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Treasury Diagnostic Toolkit

Ali Hashim
Allister J. Moon

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Washington, D.C.

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Foreword

Effective Treasury systems are a key element in improving financial management and reporting and building better accountability in Government. For this reason alone, it is a welcome development to have a systematic means of assessing how well member countries are progressing in building up such systems, as well as a useful tool to help the World Bank and others in assisting such efforts.

The toolkit has emerged primarily as a working instrument in the course of operational and applied analytic work in the Europe and Central Asia (ECA) region. It has proved useful to the region in the course of analysis of budget management capacity among ECA countries, while elements of the toolkit have also been used in the development of practical programs of assistance on treasury development and related areas of public expenditure management reform. The toolkit provides an integrated framework for both practical assistance in lending operations and analytic assessment of capacity constraints. The instrument is divided into modules of differing levels of complexity, matched to the requirements for three broad purposes: (i) comprehensive design of programs of direct support to treasury development; (ii) detailed assessment of treasury development in analytic work and technical advice; and (iii) regular monitoring of treasury development as an important component of public expenditure management.

While the toolkit has emerged in part from experience in the ECA region, it has also drawn heavily on experience in other regions. Its publication now offers the possibility of making this approach accessible to related operations elsewhere in the Bank and among member countries, while also contributing to wider efforts to measure more precisely the progress being made in developing public sector institutions and to ensure that interventions to support public sector reform are based on a fuller diagnosis of existing capacity.

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Abstract

Improvement in the management of public finances in developing countries has been an increasingly important focus of World Bank and IMF assistance to member countries. A key element in such assistance is the development of effective treasury systems. Treasury systems form the backbone for recording and processing all financial transactions related to the budget for any level of government. An integrated treasury system offers several significant benefits in managing public monies more effectively, including, greater financial control, improved monitoring of the governments cash position, and better planning of future requirements, better fiscal reporting, and availability of better data for budget formulation. The establishment of an effective treasury system will also contribute directly to improving the transparency and accountability of government.

The Treasury Diagnostic Toolkit described in this document consists of three parts:

(a) The *Treasury Systems Questionnaire* given in Chapter 1 provides a diagnostic tool to assist country officials and Bank task managers to assess the status of a treasury function in a given country. The instrument is divided into modules of differing levels of complexity, matched to the requirements for three broad purposes: (i) comprehensive design of programs of direct support to treasury development; (ii) detailed assessment of treasury development in analytic work and technical advice; and (iii) regular monitoring of treasury development as an important component of public expenditure management.

(b) *Costing Model:* Information system features obtained as a result of completing the detailed Treasury Systems Questionnaire described in Chapter 1 can be linked in to a simple costing model (described in Chapter 2) to generate first stage estimates of the likely cost of a comprehensive investment program. Chapter 2 sets out a costing for a typical program for illustrative purposes only, although the model has now been used in actual program development in several countries as the base for project development.

(c) *Application Software Questionnaire:* Chapter 3 of this paper is intended to assist Treasury managers in the process of selecting appropriate application software from the wide range of options that are now available in the market. This part of the questionnaire focuses on Treasury specific requirements that are not commonly found in a statement of requirements for commercial accounting systems. It is intended to provide Treasury managers in client countries a benchmark to determine the goodness of fit of the major products on the market with the core Treasury functional processes and requirements.

Acknowledgments

The diagnostic tools presented in this paper have been developed on the basis of field work over some years as well as more intensive work during the past year, and in consequence, a number of debts have been incurred in its preparation. Work on the core diagnostic was completed during the summer of 2002, based on experience in a wide range of treasury development programs in ECA and South Asia regions of the Bank. Subsequently, the authors worked together on applying the diagnostic for analysis of treasury systems in ECA region, in the context of a regional study of budget management in PRSP countries. Many members of the team for the regional study contributed to this work. Above all, Tracey Lane played a major role in condensing the original version of the treasury diagnostic questionnaire to more manageable proportions. Several staff made significant contributions on completion of analysis in individual countries, especially Alma Kanani, Elena Nikulina, Gohar Gyulumyan, Roland Clarke, Dominique de Roquefeuil and Rocio Castro. The software analysis module benefited greatly from the suggestions and critical comments from Steven Symansky and Bill Allan of the International Monetary Fund and from Ron Points (EAPCO). The costing model was developed primarily in the course of work related to the development of the Treasury in Russia. Both authors would like to thank Tatyana Nesterenko, Deputy Minister of Finance and Head of the Russian Treasury, along with her staff, for the insights and understanding of treasury diagnostics developed in the course of long collaboration, which have directly benefited the paper. Bill Allan and Anand Rajaram also contributed as peer reviewers of the draft paper, as did Andy Anderson in his role as chairman of the review meeting. Parminder Brar represented OPCFM at the review meeting. The paper also benefited greatly from the overall supervision of Helga Muller, Sector Manager Public Sector and Institutional Reform Cluster and Cheryl Gray, Director, Poverty Reduction and Economic Management Department, Europe and Central Asia Region. The authors would like to thank Genoveva Torres for providing administrative support in finalizing the manuscript.

Acronyms and Abbreviations

EBF	Extra Budgetary Fund
ECA	Europe and Central Asia Region of the World Bank
FSU	Former Soviet Union
GFS	Government Finance Statistics
MOF	Ministry of Finance
PEM	Public Expenditure Management
PREM	Poverty Reduction and Economic Management
TGL	Treasury General Ledger
TLS	Treasury Ledger System
TRM	Treasury Reference Model
TSA	Treasury Single Account

Introduction

Improvement in the management of public finances in developing countries has been an increasingly important focus of World Bank and IMF assistance to member countries. A key element in such assistance is the development of effective treasury systems. Treasury systems form the backbone for recording and processing all financial transactions related to the budget for any level of government. An integrated treasury system offers several significant benefits in managing public monies more effectively, including, greater financial control, improved monitoring of the government's cash position, and better planning of future requirements, better fiscal reporting, and availability of better data for budget formulation. The establishment of an effective treasury system will also contribute directly to improving the transparency and accountability of government.

Objectives

Assistance in development of treasury systems requires good diagnostics as a platform for analysis and advice, design of direct support through projects, or simply monitoring progress in this area. This paper presents a diagnostic tool designed for use in each of these three contexts: (i) design of programs of direct support to treasury development; (ii) detailed assessment of treasury development in analytic work and technical advice; and (iii) regular monitoring of treasury development as an important component of public expenditure management.

Program design. Reform of a government's financial management system and improving its treasury system is a complex process that could well take several years. Prior to start of a typical Treasury Development Project it is necessary to determine the current status of the Treasury in terms of its legal and institutional arrangements, functional processes, systems and procedures. Such an assessment would highlight any weaknesses in the underlying legal and institutional arrangements and systems, provide a checklist of areas that need attention and a road map for further reform, including major parameters relevant for system design and development of detailed investment plans.

