e., Pension Management Office. This system is also in use in the DTCOs' for the decentralized pensioner service.

h. Other:

Budget implementation section of the FCGO has been using Budget Control System (BCS) to record the budget amendment (Increase & Decrease) and virement.

1.2.3 Systems Developed and Operated from other agencies

a. Transaction based Accounting and Budget Control System (TABUCS)

Developed and operated by MoHP, TABUCS is a system used for programming, accounting and monitoring. TABUCS harmonizes all the programs and accounting information including physical and financial progress which enforces budgetary control procedures in simple solutions. The key components of TABUCS includes program, activity, output based budgeting, expenditure and payments processing, payroll management and audit irregularities processing. Scope of TABUCS is broad and includes all incomes accruing from all sources at spending units. This system is

developed with the support of Nepal Health Section Support Program (NHSSP) by Ministry of Health & Population.

c. Financial Management Information System (FMIS) - Computerized Accounting System of Department of Road

Department of Road has developed and operated a computerized accounting system for accounting of all the financial transactions and producing necessary reports for auditing, decision making and for access to information purposes. This system captures budgeting, budgetary expenditures, audit irregularities, and reporting on OAG formats and other required formats.

d. Accounting System of Ministry of Federal Affairs and General Administration (MoFAGA)

- i. The ministry has developed a comprehensive Municipal Administrative and Revenue Management System (MARS) with the support of Asian Development Bank (ADB) for complete e-governance in municipalities. It has the planning, budgeting, accounting and reporting system including other administrative service management. This system was started to implement from Kathmandu Metropolitan City as pilot but could not be rolled out.
- ii. Some municipalities are using separate systems for their accounting and revenue management purpose in accrual basis. These systems are fragmented and developed by different vendors in various name and with various features. Some municipalities are using other systems of their own need by using local developer as required.

e. Sub-National Treasury Regulatory Application (SUTRA)

The SUTRA is a planning, budgeting and accounting software and web based system developed for local governments.

1.2. 4. Application Environment

Systems other than TABUCS and MoFAGA systems have the backend database of Oracle RDBMS. These systems are web based and are developed in-house with the help of contracted IT Consultants and features are added gradually as of requirement basis. To make it user friendly and easy to operate some entry forms and basic inputs fields use Nepali Unicode and most of the financial statement and reports are Nepali Unicode based. TABUCS uses Microsoft SQL server as backend and frontend is designed in php framework. All these systems can be accessed through Microsoft Windows installed Client PCs.

1.2.5 Recent Initiatives

Recently, Ministry of Finance formed a committee comprising of high level officials of the ministry to study & review the existing IT based PFM systems and recommend the roadmap for establishment of IT based National PFM Systems, i.e., a complete IFMIS with appropriate assortment, up gradation & enhancement of the existing IT Systems and immediate solutions to support the Federal, the State and the Local Governments PFM Systems. The committee has submitted the report with recommendations for development of a complete IFMIS in addition to other related actions. *The observations and recommendations of the report shall be base for this assignment.*

(The successful consultant is expected to perform their own review of systems listed here and all other relevant system in existence)



2. Objectives

The objectives of this assignment are to

- to review PFM Processes & existing IT based PFM Systems,
- (ii) to develop an Implementable Comprehensive Action Plan with Detail Terms of Reference (ToR), Cost Estimates, and Request for Proposal (RFP) for Assortment, Up-gradation & Enhancement of the Existing IT based PFM Systems in order to establish an Intermediate or Reporting Integrated Financial Management Information System (IFMIS),
- (iii) to carryout Gap Assessment between IPSAS (Cash basis) 2017 and the current NPSAS and recommend the Implementable Action,
- (iv) and to Prepare an Implementable Roadmap for Development of a Complete or Transaction Level Integrated Financial Management Information System (IFMIS) with necessary ToR, Cost Estimates, RFP.

The proposed IFMIS are for the use of all three tiers of the Governments.

