

Kingdom of Cambodia

Nation Religion King

Project Plan

for

Financial Management Information System (FMIS)

And Supporting ICT Infrastructure

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Ministry of Economy and Finance

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OVERVIEW

The FMIS Project Plan lays out the proposed structure, conduct, timetable, risks, resources and milestones of the FMIS Project under the Financial Review Committee's strategy for the financial reform of the Government's financial environment.

The Project has two components, one to install a network across MEF to permit user access to the FMIS and the other, the FMIS itself.

The ICT Component (Component 1) to provide the networking facilities, will include the complete wiring of the main buildings of the Ministry of Economy and Finance, namely the Offices in XX and the National Treasury (including the space occupied by the Phnom Penh Municipal Treasury). This networking will support all aspects of a normal LAN/WAN network, including file sharing and storage, email, web and security of data using a virtual private network (VPN). This networking will extend to connections with the National Bank of Cambodia's office in Norodom Boulevard, Customs and Taxation in Phnom Penh. Extending the network will also form part of the Component so that pilot sites for the FMIS may be connected, those pilot sites including the finance areas of the Ministry of Health, the Ministry of Education, Youth and Sport and the Ministry of Public Works and Transport, plus 5 provincial treasuries as the completion of Stage 1 (Pilot).

The second component, FMIS, will procure, install, configure, test, prepare and roll out, the FMIS, initially in Stage 1 (Pilot), limited functionality enough to capture Ledger (Chart of Accounts), commitment, budget, expenditure and asset functions. Prior to the commencement of Stage 2, full functionality will be completed and this full functionality will be implemented in the pilot sites and then rolled out to the balance of line Ministries and Provinces, once it is clear that the system, equipment, communications and staff are fully prepared.

The FMIS will provide functionality consisting of Ledger (the Chart of Accounts), Budget and Budget Preparation, Procurement, Accounts Payable, Accounts Receivable, Asset Management, Banking and Cash Management, Reporting and with interfaces with Taxation, Customs, Debt Management, Payroll and other systems that process financial transactions, making the FMIS, when completed, the depository of all financial information for Government.

A Project Plan is a 'living' document that changes over time. Delays can cause re-organization of priorities, contracts can impose changed conditions and risks, Government decisions or Ministerial directions can alter the program structure and many other factors can create the need to re-cast the Plan, its schedule and its expected outcomes.

This Version of the Plan is Draft v1, dated 24 March 2006.

Content

1.	PURPOSE	1
2.	BACKGROUND	2
3.	REFERENCES	3
4.	PROJECT STRATEGY	4
5.	PLANNING CONSIDERATIONS	6
5.1	PREREQUISITES	6
5.2	ASSUMPTIONS	7
5.3	EXTERNAL DEPENDENCIES	7
6.	BASIS OF APPROVAL	8
6.1	BENEFITS AND OUTCOMES	8
6.1.1	<i>ICT Benefits to Ministry of Economy and Finance</i>	8
6.1.2	<i>FMIS Benefits to Government and MEF</i>	8
6.1.3	<i>FMIS Benefits to Agencies</i>	9
6.2.1	<i>Management of External relationships</i>	9
7.	PROJECT DEFINITION	10
7.1	OBJECTIVES	10
7.2	RELATED PROJECTS	10
7.3	CONSTRAINTS	12
7.4	PRODUCTS/DELIVERABLES	13
7.5	EXCLUSION	13
8.	PROJECT PLANNING	14
8.1	PROCUREMENT STRATEGY	14
8.2	ASSESSMENT PROCESS	14
8.3	PROJECT SCHEDULE.....	15
8.4	PROJECT STAGES	18
8.5	PROJECT BUDGET	18
8.6	PROJECT RESOURCE.....	19
9.	PROJECT ORGANIZATION AND RESPONSIBILITIES	20
9.1	PROJECT ORGANIZATION.....	20
9.2	PROJECT RESPONSIBILITIES	21
9.2.1	<i>Champion</i>	22
9.2.2	<i>FMIS Steering Committee (PSC) (Chair by the Champion)</i>	22
9.2.3	<i>Financial and Project Management Advisor</i>	22
9.2.4	<i>Technical (ICT) Consultant: specialists as required.</i>	22
9.2.5	<i>Project Manager</i>	23
9.2.6	<i>Solution provider (Turnkey FMIS)</i>	23
9.2.7	<i>ICT Contractor</i>	23
9.2.8	<i>Change Manager (One staff)</i>	24
9.2.9	<i>FMIS Business Analyst:</i>	24
9.2.10	<i>ICT Technicians (3 Staff)</i>	24
9.2.11	<i>Training (One staff)</i>	25
9.2.12	<i>Legal Support</i>	25
9.3	ADVISORS	25
9.3.1	<i>Quality Assurance (Should have this for the procurement)</i>	25
9.3.2	<i>Procurement Officer (One Staff)</i>	25
9.3.3	<i>Other Advisors</i>	25
9.4	PERMANENT TEAM STRUCTURE	26
9.5	STAKEHOLDERS	27
10.	PROJECT MANAGEMENT	28
10.1	PROCUREMENT PROJECT OFFICE SETUP PLAN	28
10.2	SECURITY MANAGEMENT.....	29

10.2.1	Security in software	29
10.2.2	Security in hardware	30
10.2.3	Security in peopleware	31
10.2.4	Help desk	31
10.3	PARTNERSHIP	32
10.4	CONFIGURATION MANAGEMENT	32
10.4.1	People configuration	33
10.4.2	Network configuration	33
10.4.3	Hardware configuration	33
10.4.4	FMIS Software configuration	33
10.5	RISK MANAGEMENT	33
10.6	PROJECT MONITORING	44
11.	TECHNICAL MANAGEMENT	45
11.1	PROJECT PROCUREMENT MANAGEMENT PLAN	45
11.1.1	ICT Procurement – Component 1	45
11.1.2	FMIS Procurement – Component 2	45
11.2	INFORMATION AND LEARNING SERVICE PLAN	46
12.	CHANGE MANAGEMENT STRATEGY	48
13.	FMIS PILOT STAGE DETAIL WORK PLAN	49
13.1	KEY PROJECT MILESTONES	49
13.1.1	Recruitment of all required staff	49
13.1.2	Development of FMIS Project Plan document	49
13.1.3	Release of Procurement Documents	49
13.1.4	Establish scope and supply for ICT requirements	49
13.1.5	Selection of Turnkey Solution Provider	49
13.1.6	Complete System Design	50
13.1.7	Ready for Go-Live	50
13.2	PRELIMINARY STAGES	51
13.2.1	Preliminary Stage Work Plan	51
13.3	BUSINESS PROCESS REVIEW	56
13.3.1	Business Process Review Work Plan	56
13.4	CHART OF ACCOUNTS REVIEW	58
13.4.1	Chart of Accounts Review Work Plan	58
13.5	BASIC COMPUTER TRAINING	60
13.5.1	Basic Computer Training Work Plan	60
13.6	FMIS INITIATION STAGE	61
13.6.1	FMIS Initiation Stage Work Plan	61
13.7	FMIS IMPLEMENTATION STAGE	65
13.7.1	FMIS Implementation Stage Work Plan	66
13.8	FMIS PREPARATION STAGE	73
13.8.1	FMIS Preparation Stage Work Plan	73
13.9	FMIS TRAINING STAGE	77
13.9.1	FMIS Training Stage Work Plan	77
13.10	SYSTEM RELEASE	80
13.11	CHANGE MANAGER	80
13.11.1	Duties	80
13.11.2	Qualifications	81
13.12	TRAINER	81
ANNEX 1	82
STAGE 1 ASSESSMENT PROCESS	82

1. Purpose

The Project Plan¹ for the Financial Management Information System (FMIS) has been drafted for the purpose of providing a detailed step-by-step process to implement FMIS. The Plan covers the two major procurements

- the procurement of the necessary infrastructure and networking over which the FMIS will operate; and
- the procurement of the FMIS, associated hardware, software and services

that form part of the Ministry of Economy and Finance's Public Financial Management Reform Program as a tool to facilitate and promote accountability and transparency in the control and management of government revenue and expenditure.

The plan will include user requirement specifications, ICT strategy, hardware requirements, necessary steps, timeframe, resources both human and capital need, the perceived risks, change management and training.

To ensure the success and timely delivery of the objectives of this Project, the implementation of the Project will follow this Plan (as amended by agreement, from time to time) through to completion of FMIS Phase 1.

Based on the lessons learned and experience gained, a new Project Plan for Phase 2 of the project will be developed prior to the completion of Phase 1, currently estimated to be December 2007.

¹ This Project Plan is a combination of the Work Plan done by Mr. Bruce Pollock and the work by the ICT Unit, Economic and Public Finance Policy Department, Ministry of Economy and Finance.

2. Background

The Royal Government of Cambodia considers good governance as the core of the Rectangular Strategy. In response to this strategy, the Ministry of Economy has initiated a Public Financial Management Reform Program (PFM) and it was officially launched in December 2004.

The aim of this reform is to improve the standards of management and accountability in the mobilization of all government current and capital resources and promote effectiveness and efficiency in the use of resources in their application to the operation of the government and other priority programs.

To achieve this aim, the whole PFM program has been divided into 4 major different stages and prepared in such a way that at each stage it has been owned and managed by the Government and its staff. An overall framework was developed and agreed between the Government and funding partners.

Each Department has then been involved in developing its own more detailed plans and activities. One of the major activities in the PFM program has been identified as the Financial Management Information System (FMIS) with its main task to improve information about both financial and service performance.

In order to facilitate the FMIS work, the Ministry of Economy and Finance has created the Information Communication Technology Unit (ICTU) under the Economic and Public Finance Policy Department. This unit is essential to a successful FMIS project and is mainly responsible for developing policy, strategy, standards and strategic requirement to regulate and manage the information communication technology and future development in this area for the whole ministry. A major component of this is the project to select and implement a FMIS across the whole of Government.

The FMIS Project aims to select and implement a fully functioning Financial Management Information System across Government in Cambodia, covering central Government Ministries and Provincial Treasuries and providing full financial services to the central Government and to the Ministries and Provinces. The initial Phase 1 has two objectives: to provide a wide area network (WAN) for the Ministry of Economy and Finance to provide data communications for Ministry staff and to extend communications to the other pilot entities; and to select, implement and operate the most important components of a FMIS in the Ministry of Economy and Finance, 2 other pilot line Ministries and up to 6 Provincial Treasuries including the Phnom Penh Municipal Treasury. It is planned to complete Phase 1 for a go-live during 2007 in selected areas of the Ministry and to complete preparations for Phase 1 to be completed and in service by December 2007.

Roll out to other line Ministries and the remaining Provinces will form Phase 2 of the project and will be planned for during 2007 and 2008.

3. References

Different documents have been used in this project plan.

- ◆ FMIS- Key issues relating to required functionality, system design, operational environment and procurement.
- ◆ FMIS issues for consideration
- ◆ ICT unit FMIS work plan

4. Project Strategy

Two quite distinct stages are involved in the Project but the FMIS component is closely dependent on the ICT component and the Strategy is built round achieving convergence between the two stages or components. The target is to implement a FMIS but the precondition is an operating network across which, users access the FMIS application and relevant segments of this network must be in place prior to rolling out the FMIS itself.

Because of the very different nature of these two components, the decision was taken to separate them into two distinct procurements, one focusing on the ICT infrastructure, the other on the FMIS.

In both cases, there will be a two stage bid process. The first stage will comprise higher level requirement specifications against which the bids will be assessed. Based on the outcome of the first stage, detailed requirement specifications will be presented to a possible short list of bidders and a final choice made on the second assessment. The second stage responses will form the basis of the contracts that will be presented to the successful bidder for each component. To help maintain the integrity of the two procurements, both will follow World Bank standard procurement processes and an independent consultant will be appointed for Independent Verification and Validation (IV&V) of the process. Final signoff on both procurements will be by the Steering Committee or the FRC.

The Project Team of the ICT Unit, Economic and Public Finance Policy Department, Ministry of Economy and Finance, has overall responsibility for the management of both components of the Project and will be responsible for the convergence necessary between the network installation and the rollout plan of FMIS. Stage 1, as described in detail below, comprises Ledger, Budget, basic Procurement, basic Accounts Payable and basic Assets but the preliminary implementation of Stage 1 will see the Ledger become operational, followed by Budget, the plan being to use Treasury processing to trial the system and once stable, Budget will be released to the Budget Department to start loading budget data for the 2008 financial year. Before the balance of users start accessing the FMIS, Stage 1 functionality will be completed and tested prior to December 2007. To achieve this preliminary release of FMIS, the network for at least those two Departments must be installed and functioning, including a data link between Treasury and the MEF building in Street 92, Sangkat Wat Phnom

It must be stressed that this proposal is the current view of the implementation plan and may be varied considerably once the FMIS implementation partners commence their assessment and may suggest alternatives that fit their solution better than this proposal.

At the commencement of 2008, it is proposed that the remaining users of Stage 1 FMIS in MEF will have their segments of the network operational and the functionality of FMIS for Stage 1 will be approved for release. It is further hoped that at the same time, or shortly after, the Phnom Penh Municipal Treasury, at least Kandal Provincial Treasury and the 2 proposed line Ministries (Education and Health) will also be networked and able to access FMIS. Other provinces planned for the Stage 1 release will be bought on line as soon as possible, either by or shortly after 1 January 2008.

All unconnected segments of Government generating financial transactions will continue their current processes which are largely paper-based but at each point where documentation reaches MEF, MEF staff will process the paper documents and enter the data into FMIS. The result will be that, for the functionality available, all transaction data from all line Ministries and Provinces will be recorded in FMIS and FMIS will process and report on that data.

Data from unconnected sources will process exactly as they do prior to FMIS so delays and possible lack of data and detail will still influence the quality of data in FMIS. However, such data as is captured in FMIS will be more timely and the quality and quantity of data available in FMIS reports will improve as more segments of Government are bought on line. To emphasize the process, from 1 January 2008, **ALL** procurement data, budgets and actual cash payments will be captured in FMIS, the timeliness of particular information depending on whether the data is captured on line or as it presently is, on paper distributed by

courier, mail or hand delivery. Hand processing and recording, summarization and reporting can be replaced by reports generated directly from FMIS and, for those to whom the network extends, reports may be emailed or they may access reports online at any time. This should also reduce the gap between reporting period end and the generation of the reports themselves as FMIS will undertake most if not all of the processing.

With the successful completion of Stage 1, expected by mid 2008 with a stable system and the pilot Ministries and Provinces using FMIS, the balance of FMIS will become available and the rollout to all other Ministries and Provinces can commence. Potentially constrained by communications in a number of areas, this second stage may take 2 or 3 years for completion. Each additional entity brought on line eliminates the paper delay and both speeds data capture and enhances the quality and value of information.

The ICT component has as its major function, the provision of a data network that allows user online access to FMIS. However, there are many significant additional advantages that come from networking. All connected users will have access to email, both internal and external to both MEF and Government, using the domain of <@mef.gov.kh>. Where permissions are given to users, access to the internet will also be available through the network and into the NIDA fiber optic cable and MEF can provide intranet functions if required. Intranet may be a particularly useful method of distributing a wide range of information to all users within the ministry, including financial information.

Other aspects of the strategy involve the current process reviews being undertaken within some Departments in MEF with the view to assessing how the proposed changes will fit with a FMIS and allow the FMIS processes to enhance the changes. Extending this analysis to cross-Departmental and cross-Ministry processes would be likewise assessed. It is important to have as many of the revised processes mapped and agreed prior to the commencement of implementation, when the final FMIS design is agreed between the Project team and the Implementation Partner. Likewise with the finalization of the chart of accounts, standard FMISs use a single structure for both budget and transactions and agreement on the final structure in Cambodia is essential prior to the final design, even if all components of the FMIS structure are outstanding. FMIS can function adequately using Fund Source, Natural Account (economic classification), Organization and Project and other components can be phased in as and when they are finalized.

Overriding much of the program is the function of change management, where a change management program will identify and present information about the two components, their dependencies and impacts on staff and the workplace. A separate Change Management strategy and plan will be developed during 2006.