Assessment of treasury development in analytic work. In the course of analytic work such as public expenditure reviews, or other diagnostic work on public expenditure management systems, there is a potential need for a systematic and detailed checklist of issues to be covered in order to establish a comprehensive assessment of the status of treasury systems. This does not require as much detail as the diagnostics for program design, especially in the area of factors determining the scale of investment, but key aspects of functional capabilities will need a similar level of specificity to complete a robust analysis.

Monitoring of treasury development. While a full analysis of treasury systems is likely to be needed where detailed support programs are requested or where extensive analysis of the PEM environment is warranted, the paper also develops a lighter instrument which may be used for regular monitoring or rapid cross country comparison of where countries are in terms of treasury development and budget execution systems. As discussed below, this part of the questionnaire is linked to a model of a typical development sequence for treasury systems, permitting a summary evaluation of levels of development in specific country cases.

To meet these objectives, this paper describes a toolkit consisting of the following main elements:

- Treasury systems questionnaire, designed in three levels corresponding to the purposes outlined above (Chapter 1)
- Sequencing model (Table 1 below, Annex A)
- Costing model (Chapter 2)
- Application software questionnaire (Chapter 3)

Treasury Systems Questionnaire

Chapter 1 of this paper presents a questionnaire that is intended to serve as a diagnostic tool to meet each of the objectives noted above. The questionnaire is designed with three levels corresponding to the three purposes of rapid monitoring (Level I), detailed assessment (Level II), and program design (Level III). The three levels of the questionnaire are integrated and, as far as possible, nested so that the more basic assessment forms a subset of the larger instrument.

This integration of the approach across different purposes was viewed as important for several reasons. One of the hazards of design of treasury development programs has been an artificial divide between the analysis and prescription on treasury functions, linked to a broader policy context in fiscal management objectives, and the design and investment planning for supporting information systems, which are indispensable for the operation of modern treasury and financial management systems. Design of underlying information systems needs to be driven by functional requirements serving broader policy goals in economic and financial management, but equally a realistic timetable for achieving such goals must be based on a sound assessment of the underlying systems and the likely pace of their development. By encouraging a common, integrated analysis as the foundation for a single program design, there is greater prospect of developing integrated and coherent programs.

The most detailed level of the questionnaire is designed to encompass sufficient information to begin planning of an investment program supporting treasury development. The key requirements of treasury systems assumed are consistent with the Treasury Reference Model (TRM).[1]

Sequencing model. In order to assess where countries in the region are in terms of treasury development and budget execution systems, it is important first to recognize some basic features of any such system and the major increments in reform which may typically be

1. Hashim and Allan, World Bank Technical Paper No. 505, June 2001.

Table 1. Treasury Function—Stages of Development

SYSTEM FEATURES	Level I System Features	Level II System Features	Level III System Features	Level IV System Features
1. Legal and Organizational Framework				
Legal Basis	Treasury established under a Presidential decree giving it the authority to monitor and control budget execution	Initial organic budget law approved and implemented	Organic budget law approved and implemented	Improved organic budget law approved and implemented
Treasury Organization	Treasury organization set up at HQ and some branches	Network of Treasury offices set up and in operation	Network of Treasury offices in operation	Network of Treasury offices in operation
2. Treasury Coverage				
Treasury Control over Government Financial Resources	Spending agency bank accounts progressively being brought under the control of the Treasury	Most spending unit bank accounts under the control of the Treasury; however multiplicity of Bank accounts still exists with several bank accounts per agency.	All spending unit bank accounts under Treasury control; Consolidation of Bank accounts in progress; Bank accounts being consolidated to one per province/region/oblast	All spending unit bank accounts under Treasury control. Consolidation of Bank Accounts: All bank accounts consolidated into a TSA.
Coverage of Central Budget	Some central government payment and receipt transactions are routed through Treasury	Most central government payment and receipt transactions routed through Treasury	All central government payment and receipt transactions routed through Treasury	All central government payment and receipt transactions routed through Treasury
Coverage of EBFs	EBFs are not covered by Treasury	For some EBFs transfers to and from EBFs are through Treasury	For most EBFs transfers to and from EBFs are through Treasury	EBFs operate through Treasury and EBFs consolidated in TSA
Coverage of Off Budget Funds	OBFs are Not covered	Some Off Budget Funds are covered	Most Off budget funds are covered	All budget funds are covered and consolidated in TSA
Subnational Governments	Subnational government transactions are not covered	Some Subnational revenue transactions covered	Some Subnational revenue and expenditure transactions covered or Some subnational Treasuries set up; but operate independently of any national guidelines	Subnational revenue and expenditure transactions covered; or, Subnational governments operate under a set of national guidelines and exchange information

(*continued*)

Table 1. Treasury Function—Stages of Development (*Continued*)

SYSTEM FEATURES	Level I System Features	Level II System Features	Level III System Features	Level IV System Features
3. System Functionality				
Budget Management	A basic GFS-compliant budget classification system introduced.	A basic GFS-compliant budget classification system in use	A GFS-compliant budget classification system in use	A more comprehensive budget classification system introduced with capacity to monitor expenditures on projects and programs
Commitment Management	No commitment control is practiced	Selective commitment recording is in place for major contracts or for selective line items but payment control is not automatic	Selective commitment recording, but also used for payment control	Comprehensive commitment control is in place
Payments Management	Payment requests checked by Treasury against budget appropriations, spending limits and warrants	Payment requests checked by Treasury against budget appropriations, spending limits and warrants	Payment requests checked by Treasury against budget appropriations, spending limits and warrants	Payment requests checked by Treasury against budget appropriations, spending limits and warrants and for prior commitment. System has the capacity to implement establishment Control
Receipts Management	Some Receipts routed through Treasury.	Tax and customs receipts are deposited in bank accounts controlled by tax and customs but are periodically transferred to TSA	Tax and customs receipts are deposited in bank accounts controlled by Treasury	Tax and customs receipts are deposited in bank accounts controlled by Treasury

Cash Management	Treasury gets periodic information on balances in Government accounts from TSA bank	Treasury gets periodic information on balances in Government accounts from TSA bank	Treasury gets periodic information on balances in Government accounts from TSA bank	Treasury set up as a node on the inter-bank clearing system. Treasury has online access to balances in Government accounts. Treasury plays an active role in cash requirements forecasting
Fiscal Reporting	MOF starts getting some information from Treasury on the status of budget execution	MOF starts getting some information from Treasury on the status of budget execution	MOF gets fairly comprehensive and timely information on the status of budget execution	Comprehensive set of fiscal reports produced by Treasury for MOF
4. Nature of Information Systems Support				
Nature of Information Systems Support	Rudimentary and partially manual IT systems assist Treasury in distributing limits, warrants, and controlling payments	Basic IT systems at HQ and treasury branches connected via telecommunications and exchange summary information	Treasury system with enhanced functionality introduced that enables setting up a Treasury General Ledger and exchange of transaction data between Treasury HQ, Regional offices and branches	A full function Treasury system with capacity for budget management, commitment management, purchasing, fixed assets, accounts payable. Accounts receivable general ledger fiscal reporting, is in place. System has capacity to implement accrual accounting. Main spending units are directly connected to the system.

expected in each of these areas. This has been a key factor in design of the set of questions for summary monitoring. They are designed to place any existing treasury systems on a typical timeline for developing a fully functioning treasury. It is necessary to describe briefly how this sequence was derived and what are the characteristic features of the main steps within the sequence.