3. Scope of the Services

The Government of Nepal is cognizant that the proposed assignment requires highly proficient expertise both in business process and technical aspects. It would have farreaching impacts on the PFM reform of the country. There may be numerous approaches that can undertake to carry out this assignment. The full scope of this assignment and the potential challenges that may arise during the course of the IFMIS implementation are difficult to forecast at this point. Given the nature of this assignment, Government is looking for consulting service from a team of competent professionals or experts from reputed Consulting Firm. The Consultants (firm) have to work closely with MoF, FCGO, PEFA Secretariat and other concerned offices and officials to undertake a thorough study of the PFM business processes, IT based PFM systems and ICT infrastructure, and to develop an action plan with the roadmap for the design and implementation of new IFMIS and support mid-term activities. The new Constitution of Nepal and other relevant regulations should be taken in to consideration for transformation of all the PFM system and process in new structure of government. Among other activities, the scope of this assignment will be focused on the following tasks:

a. Review of the Existing PFM processes & IT based PFM Systems

Review the core PFM functions and associated business processes as specified in the Constitution of Nepal, Financial Procedure Act & Regulations, Public Procurement Act and Regulations, Inter Government Fiscal Management Act, Local Government Operation Act and other relevant Acts, Regulations, and policy frameworks, ToR for consulting service to study on IFMIS development 10



- (ii) Assess the maturity& effectiveness of the existing IT based PFM systems developed and operated by the MoF, FCGO, and other government agencies focusing on captured business processes, technical features- information/data & technology architectures and non-functional features and functional status, and identify any gaps between the existing arrangements and international practice and possible measures for improvements in these systems regarding fiscal problems.
- (iii) Analyze the existing IT based PFM systems for digitization of core PFM processes, Enterprise IT Governance, IT Capability, IT Infrastructures network connectivity, data center operations, and Interoperability & Security Architectures for data exchange as required.
- (iv) Assess gap analysis of the existing IT based PFM systems from both business process and IT perspectives by taking into account of appropriate assortment, up gradation & enhancement required for development of IFMIS.
- (v) Perform a gap analysis of the existing NPSAS and the IPSAS (cash basis) 2017 and make recommendations to the MoF/FCGO on the updates required to existing NPSAS standards.

b. Development of an Action Plan to Establish an Intermediate or Reporting Integrated Financial Management Information System (IFMIS-Reporitng) for all three tiers of the Governments

- (i) Clarify the gap between the functional capabilities or coverages of the existing IT based PFM systems and intermediate requirements to identify potential customization needs and total cost of ownership and suggest possible improvements in PFM process flows and practices to address these gaps with a focus on enhancing compliance, reducing operational costs and improving the effectiveness of service delivery.
- (ii) Identify the requirements/measures for possible simplifications in practices and reporting requirements, decision support and monitoring needs, and service delivery improvements, as well as related information system and IT infrastructure enhancements. (Tentative standard for IT infrastructures are mentioned in Annex B I.)
- (iii) Identify interface requirements to link existing PFM information systems for daily data exchange and other operational/reporting needs.

- (iv) The PFM systems at Federal Government will be enhanced to cater the changing requirements of Fiscal Federalism and New Charts of Accounts, technical upgradation. Structure and the nature of PFM functions of the Federal Government and the State Governments are almost identical. The use of existing tested and proven federal systems in a combined package with customization can optimize resource and risk. These core applications are LMBIS/BMIS for Budget Formulation and Control function, TSA for Budget Release and Payment function, RMIS for Receipt Management and FMIS for consolidated financial & managerial reporting. There will be enhancement to Accounting & Reporting function which will be used in Federal and State Level Government. The consultant should closely work with the respective vendors and suggest the improvements, optimization and integration of these systems.
- (v) The Local Governments require a combined system of Budget, Treasury Operations and Payment, Accounting & Reporting, Receipt Management, and Consolidated reporting of PFM functions (FMIS), which should have capability to operate both in Online and Near-Online mode and share data/report with state and federal PFM systems in standard data exchange framework. The consultant must analyze and recommend enhancements and interface for the system.
- (vi) The consultant shall also support to design and deploy the National Consolidated Reporting system and help MOF, FCGO and respective vendor on identifying format, frequency and mechanism to obtain & present data for the National Reporting system.
- (vii) Map current PFM processes and identify automated and manual procedures supporting these processes together with possible improvements to minimize manual involvement and maximize paperless operations (focusing on budget formulation, execution (revenue collection and expenditures), treasury operation & cash management, commitment control, payroll payments, public procurement, inventory and asset management, accounting, reporting and auditing), etc. (Refer to Annex B IIfor detail PFM functions requirements)
- (viii) Develop the systemic functional design (business process diagrams) required for the integration of current PFM system supporting future IFMIS platform (showing processes, participants, tasks, information flows, inputs, outputs and controls) to be used by the FCGO units, and other government agencies, banks and potential stakeholders (Taking consideration of the systems stated in Annex B III); and
- (ix) Prepare detailed functional and technical requirements with cost estimates for the integration of existing IT based PFM systems, and development of the Intermediate & Reporting IFMIS