5. Planning Considerations

5.1 Prerequisites

To make sure that the project will go smoothly, the ICT Unit needs to have the followings:

- ◆ **Advisors need:** a group of three advisors, (1) **Technical ICT Consultant:** specialists as required, (2) **Financial and Project Management Advisor:** specialist on budgeting, accounting, banking and reporting requirements of a FMIS, assisting the Project Manager to set up and operate the project methodology, control and reporting processes and monitoring the project and its performance. This role may also cover or support the (3) **Independent Validation and Verification (IV&V)** role normally required by The World Bank.
- ◆ **Staffing need:** 3 technicians and 3 business analysts²
- ◆ **Office need:** the unit needs a permanent office big enough to house ICT equipments and space for software providers. Server rooms in the two main MEF buildings, Main and Treasury, must be available.
- ◆ **Office supply:** computers, printers, scanners and office supplies with computer equipment networked to the application servers and the wide area network (WAN).
- ◆ **Champion:** the ICT unit needs someone in a senior position who can persuade or demand project support when it is needed, can represent the project at the highest level and who can authorize significant expenditure, travel, changes to the project, its objectives etc and support those actions to Government. This ‘champion’ would be part, probably chair, of the Steering Committee (Financial Reform Committee) and would receive regular reports on project progress and achievement.
- ◆ **Early Selection of Line Ministries and Provincial Treasuries:** there is a need to decide in the beginning about the selection of the line ministries and provincial treasuries by the MEF’s management. The reason for the early selection is to engage with them as soon as possible, so that they do understand about the process and are able to adjust to the changes. Based on the advice from the advisor³, at the first stage of the project, two line ministries and five or six provincial treasuries need to be selected. The two line ministries can be Ministry of Education and Ministry of Health as these two ministries have huge transactions with the MEF and they are priority ministries. The treasuries provinces can be selected from Kompongcham, Battambang, Siem Reap, Sihanoukville, Kandal, and Bantay Mean Chey. The reasons for the selection are based on the transaction volumes and availability of the cable network. There is a clear advantage to implementing first in Kandal as it is so close to Phnom Penh and easily supported by the project team.
- ◆ **Training Need for Change Manager:** the change management is one of the hardest task in the whole process of FMIS. As the change manager has no experience in the change management, there is an immediate need to train the change manager to be ready for future management changes. **The advisor recommends sending one of the ICT team members for at least three months training abroad. This should be done as early as possible.**

Moreover, the team also needs to following key issues for the success of the project:

² So far, there are only two technicians and none for business analyst in the ICT Unit. It seems to be difficult to fill in these positions by staff within MEF. Mr. Bruce Pollock, the former FMIS advisor, recommended recruiting these staff from outside as the contracted officials for the full duration of the FMIS Pilot stage by paying them the market wage, unless staff can be identified from within the Ministry.

³ Mr. Bruce Pollock

- ◆ Commitment of the management to changes.
- ◆ Providing the Team with the necessary status and authority to encourage cooperation and support across Government;
- ◆ Having a process to identify and then resolve, disputes between the Team and both contract partners and Government staff;
- ◆ Ensuring financial and non-financial resources are available as needed;
- ◆ Establishing the long term resources (both financial and non-financial) to operate and maintain FMIS both in production and during the following phases of its implementation across the rest of Government.
- ◆ The chart of accounts must be finalized prior to final approved design of FMIS. While the Treasury Single Account may not be a reality in time for Stage 1 rollout, progressive elimination of as many bank accounts and cash advances as possible is highly desirable.
- ◆ Agreement and introduction of refined financial processes prior to the commencement of implementation of the FMIS final design is highly important.

5.2 Assumptions

To make sure that this project is implemented as planned, the following assumptions need to be made:

- ◆ Donors commit to provide financial support.
- ◆ Advisors, staffing, office and supply are provided in time.
- ◆ The management of the MEF will provide full support to the ICT Unit.
- ◆ The Chart of Accounts will be finalized.
- ◆ Streamlining process will be implemented as planned (Activity 6 in PFM).
- ◆ All related departments and line ministries cooperate well with the unit.
- ◆ Network and ICT infrastructure will be installed as planned.
- ◆ Server rooms comprising stable and earthed power supply, climate control, water and fire proofing, dust control, insect control, alarms and security of access must be made available prior to the commencement of the ICT Component.

5.3 External Dependencies

- ◆ World Bank and other donors for financial support
- ◆ ICT structure from National Information Development Authority (NIDA) and Ministry of Posts and Telecommunications (MPTC).
- ◆ Turnkey solution provider
- ◆ FMIS depends on all concerned departments, line ministries, provincial treasuries or other organization. If the problem occurs in anyone of these stakeholders, it will affect directly to the FMIS process.
- ◆ Private sector organizations who may provide local computer support and PC training programs

6. Basis of Approval

6.1 Benefits and Outcomes

The expected outcome will be more efficient and higher quality financial management. In this regard, FMIS will provide the information needed by controlling officers of all levels of Government to develop better budget estimates and control spending. Likewise, the system will reduce the mishandling of budget and increase financial management transparency. Thus FMIS will provide benefits to both the government and agencies. The ICT infrastructure will allow for better, faster and more comprehensive information sharing and decision making across the Ministry.

6.1.1 ICT Benefits to Ministry of Economy and Finance

- ◆ Networking provides for file storage and file sharing, improving the distribution of knowledge
- ◆ Email through a MEF domain is more professional looking with external parties
- ◆ Email storage sizes are under Ministry control, reducing ‘full inbox’ errors for external mailers
- ◆ Access to the internet for information search and study

6.1.2 FMIS Benefits to Government and MEF

- ◆ Improved budget control
- ◆ Better cash management, planning and control of current payments and arrears management
- ◆ Capacity for speedier supplier payment and better negotiation position for improved service
- ◆ Capacity to interface with Customs and Taxation systems for faster and consolidated revenue information
- ◆ Better and current financial reporting
- ◆ Single point for financial reporting
- ◆ Capacity to improve international financial compliance reporting
- ◆ Current reporting at detailed levels
- ◆ Improved error and fraud control
- ◆ More detailed and easier access to transaction records and reports for audit purposes
- ◆ Increased security over budget execution
- ◆ Improved reputation of Government transparency, accountability and responsibility

6.1.3 FMIS Benefits to Agencies

- ◆ Improvement in security over spending
- ◆ Faster payments to suppliers
- ◆ Reduction in paper processing
- ◆ Simplify and speed procurement
- ◆ Increase scope for financial devolution
- ◆ Improved chances of increased delegation limits
- ◆ Reduced reporting to MEF
- ◆ Improved budget and financial control
- ◆ Better reporting at all levels of the agencies
- ◆ Simpler/better reporting to donors
- ◆ Possible elimination of shared donor bank accounts
- ◆ Be able to link input costs with performance (doing more with less)
- ◆ Better bargaining with suppliers

6.2.1 Management of External relationships

The cooperation with stakeholders is the most important factor to make FMIS project successful. Those stakeholders are:

- ◆ **Government** includes the management of the Ministry of Economy and Finance, concerned departments, line ministries and provincial offices. The FMIS project manager reports to the Director of Economic and Public Finance Policy Department, PFM Secretariat on the progress and the management of the project to the Ministry of Economy and Finance.
- ◆ **Other Donors:** World Bank and other international donors. The FMIS project team keeps contact and discussion with WB through reports and meeting.
- ◆ **Suppliers:** software and hardware suppliers will deal with ICT Unit directly. The unit will make suppliers to assure that software will be delivered and ready to go live on time. ICT Unit will work with the software supplier in the documentation, software design, software testing and software implementation phases. The Unit, line ministries and concerned departments in the MEF will take part to provide overall idea to the software provider to create the best suitable application manual to all levels of application's end users.
- ◆ **Private sector** organizations who might be involved in supplying equipment and services directly to the project or related to the project (eg, support of computing equipment, training and other services)

7. Project Definition

7.1 Objectives

The objective of this project is to enhance the management of government's revenue and expenditure by the Ministry of Economy and Finance, by implementing an international commercial strength FMIS to operate across all practical levels of Government from central MEF to all line Ministries and provincial Treasuries. In so doing, the project will extend the understanding and use of computer technology across Government and will assist the further development of a national communications infrastructure by providing the need to justify that investment. Improved telecommunications will enhance many activities of Government, not just for financial management.

FMIS will be designed through interface developments, to capture all financial data into one central database. Interfaces with Taxation, Customs, and Payroll Debt Management etc form part of this data capture program.

The Project Plan seeks to have a new FMIS in operation in 2007 with a rollout to all line Ministries and provinces covering about 5 years. With a focus on including major financial entities as early in the project as possible, the objective is to provide the greatest possible benefit to MEF and government starting in 2008 and on.

7.2 Related Projects

As this project is intended to be initially implemented only in a number of departments in the MEF, 5 or 6 provinces and 2 line ministries, its implementation is very much dependent on other projects, that are proposed to be implemented by different agencies and even departments in the MEF.

First of all, the project depends on Activity 6 in the Consolidated Actions Plan, which is to streamline ability of budget holders to spend in line with budget provision. In this activity, mapping the major existing process and reducing the unnecessary steps is highly desirable before the configuration of FMIS software.

Another project is the Human Resource Management Information System (HRMIS), which is to be implemented by Council of Administrative Reforms. HRMIS data on payroll, outstanding financial obligations by or to staff etc should be interfaced with FMIS as part of the objective of complete financial data gathering.

Debt management should also be regarded as a related project. While this is a different project, information on debt raising, repayment and interest will be integrated with FMIS through interfaces in the future.

Other projects such as those in the Tax Department, Customs and Excise Departments are very inter-dependent with FMIS as they are the source of most government revenue.

Finally, this project also depends on the availability of the telecommunication and internet infrastructure by the NIDA and Ministry of Posts and Telecommunications (MPTC). The FMIS will need to use the existing network from either NIDA or MPTC.

Related Projects/Initiative	Nature of Relationship
Process streamlining	Major financial transaction streamlining should be completed before the FMIS software contract is signed as the implementation team will need to know how to undertake a final

	design of the FMIS configuration.
HRMIS	Complementary with FMIS but FMIS need not be dependent on HRMIS.
Debt management	Integrated with FMIS but can be integrated at a later time as DM is implemented.
Project by Taxation Dept. and project by Custom and Excise Dept.	Interfaces with the FMIS should be added as soon as these systems can generate suitable revenue and debtor information.
ICT network and telecommunications from NIDA and MPTC to provide data links between line Ministries, provinces and the FMIS	FMIS will be dependent on both the ICT component networks and connections to external communications provider networks
Chart of Accounts finalized before Stage 1 implementation commences	The CoA is central to the use of FMIS and the structure of the CoA must be available to the implementers before they can commence their processes.
Suitable Server Room accommodation and refurbishment is available for the networking component installations	Unsuitable accommodation for modern high tech equipment can result in damage and either shortening of life or failure of the equipment

7.3 Constraints

As the FMIS is implemented in Cambodia for the first time, many constraints have been envisaged such as human resource, institutional, structural and technical constraints.

- ◆ Human Resource Constraints: the team is short of technicians, business analysts and experts on change management.
- ◆ Human Resource Constraints: lack of staff with suitable skills in MEF Departments and line agencies, provincial treasuries etc
- ◆ Institutional Constraints: coordination among line departments in the MEF is not well established. Many departments have not understood what FMIS actually is or the benefits that a FMIS can provide. More collaboration among departments concerned is needed. Moreover, line ministries have not been approached yet although earlier general discussions with some line Ministries (Education, Tourism) indicated interest in the project.
- ◆ Structural constraints: existing network may not be able to handle the load of FMIS transaction. Communications throughout Cambodia are not particularly strong, fast or reliable although the telephone network is extending. All Provincial Treasuries have telephone connections and generally have 2 PCs. These are stand-alone and not networked. The more modern PCs have built-in modems so can dial up to NT if required. Anecdotal comments from NBC, Tax and Customs indicate dial-up is often not suitable for data transmission because of unstable links. There are no servers in PTs, including Phnom Penh. There are also no servers in NT but there are some PCs operating in stand-alone mode with some recently installed mini-LANs in some Departments. Microsoft Windows is the standard desktop environment with MS Office as the desktop applications suite. Some provincial governments may have some PCs but the extent of PC coverage is likely to be small. It would not be possible to rely on there being any PCs available for accounting or reporting functions in Provinces. Some Ministries may have some computing power for their internal use but again it is unlikely PCs would be widely available and again unlikely that any reliance could be placed on access to existing PCs for accounting purposes. Networks are generally non-existent although BAFA is installing its own LAN in their MEF office. Current networks at LAN level cannot be relied upon for any accounting purposes.
- ◆ There is no Government-wide network in either Phnom Penh or Cambodia that is comprehensive in its coverage. NIDA has a partial coverage of fiber optic cable in Phnom Penh and this may provide some future service for financial transaction (FMIS) purposes. The ICT procurement component, which parallels the FMIS procurement, will provide for full LAN networking throughout MEF with connections between National Treasury, Phnom Penh Municipal Treasury, MEF and the pilot sites. Other networking or communications would depend on the use of simple dial-up connections or leasing bandwidth from other entities such as telecommunications companies. Current communications infrastructure does not support this option currently but as infrastructure improves, use of these options to network FMIS can be considered. Where dial-up is possible, this can be used although data transfers are claimed by a number of people in NBC, Customs and taxation to be very unreliable, particularly in poor weather conditions. Data transfers are therefore mainly going to focus on traditional manual carriers but may use floppy disk or other transportable media where FMIS is installed and relying on courier or postal services or other transportation of financial transaction records between those sites and MEF.
- ◆ The ICT Unit providing Project Management for the FMIS and ICT bids will support the installation of LANs, email, web access, file storage and sharing and ultimately to the FMIS itself but as yet there is no extant ICT Strategy for Government and the risk of future technology conflict where no standards exist, is potentially significant but would be unlikely to have an effect on FMIS during Phase 1.

7.4 Products/Deliverables

The FMIS Project aims to select and implement a fully functioning Financial Management Information System across Government in Cambodia, covering central Government Ministries and Provincial Treasuries and providing full financial services to the central Government and to the Ministries and Provinces. The initial Phase 1 has the objective to install networking within and between MEF and National Treasury, Phnom Penh Municipal Treasury and pilot agencies. It will also select, implement and operate the most important components of a FMIS in the Ministry of Economy and Finance, 2 other pilot line Ministries and up to 6 Provincial Treasuries plus the Phnom Penh Municipal Treasury. It is planned to complete Phase 1 for a preliminary go-live during 2007 with full Phase 1 for 2008, including pilot agencies and provinces. The proposed functionality for Phase 1 is:

- ◆ Networks and network servers for MEF and NT, providing the communications for the use of FMIS but also providing file sharing, email, web access, VPN and network protection
- ◆ Full General Ledger functionality of Source of Funds, Natural Account, Organization, Project, Sector, Program and Location with each segment containing budget, commitment, actual, period data. Depending on decisions made, some components may be instituted as those details are confirmed
- ◆ Procurement
- ◆ Part Accounts Payable (sufficient to complete basic procurement and payment cycles)
- ◆ Basic Assets (to collect all new acquisitions through the procurement process, the balance of asset records to be undertaken as a separate program)
- ◆ Interfaces (for payroll, taxation, customs, banks, debt management etc)
- ◆ Reporting (sufficient to provide basic information based on data capture).

This will provide basic control features including budget validation, system-based bank account reconciliations, vendor recording (a major audit and control feature), major revenue collections and through reporting, improvements in cash management information flows as well as standard procurement processing. Full GL functionality will provide information at basic levels of data capture, within the structures of the Ledger, for example, fund source, account, organization and project, possibly also location and sector.

Later phases of the project will see the completion of all FMIS functionality and the rollout to all line agencies and provinces.

7.5 Exclusion

The scope of the project will exclude:

- ◆ HRMIS
- ◆ Debt management
- ◆ Projects created by Tax Departments and Customs and Excise Department.
- ◆ Specific budget development software (this functionality may be available to some degree in some FMIS offerings but does not form an integral part of this procurement).

8. Project Planning

8.1 Procurement Strategy

Procurement is one of the most crucial components for FMIS project. Its tender process will cover the release of the bid documents, advertising the bid to attract attention of bidders, responding to or communicating with bidders, briefings, acceptance of late bids, security of bid documents, questions of clarification of responses, evaluation processes, short listing, cost assessments, contact with references, demonstrations of solutions, final selection and contract negotiations through to complete and accepted contracts for supply of the solution.

The selection of potential software and hardware providers should be done cautiously. The strict implementation of the above activities and procedure is to ensure that the successful winners will deliver excellent hardware and services. The assurance of quality, flexibility, reliability, on time supply and reasonable price of goods and services are our aims to be able to respond to the project needs and requirement. To achieve this target, the procurement strategies have been developed as follows:

- ◆ Strictly apply the procedure and methodology illustrated in Procurement Manual (World Bank) in order to assure effectiveness, efficiency, transparency and good environment for competition;
- ◆ Develop the User Requirement Specification to be a clear, sensible and comprehensive document;
- ◆ Inform and convince the potential hardware and software providers to participate in the bidding process by all means;
- ◆ Prepare a sound bid evaluation strategy and process for each component for each stage of the bidding;
- ◆ Select the highest qualified companies for the bidding process;
- ◆ Negotiation and contract are made with the most successful bidder to protect the government's interest and to ensure the quality of hardware, software, its deliveries and especially the success of FMIS project; and
- ◆ Control the risk management.

8.2 Assessment Process

The assessment of both of the two stage bids will follow an assessment process based on a weighted scoring method where groups of related requirements are given a weight in the overall assessment, any sub-groups awarded a weight within the group weight and individual responses scored against predetermined criteria of detailed requirements. The weighted score is then calculated and the best fit is the bid with the highest score. This process is described in more detail in Annex 1. A detailed Assessment Plan for each component (ICT and FMIS) containing weights and scoring criteria will be prepared prior to opening any bids.