Based on several existing programs of treasury development in which the Bank has provided direct financial support and advice, a typical series was built up for key actions in establishing a fully functioning treasury, from initial actions on establishing a legal framework through to comprehensive treasury coverage of all Government expenditure. Within the ECA region the primary reference countries were Kazakhstan, Russia, Ukraine, and Hungary while key features of the sequence were also validated with reference to experience outside the region as well. The detailed sequence of actions is described in the form of a Gantt chart at Annex A.

Both the sequence of actions and the estimate of time taken to complete each step are derived from experience in the reference countries, generally taking the more rapid implementation experience where there are variations in completion times. To this extent, the sequence is therefore a slightly optimistic assessment of potential completion times for average country circumstances within the region, while still being firmly based on actual implementation data.

A few observations should be made at this point regarding the role and status of this sequence. First, it is not intended as a universal blueprint for treasury development, although it may provide a useful reference point for operational work in this field. It is best viewed as a summary description of actual practice within the more advanced treasury development programs in the ECA region, primarily for use in this context as a yardstick to apply to less developed programs, giving a sense of where they are and how far they have to go—and how long it may take to get there, even assuming that implementation matches the more successful performers in the region.

Several features of the sequence may not be strictly optimal in a global sense. Three issues can be noted here: the development of treasury office networks, the role of information systems development, and the issue of subnational treasury development.

Treasury networks. The sequence assumes an important early step in establishing a network of centrally managed treasury offices, in parallel with the structure of line ministries and spending units. In more advanced environments, with both advanced communication networks and reasonably high levels of management capacity in line agencies, it may be possible to develop treasury systems with a less extensive network of treasury infrastructure. In FSU countries, no country has made significant progress with treasury development without developing a parallel office network and this has generally been the approach adopted throughout the transition countries. However, it is an important qualification to generality of the sequence identified here. The scale of the treasury network and the potential for subsequent streamlining of the network in line with development of line agency capacity is also an important issue for later stages of the sequence.

Information systems development. The sequence is strongly dominated by the major stages in information systems development, which are the most time consuming steps in the overall process. Critical path analysis indicates that acceleration of these steps are the most important factor for reducing overall completion of treasury reforms, but the evidence from existing programs is that the scope for major reductions in implementation time is relatively limited.

Treasury functions at the subnational level. The sequence does not attempt to address in detail issues of treasury function at the subnational level. This has been an important and sometimes contentious issue in several of the longer standing treasury development programs supported by the Bank. In some cases, as in Ukraine and Kazakhstan (at least until very recently) subnational treasury functions have been subsumed within overall treasury development, in which case the

sequence can be viewed as referring to the global system. Alternatively, the sequence may be viewed as applying independently for development of individual systems at the subnational level, bearing in mind that the time scales can probably be accelerated considerably for less complex interventions.

This detailed sequence then provides the basis for a more summary description of four levels in treasury development, key characteristics for which are described in Table 1. The four basic levels rest on assuming clusters of characteristics, compatible with the overall treasury development sequence. Clearly, the typical sequence will not be adhered to exactly in all stages and, as was seen in the application of this approach to ECA countries below, countries may often demonstrate some characteristics from different levels of development. A scoring system, shown in Table 2, converts observed characteristics on the various dimensions of development into an overall level of the total system in any given country.

Several aspects of the questionnaire have been tested and further developed in a recent study of budget management in the ECA region. For some countries the detailed questionnaire was completed, while for a wider selection of countries in the region the summary monitoring was carried out in order to complete a comparative analysis of status and the typical time profile in the region for successive stages of development. The main results of this analysis are summarized graphically in Figure 1, which plots the observed status of treasury development of the selected countries against the time taken to complete the current stage of reform.

Costing Model

Information system features obtained as a result of completing the detailed Treasury Systems Questionnaire can be linked in to a simple costing model (described in Chapter 2) in order to generate first stage estimates of the likely cost of a comprehensive investment program. Chapter 2 sets out a costing for a typical program for illustrative purposes only, although the model has now been used in actual program development in several countries as the base for project development.

Application Software Questionnaire

Chapter 3 of this paper which is based on the TRM is intended to assist Treasury managers in the process of selecting appropriate application software from the wide range of options that are now available in the market. This part of the questionnaire focuses on Treasury specific requirements that are not commonly found in a statement of requirements for commercial accounting systems. It is intended to provide Treasury managers in client countries a benchmark to determine the goodness of fit of the major products on the market with the core Treasury functional processes and requirements. In an actual software selection process it would be used to supplement the normal set of requirements used in the selection of accounting systems.

Specifically, Treasury managers would need to determine:

- How a specific package would be set up/operated in the institutional setting under which the Treasury Department has been set up in the country. For this purpose the commonly occurring organizational arrangements are described in Annex B.
- Determine how the package would support/perform the key functional processes involved in Treasury operations. A brief description of these processes and associated flow charts showing how information flows amongst the agencies that are normally responsible for these processes is given at Annex C;
- Determine, how the package would interface with the banking system (Interbank clearing system) to enable payments to be made by the Treasury from the Treasury Single Account, and record revenue receipts that are normally collected via the banking system and deposited in the TSA. These arrangements are also described in Annex B.

Table 2. Treasury System Features—Scoring Scheme

	Level of System to which this characteristic applies	Score
1. Legal and Organizational Framework		
a. Legal Basis		
Treasury has not been set up as yet	0	0
Treasury established under a Presidential decree giving it the authority to monitor and control budget execution	1	1
Initial organic budget law approved	2	2
Improved organic budget law approved and implemented	3,4	3
b. Treasury Organization		
No separate Treasury organization exists	0	0
Treasury organization set up at headquarters and some branches	1	1
Network of Treasury offices set up and in operation	2,3,4	2
2. Scope of Coverage of the Treasury		
a. Treasury Control over Government Financial Resources		
MOF transfers funds to spending agency bank accounts in central/commercial banks; spending units have direct access to bank accounts; Treasury has no control	0	0
Spending agency bank accounts being progressively being brought under the control of the Treasury	1	1
Most spending agency bank accounts placed under the control of the Treasury; however, multiplicity of bank accounts still exists, often with many accounts per agency	2	2
All spending agency bank accounts under the control of the Treasury; Consolidation of bank accounts in progress; Bank accounts being consolidated to one account per region/oblast/province	3	3
All spending unit bank accounts under Treasury control; bank accounts consolidated into a TSA held at the Central Bank and under the control of the Treasury	4	4
b. Coverage of Central Budget		
A Treasury has not been set up	0	0
Some central government payment and receipt transactions are routed through Treasury	1	1
Most central government payment and receipt transactions are routed through Treasury	2	2
All central government payment and receipt transactions are routed through Treasury	3,4	3
c. Coverage of EBFs		
EBFs are not covered by Treasury	0,1	0
For some EBFs, transfers to and from EBFs are through Treasury	2	1
For most EBFs, transfers to and from EBFs are through Treasury	3	2
EBFs operate through Treasury and EBFs are consolidated in the TSA	4	3
d. Coverage of Off Budget Funds		
Off budget funds are not covered	0,1	0
Some off budget funds are covered	2	1
Most off budget funds are covered	3	2
All off budget funds are covered and consolidated in TSA	4	3