- (x) Prepare a comparative analysis for Assortment, Up-gradation and Enhancement of the existing IT systems that can be used to support future and Complete/Transaction Level IFMIS requirements.
- (xi) Develop training materials to provide training on IPSAS cash basis 2017;
- (xii) Prepare a plan of action for software system development or harmonizing in the IT based PFM systems; and
- (xiii) Prepare road map to roll out cash based NPSAS (IPSAS cash basis 2017).

c. Preparation of a Roadmap for Development of a Complete or Transaction Level Integrated Financial Management Information System (IFMIS)

- (i) Prepare a comparative analysis for optimum solution for Complete/Transaction Level IFMIS requirements: Commercial Off-the-Shelf (COTS) packages, or Locally Developed Software (LDSW), or hybrid solutions considering open source platforms as well.
- (ii) Clarify the gap between the functional capabilities or coverages of the existing IT based PFM systems and future platform (COTS and other options) to identify potential customization needs and total cost of ownership and suggest possible improvements in PFM process flows and practices to address these gaps with a focus on enhancing compliance, reducing operational costs and improving the effectiveness of service delivery.
- (iii) Based on above assessments, develop an action plan for the design and implementation of a reliable IFMIS platform for supporting OLTP/OLAP and web publishing needs in public financial management effectively.
- (iv) Develop functional and technical specifications for the Complete &Transactional IFMIS solution with tentative cost estimates includingsoftware/license, central servers, data centers, field equipment, network connectivity etc.
- (v) The proposed IFMISshould have the following features (see Annex C IIfor a broader description of requirements):
 - support decentralized operations by providing secure and reliable access to external and internal users,
 - b. Interface with other Government information systems & external systems
 - Facilitate G2G, G2B, and G2C capabilities, future integrated IFMIS platform is expected to be a shared platform for supporting all PFM functions in Nepal,
 - d. Has high availability (backup/disaster recovery center solution for replication and redundancy).

- (vi) The PFM System reform would look at opportunity of transitioning to single platform system, or integrated systems to support next generation and complete IFMIS/ System of Systems business capability. The potential priority initiative should be consolidation of whole of the Government financial reports for the all financial performance such as budget, treasury, accounting & reporting, revenue etc. The improved modern FMIS solution should insure quality, reliability, and timeliness of financial performance data collected through PFM Systems at all levels of Governments. This should also support the Office of the Auditor General approved forms and Computer Aided Audit Tools. In this regard, the following requirements should also be considered:
 - a. The IFMIS should be developed and put into action as a management information system or system of systems. It consolidates all financial performances and information of all three governments.,
 - b. It should have national consolidated reporting system which facilitates for automatic and manual reporting mechanism to provide federal, state and local level reports as well as on "Whole of the Nation" reporting framework, and
 - c. IFMIS platform should be developed in line with the Government Enterprise Architecture (GEA) approved by Nepal Government & international best practices and industry standards

d. Recommendation for Institutional Capacity Enhancement

- (i) Develop a comprehensive PFM system modernization strategy and a time bound action plan for the development of IFMIS with IT solutions and integration with all government systems. Develop a change management program for transition to IFMIS,
- (ii) Recommend changes/enhancements to public financial management procedures and regulation, organizational structure, and other administrative processes, and
- (iii) Propose a required training program for the capacity building of officials at MoF, FCGO, PEFA, DTCOs, SNGs and other stakeholders.

The consultant should organize at least three consulting workshops with identified and agreed stakeholders in the beginning, at the middle and in the final stage of the study. The consultants have to conduct necessary interviews, direct conversations, questionnaire, field visits, discussion, survey, email, etc. to get information for the assigned tasks. In the study and review process PEFA Secretariat may coordinate with other governmental agencies on request of the consultant.



4. Staffing Requirements

The tentative staffing requirements are set out below however consulting firms are free to propose team and skill compositions appropriate to their proposed methodology and work plan.

- (a) An international Team Leader with expertise with national-scale PFM and IFMIS design & Implementation & Business Process Re-engineering;
- (b) One international PFM specialist with experience on the design and implementation of PFM Systems,
- (c) One International IT Analyst with experience on the design & implementation of Complex & Enterprise grade system
- (d) One International Change Management Expert with experience on Change Management and Capacity Development Planning
- (e) One ICT Infrastructure expert (international) having experience in designing and implementing of large and complex infrastructure preferably in PFM Systems
- (f) One PFM: IPSAS expert (international) having expertise in IPSAS implementation
- (g) one qualified PFM analyst (national) with sound knowledge of National PFM systems & NPSAS standards
- (h) One qualified ICT analyst (national) having sound experience on the related area
- (i) One Legal Expert (National) having sound expertise in PFM legal landscape of Nepal

In addition, the Consulting Firm should also engage supporting staffs as required.