A bid evaluation team will be assembled prior to opening bids and the bid evaluation process explained to the team. Governance arrangements will be described in the Evaluation Plan, which will also describe security over, bid documents and each member of the Team will be required to sign a confidentiality agreement against any disclosure of material contained in the bids.

ID	Task Name	Duration	Start	Finish	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
58	Configure FMIS for Stage 2 functionality, unit test	60 days	Mon 24/09/07	Fri 14/12/07																										
59	Prepare line Ministry pilot and PP Municipal Treasury	55 days	Mon 1/10/07	Fri 14/12/07																										
60	Go live line Ministry pilots and PP Municipal Treasury	0 days	Tue 1/01/08	Tue 1/01/08																										
61	Prepare pilot provincial treasuries	121 days	Fri 11/01/08	Fri 27/06/08																										
62	Go live pilot provinces	121 days	Fri 11/01/08	Fri 27/06/08																										
63	Deliver change management program	541 days	Fri 2/06/06	Fri 27/06/08																										
64	FMIS Preparation Stage Work Plan	135 days	Mon 1/01/07	Fri 6/07/07																										
65	Finalize codes for Chart of Accounts	5 days	Mon 1/01/07	Fri 5/01/07																										
66	Create Production version database as copy of final tested and approved system version	5 days	Mon 21/05/07	Fri 25/05/07																										
67	Establish security profiles and link users to their profiles	10 days	Mon 1/01/07	Fri 12/01/07																										
68	Set all system parameters	10 days	Mon 28/05/07	Fri 8/06/07																										
69	Set all database parameters	5 days	Mon 28/05/07	Fri 1/06/07																										
70	Define and load all opening balance data for the chart of accounts	15 days	Mon 11/06/07	Fri 29/06/07																										
71	Set parameters for standard system reports plus any reports created during implementation	25 days	Mon 9/04/07	Fri 11/05/07																										
72	Prepare report on system readiness	5 days	Mon 2/07/07	Fri 6/07/07																										
73	FMIS Training Stage Work Plan	334 days	Mon 7/05/07	Thu 14/08/08																										
74	Prepare training program and training aids	15 days	Mon 7/05/07	Fri 25/05/07																										
75	Establish training version of system, data sets, arrangements for database refreshing after training	10 days	Mon 16/07/07	Fri 27/07/07																										
76	Deliver training programs	274 days	Mon 30/07/07	Thu 14/08/08																										

8.4 Project Stages

Based on the advisor's advice, the project should be divided into two different stages. **Stage 1, Pilot Stage** itself has three parts:

- Implement the LAN/WAN in MEF, NT and the Phnom Penh Provincial Treasury;
- FMIS initial implementation in National Treasury during 2007 to record transactions against the General Ledger as Payment requests arrive in NT, followed by Budget Department who would load the 2008 budget data in the Ledger prior to opening the 2008 financial year; then
- FMIS balance of implement on 2 line ministries and 5 or 6 provincial treasuries, and

Stage 2, Countrywide Stage:

- FMIS implemented in all line ministries and provincial treasuries.

Network connections to the NIDA fiber optic cable adjacent to the main MEF building, wiring of the LAN throughout that building, providing standard network connections and earthed power supply, provision of file server, email server, VPN server and web server will be provided in the main MEF building as part of the ICT component. In addition, this component will establish data communications between the main MEF building servers and National Treasury, wire NT and the Phnom Penh Municipal Treasury with standard LAN connections and install the network server in NT. Users in NT will be routed to MEF for email and web access.

The ICT component will also provide a communications link between the ministry and the pilot line ministries and provinces.

The FMIS component will provide all hardware, including servers, for the unique use of FMIS and will connect this server, when appropriate, to the established ICT component network to provide user access to FMIS across all Stage 1 sites. The reason for the FMIS component providing unique server facilities is to avoid any disputes over server and database capacity and to provide more security around FMIS than might be possible if sharing servers with general users.

8.5 Project Budget

Based on these general assumptions and estimates, a full project cost estimate for RGC would be approximately calculated as follows:⁴

Items	Costs
ICT Component	USD 1.9m
FMIS Component	$0.75 \times 5 + 0.75 = \text{USD } 4.5\text{m}$
Total Estimate, say	USD 7.0 m

No estimates have been included for any other support that might be required. This support might include contracts for the development of detailed user requirements for inclusion in a tender, assistance with the

⁴ This cost is just a rough estimation done by Bruce Pollock, a consultant for the project.

tender process and evaluation and procurement of probity, verification, quality assurance and project management advice throughout the tender and implementation process.

Prudence would also add an allowance for «contingencies», covering incidental expenditures, unforeseeable events or costs and ‘scope creep’ where the project may determine to add extra services to those originally planned. At this early stage, 10 to 15% on-costs would be conservative and if an amount were included for «other services» as described above, the total cost estimate might be nearer **USD 10m** over all.

Annual maintenance fees are usually paid on both software and hardware and the estimated rate used here is 20% for that part of the costs subject to these charges (licensed software, hardware but excluding implementation costs, networking costs etc which are not subject to these charges).

Annual costs are estimated at 20% of license fee for maintenance of FMIS of about \$1m for NT and PTs plus 20% maintenance for hardware of about \$1m for all sites (excludes networking etc). Support staff costs one System Administrator, one full time one half time User Help Desk plus some time for each ICT staff. Every 3 – 4 years, major upgrade at, say, \$500k plus services of implementers at 2 times license fees or \$1.5 m.

Therefore, annual operating costs except for major upgrade years, based on these assumptions, would be approximately USD 400k pa plus local staff costs.

8.6 Project Resource

The project will be funded by the Trust Fund, which is supported by the World Bank, other donors and the government.

9. Project Organization and Responsibilities

9.1 Project Organization

To make sure that the project will be implemented according to the plan, the project organization will be created to include Champion, financial reform, FMIS steering committee, project manager, project management advisor, solution provider, business analyst for accounting and report, business analyst for budget and finance, business analyst for line agencies, ICT technicians, trainer, change manager and procurement officer.

The project management is a key factor in the success of a project of this scale. The current organizational structure has the ICT Unit under the Director, Research and Policy Analysis within MEF and answerable for the FMIS Project to the Financial Reform Steering Committee. Key issues that require consideration include:

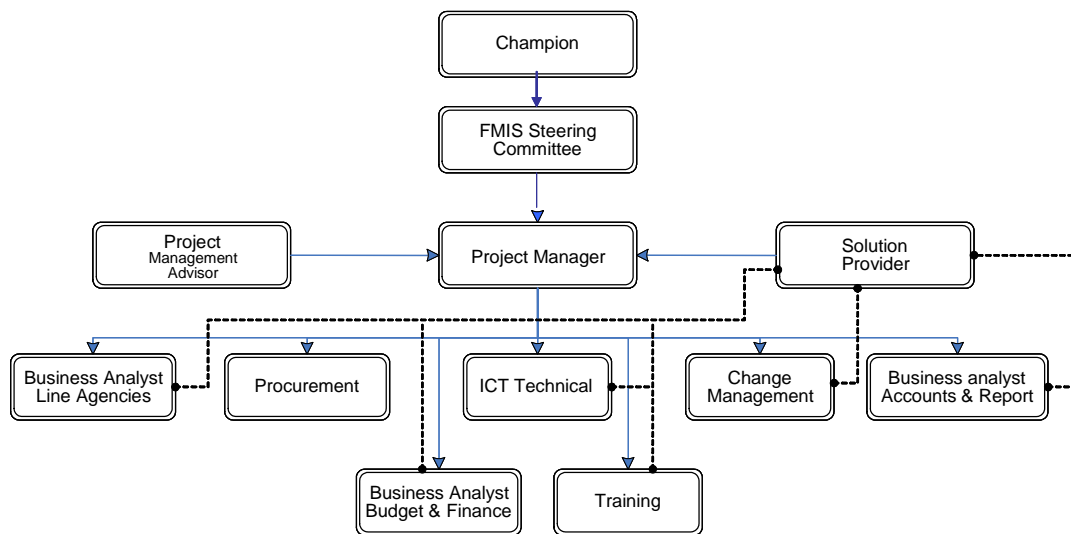
- ◆ providing the Team with the necessary status to encourage cooperation and support across Government. There will be a number of occasions when the Team needs to take some staff from normal line duties to test or approve of system design or operations and it is imperative that the Team can obtain those services as needed to ensure the entire project is not delayed because of unavailability of particular staff. This requisitioning of staff should be able to be notified some considerable time in advance of actual need;
- ◆ having a process to identify and then resolve, disputes between the Team and both contract partners and Government staff. In a relatively complex project like this, there will always be disputes, misunderstandings and refusals to comply with requests for changes, particularly where it requires compromise or may have resource (cost) implications;
- ◆ establishing a clear priority for this project among all other demands of MEF and other line agencies such that resources needed for the project are made available as soon as possible. Both MEF and line agency and province staff must clearly understand the relative importance in complying with schedules;
- ◆ ensuring financial and non-financial resources are available as needed. The unexpected always occurs and no project plan can be perfectly programmed. The project must be given some flexibility to access additional resources where unexpected demands arise;
- ◆ making decisions on 'ownership' issues as they affect the 'software and hardware owners' and the 'business owners' of the FMIS to ensure that ongoing functional responsibilities are clearly defined. Both during and after the implementation, problems can arise over disputes as to whom has responsibility for aspects of the 'equipment'. Hardware is usually the responsibility of the ICT area, software is the responsibility of the Project Manager and the business process is the responsibility of the business area (for example, Treasury, Budget, Procurement, Financial Controller etc). The business process is the configuration of the software; and
- ◆ establishing the long term resources (both financial and non-financial) to operate and maintain FMIS both in production and during the following phases of its implementation across the rest of Government. Once the first stage of the implementation is complete, users will need to be supported by a user help desk, the system and hardware will need to be maintained by the software owner, annual maintenance changes will have to be paid according to the contractual agreement and later stages of the project resourced.

The project of this scope needs a 'Champion', someone in a senior position who can persuade or demand project support when it is needed, can represent the project at the highest level, both in Government and

in relation to the TSP and donors and who can authorize significant expenditure, travel, changes to the project, its objectives etc and support those actions to Government. This 'champion' would be part, probably chair, of the Steering Committee and would receive regular reports on project progress and achievement.

The Steering Committee is made up of representatives from a cross section of interested Government agencies and MEF departments and a smaller group, comprising representatives of National Treasury, Budget Department, a line Ministry and the ICTU as the more directly involved group who can monitor and direct the project. While the FRC is undoubtedly the senior reference body and the Steering Committee as the Project's major review and advisory group, the FMIS project is just one of the reforms being undertaken, and functionally it will be better to have a subcommittee of the Steering Committee as the direct supervisor. When identified and contracted, the Turnkey solution provider should join this smaller group or 'Working Party' as invited member along with the Project Management Advisor forming the balance of the Committee. This Working Party allows for a more hands-on approach that can be used for deciding many of the more day-to-day problems and decisions without involving the full Steering Committee. Occasional briefings of Audit by this Working Group or the ICTU will also be useful in preparing Audit for its role with the new system.. The Working Group should meet monthly at least with the ICTU Manager able to call ad hoc meetings as required. The ICTU Manager should provide project progress reports to this Working Group 2 days before scheduled meetings and when approved, that report is passed on to the Steering Committee and the FRC.

Organization Chart



9.2 Project Responsibilities

Within the Team itself, the nature of the FMIS project will require staff to share parts of tasks as their skills require. For example, while there is a position of Trainer, the ICT Technician would be involved in training requiring specific technical input. Business Analysts will cross over between the areas as needed and will also be involved in training delivery and planning. At higher levels of the Project Structure, the responsibilities rest with the nominated individual.

Based on current expectations of scope, the suggested team size and composition for the ICT Unit for the period October 2005 to December 2008 is as follows:

9.2.1 Champion

- ◆ Supporting the Project Steering Committee (PSC), Project Working Group (PWG) and Project manager (PM),
- ◆ Representing the project at the highest level of government, chair of the PSC, decision maker on project development and acceptance and authorizes milestone payments under the contract with supplier,
- ◆ Arbitrates on major disputes,
- ◆ The ultimate decision maker for the project.

9.2.2 FMIS Steering Committee (PSC) (Chair by the Champion)

- ◆ Responsibilities include project monitoring, high level decision making, recommending to Sponsor to accept/reject contract payments, milestone sign-offs, resource requirements, high level risk assessments.
- ◆ Determine appropriate changes to FMIS policy;
- ◆ Set the strategic vision and direction for procurement, including determination of system scope and selecting a FMIS alternative;
- ◆ Set priorities and resolve issues that could not be resolved at a lower level and that without resolution can affect time, cost or performance constraints on the Project;

9.2.3 Financial and Project Management Advisor

- ◆ Assisting the Project Manager to set up and operate the project methodology;
- ◆ Control and reporting processes and monitoring the project and its performance;
- ◆ Conduct the survey on communication infrastructure and give advice to Project Management in all technical aspects.
- ◆ Give advice on budgeting, accounting, banking and reporting requirement for a FMIS.
- ◆ Work with the Contractors and ICTU and provide advice as required on project matters.

9.2.4 Technical (ICT) Consultant: specialists as required.

There are three major tasks expected of the ICT Advisor:

- ◆ Complete the survey of infrastructure and equipment currently available for use with FMIS and to identify gaps in that infrastructure. Concurrently with the survey, identify any obvious inadequacies either in infrastructure or in understanding of its use;
- ◆ A detailed assessment of the available communications environment within MEF and other FMIS target locations and prepare recommendations for raising the communications infrastructure to a level capable of supporting a FMIS;
- ◆ Undertake an estimation of data sizes and transaction volumes and growth rates for equipment required for the FMIS, both the central server and all other equipment needed to complete the infrastructure environment.

9.2.5 Project Manager

Day-to-day management of the Unit and its staff; and Project Management of the FMIS project. The management function has not been included in this work plan but must be considered as a very significant part of the Manager's work load. He will be responsible with the following:

- ◆ Define goals and objective for the project consistence with FMIS requirement;
- ◆ Responsible for the project planning and execution, management of resources, and management of relationship with implementation partners;
- ◆ Responsible for meeting targets, risk and quality management, project probity, is member of PSC and PWG;
- ◆ Manages Project budget and takes all decisions with regard to implementation and changes to process rules within the implementation;
- ◆ Overall responsibility for day-to-day management of the Unit and its staff; and Project Management of the FMIS project;
- ◆ Facilitate and promote cross-administration communication;
- ◆ Develop and manage a FMIS stakeholder management plan;
- ◆ Act as the communication point person with PSC, PWG, Champion, MEF Departmental Managers, line Ministries and Provinces;
- ◆ Act as the primary point of contact between the Project Office and representatives from the Development Partners;
- ◆ Ensure FMIS stakeholders receive deliverables and are afforded timely review times;
- ◆ Monitor status of vendor(s) contract deliverables;
- ◆ Maintain project work plans, action item lists and issue logs;
- ◆ Facilitate the appropriate change to the procedure, operation and system;
- ◆ Resolve the issue that could not be solved at the Team unit level and that without solution can affect time, cost or performance constraints on the Project and/or escalate issues to the steering committee;
- ◆ Identify risks and implement risk mitigation strategies; and
- ◆ Report on changing risk situations to PWG and/or PSC.

9.2.6 Solution provider (Turnkey FMIS)

- ◆ Supplier of the FMIS solution, specific hardware and software for its implementation;
- ◆ Design and implementation services, training, change management, documentation and all other services to install and make ready, FMIS, in cooperation with ICTU.

9.2.7 ICT Contractor

- ◆ Supply and install all equipment and connections required to complete the networking for FMIS in MEF and connections between buildings, servers etc and connections with NIDA fiber optic network and telecommunications suppliers.

9.2.8 Change Manager (One staff)

1 staff will design the change management strategy and plan and instigate and deliver the change management program for the project. Change Management is the process of preparing the organization and its staff for the changes that will occur across the Ministry as both the ICT changes, and then the FMIS changes impact on workplace structures and process changes. The change management function prepares the way for those changes and supports staff and the agency through the changes that occur. The Change Manager will liaise with the change management advisor of the Solution Provider in the delivery of FMIS. It is anticipated that the Change Manager will require training to gain the necessary skills and this may involve off shore training for up to 3 months specializing in change management models and practices. The person would need to have a degree and be prepared to undertake this specialist study over seas. The Solution Provider should provide an experienced Change Manager as part of their team and this person would assist the ICT Unit's CM in developing specific skills for application in Cambodia.