TABLE 2. TREASURY SYSTEM FEATURES—SCORING SCHEME (*Continued*)

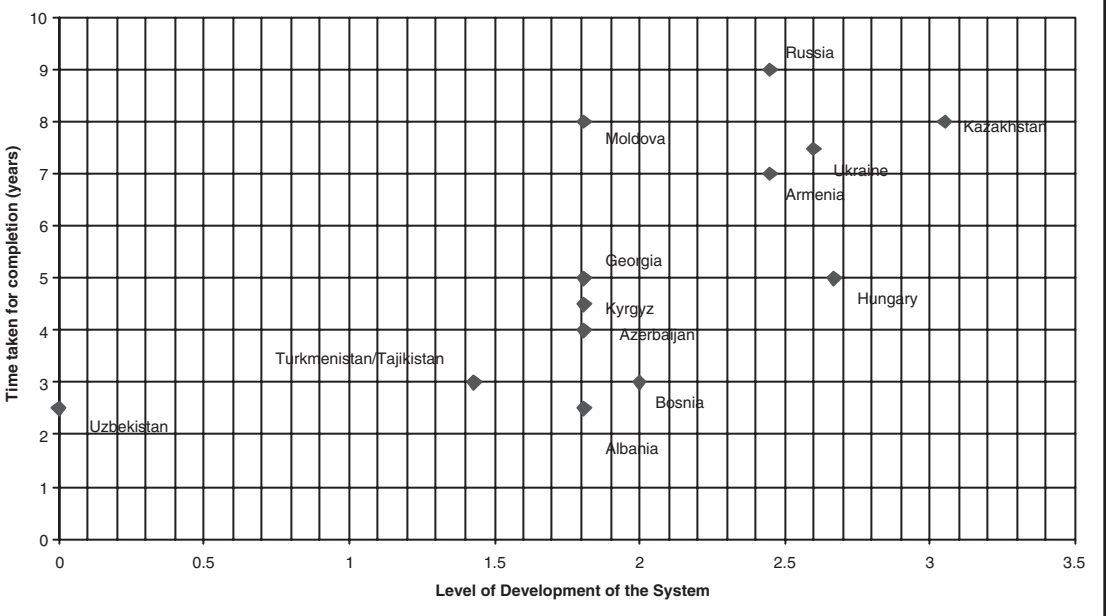
	Level of System to which this characteristic applies	Score
e. Coverage of Subnational Governments		
Subnational government transactions are not covered	0,1	0
Some subnational revenue transactions covered	2	1
Some subnational revenue/expenditure transactions covered; and/or some subnational treasuries have been set up but operate independently of central Treasury	3	2
Subnational revenue and expenditure transactions covered; or, subnational treasuries have been set up and operate under a set national guidelines and exchange information with the center	4	3
3. System Functionality		
a. Budget Management		
Budget classification structure is not GFS-compliant	0	0
A basic GFS-compliant budget classification structure has been introduced	1	1
A basic GFS-compliant budget classification structure is in use	2,3	2
A more comprehensive budget classification structure with capacity to monitor expenditures on projects and programs in use	4	3
b. Commitment Management		
No commitment control is practiced	0,1	0
Selective commitment recording is in place for major contracts or for selective line items, but payment control against these commitments is not automatic	4 4	3 3
Selective commitment recording in place and also used for payment control	3	2
Comprehensive commitment control is in place	4	3
c. Payments Management		
No control exercised by Treasury	0	0
Payments requests checked by treasury against budget appropriations, spending limits and warrants	1,2	1
Payment request also checked for prior commitment;	3	2
System also has capacity to implement establishment control; main spending units are also connected to the system	4	3
d. Receipts Management		
Treasury has no role	0	0
Some receipts routed through Treasury	1	1
Most receipts are routed through treasury; Customs and tax receipts are deposited in bank accounts controlled by tax and customs and deposited periodically to the TSA	2	2
All receipts routed through Treasury; Tax and customs receipts are deposited in bank accounts controlled by Treasury. Treasury informs tax and customs departments of details of receipts	3,4	3
e. Cash Management		
Treasury has no control over spending agency Bank accounts	0	0
Treasury gets periodic information on balances in bank accounts from central (TSA) bank	1,2	1
Treasury has on-line access to balances in bank accounts; Treasury able to monitor balances and recommend level of spending limits/warrants/borrowing.		
Treasury plays an active role in cash requirements forecasting	3,4	2

(*Continued*)

Table 2. Treasury System Features—Scoring Scheme (*Continued*)

	Level of System to which this characteristic applies	Score
f. Fiscal Reporting		
MOF relies on reports from line agencies which are submitted on monthly/ quarterly basis, are late in coming and cannot be verified for accuracy	0	0
MOF starts getting some information from Treasury on the status of budget execution for payments and receipts that are routed through Treasury	1	1
MOF gets fairly comprehensive information on the status of budget execution since most central budget transactions are routed through Treasury	2,3	2
The Treasury has complete and timely information on all budget receipts and expenditures; Comprehensive set of fiscal reports produced by Treasury for MOF	4	3
4. Nature of Information Systems Support for Treasury Processes		
No information systems support	0	0
Rudimentary and partially manual information systems assist Treasury in distributing limits, warrants and controlling payments	1	1
Basic IT systems at HQ and Treasury connected via telecommunications and exchange summary information	2	2
Treasury systems with enhanced functionality introduced that enable Treasury to set up a Treasury General Ledger (TGL) and exchange transaction data between Treasury HQ, regional offices and local treasury branches	3	3
A full function Treasury system with capacity for budget management, commitment management, accounts payable, accounts receivable, general ledger, purchasing, fixed assets and fiscal reporting is in place. System has capacity to implement accrual accounting	4	4

Figure 1. Status of Treasury Reform Implementation in Some ECA Countries



Treasury managers could use the questionnaire to ask suppliers of application software to describe how their product would support Treasury requirements.

This questionnaire has been used in a recent series of vendor presentations organized by the PREM public expenditure management group where vendors were asked to demonstrate how their products would fulfill treasury requirements.

Annexes B and C provide a ready reference to commonly occurring institutional arrangements associated with the treasury function and details of key treasury functional processes to assist in completing the two questionnaires.