5. Reports and Schedule of Deliverables

Following deliverables shall be made to the PEFA Secretariat/FCGO after the commencement of this assignment:

ToR for consulting service to study on IFMIS development 15



Major Activities	Major Outputs	Expected Completion date
Inception Report and Work Plan	Brief review and confirmation of work plan; identification of issues that may affect work schedule	T + 2 Weeks
Interim Report	 Preliminary results and findings of assessment and review of current PFM systems, practices and gap analysis; significant lessons drawn and applicable for the development of the IFMIS models and roadmap; Complete roadmap & documents for intermediate activities Gap Assessment on IPSAS cash basis 2017 and the current NPSAS 	T + 8 Weeks
Draft report of IFMIS with Capacity Planning	 Draft final report of IFMIS, covering all activities listed under the scope of services, including an action plan for PFM modernization and transition to IFMIS. Capacity planning report for Pre-& Post IFMIS 	T+ 14 Weeks
Final Report	Final report of IFMIS along with necessary documents after validation of Draft reports	T+ 18 Weeks

Under the deliverables of this assignment, following outputs shall be covered;

(1) Inception reports shall include:

- Approaches and plan of actions to carry out the assignment,
- Details of Consultant's resources engaged in the assignment,
- Any other relevant issues regarding the assignment.

(2) Interim Report shall include:

- Preliminary results and findings of assessment and review of the existing IT based PFM systems, practices and gap analysis;
- significant lessons drawn and applicable for the development of the IFMIS models and roadmap;
- comparative analysis of optimum IT solutions to meet future requirements;
- suggestions for enhancement of system, practices, procedures, and regulations;
- technical specifications, Bidding document and cost estimate for developing intermediate solutions for Pre-IFMIS PFM solutions in all three level of governments, reporting IFMIS, shared infrastructure & data center
- roadmap on compliance of the existing system and future IFMIS solution to the approved GEA standards and international best practices.

- Gap analysis of IPSAS (Cash Basis) 2017 and the Current NPSAS & prepare a road map to roll out cash based NPSAS (IPSAS cash basis 2017).
- (3) Draft report of IFMIS/Final Report shall include:
 - Recommended and suggested model, detailed design with the listing of tasks to be carried out in logical sequences and roadmap for PFM modernization and transition to Complete & Transaction Level IFMIS in Nepal
 - Draft Request for Proposal (RFP) with ToR and Cost Estimates for development and implementation of Intermediate/Reporting and Complete/Transaction Level IFMIS
 - Strategic Capacity development & change management plan for PFM modernizations through IFMIS

6. Reporting

The Consultant shall report to the Coordinator of PEFA Secretariat about the progress status in advance before every bi-weekly meeting with at least three printed copies with soft copy of the report. The PEFA Secretariat will circulate the report to the concerned stakeholders as per requirement and conduct bi-monthly meeting to update on the progress and key issues, as well as recommendations for the resolution of these issues.

The Government of Nepal – MoF/FCGO/PEFA secretariat and other key stakeholders involved in PFM reforms may provide suggestions and feedbacks for the development of IFMIS based on their requirements. The suggestion and feedback of the key stakeholders can be provided during progress review meetings or through the consultation workshops. There shall be a minimum scheduled bi-weekly progress status review meeting in PEFA/FCGO.

7. Client's Input

The FCGO/PEFA Secretariat will provide a limited office space with power connectivity and internet facility. For the purpose of discussion and meetings, FCGO meeting hall or PEFA secretariat's office space can be provided upon request. For completion of the assignment, the consultant should organize meetings/workshops including participants from MoF/FCGO/PEFA and other concerned stakeholders on its own resources.

While conducting the assignment, the consultant may use the knowledge and experience of MoF/FCGO/PEFA officials and staffs taking consents of the client.

8. Duration and Commencement of Contract

The estimated duration of the assignment is 18 weeks and expected to commence on or about March 2019.