The Change Manager will have the following tasks:

- ◆ Develop a change management strategy and plan covering both central ministries, particularly the MEF and National Treasury, other line ministries and provincial treasury offices. The strategy and plan will address changes that will arise from both the ICT and the FMIS components of the project;
- ◆ Work closely with the FMIS Solution Provider to develop the final structure of the program and then to deliver the program in parallel to the FMIS development;
- ◆ Provides advice to users or people affected by the new system of what the system will do, how it will change processes and responsibilities, how it will affect them and what will happen to them if they are adversely affected;
- ◆ Help identify training needs for particular groups of users. Help define training policy and user needs;
- ◆ Provide knowledge and culture of government and Khmer people to the implementation process and partner staff.

9.2.9 FMIS Business Analyst:

Average 3 staff will liaise with relevant areas of MEF and line agencies to represent their needs in the design and configuration of the solution. They will cover accounting, budgeting, information reporting, control, financial structures, vendor record management, banking and cash management and interface data flow requirements. They will operate as part of the implementation team in the structure indicated by the Solution Provider but could generally be expected to represent one as the line Ministry and Province expert, one specializing in budget, cash management, banking and finance generally and the third, specializing in chart of accounts, general accounting and reporting.

9.2.10 ICT Technicians (3 Staff)

3 staff, 2 being responsible for coordinating all ICT activities, from design to installation of the required supporting infrastructure. Also working as part of the implementation team, they will be responsible for the technical aspects of FMIS including establishing security protocols, database design and support and interface developments working with Solution Provider. The third ICT Technician will concentrate on physical support of the desktop and infrastructure hardware, desktop applications, LANs and hardware upgrades for that equipment installed for

the implementation and use of FMIS. Other non-FMIS user hardware will not be supported. Additional ICT resources may have to be recruited from the private sector. The two Technicians engaged directly on the FMIS project will be supported and trained by the Solution Provider's technical experts on the FMIS itself and the local staff will help install and operate the server environment, databases and communications during the project.

9.2.11 Training (One staff)

1 staff will design and deliver user training and training materials for staff of Government as and when required for the project implementation. The Trainer will probably have to be recruited from the private sector. They will be trained by the Solution Provider's staff and would be involved in testing the FMIS to gain detailed knowledge of the system before delivering training to the Government's users. The Trainer will require a good understanding of ICT equipment and software as they will be involved, along with staff from EFI, in delivering general PC training to users as infrastructure equipment is installed prior to the roll-out of FMIS.

9.2.12 Legal Support

In the preparation of the second stage bid documents and the contract, as well as in contract negotiations, the ICTU will require the support of a legal advisor. While it is assumed this advice can be provided from within MEF, an alternative would be to engage a lawyer from the private sector. Provision of legal advice is essential for the adequate understanding and protection of the Ministry in contracting for such a major project.

9.3 Advisors

In addition, a number of specialist Advisor positions would be required over the course of the project, particularly in the early phases. These Advisor positions would cover:

9.3.1 Quality Assurance (Should have this for the procurement)

- ◆ Conduct the survey on the market regarding the sample and price of the products;
- ◆ Evaluate the standard of the service providers and quality of goods and services;
- ◆ Testing the goods and services and monitor the implementation of the contract.

9.3.2 Procurement Officer (One Staff)

- ◆ Set up the procedures for the tender process;
- ◆ Be responsible for all procurement tasks with software and hardware providers;
- ◆ Make sure the procurement follows the World Bank guideline.

9.3.3 Other Advisors

Other possible but very short-term advisors that may be required, depending on recruitment success for Team membership and training programs, might include:

- ◆ Change Management support/mentor/quality assurance
- ◆ Training support/mentor/quality assurance

9.4 Permanent Team Structure

A number of important considerations arise when considering team size and composition. The FMIS project will require a team from the ICT Unit to participate in all phases of the implementation, including the later extension into all other line Ministries, all Provincial Treasuries and possible future connection into District Treasury operations. In addition, the Unit team will also have to maintain the operation of the functioning parts of FMIS and its user base during operations. Succession planning is imperative to maintain a viable team with growing experience to continue the later phases of the project. It is important that staff is retained even when their skills will provide them with highly marketable experience sought by other areas of Government and the private sector, even internationally. Accepting that some staff departure will be inevitable, part of the Unit's strategy will be to have the Business Analysts and ICT Staff rotating or crossing over in their responsibilities so they each have a sound understanding of all other areas of the team and can support other team members during peak demand periods and replace or back fill staff who are unavailable for any reason (resignation, illness, accident, family commitments, leave of absence, study etc).

The structure therefore has a small level of built-in overstaffing for some short periods during the project, to allow for team training, succession preparation and mutual support in a program which will be a completely new and challenging time (5 or more years) for all concerned.

It is therefore believed that the Team should consist of the Manager, two technical experts, 3 business analysts, one change manager and one trainer. Of these staff, only the change manager would have a limited full time role in the FMIS team. It is anticipated their function would reduce to a part time one by about March 2008, as FMIS beds down in its Phase 1 status and prior to second phase commencing. Part time change management involvement would be required after that, during the rest of the project, and it is suggested that the change manager could then be shared between the FMIS project and other areas of change undertaken by the Financial Reform Committee.

In addition, one technical expert will be required on a permanent basis to support the LAN and desktop equipment and also be involved in the preparation stage of FMIS. This function may be contracted out to the private sector if permanent staff cannot be located to fill this position.

It is important to recruit the required additional staff as soon as possible and to use the time between recruitment and their direct involvement in the project, to undertake training in their specific areas of responsibility. Specific training for business analysts would include exposure to financial systems and their operations, process mapping, financial operations, government rules and regulations affecting finance and personnel in preparation for applying this to the FMIS project. Technical staff would be trained on database management, security, programming, structures of the existing systems in customs, tax and payroll to support the design of interfaces. Change Management training is discussed below. All members of the team would require training in project management, risk management and mitigation, bid evaluation processes and selection procedures, change management, governance and reporting on project performance. This is likely to be particularly important for the change manager and trainer who may both require a combination of domestic and overseas training to bring them to the desired level of understanding to undertake their functions.

A further consideration in staffing the project is that once Phase 1 is completed, there will need to be a team of at least 3 people to support the system in operations, the Trainer, who will probably also provide the User Help Desk service, an ICT Technician to provide service to the operational system and database, plus the interfaces, and the ICT Manager as the manager of the operational system and the person with major responsibility for determining changes to user access and security profiles. The ICT Manager will also have to continue with the project into its ongoing roll-out to other line agencies and provinces. It would be advisable to maintain as many of the original Project Team as possible for the Phase 2 rollout as many line Ministries and provinces will be involved.

9.5 Stakeholders

The Government stakeholders will include, ICT unit, PFM secretariat, PSC, PWG, Government, staff of MEF including Taxation and Customs, line departments in MEF, the Supreme Audit Institution, municipal treasuries, provincial treasuries, and some selected line ministries. External stakeholders will include the NBC, private sector companies or persons involved in the project, Development Partners, Implementation Partners and equipment suppliers and the community in general, who should be aware of the steps being taken to increase the level of accountability, transparency and control over their Government's finances.

10. Project Management

10.1 Procurement Project Office Setup Plan

This section refers to both components of the Project, that ICT component and the FMIS component.

There need to be a number of staff to deal with the procurement issue. Since procurement activities are complicated and take much time, staff supporting administrative affairs will be required. This team will include one technical staff, one administrative staff and one procurement team leaders. The team will be in charge of several tasks such as communication, the design of application form, facilitation in the process of tendering, monitoring of contract implementation.

The ICT team will develop the User Requirement Specifications (URS) for both components and other procurement documents. The URS must be clear, informative and understandable. The document should also demonstrate clearly the purpose of the project; the type of the supply needed and define the specific services or products we want from the suppliers.

The bid process will follow the World Bank procurement guidelines for 2-stage bid processes and Procurement Office staff may need training from the World Bank in the conduct of the Bank's processes.

The team will also be responsible for setting up the criteria to select and evaluate the qualified sellers for tendering process. The potential software and hardware providers will be well informed and encouraged by all means. The document will be publicly advertised on Internet and media. Moreover, there will be a bidder conference for both components, which is a meeting with prospective sellers prior to preparation of a bid or proposal. A site inspection for the ICT component will also be offered. (An application form will be technically designed to get the most important information). The principle of transparency, good governance and effectiveness will be applied in the procurement process. Thus, procurement will conform strictly to the procedure, method, timing and technical norm.

A short list of qualified bidder will be established based on a preliminary proposal. The selected bidder will be judged based on proposal and draft contract, which will be the actual contract when an award is made. The evaluation criteria can include samples of the supplier's previously produced and the review of the supplier's history with the similar projects or contract elsewhere. Many factors such as the following will be used in service provider's selection:

- ◆ Price or cost could be the primary determinant for an off-the-shelf item. However, we are aware that the lowest proposed price may not be the lowest cost, if the sellers prove unable to deliver the products, services or resulting in a timely manner or if the product is a poor fit against requirements.
- ◆ Proposals are separated into technical (approach) and commercial (price) sections, with each evaluated separately. Besides, management sections are required as part of the proposal and also have to be evaluated.
- ◆ The most reliable, best fit, responsive and flexible company will be selected. (The criteria to be used for the selection will be detailed in the scoring system.)
- ◆ Each component will select only one supplier to mitigate risks that can be associated with issues such as delivery schedules and quality requirements if suppliers were to be diversified. The potentially higher cost associated with such multiple sellers, including any loss of possible quantity discounts, and replacement and maintenance issues were considered in making this decision. To avoid confusion or shifting the blame from one to others we will allow only a single software company and networking agency.

The team also needs the supports from lawyers in the process of negotiation and making the contract. The contracts need to be clear, firm, and comprehensive regarding details of obligation and legal measures in case the contract has been abused.

- ◆ The successful bidder must provide a detailed Project Plan, identifying resources provided by itself and those expected to be provided by the RGC, people, skills, equipment, office space, communication etc. The project plan must also contain timeframes, critical milestone, reporting and dispute resolution procedures, risk and risk management, strategy and quality control.
- ◆ The successful bidders will be requested to sign contracts with the government. It will review and document how the bidder is performing or has been performing to establish required corrective actions and provide a basic for future relationship with the sellers, managing the contract-related changes and when appropriate, managing the contract actual relationships with outside buyer of the project. This will be based on the contract law and assure that the government interest will be well preserved and protected. This requires tough negotiation, both prior and post, with potential suppliers.

10.2 Security Management

In a nationwide system like FMIS, the security becomes one of the most outstanding matters as all data and information stored in the system shows detailed budgets, spending, vendors, debtors and the value of money transferred from one place to another around the country. Without proper security management, the whole system at anytime will face the huge problem of hackers and illegal access to information and even the creation of false transactions and payments. During transacting, the hardware components of the FMIS must be assured to run properly or otherwise the transaction will fail. The users should guarantee that all data entries and interaction with the System application are done properly with minimal mistakes.

The LAN and WAN network will carry and store personal data, correspondence, government budget plans and policy documents created by the MEF or received by it in electronic format. The network must ensure all this material is kept private from external and unauthorized internal persons.

10.2.1 Security in software

To provide a strong security in software the system must be developed by the following criteria:

- ◆ In the documentation stage, before contract with software supplier, the User Requirement Specification Documents were released to departments and line ministries that will involve in FMIS system utilization to get more comments and requirements. After that all the comments and requirements will be included in the User Requirement Specification and the Final Document will update and be ready for tender.
- ◆ At the procurement and contracting phase, all features of software, which are included in the User Requirement Specification, will be embedded in the contract.
- ◆ The security management for typical FMIS software is as follows:
 - **User authentications:** when the system software is about to be released, ICT Unit will collect all end users to determine who has right and permission to log into the system. The users can be divided into different following categories:
 - **Data entry level:** the user has right to enter raw data into the system only, he cannot delete, or update the data after the submission has done. These users are FMIS data entry staff;
 - **Data approval level:** users at this level have rights to approve the information from the data entry level whether it is valid or invalid. Thus he has right to delete, deny

and update the data from the first level. This type of user in FMIS should be *the financial controller, the director and deputy director of departments, the general and general deputy secretariats or higher rank*;

- **Data auditing level:** users have rights to view all flows of data from the sources to destination. This means he can query or search but has no right to manipulate data at all, that is, no Update. This person may include *the auditor, MEF senior management, some people in data approval level, and the ICT Unit staff*;
- **Transaction log viewer:** only the ICT Unit staff who are assigned do the job can see and enquire the transaction log within the system;
- **Report level:** users can only preview and print various built-in reports of the system but cannot manipulate the data at all. Users can search for some information from which source the system permitted.

For both the network itself and for the FMIS application, a number of additional standard facilities will be sought, including:

- **Data and transaction log recorder:** the system has the capabilities to record all transaction logs. It records who log into the system, at what time, at what level and do what. The transaction log recorder is extremely important for data audit and systematic error (man made error) detection;
- **System roll back:** software will automatically provide system roll back whenever there is power failure, hardware or system crash, back to the last completed transaction;
- **Data backup:** Backup is an essential security tool to sustain the database. Backup must be done automatically by the system to the backup server by the system backup preset (schedule to backup) or manually by the ICT Unit staff into electronic tape or hard disk;
- **Data encryption:** it is another powerful tool for data security to prevent data from intruders. The strongest encryption method is highly desired and a Virtual Private Network is planned to protect the network and applications.
- **Anti-virus and hacking:** the system must include the tools to protect the whole system from the damage from worms, hackers/spy ware or viruses. It is the best solution if the system has internal firewall to protect the system from those staff and hackers.

10.2.2 Security in hardware

Good performance of hardware will allow the system to run with the highest accuracy. The hardware mentioned here includes all desktop computers, computer servers and the media for networking. All hardware connected to the network must have an earthed power supply to protect against damaging power surges from lightning strikes etc that could fatally damage or destroy equipment and the data stored on that equipment:

- ◆ **Desktop computers:** the computers must support the system software requirement with high speed and capacity. These computers must be only installed the FMIS application software or some other permitted software. The ICT Unit will be responsible for these software and maintenance of hardware. The FMIS computers must be equipped with Uninterrupted Power Supply (UPS) to prevent power surge. Moreover, these computers will be protected by personal password and the password of administrator (ICT Unit).
- ◆ **Server computers:** the server computers must have enough capacity to support the software, the whole system and future expansion. These must be kept in a safe environment. This environment must have clean and temperature controlled air, be dust and insect free, have

access security, fire and water protection and alarms. Standard server environments will be required from the ICT component contractor. ICT Unit visits to see the FMIS system in successful countries would also observe the nature of environments for server rooms and network and systems protection. The ICT network and FMIS software supplier may offer recommendations to this matter also. The network and equipment must run with a high level of availability and the requirements will be complex, as described below:

- **Database server:** run and store the FMIS database only (provided under the FMIS component).
 - **Backup server:** back up the database from database server automatically and regularly (FMIS component).
 - **File servers:** required in both main MEF building and National treasury.
 - **Web server:** to allow access to the internet
 - **Email server:** to manage and control email and control the MEF domain
 - **VPN Server:** to provide the Virtual Private Network to protect data transmission from interception through high level encryption of transmitted data
 - **Web database server (optional):** provide possibility to extract the database from the Database server so that web surfers will not query directly from the Database server that way reduce the access to database server and risk caused by viruses and hackers. Web database server may include the function of file sharing, mail server and anti virus scanning server.
- ◆ **Media or networking:** networking is a major problem in Cambodia and the ICT network supplier will be required to offer solutions that allow secure and reliable transmission of data, including the financial data to and from FMIS.
- ◆ **Firewall:** FMIS and the general network system needs a strong and powerful firewall to filter the uninvited guests and unexpected information from the outsider. This will be the responsibility of the ICT software and hardware supplier to protect the network at all entry points (online, dialup etc).

10.2.3 Security in peopleware

No one would deny that “without people a manmade system would not run”. Those people will be trained and introduced to FMIS application before the application testing phase. After the training, only trained people can handle with FMIS desktop computer and application within the environment of FMIS or become FMIS people or staff. They will be encouraged to give strong commitment to the system. They will take care of the system as much as the ICT Unit staff will.