CHAPTER 1

TREASURY DIAGNOSTIC QUESTIONNAIRE

A Tool Designed to Assess the Status of the Treasury Function within a Country

1. Legal and Organizational Framework

a. Legal Basis

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

- Treasury has not been set up as yet
- Treasury established under a Presidential decree giving it the authority to monitor and control budget execution.
- Initial organic Budget Law approved
- Improved organic budget law approved and implemented

Level II Detailed Assessment—Functional aspects

Please indicate which of the following represents the current status:

- Treasury has not been set up as yet
- Treasury established under a Presidential decree giving it the authority to monitor and control budget execution
- Initial organic Budget Law approved
- Improved organic budget law approved and implemented

Detailed Assessment:

Has a Treasury been set up and is operating in the country? If so, since when?

If there is a Treasury operating, give details of the legal basis under which the Treasury has been set up (with dates).

Case I: Presidential decree;

Case II: Organic Budget Law;

Case III: Other legal arrangements.

What is the status of an organic budget law governing the budget management processes in the country?

If a new law is being drafted, give the status of the draft (e.g. first reading in the parliament etc.)

b. Treasury Organization

Level I Summarized Monitoring

Please indicate which of these statements represents the current status.

- No Separate Treasury organization exists.
- Treasury organization set up at headquarters and some branches
- Network of Treasury offices set up and in operation

Level II Detailed Assessment—Functional Aspects

Please indicate which of these statements represents the current status.

- No Separate Treasury organization exists.
- Treasury organization set up at headquarters and some branches
- Network of Treasury offices set up and in operation

Detailed Assessment:

What is the relationship of the Treasury to the MOF? Is it a department of the MOF or is it a separate organizational entity?

If the latter what are its reporting relationships?

Is the Treasury supported by a network of Treasury offices/branches distributed throughout the country?

If yes, is a two tier (branches at center and provincial levels) or three tier (branches at center, provincial and district levels) structure of Treasury offices in place/envisaged?

When was this network set up?

Level III Additional Information Required for Investment Program Design

How many staff are employed at the Central Treasury headquarters?

How many of these staff would need to be connected to the Treasury system?

How many second tier/third tier Treasury offices are there in the country?

Typically, how many staff are employed at a large, medium and a small second tier branch and how many of these staff would need to be connected to the Treasury system?

Typically, how many staff are employed at a large medium and a small third tier branch and how many of these staff would need to be connected to the Treasury system?

2. Scope of Coverage of the Treasury

a. Treasury Control over Government Financial Resources

Level I Summarized Monitoring

Please indicate which of these statements represents the current status.

Case I: MOF Transfers funds to spending agency bank accounts in central/commercial banks; spending units have direct access to bank accounts; Treasury has no control

Case II: Spending agency bank accounts being progressively being brought under the control of the Treasury.

Most spending agency bank accounts placed under the control of the Treasury; however, multiplicity of bank accounts still exists, often with many accounts per agency.

Case III: All spending agency bank accounts under the control of the Treasury; Consolidation of bank accounts in progress; Bank accounts being consolidated to one account per region/oblast/province.

Case IV: All spending unit bank accounts under Treasury control; bank accounts consolidated into a TSA held at the Central Bank and under the control of the Treasury.

Level II Detailed Assessment—Functional Aspects

Please indicate which of these statements represents the current status.

Case I: MOF Transfers funds to spending agency bank accounts in central/commercial banks; spending units have direct access to bank accounts; Treasury has no control

Case II: Spending agency bank accounts being progressively being brought under the control of the Treasury. Most spending agency bank accounts placed under the control of the Treasury; however, multiplicity of bank accounts still exists, often with many accounts per agency.

Case III: All spending agency bank accounts under the control of the Treasury; Consolidation of bank accounts in progress; Bank accounts being consolidated to one account per region/oblast/province.

Case IV: All spending unit bank accounts under Treasury control; bank accounts consolidated into a TSA held at the Central Bank and under the control of the Treasury.

<u>Detailed Assessment</u>:

What is the status of Treasury control over Spending Unit Bank Accounts?

Case I: Spending units have one or more bank accounts at the central bank or with commercial banks to which they have direct access. MoF periodically transfers funds to these accounts to meet SU spending requirements. Treasury has no role.

Case II: It has been decided to transfer control of spending unit bank accounts to Treasury. Treasury control is being extended progressively to cover SU Bank accounts. Some SU Bank accounts (with commercial banks) have been closed and accounts opened with the Treasury.

Case III: Most SU Bank accounts (with commercial banks) have been closed and accounts opened with the Treasury.

Case IV: All SU Bank accounts (with commercial banks) have been closed and accounts opened with the Treasury.

If Treasury has no control over SU Bank accounts and payment processing is decentralized and spending units have direct access to bank accounts, how many such accounts are operative and what is the average daily balance in these account.

If Spending unit bank accounts are gradually being brought under the control of the Treasury, what percentage of these accounts are now under the control of the Treasury and what percentage are still outside treasury control. What are the number of accounts in these categories.

What are the institutional arrangements envisaged for processing government payments with Treasury?

Case I: Payment processing will be/is centralized through the Treasury with all payment transactions from spending units routed to an appropriate branch of the Treasury which after checking for budget appropriations, spending limits, cash allocations etc. authorizes payment from accounts held at the central bank/ designated bank and controlled by the Treasury.

Case II: Payment processing will be/is centralized through the Treasury. All payment transactions from the spending units are routed from the spending unit through the parent ministry to Treasury office(s) operating at the center.

Case III: Payment processing will be/is decentralized with spending ministries/units being directly responsible for processing payment transactions through designated banks. However, these accounts will be opened with Treasury permission and Treasury will retain control. Balances will be cleared periodically to Treasury accounts with the Central Bank at the center.

Case IV: Other.

Has a Treasury Single Account (TSA) been set up?

Where is the Treasury Single Account (TSA) held and what are the government banking arrangements.

Case I: TSA is held at the central bank at the center. In addition, separate Treasury accounts exist at branches of the central bank at lower government (provincial/oblast) levels. Treasury offices send approved payment transactions to the central bank at the center or to branches of the central bank at the provincial level. Treasury accounts at the provincial branches of the central bank are sub accounts of the TSA and are cleared daily to the TSA account at the center. Revenue receipts are collected through commercial banks which transfer them to the TSA at the center on a daily basis.

Case II: TSA is held at the Central Bank at the center. However, since the Central Bank does not have an adequate network of branches or does not want to engage in retail banking operations, government payment and receipts transactions are

processed through a network of branches of designated, commercial banks acting as fiscal agents. Revenue receipts are collected through commercial banks which transfer them to the TSA at the center on a daily basis. Spending unit payment requests are met by branches of the commercial banks which recoup their outlays from the central bank on a daily basis.

Status of consolidation of Treasury accounts into a TSA (give dates):

- Treasury has several accounts for each SU Accounts are being gradually consolidated
- Accounts have been consolidated into one account per province/region/oblast?
- All accounts consolidated into a single TSA at the central bank at the center.

b. Coverage of Central Budget

Level I Summarized Monitoring

What is the scope of coverage of budgetary transactions by the Treasury as regards Central Government payments and receipts?