Annex A I :Brief Descriptions of the Existing IT based PFM Systems

	PFM Functions & Systems					
Government	Budget Formulation & Control Budget Execution			Others		
s		Budget Release & Receipt Management Payments		Accounting & Reporting		
Federal	Line Ministry Budget Information System (LMBIS) & Budget Management Information System (BMIS) - Budget Ceiling - Line item & Activity wise budget propose - Budget finalization & approval - Budget authorization - Virement& Source change - Additional budget/ Supplementary Budget Budget Control System (BCS) - Recording of virement, source change, additional budget Transaction Accounting and Budget Control System (TABUCS) - Line item & Activity wise budget preparation (e-AWPB electronic annual work planning and budgeting)	Treasury Single Account (TSA) - Budget Release - Deposit Payment - Other Funds Payment - EFT Integration - Commitment Recording (partial usage)	Revenue Management Information System (RMIS) - Revenue Collection,	Computerized Government Accounting System (CGAS) - Authorization - Central Level Accounting - Deposit Accounting - Other Funds Accounting - Integration with TSA TABUCS - Activity based accounting - Payroll - Authorization - Central Level Accounting - Deposit Accounting - Deposit Accounting - William (entry and clearance) - Annual Procurement Plan FMIS of DoR - Activity based accounting - Authorization - Central Level Accounting - Authorization - Contract Contingency - Amount recording - Contract Management - System (separate system) - Only up to Department	Financial Management Information System (FMIS) Consolidated financial reporting MIS & Data Repository Treasury Operations Manual NPSAS Reporting Tool Consolidation of financial transactions of the central economic entities Excel based tool Aid Management Information System (AMIS) Aid Management Project & Activities details Recording of Commitment, Disbursement Post-earthquake Assistance Portal Pension Management System (PMS) Pension record & disbursement Public Asset Information System (PAIS) Recording of land, building & vehicle	
State	Sub National Treasury Regulatory Application (SUTRA)	State TSA - Budget Release	Manual	Manual	1	

	Budget Ceiling Line item & Activity wise budget propose Budget finalization & approval Based on new COAs, 2017	- Deposit Payment - Other Funds Payment			
Local	SUTRA - Budget Ceiling - Line item & Activity wise budget propose - Budget finalization & approval - Based on new COAs, 2017 - Used by around 172 Local Governments	Manual	Manual	SUTRA - Activity based accounting - Treasury Accounting - Used by around 70 Local Governments FCGO's Initiations - Excel based Tool	Municipality Administration and Revenue System (MARS) - Based on Local Self- Governance Act, 1995 - Revenue Collection Management - Office Administration - PIS - Inventory - Accounting - Piloted only in KMC

The owners and liable agencies for support and operation of PFM systems are as follows:

- 1. LMBIS, BMIS, AMIS MoF
- 2. TSA, RMIS, CGAS, FMIS, BCS, NPSAS Reporting tool, PMS, PAIS, DMA FCGO
- 3. SUTRA PEFA

- 4. TABUCS Ministry of Health and Population
- 5. MARS Ministry of Federal Affairs and General Administration
- 6. DoR-FMIS Department of Roads



Annex BI:Requirements for Information Technology & Infrastructure

Enterprise Architecture (EA) of PFM Systems

- Enterprise Architecture can provide the framework for ensuring that Nepal's PFM landscape & goals, objectives, and policies are properly and accurately reflected in building, implementing or changing information systems.
- ii. The practice of EA produces technology-enabled blueprints to transition PFM enterprise from a current state to a desired future state in alignment with approved Government Enterprise Architecture (GEA) principles & PFM strategy ensuring better agility, adaptability, interoperability and responsiveness.
- iii. It is important to extend National GEA to create a PFM segment Enterprise Architecture for PFM following international best practices and reference PFM Industry Architectures.

Technology Platform

There is technology diversity in the PFM systems which increases the cost of ownership and supporting the PFM systems using these diverse technology platforms. Following can help optimize resources across PFM landscape and can increase operational efficiency.

- Architecture: The system must be compatible with National GEA/ PFM Segment Architecture and have ability to use Enterprise Service Bus for system integrations.
- Platform: Secure, Proven & Enterprise grade platform must be used for all PFM system, platform choice should have minimal migration effort and cost.
- iii. Database: All database should be of enterprise edition with support of real time clustering, high security and reliability, the choice of database should also have minimum migration effort from existing system.
- iv. Client-Side framework: It includes usability, security among others and



should be reviewed.

v. The system should have capability of **Online Analytical Processing (OLAP)&Business Intelligence (BI)** for improved service delivery and assist with planning, problem solving and decision support.

IT Infrastructure

- The present infrastructure is fragmented and diverse. The sustainability, security and reliability of these infrastructure are challenging. It is difficult to manage and operate cost effectively for all three level of governments. The financial data and information are even more vulnerable to security threats.
- The data center infrastructure, computing and storage infrastructure, networking & security infrastructure, and end user infrastructure must be planned and deploy with strategic perspective. Managing infrastructure with reasonable security and reliability in all agencies individually can create huge investment and may not be sustainable.
- The prudent and effective shared infrastructure planning & up gradation to support immediate and mid-terms system must be done with close coordination among system owners.