10.2.4 Help desk

A help desk is required to provide immediate assistance of users of the entire system both software and hardware. The help desk will offer online solutions through phone and email. If the problems still cannot be solved, the problem will be referred to ICT Unit. Information and Learning Services will be provided by the help desk and the ICT trainers. The composition of the help desk is:

- ◆ ICT director
- ◆ ICT technicians
- ◆ Finance trainers

- ◆ IT trainers

10.3 Partnership

Similar to relationship for corporation strategy, partnering will be the key factor that leads to FMIS's success. The ICT Unit will have the following partners:

- ◆ **Departments in MEF:** departments in the MEF that are directly involved with FMIS must work cooperatively with ICT Unit. The staff of those departments will become partners of the unit. They will be the eyes or helpful hand to work as FMIS staff in their departments. The ICT Unit will select one, two or three staff from each department to be the technical person who should be the first person to know almost everything about FMIS system in their departments. They have to inform their department management and other staff about FMIS or its development. The director of ICT Unit will work cohesively with all the departments' management.
- ◆ **Line ministries:** line ministries that use the FMIS system such as the Ministry of Education Youth and Sport, the Ministry of Health, the Ministry of Agriculture, the Ministry of Rural Development, the Ministry of Commerce and other ministries will have to nominate one or two staff to be trained to use FMIS with the ICT Unit.
- ◆ **Donors:** donors have to support the system in term of funding and capacity building. ICT staff and other staff in FMIS system will need more improvement in capacity building especially those in provinces. The FMIS staff need more study not only in the application but the financial system as well.
- ◆ **Partnering with National Treasury:** the FMIS system will function better with fewer bank accounts and cash advances and ultimately to have a Single Treasury Account (STA) for the National Treasury. The ICT Unit will work closely with National Treasury to achieve the necessary banking changes as it is the core of the system.
- ◆ **Partnering with private sector:** this is meant to be with both hardware and software providers, possible trainers and local contractors.
- ◆ **Partnering with FMIS countries:** the World Bank has set up video conferences among the FMIS countries such as Canada, Mongolia, East Timor, Philippines, Vietnam and Cambodia. Those countries have the opportunity to study from each other and share experiences not only the successful parts but also difficulties. Cambodia would like the above countries to be the FMIS partner countries in order to learn from them.

10.4 Configuration Management

Another key factor to enhance the FMIS system is configuration management. It is the road map to arrangement of the FMIS component to be ready for the whole system performance. The configuration will focus on people, network infrastructure, hardware and application software.

- ◆ People configuration
- ◆ Network configuration
- ◆ Hardware configuration
- ◆ Software configuration

10.4.1 People configuration

The people configuration is the arrangement for the people in charge of FMIS system to suit all levels of user authentication. The ICT Unit will collect information about all people who will be the user of the ICT network and the FMIS application software with information such as names, titles, functions, roles in financial system and put into FMIS end users list. Then the ICT Unit and PFM Secretariat will analyze the function and right of those users in the FMIS system. After the software is released, all necessary users will be provided with usernames, passwords and rights to access into the program.

10.4.2 Network configuration

The network infrastructure will be laid out before the pilot stage is about to start. At least the interconnection between the MEF to NT must be in place and then the link to other line departments and ministries. The ICT Unit and the network provider will work together to setup the connection and do the maintenance also. Every network will be tested on its speed and capacity and will make sure it works perfectly before launching the software.

10.4.3 Hardware configuration

After procurement, all desktop computers and other FMIS hardware equipments will be installed in each departments and line ministries just before the installation of software. Those computers will be connected to FMIS network to check the performance and its functionality in the network system.

10.4.4 FMIS Software configuration

The software installation will be divided into two stages: **Stage 1**-the pilot: and **Stage 2**- countrywide implementation. The preliminary pilot phase will see the FMIS introduced in NT and Budget, the remainder of the pilot following successful use in those two areas. The ICT Unit and the software provider will check and test the functionality of software on the real system and make sure that there is no other unnecessary software installed in FMIS computers.

10.5 Risk Management

Risk management is a set of activities for identifying, analyzing, planning, tracking, and controlling risks. The ICT Unit is responsible to implement the risk management. The risk that ICT Unit will face might cause by the external dependencies and the failure of security management in the FMIS system. The critical success factors are firstly ensuring Government-wide commitment to the FMIS. Given the delays to date, there is considerable pessimism across Government regarding the effectiveness of the FMIS. Secondly, the component will require particularly good management, given the large procurements and complexities of implementing the system across the Government.

But anyhow the unit must be capable enough to minimize to risk to zero probability. The change management will share 70 percent to deal with the risk management, 20 percent for IT technician and 10 percent for ICT Unit director and procurement manager. In case the quality of the FMIS hardware is found to be broken before the warranty date then 90 percent of the risk must be responsible by the procurement manager and change management. The IT technician is the person who deals with the problem of software, hardware and peopleware after the FMIS application was released. But the change management will be the person in charge of risk management development plan.

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
Lack of commitment of RGC leaders to FMIS	Lack of pressure to encourage compliance with project objectives. Loss of political backing threatens reforms that an FMIS can assist with.	Low	High	Medium	Steady. Clear progress in Project needed to reduce risk	The Government and the Supreme National Reform Council pledge to endorse the Public Financial Reform Program and FMIS as the heart of the PFM Reform Program
WB decision on FMIS might be changed. The delay of FMIS project caused by the transferring of the FMIS fund to other projects. WB definitely stops funding FMIS.	Deferral of funding would delay project while other sources were committed. Loss of WB support might cause other donors to withdraw.	Low Low Low	Medium Medium High	Medium	Increasing. Can be reversed with clear statement of WB intent	This project depends primarily on the commitment of the Royal Government Leaders. Even though the World Bank stopped or delayed providing fund to FMIS, still the RGC could pursue and appeal for the other fund source from the other donors like JiCA, KOICA, ADB, UNDP and other countries. FMIS is the vital and focal point to be achieved in order to improve the sufficient, efficient use of national budget within the spirit of equitable share of national resources to all Cambodians. Also, the RGC is crying out for the achievement of CMDGs for its people, FMIS provides some of the capacity to address these needs as it is the powerful tools to assure the Good Governance elements such as transparency, accountability, equity, anti-corruption etc.
Harmonization and Computerization	Negative perceptions by staff and resist change which threatens their job security	Medium	High	Medium	Steady. Can increase unless change management and human resource planning	By the completion of Stage 2, FMIS will computerize all the financial transaction within the framework of Budget execution and FMIS will reduce

⁵ L = likelihood; C = Consequence; R = Risk Level

⁶ An assessment of whether the Risk Level has been increasing or decreasing in the (approximately) 6 months leading to the present time.

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
					introduced.	all manual and many inefficient tasks of current business. This does not mean that many current staff will be dismissed from their jobs. Instead of this concern FMIS will provide them new opportunity to implement modern Information Technology or be trained in other more productive activities. FMIS can assist the reduction of corruption and will support the Rectangular Strategy.
LAN/WAN network design or installation is inadequate	Network proves unstable or unable to carry necessary traffic slows response times and damages project	Low	Medium	Medium	Steady.	Procurement plan and advice from an ICT consultant should reduce risk. Servers can be upgraded but bandwidth may not be easily increased. Built-in redundancy will feature in accepted design.
Delay in identifying Server Rooms in NT and MEF buildings	Server installation for the network would be delayed and may cause deferral of FMIS implementation	Medium	Medium	Medium	Increasing. Early decision on available location is important for room preparation and cabling	FRC must determine suitable space before bid documents are released as bidders must be able to inspect sites to estimate costs of their bids
Delay in ICT strategy	Risk of incompatible equipment being installed and having to be scrapped	Low	Medium	Medium	Increasing. As more equipment is installed, the chance of incompatible hardware or software increases	ICT Strategic Plan for MEF is required to set standards and benchmark performance. Plan would include parameters for network access security and ultimately access through the network to FMIS. Standards for desktop applications, web and email access and approval all form part of the strategy.
Problem with WAN installation between	WAN connections across either public domain or wireless links are	Medium	Medium	Medium	Steady	Cabling between buildings in the pilot can be complicated by the demands of security and may require non-on-line

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
sites	exposed to hacking and illegal access or corruption of transmitted data, even to illegal access of servers. Hard wiring of networks for VPN may mean running cables in streets and other public thoroughfares, all requiring permissions, delaying installation					access (eg, dialup) between non-MEF sites and the FMIS server. Reliance on NIDA to extend the Government fiber optic network would slow the development of a WAN for MEF and FMIS. Private installation of cabling may have to be undertaken. Early discussions with NIDA needed to determine their expansion plans and ownership of any MEF cabling that was installed. Must also have access to NIDA fiber optic cable for external email and web access.
Enforced decentralization of FMIS caused by communications difficulties	Numerous instances of FMIS in a variety of distributed sites caused by lack of adequate communications links will create more work and slow down the project	Medium	Low	Medium	Declining	Expert assessment of communications options and general improvements in Cambodian communications networks, extension of NIDA network and the development of more sophisticated technologies all reduce the risk of serious disruption to the Project, particularly in Stage 2.
Local service for server and other equipment fails to meet required standards	While a factor in the bid assessment will be the offered level of local support, it may not be adequate, delaying hardware or software servicing	Medium	Medium	Medium	Declining	Contract conditions will establish support levels for failure conditions but there is little guarantee of the quality or capability of service engineers over time. Expansion of technology base in Cambodia should reduce this risk over time.
Inability to identify suitable local ICT support services outside Phnom Penh	Delays in services for faults if support must come from Phnom Penh	Medium	Low	Medium	Declining	Basic local support for desktops in provincial offices will increase as technology spreads. Stage 1 focuses on more developed areas, the more remote provinces being in Stage 2 when technology spread will reduce risk.

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
Higher than expected training requirements for non-technical users of networks and PCs	Inability to use computers among proposed data entry staff will slow processing and possible FMIS rollout	Medium	Low	Low	Declining.	Computer usage becoming more common. Training programs for PC use and eventual use of FMIS are part of the project plan
Delay of New Chart of Account will delay the FMIS progress	CoA must be confirmed before implementation commences but complete structure in all FMIS functions are not required. Could operate on Fund, Account, Organization and Project initially	Low	Medium	Medium	Declining. Much of the new structure is agreed and complete agreement should be forthcoming in time for FMIS implementation	The current chart of accounts development and the merging of budget nomenclature and natural account (economic classification) structures must be agreed as soon as possible. Depending on the final FMIS product chosen, there may be a need to make some modifications to the new chart prior to the FMIS implementation. This depends on the cooperation of National Treasury and Budget Department to accomplish the NCA before January 2007. Any FMIS-driven modification to the new chart would have to be agreed by March 2007. The NCA is expected be a standard CoA applying in most countries. Agreement between NT and Budget must be achieved quickly, using pressure from FRC, Development Partners and other interested parties. Normally, standard FMIS software had its own default CoA structure which is relatively standard. Agreement in principle will also be required between parties that the CoA functionality of the software supplier will possibly impose further minor changes to fit the FMIS. If the Government leader and WB give

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
						strong commitment to encourage FMIS to go live on its milestone date. Resolution of the CoA issue is essential for a smooth implementation of the FMIS. Failure to resolve a final structure may not delay the startup of FMIS but would require the current COA and a complete change as soon as the new one were agreed. Most functionality of the new FMIS Ledger would be lost in the early stages
Issue of dual system in National Budget Execution	This is a natural consequence of a phased implementation. Alternative of a once-only total FMIS implication considered highly risky and probably impossible	Low	Low	Low	Steady	The strategy proposed for the rollout of FMIS will see the progressive replacement of purely paper-based recording by recording in FMIS. For example, once NT are on line, a cut-off date will be set after which all transactions received by NT for payment will be processed exclusively in FMIS and this strategy will be followed in all locations as FMIS is extended to other areas of Government. Cutover supported by reconciliation and document control in all each area of NT, MEF, 2 line ministries and pilot provinces as they are computerized reduces any risk of duplicate transactions or missed transaction recording
Change management will be fail to be	Failure of CM may result in resistance to change in both computer	Low	Medium	Low	Steady	Change management is the task of ICT Unit to deal with won't be totally be successful unless there is cohesive

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
achieved	technology and FMIS					cooperation by line departments and lines ministries and other authorities to lighten the burden of ICT Unit and accept the necessity for change. In case the change management is failed under the duty of ICT Unit, it is time for Steering Committee to rehabilitate the change management by using the power of the Champion or the «Stick and Carrot method» to deal with this obstacle. Anyway the help of the consultants or advisors, the champion, the steering committee, working group and the ICT Unit together, will support resolution.
The other departments and line ministries not interest or care about ICT or FMIS.	Disinterest in project potential or distrust of its usefulness may hinder progress and success	Low	Medium	Medium	Steady. Anecdotal evidence supports these changes and the current demand for technology is positive	By applying the change management and through the use of PSC and PWG, partnering should occur. Acceptance that ICT and FMIS is not just for the ICT Unit but the entire nation to strengthen Good Governance and participate in poverty reduction strategy.
Future Governments or senior civil servants will not be as committed to improving budget expenditure and accountability	May wind back controls inherent in the system but reverting to manual systems would be very difficult to achieve	Low	Medium	Low	Steady	Establishment of good governance and strong finance laws would be difficult to reverse
Accountability institutions and	Failure to report or penalize offenders will	Medium	Medium	Medium	Declining	The Rectangular Strategy of the Government fights against corruption

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
management expose corruption or inefficiencies and their influence or impact is curtailed.	encourage greater excesses and less compliance					and the corruption law will be passed in the next coming year.
The FMIS project will suffer mismanagement or prove difficult to manage.	Inadequate Project Management or resources will cause delays and problems with the implementation achieving its stated goals	Low	High	Medium	Steady/declining. Project Manager must be able to make the project the highest priority and devote most effort to the project.	The project plan was designed to set up a road map for FMIS and the PFM Secretariat and WB support the push FMIS implementation. Project team structure and advisor support will identify any issues and seek to address them promptly
The complexity of FMIS will overwhelm the implementing agencies and slow other expenditure management reforms	Lack of confidence can cause confusion and poor decisions	Low	Medium	Low	Steady. Change management and staff training supported by advisors will help reduce the risk over time	Government and WB have focused on realistic phasing of implementation and ensuring adequate project management within the implementing agencies.
Process changes to streamline financial processes, modified to fit FMIS, will not be complied with and current processes retained as well as new processes followed	Wasteful duplication of processing effort where FMIS adds to process complexity rather than helping reduce it	Medium	Low	Medium	Declining	Process change will be supported by the new system, training on FMIS will help reinforce the new processes and change management will help explain the benefits and reasons for the changes. Changes are being driven by the RFC and follow-up from that area will add to mutual support for sustained change.
Over time, interest will be lost in key components of the	Lack of enthusiasm would slow the project but successes in the pilot	Low	Low	Low	Steady	An aggressive monitoring and evaluation system will serve as an early warning system to both implementation

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
project, such as FMIS, the training fund, or internal audit, due to perceptions of poor implementation.	stage will encourage others					challenges, and changes in perception within the civil service regarding reforms underway.
Political leaders will have weak incentives to improve accountability and transparency.	Lack of Government support would undermine the project	Low	Medium	Low	Declining	The project is being linked closely to both the NPRS and the PRSP, which ensure senior political commitment and ensure the reforms envisioned remain at the forefront of the political and development debate.
The software supplier fails to provide quality software and defaults on contract obligations.	May slow the process due to contract legal action	Low	High	Low	Steady	Procurement processes and project management and control should quickly identify any likelihood and lead to early correction
The network will fail to support the system or the network link was damaged.	Failure of the network may, depending on failsafe design, interrupt processing until fault was repaired	Low	Medium	Low	Steady. Modern network design has failsafe and recovery built in to avoid undue delays in restoring services. Disruption of main cabling is a threat	The network provider must assure that the network system works uninterruptedly. Design will feature failsafe and recovery processes but can't correct physical damage to cables
Intruders will try to attack the system.	If successful, disruption and fraud are possible, as is destruction of data	Low	Low	Low	Steady	The network software (VPN proposed), provides strong encryption for database. The firewall and anti-virus will be installed to protect the system and user ID and passwords will help protect against internal unauthorized access
The database server	Backup will reduce damage to possibly the	Low	Low	Low	Steady	The backup server will temporarily act as the database server before the

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
will fail.	current day's transactions that would need to be re-entered into the application					problem might be fixed.
The system expansion to many other area in the FMIS system will occur.	Enhancement of functionality is built into the Project beyond Stage 1	Low	Low	Low	Steady	The software has enough capability to support further improvement in functionality beyond Stage 1
The FMIS end user loses or wants to change his password.	User would be unable to access the network or system until password is reset	Low	Low	Low	Steady	Standard operating procedures would address this through the Help Desk
The end user in remote area needs emergency help.	User would be unable to enter transactions or access reports	Low	Low	Low	Steady	The help desk will provide real time solution to end users via web site, e-mail or phone number. If the problem cannot be solved then the help desk representative will be sent there to deal with the problem. Training materials provided to each user and on-line system help may speed problem solving
The end users cannot use the system well.	Would result in high level of errors, delays in processing or omitted/duplicated transactions	Medium	Low	Low	Steady	The training will be provided to the FMIS end user before they are provided with access.. The manual and important documents will be delivered to them. A help desk will be created to deal with all the unexpected problem in the both the central and remote area
New function need to be included to the	Desktop or FMIS software upgrades are available and new	Low	Low	Low	Steady	Both desktop and FMIS software has flexibility to provide upgrade solution rather than completely replacement of

Risk Event	Potential Impact	Current Risk Level ⁵			Risk Trend ⁶	Risk Treatment
		L	C	R		
existing system.	software for desktops can be procured with approval					the old version. New software can be procured if justifiable
The FMIS computer is in a state of error and cannot operate the FMIS application.	Users unable to access the system for data input of reporting	Low	Medium	Low	Steady	Maintenance support of FMIS will guarantee response times to catastrophic failure. Transaction processes can continue and backlogged until FMIS is recovered

L = likelihood; C = Consequence; R = Risk Level

An assessment of whether the Risk Level has been increasing or decreasing in the (approximately) 6 months leading to the present time.