Case I: Treasury has no role;
Case II: Covers some (< 50%) Central Government payments and Receipts;
Case III: Covers most (>50%) Central Government payments and Receipts;
Case IV: Covers all Central Government payments and Receipts

Level II Detailed Assessment—Functional Aspects

What is the scope of coverage of budgetary transactions by the Treasury as regards Central Government payments and receipts?

Case I: Treasury has no role;
Case II: Covers some (< 50%) Central Government payments and Receipts;
Case III: Covers most (>50%) Central Government payments and Receipts;
Case IV: Covers all Central Government payments and Receipts

What central budget transactions are not routed through the Treasury? Does Treasury cover Ministry of Defense and/or Internal Security transactions?

Level III Additional Information Required for Investment Program Design

What is the number of first level budget holders (ministry level spending agencies)?

What is the total number of subordinate spending units (subordinate to these ministries)?

What is the average daily, monthly and annual volume of central budgetary payment and receipt transactions at a large, medium and a small treasury unit?

What would be the maximum (peak volume) of these transactions?

c. Coverage of Extra Budgetary Funds

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

- EBFs are not covered by Treasury
- For some EBFs, transfers to and from EBFs are through Treasury

- For most EBFs, transfers to and from EBFs are through Treasury
- EBFs operate through Treasury and EBFs are consolidated in the TSA.

Level II Detailed Assessment—Functional Aspects

Please indicate which of the following represents the current status:

- EBFs are not covered by Treasury
- For some EBFs, transfers to and from EBFs are through Treasury
- For most EBFs, transfers to and from EBFs are through Treasury
- EBFs operate through Treasury and EBFs are consolidated in the TSA.

Detailed Assessment:

Are there any Extra budgetary funds operating?

If yes which are the primary ones? What is their size, relative to the Government budget?

What is the nature of the relationship of the Treasury with EBFs?

Case I: EBFs are not covered.

Case II: All fiscal transfers to and from these funds are recorded and controlled by the Treasury. However, these funds control their own bank accounts which are lodged in the central bank/designated bank and the funds process all day to day expenditure and receipt transactions against these accounts.

Case III: All contributions to these funds are collected by the Treasury and later transferred to the funds. Expenditure transactions are processed by the fund managers directly against bank accounts controlled by the Funds.

Case IV: The Funds do not hold any separate accounts. All individual payment and receipt transactions are carried out by the Treasury

Level III Additional Information Required for Investment Program Design

What is the average daily, monthly and annual volume of EBF transfer, payment and receipt transactions for each of the major EBFs?

What would be the maximum (peak volume) of these transactions?

What would be the volume of EBF related transactions compared to Central government payment/receipt transactions?

Do any of the major EBFs operate their own information systems?

If yes please give details of their functionality. Can/do these systems generate payment transitions that could be entered electronically to the Treasury system?

d. Coverage of Off Budget Funds

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

- Off budget transactions are not covered
- Some (<50%) off budget transactions are covered

- Most (>50%) off budget transactions are covered
- All off budget transactions are covered and consolidated in the TSA.

Level II Detailed Assessment—Functional Aspects

Please indicate which of the following represents the current status:

- Off budget transactions are not covered
- Some (<50%) off budget transactions are covered
- Most (>50%) off budget transactions are covered
- All off budget transactions are covered and consolidated in the TSA.

Detailed Assessment:

Do spending agencies operate off budget funds for earnings they receive from rendering specific services?

What is their size relative to the Government budget?

Where are these funds lodged?

Level III Additional Information Required for Investment Program Design

What is the average daily, monthly and annual volume of OBF transfer, payment and receipt transactions for the OBFs?

What would be the maximum (peak volume) of these transactions?

How does the volume compare to the volume of Central government payment/receipt transactions?

e. Coverage of Subnational Levels of Government

Level I Summarized Monitoring

Does the Central Treasury cover transactions for the sub-national level of Government?

- Sub national transactions are not covered
- Sub national Revenue transactions are covered
- Sub-national Expenditure transactions are also covered
- Sub national Treasuries have been set up and operate under a set of guidelines from the Central treasury

Level II Detailed Assessment—Functional Aspects

Does the Central Treasury cover transactions for the sub-national level of Government?

- Sub national transactions are not covered
- Sub national Revenue transactions are covered
- Sub-national Expenditure transactions are also covered.
- Sub national Treasuries have been set up and operate under a set of guidelines from the Central treasury

Is there a requirement that all or some sub-national government transactions are to be covered by the treasury.

If yes, what are the criteria for their inclusion—(e.g. all deficit provinces may be required to process/route their transactions through the treasury).

If the Central Treasury does not cover sub-national government transactions, do the sub-national governments operate their own treasuries

Do the sub-national treasuries operate under a set of standards prescribed by the central treasury

Level III Additional Information Required for Investment Program Design

What is the average daily, monthly and annual volume of sub national government transfer, payment and receipt transactions?

What would be the maximum (peak volume) of these transactions?

How does the volume compare to the volume of Central government payment/receipt transactions?

3. System Functionality

a. Management of Budget Authority

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

- Budget classification structure is not GFS compliant.
- A basic GFS compliant budget classification structure has been introduced.
- A basic GFS compliant budget classification structure is in use.
- A more comprehensive budget classification structure with capacity to monitor expenditures on projects and programs in use;

Level II Detailed Assessment—Functional Aspects

Please indicate which of the following represents the current status:

- Budget classification structure is not GFS compliant.
- A basic GFS compliant budget classification structure has been introduced.
- A basic GFS compliant budget classification structure is in use.
- A more comprehensive budget classification structure with capacity to monitor expenditures on projects and programs in use;

Detailed Assessment:

Please give the status of implementation of a GFS compliant budget classification structure by the MOF.

Case I: A Basic GFS compliant budget classification structure has been designed and introduced with at least the following segments, Function, Organization and Economic Classification.

Case II: A more comprehensive classification structure that also enables recording and monitoring expenditures on programs and projects has been introduced.

Please give details of the budget classification structure in use. What are the primary segments in the budget classification structure? (Fund, Function, Organization, Program, Project, Economic).

What is the level of detail used in the MOF for budget execution and control purposes? For example, is the budget broken down by individual spending units and by economic classification for each spending unit, or is control exercised at a more aggregate level.

If the latter what is the level at which this control is exercised?

Are the ministries/spending units required to submit expenditure plans at the start of the fiscal year.

What is the level of detail (e.g. are the plans required to be broken up by economic classification) time horizon (are the plans prepared on a yearly, half yearly or quarterly basis) of expenditure plans prepared by the line Ministries/spending units?

How are these plans sent to MOF by the Ministries/spending units?

How is the process of budget apportionment (for ministries) and allotment (for spending units) carried out?

Are the spending limits set taking into account ministry/spending unit expenditure plans? Are they set by prorating the overall approved budget?

What are the controls in place on the releases of warrants/sub-warrants?