IT Services & Support

- i. The PFM Systems can be effective by ensuring quality service delivery and support. IT Service management must be based on best industry practices to realize benefits of improved service quality, optimized costs and increased value, and governance and control.
- ii. Deployment of IT services management with call center and automation of service desk for support service, adopting Information Technology Infrastructure Library (ITIL) framework to fit the business requirement of PFM related agencies.

Annex B II :Requirements for Completeness of PFM Functions & Capacity Building

1. PFM Functions

- i. In Budget Formulation and Control System, there is a need to perform a comprehensive study to design an effective platform that links policy, planning and budgeting, along with the implementation of Mid-Term Fiscal Framework (MTFF)/Mid-Term Budget Framework (MTBF)/Mid-Term Expenditure Framework (MTEF).
- ii. In budget execution cycle, IT based PFM systems must enhance Internal Control Framework, specifically financial control.
- iii. In Accounting & Reporting System, following incorporation are required:
 - Commitment accounting
 - "Beruju" (irregularities/arrears) recording
 - Assets & inventory management system
 - Central payroll system interlinked with Personnel Information System
 - Contract management system including contract contingency tracking system
 - Interlink age of annual procurement plan
 - Compliance of NPSAS based reporting requirements
 - Study on accrual-based accounting requirements
- iv. Treasury management framework, including inflow and outflows of all relevant funds into Government treasury, should be developed and incorporated in respective FMIS. Reimbursement accounting and project account module should also be incorporated in respective FMIS.
- v. The sequence of these initiatives for PFM Business gap fulfillment has to be prioritized after comprehensive business assessment and flow detailed out first.
- vi. Charts of Accounts: PFM system of all three governments must be complied with Integrated Economic Codes and Classifications /Charts of Accounts, 2017. Code uniformity for organization, and spending units/cost centers/paying offices is necessary for attainment of integrated financial management system and seamless data exchange. Study on revision of Integrated Economic Codes and Classifications /Charts of Accounts, 2017, which should be based on GFS, 2014.
- vii. Digitization of Payments should be integrated into PFM Systems to increase the PFM capabilities of the Nation. "Electronic Fund Transfer" (EFT) -

digitization of Government payment and "Electronic Bill Payment" (EBP) - digitization of Government receipt must be enhanced and scaled-up with proper integration with National e-payment and include all payment channels (card payment, internet banking, mobile banking, and digital wallet). This will result in reduction of transaction time & cost, faster reconciliation, reliable audit trail, reduction in leakage, modernization of Social Security payment and Direct Benefit Transfer system, and control of fraudulent payments & tax evasion.

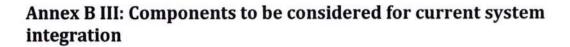
viii. Implementation roadmaps for establishment of IT based National PFM Systems must be prepared after performing assessment of other PFM business processes.

2. Capacity Building

- i. Capacity Building Training need to be identified after capacity gap assessment and analysis. Hands on training with sufficient user's manual & materials for PFM Systems use (LMBIS, TSA, RMIS, CGAS, and FMIS) to the State Government Officials must be managed accordingly. Training modules for all systems needs to be developed to cater different users' level and on regional basis.
- ii. There is need of accountability framework for Federal, State, and Local level to facilitate federated governance and seamless operations of PFM Systems. Also, formation of a permanent cross-agency working committee to establish and implement Enterprise Architecture, Security architecture, integration & information exchange in the PFM enterprise has become a necessity.

3. Others

- i. The assessment of dimensions such as human resources/ IT staffing, systems maturity, resource optimization, value delivery, benefit realization, and functional suitability including non-functional features like risk optimization, scalability, business continuity of PFM Systems.
- ii. Assess integrated solutions for disclosure of public finance and other sector specific information such as "Open Fiscal Data" along with improvement of e-services for public service delivery Government-to-Citizen, Government-to-Business, Government-to-Government services.





The consultant should develop the current PFM system integration model taking into consideration of the following core and non-core functional modules and other modules as identified during the study:

Core Components/Functions:

- i. Legal Framework
- ii. Treasury Management
- iii. General Ledger/Charts of Accounts
- iv. Budgetary Accounting (Revenue and Expenditure)
- v. Accounts Payables
- vi. Accounts Receivables etc.