10.6 Project Monitoring

Project monitoring will be conducted over the project and by the project team itself.

Monitoring and evaluation will be an on-going activity of the project and component of the management team. Mid-way through the project, an evaluation will be done by the survey programmes. Towards the end of each phase of the project, an evaluation will be undertaken of the pilot survey program and related programs ongoing in the country. The evaluation results will serve as an input to the development of a national program for public performance and expenditure tracking. The expected outcomes will become the useful tools to assess the level of understanding of the FMIS staff and the in line departments' staff, the progression of financial system, the difficulties caused by the FMIS and the recommendation and comments from the users and management. The change management will take into account all be pros and cons of FMIS to setup a new policy to maximize the benefit and understanding of FMIS.

Reporting by the Project Team to both the Project Working Group and the Project Steering Committee will provide both those entities a regular update on the project and activities as seen by the Project manager.

The ICT Unit will also conduct monitoring. ICTU has done successfully the first FMIS Survey on the capacity of hardware, software and people skills of all the inline departments and the relevant ministries⁷. The ICT Unit plans to setup other key surveys in every phase of FMIS project such as:

- ◆ After basic training survey- this survey will be done by the ICT trainer, who will enquire to trainees on their interests in the training course and FMIS program, their satisfaction and non-satisfaction, what are their recommendation and request. The data of the survey will be evaluated by the change management of ICT Unit. The target of this survey is the trained participants.
- ◆ After training- the survey aim to collect all information of trainees about the level of understanding, the benefit they expect from the system, their difficulty and their commitment to FMIS.
- ◆ Implementation phase survey- This type of survey will be expected to take place in the implementation stage of the FMIS and might be done more than one survey, according to the requirement to develop the FMIS system and the capacity building of its staff. The surveys will focus directly on the FMIS application cost and benefit and its outcomes. The result of the surveys will be assessed to identify and track all obstacles and problems which are facing during the phase. By then the change management will modify its policy for the ICT Unit to rationalize but maximize the benefits produced by FMIS system.

The ICT Unit will monitor on the hardware utilization in the FMIS networks, check software randomly in each computers on the network to make sure that unlicensed software is not installed in the system without authorization from the unit.

⁷ The result shows that not more 20% of the total employees of each department know or have learned to use computers. The knowledge of those people is mostly basic. But 99 % of their departments need further knowledge and skill for their staff. Only 5% of the departments know clearly about FMIS and its benefit. The operating system and software being used is the product of Microsoft such as Window 98, Window 2000, Window XP and Microsoft Office. Most of them are familiar with Window XP platform. Unfortunately, 70% of the hardware in every department is very old, out of date and need to be renewed.

11. Technical Management

Another critical part of the FMIS project is technical management. The technical management will comprise of all the ICT Unit staff from all levels. The director will monitor on the system as whole. The change manager will be responsible for the general user understanding, awareness and readiness for the introduction of both the ICT and FMIS components of the project. The procurement manager deals with the procurement of hardware and software. The ICT technician monitor and organize the computers network in FMIS system both software and hardware. The ICT technician, ICT training manager and the change management do R&D in system development. The ICT technician and training manager will provide the Information and Learning Services to the FMIS people.

11.1 Project Procurement Management Plan

The project procurement is planned to start during 2006. The procurement news will be announced publicly to ICT and FMIS software companies both domestically and internationally. The bidding documents will be distributed publicly in the spirit of transparency and fairness. The ICT Unit will provide those documents and the procurement application forms to all companies who are interested in either or both the ICT networking and FMIS software development. The deadline of the procurement will be advised to interested parties. The successful bidder must be the one who satisfy the below criteria:

11.1.1 ICT Procurement – Component 1

- ◆ User Requirement Specification: the most important criteria to select a valid supplier, the company must assure that it can meet all conditions in this document. The company must provide the below criteria, the company, which is capable to provide these condition will be selected for the contract
- ◆ Provide a strategy for the ICT networking and communications that is consistent with MEF requirements
- ◆ Satisfy building requirements in the refurbishment of the Server Rooms
- ◆ Install and connect all required network wiring
- ◆ Install all servers and other hardware and their associated software
- ◆ Provide the communications required between MEF, NT and pilot sites
- ◆ Provide suitable desktop PCs and other peripherals

11.1.2 FMIS Procurement – Component 2

- ◆ User Requirement Specification: the most important criteria to select a valid supplier, the company must assure that it can meet all conditions in this document. The company must provide the below criteria, the company, which is capable to provide these condition will be selected for the contract.
- ◆ Fulfill security criteria
- ◆ Provide import export data tools
- ◆ Provide user friendly interface and most users' satisfaction

- ◆ Provide manual of the FMIS application in both language Khmer and English
- ◆ Provide efficient training course to FMIS staff
- ◆ Provide long term guarantee
- ◆ Provide free upgrade version
- ◆ Provide online solution by offering a web page that connect to FMIS database
- ◆ Provide possibilities to recognize different type of DBMS- Integration of data from different architecture.
- ◆ Provide compatibility with minimal requirement of hardware
- ◆ Provide possibility to expand the system to remote area or more clients
- ◆ Provide on time product without delay
- ◆ Encourage the cooperation with the ICT Unit during the documentation, development and implementation phase
- ◆ Open and suggest the newest technology for ICT Unit

11.2 Information and Learning Service Plan

Information and Learning Service (ILS) must be created in order to provide to all audiences with news and knowledge. The audiences here focus directly on the FMIS staff. We shall never confuse between the FMIS staff and the ICT Unit staff. The FMIS staff are all government officials at all levels and functions i.e. the government officials who use and involve in the FMIS system. Those people include MEF management, senior officials, department heads, financial controllers and MEF staff. The information around FMIS environment will be shared with all of them. The ICT Unit will setup ILS Plan for the development plan of FMIS from the early stage.

- ◆ **The early stage:** the basic understanding of computer and some useful desktop computer will dispatch to all FMIS staff that come from line departments. The training course will be organized before the pilot project would start. All the logistics and other facilities will be provided by the ICT Unit, including transportation fee, food and accommodation cost during the training course. In this training course trainees will expect to absorb the fundamental concept of computers such as MS Word, Excel and Access, networking, Internet, E-mail and maintenance.
- ◆ **In pilot stage:** all previous trainees in the early stage will be invited again to participate in the FMIS application course. This course teaches them how to use the world system of FMIS, for example how to log in, log out, how use the menu and commands in the system, how to manipulate and query data...etc. The useful concept of accounting, financing and economic policy will be included in the course to achieve the well understanding of the participant in the financial management information system.
- ◆ **Go live stage:** counting toward the implementation stage there will be new trainees who will require the course as similar to the pilot stage. Some update features or information of the FMIS application or other relevant news would be informed through new course or otherwise via newsletters or webpage.

This means that requirement of the online library or Information Sharing Center (ISC) must be created for various purposes.

Information Sharing Center

- ◆ Provide online and real time solution to FMIS staff such as FMIS update information, application manual...etc.
- ◆ Provide audience a forum to discuss and exchange opinions on FMIS's pros and cons, financial reform comment, economic view...etc.
- ◆ Provide mailbox for FMIS staff to communicate each other.
- ◆ Report to Government, donors, private sector and civil society about FMIS progress, economic statistics and performance...etc.
- ◆ Online library which distribute all newsletters, articles and books about FMIS, IT development, economic and finance and other useful documents.
- ◆ Online report viewer for publishable part of FMIS system.
- ◆ Gateway to get comment from government management, donors and private sector.

ICT Unit must have its own website as the information sharing center to support ILS. The ILS here does not only provide to FMIS audience, but it will be also distributed countrywide and worldwide also.

The ICT Unit also needs to build the capacity building of its staff also.

- ◆ Improve management and planning capacity.
- ◆ Improve data analysis capacity
- ◆ Management, IT and planning training as needed
- ◆ Expand ICT personnel
- ◆ The Senior Management of ICT
 - Improve management capacity.
 - Improve data analysis capacity
 - Management and IT training as needed

12. Change Management Strategy

For a solution that addresses such a potentially wide audience of users at all levels of government financial operations, planned and successful change management strategies can be major factors in determining the success or failure of the overall project. An essential part of the implementation and the achievement of success over the lifecycle of the solution is both the initial and ongoing change management plan and execution to ensure all users have the information, incentive and tools to adapt to ongoing change and to be willing participants in the change program. Change Management expertise is required to develop comprehensive programs of informing, educating and encouraging participation in any project development.

Adoption of changes to the functions of accounting arrangement, accounting staff and their interaction with a new FMIS will no doubt span a number of years and vary widely across the levels and areas of government. The introduction of computer based systems alone will create potentially significant changes to the working life and condition of many people. These changes need to be carefully and sensitively managed to reduce any negative impacts on, or reactions from, staff. The changes should also avoid threatening the existing viability of the current arrangements, which must be operated in parallel with, and form a back-up to, the new system. While progressive implementation of change may not be very efficient, care of staff and their concerns is important to reduce risk of disruption and lack of cooperation of staff feeling threatened by the reforms and change.

In designing the transition to a new system, it will be important to provide strong incentives for individual units and staff within the system to adopt and utilize the changed arrangements. As the changes from the reform program and the introduction of a FMIS will potentially provide some level of efficiency gain, the freed resources may be redirected to other services or retrained but they need reassurance that they will be looked after.

A change management strategy and plan will be produced as a separate document and will form an essential part of the overall project plan to ensure minimal disruption and maximum acceptance of a new system as it is delivered.

13. FMIS Pilot Stage Detail Work Plan

The FMIS pilot stage is developed round a number of activities, some of which must precede others, some which can operate concurrently. In assessing and managing resources, this concurrency needs to be considered.

The pilot stage has the objective of implementing a FMIS in MEF, 3 pilot line Ministries and 5 or 6 Provincial Treasuries. For pilot stage, only some components of the FMIS may be implemented, the most likely being the Ledger, Budget, Procurement, Banking and parts of Accounts Payable and Assets.

13.1 Key Project Milestones

To achieve a startup date of 2007, a number of important milestones have been identified and dated.

13.1.1 Recruitment of all required staff

- ◆ May 06

Three additional staff should be recruited, one Business Analyst, one Trainer and one Change Manager.

13.1.2 Development of FMIS Project Plan document

- ◆ 17 Mar 06

A first draft of this document covering project objectives, resources, responsibilities, timeframes, assumptions, risks, dependencies and performance measures should be ready for presentation to the Project Steering Committee as soon as possible. The Plan will be regularly updated as timeframes, assumptions, risks and delays outside the control of the Project Manager arise but the Plan sets the framework within which the project will be undertaken. The project plan will continue to be developed as the project itself develops.

13.1.3 Release of Procurement Documents

- ◆ 29 May 2006 for ICT Procurement
- ◆ 29 May 2006 for FMIS Procurement

This key milestone is critical to the timing of the entire project. Releasing the document at this date is required to allow potential bidders to raise questions about the document, prepare and lodge their bids and for the bid evaluation process to proceed in an ordered fashion. Once the bid documents have been finalized, the detailed bid evaluation plan should be prepared and governance (proper control of the process) prepared.

13.1.4 Establish scope and supply for ICT requirements

- ◆ 19 May 2006

This milestone includes both the necessary detail of infrastructure to be included in the User Requirement documentation for release with the Procurement Documents but also forms the basis for contracting for the supply and installation of the necessary infrastructure for Phase 1.

13.1.5 Selection of Turnkey Solution Provider

- ◆ 11 August 2006 for ICT

- ◆ 29 September 2006 for FMIS

This milestone, like the previous one, is critical to achieving the FMIS startup. The TSP will have to install their hardware, prepare for configuration of the software (so that the software processes transactions the way the Team want it to) and prepare for testing and start-up.

13.1.6 Complete System Design

- ◆ 29 December 2006 for Stage 1 functionality
- ◆ 14 December 2007 for complete functionality

The final design for pilot stage is required to allow configuration, programming, testing, training and data upload for the Go-Live event.

13.1.7 Ready for Go-Live

- ◆ 23 February 2007 Budget preparation functionality
- ◆ 20 July 2007 FMIS Stage 1 functionality

The timing of this milestone allows for a 6-week gap in the project timetable during the implementation stage. This allows a period of pre-operations using the new system as a trial while the current processes continue in parallel so that both the new and current systems record the same transactions, testing that the same results are achieved as a final test of the FMIS. It also allows for any unavoidable delays during the process without threatening the start-up date.

13.2 Preliminary Stages

This stage completes all required tasks prior to the issuing of the bid documents and also covers the installation of necessary networking and infrastructure hardware and software required before the FMIS can be tested across the first stage sites.

The network and infrastructure components included in the preliminary stage does not include the FMIS-specific hardware and software but does include adequate linking of the various geographically disbursed sites, office networking, servers, desktops etc to support the later introduction of the FMIS.

13.2.1 Preliminary Stage Work Plan

ID	Task	Start	End	After	Resources	Details
PS1	ICT Strategy Plan selection of Advisor	3 Apr 06	21 Apr 06		ICT Technical (50%) Project Manager (50%)	Collect CVs and identify preferred Advisor, contract for assignment
PS2	Conduct ICT Strategy	24 Apr 06	19 May 06	PS1	ICT Technical (50%) ICT Advisor (100%)	<p>Determine readiness of network and infrastructure for project Stage 1:</p> <ul style="list-style-type: none"> ▪ audit current infrastructure ▪ identify gaps between current and required infrastructure (eg, LANs, WANs, servers, desktops, operating systems, application and communications between all target sites for Phase 1. ▪ Estimate data volumes based on current transaction levels and scale for future growth ▪ assess gap options

						<ul style="list-style-type: none"> ▪ determine preferred solutions ▪ Report to assist finalization of the procurement document for ICT supply
PS3	Complete Bid documents for network and infrastructure	6 Mar 06	26 May 06	PS2 Input strategy To bid docmts	Project Advisor (10%) Project manager (20%) ICT Technical (50%) Procurement specialist (50%)	Combine the ICT SOUR and the ICT Strategy report into the bid document to comply with World Bank requirements and have bid document released to bidders
PS4	Bid responses for network and infrastructure	29 May 06	23 Jun 06	PS3	ICT Technical (10%) Project manager (5%)	Respond to bidder questions, coordinate site visits in Phnom Penh
PS5	Assessment of Bids and approval of Recommendation	26 Jun 06	21 Jul 06	PS4	Project Manager (100%) ICT Technical (100%) ICT Advisor (50%) Project Advisor (25 %)	Compare bids against requirements and the Assessment Plan. Determine best bid and recommend outcome to Steering Committee and FRC. EFI may be an invited observer
PS6	Contract for network and infrastructure completion	24 Jul 06	11 Aug 06	PS5	Project Manager (100%) ICT Advisor (33%) Project Advisor (33%)	To be signed off by Steering Committee and RFC

					Legal Advisor (Legal Department (100%))	
PS7	Prepare Server Rooms in MEF and NT	14 Aug 06	8 Sep 06	PS6	ICT Contractor (100%) Project Manager (5%) ICT Technical (10%)	Designated server rooms fitted out and wired
PS8	Install wiring in MEF and NT	14 Aug 06	8 Dec 06	PS6	ICT Contractor (100%) Project Manager (5%) ICT Technical (5%)	Network wiring in MEF and NT in priority order as determined by Project manager: <ul style="list-style-type: none"> ▪ Server rooms ▪ ICTU offices ▪ FMIS Partner workspaces ▪ Budget ▪ NT ▪ Balance as determined
PS9	Prepare connections between MEF and NT	14 Aug 06	6 Oct 06	PS6	ICT Contractor (100%) Project Manager (5%) ICT Technical (5%)	Connection between server rooms in each building. Connection hardware and software installed
PS10	Install media converter and connect MEF to NIDA Fiber Optic Cable	14 Aug 06	25 Aug 06	PS6	ICT Contractor (100%) Project Manager (5%)	Supply and fit Media Converter. Run cable from NIDA FO node to Server room

					ICT Technical (10%) NIDA (5%)	Install and connect Media Converter and wire to Server
PS11	Install, test and implement servers and network infrastructure required for Stage 1 in MEF and NT	11 Sep 06	29 Dec 06	PS7	Contractor ICT (100%) Project Manager (5%) ICT Technical (20%)	Contractor undertakes work in accordance with contract, supervised by ICT Technical. At completion of this task, all required networking and infrastructure for Stage 1, except that to be supplied by Solution Provider for specific FMIS hardware and software, would be provided and be operational, in MEF and NT
PS12	Install, test and implement any other servers and network infrastructure identified as required for Stage 1 in pilot sites, NBC, Customs and Taxation	1 Jan 07	14 Dec 07	PS11	ICT Contractor (as needed) Project Manager (as needed) ICT Technical (as needed)	At completion of this task, all required networking and infrastructure for Stage 1, except that to be supplied by Solution Provider for specific FMIS hardware and software, would be provided and be operational, including in line Agencies under pilot, and selected Provincial Treasuries.
PS13	Finalize User Requirements specification for the FMIS procurement	12 Dec 05	17 Mar 06		Project Manager (25%) ICT Technical (10%) Project Advisor (50%) Procurement specialist (50%)	This Task requires: <ul style="list-style-type: none"> ▪ completion of discussions with MEF Departments on User Requirements (UR) ▪ discussions with line Agencies on User Requirements ▪ analysis of the views and merging those views into the UR ▪ updating UR with ICT decisions and data

						volume estimates
PS14	Monitor decisions of the Financial Reform Committee for issues that will affect or be affected by, FMIS	5 Dec 05	28 Dec 07		Project Manager (5%)	Ongoing monitoring of agenda and decisions of the FRC that might impact on the FMIS Project

13.3 Business Process Review

An important aspect of implementing a FMIS is the impact a computer-based system will have on current paper-based processes. Some work has been undertaken on process mapping and it would be prudent to complete mapping of all major financial transactions and review them for possible streamlining and improvement prior to the introduction of the computer-based solution, to reduce the otherwise potentially negative impact that a new system might have, in duplicating or even replacing, steps in the current manual processes.