Typically how often are warrants/sub-warrants released per year/per month? What is the frequency of releases?

What are the rules in place regarding budget transfers between economic categories within an organizational unit and between organizational units?

Which agencies have the authority to make these transfers? What authority is exercised at the spending unit level, at the line ministry level and the MOF?

Level III Additional Information Required for Investment Program Design

Please give details of the budget classification structure in terms of the number of segments, their dependencies/inter-relationships and the number of characters in each segment.

Is an automated budget preparation system in use?

Does it interface with the Treasury system. (i.e. does it at the start of the year, transfer budget appropriation data to the Treasury system and provide periodic updates as budgetary transfers take place)?

What automated arrangements are in place to pick up spending unit expenditure plans?

How are first line budget holders/spending units advised about their budget appropriations, spending limits, warrants?

What is the average daily, monthly and annual volume of budget related transactions (budget appropriations, spending limit, warrants, budget transfers)?

What would be the maximum (peak volume) of these transactions?

b. Commitment Management

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

Case I: No commitment system is operational; no commitments are recorded;

Case II: Selective commitment recording in place but payments are not automatically checked against these commitments before release.

Case III: Selective commitment recording, but also used for payment control.

Case IV: Comprehensive commitment control in place.

Level II Detailed Assessment—Functional Aspects

Please indicate which of the following represents the current status:

Case I: No commitment system is operational; no commitments are recorded;

Case II: Selective commitment recording in place but payments are not automatically checked against these commitments before release.

Case III: Selective commitment recording, but also used for payment control.

Case IV: Comprehensive commitment control in place.

What are the controls in place for approving commitments?

Is the commitment request checked against the budget appropriation, or against the available warrant allocation before approval?

At which level is the commitment approved—(Spending Ministry, Spending Unit, MOF)-What are the thresholds and other criteria for approval of procurement requests applicable at the spending unit, parent ministry and at the MOF level?

Are existing commitments reviewed before approving new requests; and are those approvals based on the line ministry's/spending agency's expenditure plans?

What is the stage during the procurement process that a commitment is recorded in the system? Is it at the stage of the procurement request or the actual placement of a PO.

Who is responsible for making commitments related to salary and payroll payments? Treasury/Line Ministry/Spending unit?

Who is responsible for making changes to these commitments due to changes in staffing?

How is the impact of changes to the pay and benefits structure on the budget and commitments calculated?

Level III Additional Information Required for Investment Program Design

Does the line ministry/spending unit making the commitment have direct access to the commitment module of the Treasury system to record commitment requests?

If not how are commitment requests transmitted to the Treasury?

- Paper
- Computer compatible medium
- Electronically

Is there a system in place to track the progress of a purchase order. Is this data accessible by the spending unit?

What is the average daily, monthly and annual volume of commitment transactions?

What would be the maximum (peak volume) of these transactions?

Is there a procurement system in use that tracks progress of a purchase order from inception to receipt of goods?

Is it accessible by the spending unit, line ministry, treasury etc?

Is there a common vendor data base in use across all organizations—line ministries, Treasury etc? How is it stored and accessed?

Is there a master contracts database in existence and in use?

Please provide samples of a Purchase order form.

c. Payment Management

Level I Summarized Monitoring

What is the process of payment authorization? Please indicate which of the following represents the current status:

Case I: Payment requests are checked by Treasury against budget appropriations, spending limits and warrants;

Case II: Payment requests also checked for existence of a prior commitments;

Case III: Payroll payments also check for and implement establishment control.

Level II Detailed Assessment—Functional Aspects

What is the process of payment authorization? Please indicate which of the following represents the current status:

Case I: Payment requests are checked by Treasury against budget appropriations, spending limits and warrants;

Case II: Payment requests also checked for existence of a prior commitments;

Case III: Payroll payments also check for and implement establishment control.

Detailed Assessment:

Who is responsible for approving payment requests before they are sent to Treasury for payment; Ministries or spending units? If both, what are the payment thresholds for line ministries/spending units?

Who is responsible for approving payment requests and tracking them at the line ministry/spending unit level? At the Treasury level?

Are total funds available checked against (1) warrant, (2) budget prior to authorization? Is this done automatically?

Are payments checked against prior commitments?

How are payments prioritized? (by size, by currency, recurring vs. one-time, by vendor etc)?

How are these priorities set and by which agency—Treasury or spending unit?

Payroll payments

Who is responsible for making payroll and benefits payments?

Is the payroll calculated by the line ministries/spending units and a payment request forwarded to the Treasury; or is the payroll calculated by the Treasury itself, with individual transactions being transmitted to the treasury from the spending units?

What are the controls in place at the Treasury prior to making payroll payments?

Case I: the total salary bill of a unit is checked against available budget;

Case II: Treasury checks existence of a sanctioned position for each position in a spending unit prior to making the payment.

If the payroll is calculated by the spending unit. Does the Treasury re-check the validity of the payroll calculations?

Level III Additional Information Required for Investment Program Design

What is the work flow associated with payment authorization? Who needs to authorize and from which agencies? How many people are required to approve and authorize prior to payment?

What is the average daily, monthly and annual volume of payment transactions?

What would be the maximum (peak volume) of these transactions?

What percentage of payments are made electronically?

What percentage of payments are made by check?

How is progress of a payment request tracked? Is there an automated system in use? Which agencies can access this system?

Is a human resources information system (HRIS) operational and integrated with the financial management information system (FMIS)?

If yes, does the HRIS generate transactions based on personnel actions such as hiring/separation, promotions, etc. for the payroll/financial management system?

Is there an automated payroll system in use at the center or at the spending units?

If yes does the payroll system interface directly with the Treasury system?

Is it fully integrated with the Treasury system?

It operates in stand alone mode but can generate a list of transactions that can be sent electronically to the Treasury system

The payroll system calculates a Spending units' payroll, but a separate transaction for the total amount to be paid for that unit has to be separately entered into the Treasury system.

What is the total number of government personnel for which the payroll needs to be calculated?

Are staff salaries paid in cash, check, electronically? Please specify percentages for each category?

Which agency is responsible for pension payments for civil servants?

How are these payments processed through the Treasury?

What is the total number of pensioners and what is the volume of transactions associated with these payments?

d. Receipts Management

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

Case I: Treasury has no role

Case II: Some receipts routed through Treasury

Case III: Most receipts are routed through Treasury; Customs and tax receipts are deposited in bank accounts controlled by tax and customs and deposited periodically to the TSA.

Case IV: All receipts routed through Treasury; Tax and customs receipts are deposited in bank accounts controlled by Treasury. Treasury informs tax and customs departments of details of receipts.

Level II Detailed Assessment—Functional Aspects

Please indicate which of the following represents the current status:

Case I: Treasury has no role

Case II: Some receipts routed through Treasury

Case III: Most receipts are routed through Treasury; Customs and tax receipts are deposited in bank accounts controlled by tax and customs and deposited periodically to the TSA.