Non-Core Components/Functions:

- i. HR/Payroll System
- ii. Cash Management/Commitment Control Module
- iii. Fiscal Forecasting/Budget Planning
- iv. Revenue Administration (including grants)
- v. Procurement Module
- vi. Project Ledger
- vii. Inventory/Assets Module
- viii. Public Investment Management
- ix. Pension Management
- x. Provident Fund Management (including contributory pension fund management system)
- xi. Reporting Module (Data transaction entry, budget reports, statutory financial reports, other reports) etc.



Annex C I: Attributes of a Well-Designed IFMIS

- i. The IFMIS should be modular, and capable of continued upgrading to accommodate future needs;
- ii. It should offer a common platform and user interface to the stakeholders in different agencies responsible for financial management, for adding to and accessing the information database;
- iii. A well designed FMIS maintains a historical database of budget and expenditure plans; transaction data at the highest level of detail; cash flows and bank account operations including checks issued, cancelled, and paid, cash balances and floats;
- iv. FMIS includes dedicated modules to handle monthly, rolling, periodic and medium term forward estimates of revenues and expenditures prepared by agencies, and corresponding estimates of the resulting cash flows;
- v. FMIS should be linked with a Data Warehouse with built-in analytical tools to offer trend analysis of various elements of fiscal operations to permit a forward look at the emerging events bearing on the fiscal stance;
- vi. It should compile formal government accounts from the database of authorizations and cash allocations, primary revenue and expenditure transactions of the agencies; and treasury operations, avoiding the need to duplicate data entry for accounting purposes;
- vii. It enables real-time reconciliation of parallel but related streams of transaction data—at the agency level: checks issued with those paid by the banks; at treasury: receipts from banks with the checks paid by taxpayers; cash balances reflected in the agency ledgers with the cash balances in the banks;
- viii. It mechanizes all possible routine tasks at the central and spending agencies—generating various forms/authorizations, checks, outputting hard copies of key registers and statements, etc.; and
 - ix. It should be flexible enough to provide user-defined management information, aggregated at the desired level of detail, from the database.

x.

Ideally IFMIS should have the following broad features:

- i. Designed to streamline the financial transactions and gather the related information with the least possible delay.
- ii. Supported by a robust and exhaustive Chart of Accounts which should be able to handle all present transactions and also the transactions in foreseeable future and will give extensive data analysis capability in a structured manner.
- iii. Various subsystems like budget, expenditure, account consolidation, asset register should be fully integrated.
- iv. Should not have any redundant or inconsistent data. All data should be entered only once and at source.

- v. Enable users to execute their own queries, change formats and contents of existing queries and perform various textual and graphical analyses based on user requirements.
- vi. Should have facility to capture data from external systems (i.e. Banks, DRC) sent through electronic media, in flat file, excel etc. format wherever applicable.
- vii. Should have sufficient security features (with backup) and audit trail to keep track of all the transactions. This is provided to track any unauthorized access to the system, thus reducing the chances of fraud.

F = B + T (+ 0)

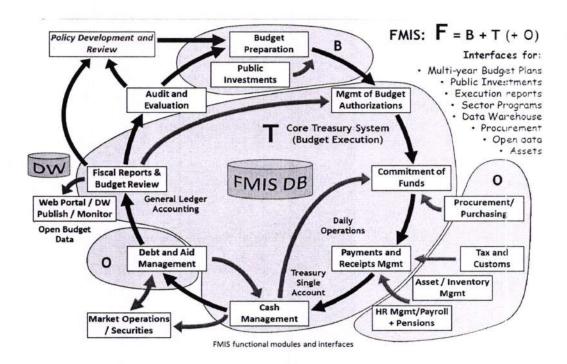
- F = Financial Management Information System
- B = Budget planning and preparation processes
- T = Transactions relating to budget execution and monitoring processes
- 0 = Other public financial management processes pertaining to revenue administration, debt management, commitment of funds, management of budget releases, cash forecasting, accounting and reporting.

During the assessment of current PFM practices, information systems, and ICT infrastructure, the following points should be considered by the Consultants:

- 1. Review the operational status and technical capabilities of the FCGO's existing information systems.
- 2. Review the interfaces with other core PFM functional systems like: BMIS, LMBIS, AMP, etc. of Ministry of Finance, Revenue systems of Internal Revenue Department, ASYCUDA and other systems of Department of Customs, FMIS of Ministry of Federal Affairs and Local Development, TABUCS of Ministry of Health, PMIS of RastriyaKitabKhana, e-GP of Public Procurement Monitoring Office, Banking systems, license system, National ID and/or citizenship etc.
- Review the status of information management practices and systems for internal control system, reimbursement of reimbursable (external loans and grants) budget expenditures, direct payments and turn-key of external assistance, etc. and other decision support systems.
- Suggestions for single sign-on for these systems with proper user profiles for each type of users.
- 5. Suggestions for internal auditing of IFMIS and information system security (internal, external).
- 6. Review existing tools for sector or agency level decision support in PFM domain.
- 7. External security as the system communicates with the outside world: Internet, the banking system, citizen interfaces for facilities like taxes, licenses, etc.
- 8. Develop a detailed system architecture and plan for designing a powerful, resilient, dependable IFMIS system to handle the information flows. These systems must be able to handle and communicate all the financial movements for the complex structure made up of central federal government/line ministries/spending agencies, provincial and local level governments as well as other government clients.