It is therefore desirable that the mapping process should be consolidated and completed, reviewed for improvement and introduced so that the new FMIS can support efficient processes rather than operate in parallel and therefore duplicate outdated paper-based processes.

Both the process maps before and after review will be required by the Solution Provider as part of assessing fit/gap analysis and in configuring the FMIS to support processes that will apply under a FMIS regime.

It should be understood that processes may require further modification during and following the introduction of FMIS. Any such changes should be relatively minor if the assessment undertaken under Stage BR2 is comprehensive but each FMIS has its own way of processing many transactions that may generate some further modifications.

13.3.1 Business Process Review Work Plan

ID	Task	Start	End	After	Resources	Details
BR1	Modify major business processes to best fit FMIS	05 Jan 06	21 Apr 06 NB, this will start later but is not on the critical path		2 x ICT Business Analyst (50%) ICT Manager (10%) Financial Advisor (20%)	Some process mapping has been undertaken but all major transactions (by volume and value) should be reviewed before an FMIS is introduced. Therefore: <ul style="list-style-type: none"> ▪ collect all reviews undertaken ▪ identify all major processes not covered by completed reviews ▪ using appropriate methodologies, undertake mapping process of all identified significant processes

						<ul style="list-style-type: none"> ▪ document those processes ▪ review for weak points or stages and analyze risk levels (both on volume and amount) ▪ emphasize where geographical document transfers are important ▪ gain sign-off from senior staff that the mapped process is accurate
BR2	Document and change processes	24 Apr 06	9 Jun 06 This will start later but is not on the critical path	BR2	1 x ICT Business Analyst (50%) ICT Manager (10%) Financial Advisor (20%)	<p>From documented and approved changes to processes, it is then necessary to put those changes into practice. This requires:</p> <ul style="list-style-type: none"> ▪ revised process documentation that reflects the approved changes ▪ development of training programs and materials to educate staff on the new processes and the reasons for the changes ▪ redesign any forms etc that will be required to support the changed processes ▪ deliver training and introduce the new processes

13.4 Chart of Accounts Review

While a recent review of the budget and budget execution charts merged these two structures and made modifications to the previous structure, the introduction of a computer based system will both require a number of relatively minor changes and also permit a considerable expansion of the functionality of the chart to increase further the usefulness of information to users.

The likely functionality available in a FMIS would require the structure of the new chart to be reformatted into the field structure used in FMISs and add additional fields that a modern FMIS permits. The review would need to identify the best use of these additional fields and then design the coding structure to implement both the new structure and any additional fields that will be added.

13.4.1 Chart of Accounts Review Work Plan

ID	Task	Start	End	After	Resources	Details
CA1	Complete design of Chart of Accounts (French)	12 Jan 06 This will start after CoA project is closer to completed	28 Apr 06		1 x ICT Business Analyst (20%) ICT Manager (10%) Financial Advisor (20%)	Review structure of new CoA and separate into a field structure suitable for FMIS. Replace flat numeric coding structure with the appropriate field separations
CA2	Add new fields required for FMIS	28 Jul 06	24 Aug 06	CA1	2 x ICT Business Analyst (50%) ICT Manager (10%) Financial Advisor (20%) Change Manager (20%)	Identify new fields for FMIS and develop coding structure. This requires: <ul style="list-style-type: none"> ▪ discussion with users about potential for additional information ▪ based on user needs, develop new field structures required to satisfy those needs ▪ develop coding for the new fields ▪ gain acceptance for the proposed structure

						by users. ▪
CA3	Approval for new structure	25 Aug 06	22 Sep 06	CA2	ICT Manager (10%) Financial Advisor (20%) Change Manager (20%)	Presenting reasons for alterations and gaining signoff approval from Reform Steering Committee.
CA4	Train Users in MEF and Pilots in new structure	25 Sep 06	23 Jul 07	CA3	Trainer (20%) Change Manager (20%)	Part of the training associated with FMIS

13.5 Basic Computer Training

As new desktop and infrastructure equipment will be installed during the preliminary stage of Phase 1, the equipment to be used by staff who will be involved in FMIS usage, training both the technical support staff and the users in those areas to support, maintain and use that equipment will be important to those staff's ability to quickly adapt to FMIS when it is rolled out. Staff who are confident in the use of computer equipment are less subject to feelings of intimidation by a major new application such as a FMIS.

It is expected that some of the new equipment will be installed in the pilot line Ministries and in the first Provincial Treasuries, training staff in those areas to support that equipment with minimal support from the ICT Unit at a time when the project is reaching intense activity will aid the more central efforts of the project team without unnecessary distraction from the users who will be building their capability in general PC usage prior to training on FMIS itself.

13.5.1 Basic Computer Training Work Plan

ID	Task	Start	End	After	Resources	Details
CT1	Understanding and use of PCs	3 Apr 06	30 Jun 06	PS4	ICT Technical (10%) Trainer (10%)	Run in conjunction with EFI
CT2	Understanding and use of desktop applications	3 Jul 06	29 Sep 06	CT1	ICT Technical (5%) Trainer (25%)	Run in conjunction with EFI

13.6 FMIS Initiation Stage

The initiation stage of the project covers the final preparation of the procurement documentation and its release into the market, requiring clearance by the Project Steering and Financial Reform Committees. On release, project governance is required to protect the integrity of the bid process during the period from release to the final decision and announcement of the successful bid.

During this time when the Procurement Documents are released, the ICT Team under the direction of its Project Manager and Advisor must complete and have approved by the Project Steering Committee, the bid evaluation process under which the bids for the Solution Provider will be assessed.

The bid evaluation team should be formed and the members instructed in their governance obligations and the methodology used for the bid evaluations.

The governance plan forms an integral part of the bid evaluation document which covers such issues as security of the bid documents, communication with bidders and responses to questions, record keeping of the assessment process and the preparation of the bid outcome and recommendation for selection of the Solution Provider to the Steering Committee and the Financial Reform Committee.

With a Change Manager appointed and trained in the processes required of change management, the Change Manager will, in conjunction with the team, develop a change management and strategy for the project. This strategy will be further developed when the bidder approaches have been revealed in their bid documents and the team will be able to modify and finalize the project strategy supported by this information.

Once the Solution Provider has started their assignment, further changes to the Change Management strategy are likely and may further change during the project.

13.6.1 FMIS Initiation Stage Work Plan

ID	Task	Start	End	After	Resources	Details
IN1	Review and Finalise RFT	06 Mar 06	26 Mar 06		Business Analysts (50%) ICT Manager (50%)	Bringing together all the reviews of CoA, processes and discussions undertaken with MEF and other people, ICT updated data and update all required alterations to the procurement documents.

IN2	Release Procurement Documents to the market	27 May 06	14 Jul 06	IN1	ICT Manager (100%)	Advertise and distribute documents on request to interested bidders. Respond to bidder's questions as described in governance policies.
IN3	Complete bid evaluation process and documentation	17 Apr 06	12 May 06	IN1	ICT Manager (100%) Project Management Advisor (100%)	Complete all bid evaluation documents, security storage for the documents, finalize the evaluation forms for scoring, accommodation for the evaluation process to meet and discuss privately
IN4	Undertake first stage evaluation of bids and form a recommendation for a shortlist if required	17 Jul 06	4 Aug 06	IN3	ICT Manager (100%) Business Analysts (300%) Change Manager (20%) ICT Manager (50%)	Bringing the evaluation team together, advice them of the processes and methodology to be followed and undertake the evaluation. This requires: <ul style="list-style-type: none"> ▪ assessment of the bids for general compliance ▪ seek any clarifications required on interpretation of the bids as permitted by the evaluation strategy ▪ undertake preliminary scoring of the bids ▪ compare initial scoring between assessors and, if significant differences appear ▪ reappraise and modify scoring until reasonable agreement is reached in the ranking

						<ul style="list-style-type: none"> ▪ agree final ranking, including recommendation for short-listing and further evaluation ▪ advise unsuccessful bidders
IN5	Prepare second stage bid documents	7 Aug 06	18 Aug 06		ICT Manager (100%) Business Analysts (300%) Change Manager (20%) ICT Manager (50%)	
IN6	Release second stage bid documents to short list bidders	21 Aug 06	22 Sep 06		ICT Manager (100%) Business Analysts (300%) Change Manager (20%) ICT Manager (50%)	
IN7	Prepare second stage assessment plan	10 Jul 06	21 Jul 06		ICT Manager (100%) Project Management Advisor (50%)	

IN8	Finalize assessment and document recommendation for preferred supplier	24 Jul 06	1 Sep 06		ICT Manager (100%) Project Management Advisor (25%)	
IN9	Government approval of bid process and acceptance of recommendation	4 Sep 06	29 Sep 06			
IN10	Negotiate with successful bidder, details of contract	2 Oct 06	13 Oct 06			
IN11	Develop Change Management Strategy and Plan	28 Apr 06	1 Jun 06			

13.7 FMIS Implementation Stage

Much of the implementation stage will be managed by the Solution Provider (SP) as the technical expert in the chosen FMIS solution. Team members will be required to work closely with the team provided by the SP and to learn from, as well as advise and teach, the SP's team members.

The first part of this stage is to undertake, with the SP, the fit/gap analysis, identifying where the new FMIS will do what was expected and where it does not. As no computer system provides a perfect fit, compromises will be required and on identifying gaps, the SP, in agreement with the team, will determine options for overcoming those problems.

The fit/gap is a make-or-break phase for the solution. If gaps cannot be resolved to the satisfaction or acceptance of Government, the project may terminate and a different solution sought.

When the identified gaps have been addressed, major work-around solutions should be approved by the Steering Committee as they will change expectations on the way the new system is expected to function.

Following approval, the SP, supported by the team, will develop the final system design prior to undertaking configuration. This design will form the basis for making decisions on the way the system will be configured to fit best with the user requirements (as modified by the gap work-around) and will be fully documented by the SP, approved by the team.

Configuration is the process of fitting the design to the system capability and sets up the system to behave in the planned fashion. This does not include changing code but setting coding parameters within the system coding structures to ensure the system responds as required and takes a user to the next stage or reacts to the user with the correct messages or prompts. At each stage, the configuration is 'Unit Tested', ie, the specific configuration is tested that it works correctly. During this step in the project, ICT Unit team members will work with the SP's team and learn the way the system is configured and tested and, where appropriate, help or even undertake configuration tasks as part of the knowledge transfer process.

At completion of configuration and unit testing, the FMIS will be subject to more broad or 'System Testing' where each component of configuration in a part of the system is tested as a group, through transactions that test the relationship between all the parts of the system. Errors will be corrected until the system is found to be functioning as expected.

Interfaces with external systems will be designed and coded both by the FMIS team and by the owners of those external systems. It will require the cooperation of the various system owners for the design and development of the data import and export facilities, their testing with test data and the ongoing maintenance of both systems leading up to, and following, the implementation of FMIS and changes to any of the systems thereafter.

Any installations required for FMIS in the pilot line Ministries and in the selected Provincial Treasuries will have to be installed (the extent of this will depend on the final architecture of the implementation process) and communications tested between any software and the FMIS.

When all these tasks have been completed, the final system development sign-off between the SP, Steering Committee and probably the Financial Reform Committee should be sought to ensure the milestone status is accepted and recorded in the project documentation.

During this entire stage, the Change Management program should be implemented and delivery of the program commenced early enough to reach the desired audience and to link with progress on development as well as with training.

The end of this stage has the FMIS ready to be moved into its production environment and readied for the go-live event.

13.7.1 FMIS Implementation Stage Work Plan

ID	Task	Start	End	After	Resources	Details
IM1	Implementation Partner commences in Cambodia		6 Nov 06			
IM2	Settling in with the Solution Provider	6 Nov 06	10 Nov 06		3 x ICT Business Analyst (10%) ICT Technician (50%) ICT Manager (50%) Project Management Advisor (20%)	Set up work space, PC connections, telephones, faxes, copiers and a library space. Agree team structures, finalize the project plan and project and system documentation standards. Presentation by Solution Provider (SP) to senior management and Steering Committee on SP's view of the project and their requirements of MEF and other staff. Identify and establish Server Room and supporting infrastructure (reliable power, lighting, cabling, air conditioning, secure access and fire and flood proofing) Establish or identify training facilities (room, equipment, communications etc)

IM3	Install hardware and software in server room for FMIS	13 Nov 06	1 Dec 06			
IM4	Fit/Gap analysis of the proposed solution	13 Nov 06	1 Dec 06	IM1	<p>3 x ICT Business Analyst (100%)</p> <p>ICT Technician (20%)</p> <p>ICT Manager (50%)</p>	<p>Work with SP through their solution and reach understanding on solutions to any problems with solution's approach to user needs:</p> <ul style="list-style-type: none"> ▪ compare all user requirements with solution ▪ identify where system does not fit or needs work-around ▪ determine relative importance of gaps (if of major importance, project may have to be stopped and a new SP and solution selected) ▪ determine acceptable alternatives (system changes, process changes etc). ▪ Steering Committee to agree final position on gap resolution and approve project continuation.
IM5	Agree work-around for identified gaps	4 Dec 06	8 Dec 06	IM2	<p>3 x ICT Business Analyst (100%)</p> <p>ICT Technician (20%)</p> <p>ICT Manager (50%)</p>	Major changes or modifications agreed should be approved by Steering Committee

IM6	Complete system design	11 Dec 06	29 Dec 06	IM3	<p>3 x ICT Business Analyst (100%)</p> <p>ICT Technician (20%)</p> <p>ICT Manager (50%)</p> <p>Project Management Advisor (20%)</p>	<p>System design stage mainly done by SP but used as capacity building for all team. ICT Manager and Steering Committee to sign off acceptance of final design.</p> <p>SP will prepare a test plan for system and integration testing</p>
IM7	Configure budget preparation functionality	1 Jan 06	23 Feb 06			
IM8	Release budget preparation functionality to Budget Department		23 Feb 06			
IM9	Configure and unit test configuration for Stage 1 functionality	1 Jan 06	23 Mar 06	IM4	<p>3 x ICT Business Analyst (100%)</p> <p>ICT Technician (100%)</p> <p>ICT Manager (50%)</p> <p>Project Management Advisor (10%)</p>	<p>Mainly SP responsibility but major opportunity for ICT Team to understand system and learn how to make configuration changes. Unit testing is testing each step as changes are made</p>

IM10	System and Integration Testing	26 Mar 06	4 May 06		<p>3 x ICT Business Analyst (100%)</p> <p>ICT Technician (100%)</p> <p>ICT Manager (50%)</p> <p>Project Management Advisor (10%)</p>	<p>As each major area of the solution is completed, that entire area is tested and all problems logged. Corrections are made, then subject again to unit testing until all problems seem to be resolved, the area then subject again to the SAME system tests that identified the original problems. Each stage of testing and changes to configuration must be recorded. When all areas have been tested, the entire system is tested (Integration testing) to ensure all areas work together correctly. Each major stage of testing completion should be signed off by both the ICT Manager and the SP.</p> <p>Testing is an iterative process that requires careful repeating of scenarios repetitively with staged minor changes to each step.</p>
IM11	Interface development and testing	26 Mar 06	4 May 06	IM5	<p>Business Analyst (50%)</p> <p>ICT Technician (100%)</p> <p>ICT Manager (20%)</p>	<p>Each interface is identified from user requirements and final system design, then:</p> <ul style="list-style-type: none"> ▪ Data flows and timing of flows between FMIS and external systems identified and documented ▪ Interfaces designed and agreed with external system owners (tax, customs, payroll, NBC etc) ▪ Interface programming and testing undertaken ▪ Problems resolved and batch testing to

						<p>complete test stage</p> <ul style="list-style-type: none"> Sign-off each interface with agreed and signed responsibility allocated between system owners for any problems identified
IM12	Final full test of completed system and interfaces for Stage 1	7 May 07	18 May 07		<p>3 x ICT Business Analyst (100%)</p> <p>ICT Technician (100%)</p> <p>ICT Manager (50%)</p> <p>Project Management Advisor (5%)</p> <p>Trainer (50%)</p>	At completion of this stage, system is almost ready for live operations and SP will reduce their team to a minimum to maintain the system and prepare for data uploads. System will still require detailed testing across the network
IM13	Sign-off system ready	9 Jul 07	13 Jul 07			
IM14	Load data for NT	16 Jul 07	20 Jul 07			
IM15	Go live NT		20 Jul 07			
IM16	Budget preparation and data load	3 Sep 07	21 Sep 07			

IM17	Go live Budget		21 Sep 07			
IM18	Configure FMIS for Stage 2 functionality	24 Sep 07	14 Dec 07			
IM19	Pilot Ministry and Provincial Treasury preparation	1 Oct 07	14 Dec 07	IM8 PS4 PS5	ICT Business Analyst (100%) ICT Technician (50%) ICT Manager (20%)	While the infrastructure would be in place and operational, FMIS-specific software and possibly hardware would be installed in each site and tested for effective communications with the completed FMIS.
IM20	Go live line Ministry and PP Municipal Treasury pilots		1 Jan 08			
IM21	Prepare pilot provincial treasuries	11 Jan 08	27 Jun 08			
IM21	Go live pilot provincial treasuries	11 Jan 08	27 Jun 08 Phased implementation			
IM22	Deliver change management program	2 Jun 06	27 Jun 08	IN9 IM4	Change Manager (100%) ICT Manager (10%)	The change management strategy will be refined in conjunction with the SP and their advisor. The strategy will be related to the development of the FMIS and will reflect any changes in the FMIS schedule to ensure

						<p>accurate information delivery.</p> <p>A link with the training program for FMIS, including some common delivery (where the Change Manager and Trainer present at training sessions) will support both activities. Change Management will continue after the implementation to reinforce the change message and encourage compliance with the requirements of the new system and processes.</p>
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13.8 FMIS Preparation Stage

The preparation stage of the project is where the completed system is made ready for going into normal service in those areas where it will be implemented.

Preparation requires the new system to be moved into the 'Production' environment as a clean (no data) copy of the approved version of the system. The system will then need to be readied by populating all the necessary controls and initiating data, security, budgets, structures, opening balances and reports that the production system will require.

The timetable included in the Work Plan below is very short but is based on a 'last minute' plan that may be moved forward if other areas of the project take less time than the scheduling here has allowed. The introduction of the Solution Provider will allow closer refinement of these timetables, based on the actual solution chosen.

Should the project reach this stage earlier than this schedule indicates, much of the work entailed, except for opening balances, can be achieved and the system left idle until the scheduled date for going into full production. It would also be possible, during any such period of idleness, to actually use the system in parallel with the manual processes the results of the system and manual processes be compared to ensure the system was operating as expected. The limitation on this is the amount of duplicate work that users would be required to undertake, doing both the manual processing and entering the same data into the FMIS. Sampling of some duplicate data may be trialed if circumstances allow. This process would also allow a final testing of the communications links between the server based in MEF and users in the pilot sites and Provinces.

13.8.1 FMIS Preparation Stage Work Plan

ID	Task	Start	End	After	Resources	Details
PR1	Finalize codes for Chart of Accounts	1 Jan 07	5 Jan 07		2 x ICT Business Analyst (50%) ICT Manager (10%) Financial Advisor (20%)	Undertake a final review of the chart of accounts to ensure it complies with the functional structures set in the system during implementation.
PR2	Create Production version database as copy of final tested	21 May 07	25 May 07		ICT Technician (100%)	Copy final version of software into newly created database for operational use

	and approved system version				Business Analyst (100%)	('Production')
PR3	Establish security profiles and link users to their profiles	1 Jan 07	12 Jan 07	PR1 PR2	3 x Business Analysts (25%) ICT Technician (100%) ICT Manager (50%)	Design of security profiles determines what each profile can and cannot do within the system. Linking individual users to a profile therefore controls an individual user's access to the system.
PR4	Set all system parameters	28 May 07	8 Jun 07	PR2	3 x Business Analysts (100%) ICT Technician (10%) ICT Manager (10%)	Parameters include: <ul style="list-style-type: none"> ▪ calendar ▪ budget validation rules ▪ chart of accounts ▪ security profiles ▪ password rules ▪ printers ▪ customized error messages ▪ screen language settings ▪ user defined help screens ▪ timings for automated processes (logouts,

						refreshes, batch processes etc)
PR5	Set all database parameters	28 May 07	1 Jun 07	PR2	ICT Technician (100%)	Parameters include: <ul style="list-style-type: none"> ▪ data storage sizes ▪ audit log size ▪ database management and backup ▪ database security ▪ any automated timeouts or system shut-downs
PR6	Define and load all opening balance data for the chart of accounts	16 Jun 07	29 Jun 07	PR4 PR5	2 x Business Analysts (100%) ICT Manager (50%)	Opening balances would include: <ul style="list-style-type: none"> ▪ budgets ▪ debtors and creditors ▪ assets ▪ bank balances ▪ commitments
PR7	Set parameters for standard system reports plus any reports	9 Apr 07	11 May 07	PR4	Business Analyst (100%)	Report parameters based on CoA etc. Reports

	created during implementation				ICT Technician (50%)	can be tested using opening balances
PR8	Prepare report on system readiness	2 Jul 07	6 Jul 07	PR4 PR5 PR6 PR7	ICT Manager (50%)	Sign-off required from ICT Manager, SP, Steering Committee and Finance Reform Committee.

13.9 FMIS Training Stage

The training strategy required for the FMIS project should be an extension of the earlier training in desktop applications undertaken by the trainer and focusing on the future users of FMIS.

If it has been set as a prerequisite that staff who will be given access to FMIS have been required to successfully undertake the desktop applications training, the trainees will already be familiar with the Trainer and that will make the process easier to introduce and deliver. It is therefore necessary for the training program to have identified those staff of agencies within and external to MEF who will be the users of FMIS. Training material should be developed to closely resemble the final version of the FMIS that will be moved into Production. This means the finalization of the training material should be done after the system has been accepted as configured.

Based on this, and the availability of training facilities and access to a training environment where trainees can access the new system during training, the training program should be structured to deliver useful skills as closely to the introduction of the system as possible. As detailed training must be delivered to manageable groups of staff, detailed system training must spread over a number of weeks. The training strategy therefore should focus on identifying some very interested and apparently capable people to be the 'leaders' in their work area and it is useful to allow trained users to access the training environment at any time between their training and the system go-live.

The training program should also be related to the change management program to ensure staff is aware of the changes, the reasons for them and the impacts before training commences. A 3 layered approach to training would have a general overview of what FMIS is and how it will function, what it can do and the way staff will interact with the system. The second layer would present training material and hands-on use of the training environment as near as possible to the go-live date and would provide focused hands-on training through example, of the types of transactions the staff would be expected to undertake.

The final layer of training would be follow-up training for staff who requested it, to refresh and reinforce their understanding and encourage them to use the system to greatest advantage and to help other staff in their areas in the use of the system.

It is envisaged that refresher training will be made available at least every few months for system users and a program developed for new staff required to learn the use of FMIS.

13.9.1 FMIS Training Stage Work Plan

ID	Task	Start	End	After	Resources	Details
TR1	Prepare training program and	7 May 07	25 May 07	IM8	ICT Business Analyst	Finalize training program:

	training aids			CT2	(50%) Trainer (100%) Change Manager (50%) ICT Manager (10%)	<ul style="list-style-type: none"> ▪ complete material based on completed system design ▪ schedule of training program for users and demonstrations to general interest among all Government staff
TR2	Establish training version of system, basic data sets and arrangements for database refreshing after each session.	16 Jul 07	27 Jul 07	TR1	Trainer (100%) ICT Technician (100%) Business Analyst (25%) ICT Manager (10%) Change Manager (20%)	<p>A separate version of the tested software would be established in its own domain on the systems server. This training version would require the following characteristics:</p> <ul style="list-style-type: none"> ▪ separated from other versions by use of security ▪ sets of standard training data, security profiles for 'generic users' (Train1, Train2 etc) for participant only ▪ ability to reset all data back to standard at completion of training courses
TR3	Deliver training programs	20 Jul 07	14 Aug 08	TR2	Trainer (100%) ICT Technician (10%) Business Analyst (10%) ICT Manager (5%)	<p>Training program at 3 levels:</p> <ul style="list-style-type: none"> ▪ general awareness and user preparation before change-over ▪ user training on areas specific to the user's needs

					Change Manager (20%)	<ul style="list-style-type: none">▪ follow-up training to support new users to gain confidence in use
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13.10 System Release

When the system has been approved for release into Production by the Steering Committee and the Finance Reform Committee, the only task requiring attention on the first working day with the new FMIS is to unlock security and change the status of the first period in the annual calendar to 'Open', allowing all with access security to enter the system and commence transaction entering and reporting.

The system then moves into operational mode, requiring ongoing maintenance of users, addressing user problems, reporting apparent system faults ('bugs' is the common term for these problems) and reporting them to the SP during the contractual maintenance period. Support of the system during early period of operation would normally require the attention of the Trainer and one Business Analyst. The Change Manager would continue with the change management program for some time after the system became operational to continue to promote the changes and potential for improvements that the system may offer.

The remaining staff on the team would start detailed preparation for Phase 2, expanding the user base to other line Ministries and Provincial Treasuries, plus preparing other functionality not included in the first Phase program.

There will be a number of functions not implemented in the initial phase but will be implemented as the system settles down and stabilizes. A Phase 2 Work Plan and Project Plan would be developed during the period from February to March 2007, to commence initiation and implementation as early as resources allow, expected to be May 2007.

13.11 Change Manager

The Change Manager has an essential role to play in the project, to ensure people are prepared for the changes that will occur as a result of the introduction of the FMIS. This preparation will consist of providing understanding of the reasons for change, the likely impacts of the change, the FMIS changes in the context of the broader financial reform program and an understanding of how the changes will affect the workplace, daily work practices, career opportunities and skills requirements.

It is highly unlikely that an experienced Change Manager can be recruited from existing staff of the Government due to the limited opportunities for any one to develop these skills within the current stages of development of Cambodia's civil service. It is therefore likely that an inexperienced person need be recruited and provided with adequate training to allow them to undertake this role.

It is anticipated that the period of 2006 and early 2007 will be the period of most intense activity for the Change manager with ongoing requirements for the duration of the FMIS project (3 to 5 years) but it is anticipated that demand for change management services will taper off after early 2007. It would then be possible to perhaps share the Change Manager with the Financial Reform Committee's other reform program to assist with its implementation.

13.11.1 Duties

As Project Change Manager, the person undertaking this role will need to understand the philosophy behind managing change, understand how to encourage the right attitudes among staff, overcome resistance to a level of acceptance of change, ensure no slipping back into outmoded processes and encourage staff to promote the benefits of the changes to others that might be affected by later changes.

The person must be willing to undergo training in change management, possibly out of country. This will almost certainly require language ability other than Khmer, most probably English.

The person would be required to develop a change management strategy and plan covering both central ministries, particularly the Ministry of Economy and Finance, other line Ministries and Provincial Treasury offices.

In addition, the Change Manager would work closely with the FMIS Solution Provider to develop the final structure of the program and then to deliver the program in parallel to the FMIS development and also with the training program.

13.11.2 Qualifications

The person chosen as the FMIS Change Manager would need to have tertiary qualifications in an appropriate discipline such as Management, Finance or related area.

A competence in another language, such as English, would facilitate the Change Manager's training.

The Change Manager would have to be willing to undertake course work overseas to build expertise in this area, the training period being up to 3 months.

The Change Manager would be required to communicate and persuade staff and management at all levels of Government and must therefore have a strong personality but with a gentle and persuasive presentation, be able to debate issues in large meetings and be able to present well structured and presented arguments to support the project.

As the Change Manager will be required to develop a strategy and plan for Change Management and to deliver a well structured program, the capacity to plan and document a program is essential to the success of this position.

The project's success is heavily dependent on the team created for this project and the Change Manager will be an integral part of that team. Therefore a capacity to work and integrate well with others within a project environment which, at times, will be particularly stressful, is essential.

13.12 Trainer

The Project Trainer will be responsible for developing the training program and delivering a range of training to end users. The initial training program to be developed and implemented is to train staff receiving desktop hardware in the operations of that hardware and the standard applications made available with that hardware (for example, Microsoft Office), plus printers, modems etc that might be supplied with that equipment. Training will also be provided to any staff outside MEF who will have responsibility for the maintenance of hardware in their respective locations (for example, Provincial Treasuries).

The second training program will be the training on FMIS itself. This training will need to be focused on the functions that will be accessed by individual users but should be structured as a layered program. The layers comprise system overview, conducted most likely with the change management program and followed, as closely to system go-live as possible, the detailed training on the use of the system and changes in processes that the system might require.



Annex 1

Stage 1 Assessment Process

Both Components

The Statement of User Requirements for both the ICT Networking and the FMIS product specifies requirements in a number of defined groups of requirements. These groups of requirements will be individually assessed bid by bid and scored, using a specific and described scoring process.

The first group in both components comprises the Gateway Criteria and this group is the exception. Each criterion in this section is simply a Pass or Fail.

If all 7 (ICT) or 6 (FMIS) criteria are passed, the bid proceeds to detailed assessment. If one or more of these criteria are failed, the bid is put aside and will only be reviewed if the pass bids prove on detailed examination to compare poorly with specified requirements. At this stage of the assessment, the failed bids may be then subject to detailed assessment.

Detailed assessment will be based on a weighted scoring arrangement.

Using the FMIS component as an example, there are 3 main areas of assessment, being Hardware and Software, SOUR and Implementation Strategy. Each of these 3 areas will be awarded a weighting which will add to a total of 100%. In the areas of Hardware and Software and Implementation Strategy, each of the criteria will be scored out of a maximum (usually 10 for perfect fit) and each score weighted by the weight (say, for example, 10%). A score of 8 out of 10 for a specific criterion would therefore carry a weighted score of 10% of 8 or 0.8 overall.

The SOUR section covers the actual system and contains a number of subsections. Each of these subsections will be allocated a weight which will itself be weighted by the SOUR weight. For example, if the SOUR weight was 70% of the total and the subsection of Integration was given a weight of 20% of the 70%, Integration would in total be weighted at 14% of the total weighted score. A criterion assessment scored between 0 and 10 of, say, 6 would provide an overall weighted score of 0.64 overall, with a maximum score depending on the number of criteria. The ranking of the bids by their weighted score suggests the highest weighted score would be the best fit option.

The scoring will be determined by the information supplied by bidders in their responses. A score 'sheet' of specific requirements will guide the scoring process in the evaluation. For example, FR1 requires certain characteristics in the Ledger structure. Assessment may include maximum number of characters in a field. A second aspect may be alpha-numeric characters allowed and a third may cover the use of special characters such as spaces, dashes or asterix as examples. Depending on the information provided, a score will be determined by what the bid document specifies the capacity of the Ledger fields to be. Scoring might be 10 for 'all fields, field length maximum 9 characters and alphanumeric supported and disallows special characters' whereas a response that only identified it had all fields but provided no field characteristics might score only 4 (if this bidder passed through to Stage 2 assessment, these details would then be sought and re-scored).

Assessment packages are available to assist scoring and the weights can be pre-loaded. Alternatively, Excel is capable of achieving the same result.

It would be normal, if time permits, for each member of the assessment team to score the entire bid individually, then the team comes together in caucus to reconcile significant differences if they exist and to agree final scoring. Comments on why scores were awarded by each assessor supported by reference to the information they based their score on, allows for mutual support and cross reference in the caucus stage of the assessment.

Stage 2 bids will be based around the Stage 1 assessment criteria where bidders can clarify their responses and provide additional detail against the expanded criteria. These results will again be scored but bidders could add no changes or completely new information at that stage. Depending on the number of bids received, some bids may be considered unsuitable for second stage assessment, effectively producing a short list of bidders for the second round.

After the bid assessments of the second round was completed, one or two preferred bidders might be appraised against other criteria including reference sites, reputation, financial status etc if not explicitly included in Stage 2. Cost will be considered as a component of value-for-money as the last stage of the assessment but only effectively insofar as it affects donors because the funding for FMIS is a grant to Cambodia and costs therefore do not play a major part in the assessment by Cambodia itself.

Consultant note: Staff Succession Planning

It is assumed some of these resources will be hard to recruit from within the public service so that optional solutions, including graduate recruitment from recent graduates in the areas of accounting, general finance and management may support staff seconded from major MEF Departments such as Budget, Treasury, and Procurement etc. The expectation would then be that the seconded staff would return to their line positions after Phase 1 and the graduates would continue to work on the balance of the project, having gained enough skills during their 'trainee' year, to complete the FMIS

Alternative is to seek contractors locally or use a mix of staff and contractors