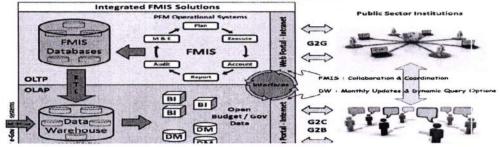
- 9. Suggestions for IT infrastructure improvements.
- Ministry of File Toengihire & Financial Account 10. Suggestions for Data conversion/migration, Data mining and Data warehousing
- 11. Review the legal and regulatory framework and assess the necessary changes to the overall framework for public financial management, including the deployment and reporting of resources.
- 12. Review of all PFM systems, functional processes, methods, rules and regulations, legislation, banking arrangements and related processes.
- 13. Suggestions for Data Center, Secondary Data center & Disaster Recovery Center.
- 14. Suggestions for the restructuring of the IFMIS Division of FCGO with professional, experts/specialist manpower planning for the sustainable IFMIS implementation.
- 15. Suggestions for a change management plan for transition to IFMIS.

Figure 1: Modular approach for building FMIS and transition to Integrated FMIS platform



Integrated FMIS:

> Sustainable public resource management + Effective public service delivery + Open and accountable government



Source: Dener, Cem, & Saw Young Min. 2013; FMIS & Open Budget Data: Do Governments Report on Where the Money Goes?

Annex C II: Requirement for new IFMIS platforms

Next-generation IFMIS solutions combine PFM operational systems for online transaction processing (OLTP) with powerful Data Warehouse (DW) capabilities for multidimensional online analytical processing (OLAP) to assist in effective forecasting, planning, performance monitoring and decision support (see **Attributes of a Well-Designed IFMIS - Reference to Annex C I)**. Innovative IFMIS solutions also allow more detailed analysis by providing dynamic query options through a budget portal to a large number of users, both internal (public organizations) and external (citizens, nongovernmental organizations, businesses), and they support the publication of open budget data.

The key functional modules of future IFMIS platform will support the following capabilities:

- i. Financial planning- It is the bridge between the preparation and execution of the annual budget.
- ii. Budget preparation- covers the entire process of budget preparation starting with budget at each spending unit level and aggregating the budget till the ministry and government level. Ideally, IFMIS should be able to capture budget not only for each ministry and spending units under it, but also should be able to track budget for different sectors and geographies.
- iii. Budget allocations- enables the allocation of budget at a detailed or aggregate level and release of budget funds on a periodic (weekly or monthly or trimester or half yearly or yearly) basis based on the PFM policies and practices of the government.
- iv. Commitment control and management- ensures that commitments for recurrent and capital expenditures are monitored and controlled so that funds are available as per the plan.
- v. Cash management- is important to ensure that the government has liquidity to execute its payments and that the costs of this liquidity are as low as possible.
- vi. Expenditure management ensures accounting of all expenditure (including Electronic Fund Transfer) and keeping their track vis-à-vis the budget.
- vii. Revenue management ensures consolidation of all tax and non-tax revenues collected by different ministries/ departments (including Electronic Bill Payment) and keeping their track vis-à-vis budget.
- viii. Asset management includes management of infrastructure assets, land and resources, purchase of machinery and other property and disposal of the assets.
 - ix. Accounting of all transactions and their consolidation is one of the main functions of IFMIS.
 - x. Internal Audit- enables controls and check points for internal audit operation. This includes generation of reports from the system to facilitate audit of the transactions.
 - xi. Fiscal reports- Generate required reports within the required timeframe and with correct data are important functions of IFMIS. The system should have an exhaustive

- report and query module to cater to the requirements of all three levels of the government.
- xii. Data Warehouse- ensures reliable access to all daily financial transactions and other sector data extracted from government systems, for generating consolidated results for budget analysis, decision support, performance monitoring and web publishing (through a budget portal).
- xiii. Data Management-ensures producing of data and reports as required by the budget division, planner, decision maker, research and studies, audit, oversight, supervision, monitoring and evaluation purposes.