Case IV: All receipts routed through Treasury; Tax and customs receipts are deposited in bank accounts controlled by Treasury. Treasury informs tax and customs departments of details of receipts.

How are tax receipts routed to the Treasury Single Account?

Case I: Tax Receipts are first deposited in Bank accounts controlled by the State Tax Administration Department and are subsequently transferred to the Treasury Account on a periodic basis.

Case II: Tax receipts are directly deposited by tax payers into the TSA or accounts controlled by the Treasury.

If the Taxes are collected via designated banks, does the tax department have a contract with one bank that processes all tax payments?

If no, how many commercial banks process tax payments for the department?

What is the average float before tax revenues are transferred from the collecting banks to the TSA?

If Tax receipts are deposited directly into the TSA by the collecting banks, then is the information/data on tax collections received by the Tax department?

- From the Treasury;
- From the collecting banks
- Both.

What is the frequency of the reconciliation between the deposits at the bank and returns/payments received at the tax administration department?

How are Customs Receipts routed to the TSA?

Case I: Customs Receipts are first deposited in Bank accounts controlled by the Customs Department and are subsequently transferred to the Treasury Account on a periodic basis.

Case II: Customs receipts are directly deposited by tax payers into the TSA or accounts controlled by the Treasury.

If customs receipts are first deposited in Bank accounts controlled by customs as in option (a) then what is the average float before these duties are transferred from the collecting banks to the TSA?

Level III Additional Information Required for Investment Program Design

What is the average daily, monthly and annual volume of receipt transactions broken down by various types of receipts, e.g. Tax, Customs etc?

What would be the maximum (peak volume) of these transactions?

Do the banks where tax payers deposit tax and customs receipts connected electronically to their head offices and the central bank branches at the center and at e.g., provincial head quarters?

Do the central bank branches at the provincial/district headquarters have an electronic connection with the Treasury offices at these locations?

e. Cash Management

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

- Treasury has no control over spending agency Bank accounts
- Treasury gets periodic information on balances in bank accounts from central (TSA) bank
- Treasury has on-line access to balances in bank accounts;
- Treasury able to monitor balances and recommend level of spending limits/warrants/borrowing.

Level II Detailed Assessment—Functional Aspects

Please indicate which of the following represents the current status:

- Treasury has no control over spending agency Bank accounts
- Treasury gets periodic information on balances in bank accounts from central (TSA) bank
- Treasury has on-line access to balances in bank accounts;

- Treasury able to monitor balances and recommend level of spending limits/ warrants/borrowing.

Does Treasury have easy access to information on balances in government accounts In TSA bank?

Case I: Treasury gets periodic information on balances in Government accounts from the TSA Bank.

Case II: Treasury is set up as a node on the EPS and has on-line access to balances in Government accounts.

Treasury's role in Cash requirements forecasting:

Case I: Treasury receives cash requirements requests from Spending units but does not have an active role in cash requirements forecasting;

Case II: Treasury plays an active role in cash requirements forecasting on the basis of data from prior periods.

Which department of the Treasury/MOF is responsible for monitoring balances in Government Bank accounts and comparing cash requirement forecasts with available cash balances?

How often is reconciliation between the TSA and sub-account balances performed? Is this carried out automatically?

Are cash balance reports transmitted to other agencies? (e.g. other departments of the MOF) How often?

Please describe the process and related analyses of preparing the revenue forecasts.

Who is responsible for preparing the revenue forecasts?

How often are revenue forecasts prepared/revised?

Please describe the process and related analyses of preparing the cash requirements forecast.

Who is responsible for preparing the cash requirements forecast?

Level III Additional Information Required for Investment Program Design

How are cash requirements transmitted from spending units to the parent ministries and to the Treasury?

How often are these requirements transmitted to the Treasury? annually, six monthly, quarterly, monthly, other.

How are revenue forecasts transmitted from the revenue agencies to the Treasury?

How often are these forecasts transmitted to the Treasury?—annually, six monthly, quarterly, monthly, other.

Are there any automated tools in use to project cash requirements?

What facilities are available to monitor payables?

What facilities are available to monitor receivables?

f. Debt and Aid Management

Debt Management

Level II Detailed Assessment—Functional Aspects

Who is responsible for monitoring the debt servicing requirements for Government debt?

Level III Additional Information Required for Investment Program Design

How do you track the life of a debt instrument?

How are records relating to the debt portfolio maintained?

- electronically
- in paper form

Is there an automated debt management system in place?

Does the system automatically notify the responsible parties of approaching maturity and payments due?

How are bills received from lenders?

Does the system generate payment transactions relating to debt servicing that can be entered into the Treasury system?

Does it capture new debt inflows?

Foreign Aid and Grants Receipts

Level II Detailed Assessment—Functional Aspects

How are foreign aid/grants terms and conditions tracked?

Who is responsible for foreign grant tracking?

How is information on aid/grants received by the agencies transmitted to the Treasury?

Where are the moneys associated with aid/grants deposited?

Level III Additional Information Required for Investment Program Design

Is there an automated system in place to track Foreign aid and grants?

g. Budget Review and Fiscal reporting

Level I Summarized Monitoring

Please indicate which of the following represents the current status:

Case I: Treasury has the capacity and produces some fiscal management reports on the status of budget execution;

Case II: Treasury can produce fairly comprehensive and timely information on the status of budget execution on a periodic basis.

Case III: Comprehensive and up to date set of fiscal reports produced by Treasury for MOF.

Level II Detailed Assessment—Functional Aspects

What is the capacity of the Treasury to produce fiscal management reports?

Case I: Treasury has the capacity and produces some fiscal management reports on the status of budget execution;

Case II: Treasury can produce fairly comprehensive and timely information on the status of budget execution on a periodic basis.

Case III: Comprehensive and up to date set of fiscal reports produced by Treasury for MOF.

How frequently are fiscal report prepared?

These reports are based on data received from which agencies?

Revenue Monitoring

Level II Detailed Assessment—Functional Aspects

How frequently is revenue data received from tax administration agencies?

How frequently are data received from customs administration agencies?

What other agencies send collection data?

Is past collection data used in reviewing current year collections?

Are there any specialized tools used in comparing current collections against expected collections?

If so, please provide details.

Expenditure Monitoring

Level II Detailed Assessment—Functional Aspects

How frequently are expenditure plans received from line ministries/spending units?

Is actual expenditure data available directly from the Treasury system? Is this data used for expenditure monitoring or is it collected separately from the line ministries/ spending units?

Is past expenditure data used in reviewing current year expenditures?

Are there any specialized tools used in comparing current expenditures against expected expenditures? If so, please provide details.

Where does the primary responsibility reside for preparing corrective plans in case of deviations in actual expenditures from plan?

How are these corrective plans communicated to the agencies?

Are poverty expenditures identified and reported against? If so, is this done automatically?

Is expenditure data collected by economic classification? Functional classification? Both?

Work Program Monitoring

Level II Detailed Assessment—Functional Aspects

Are progress/status reports that give details of physical progress used in monitoring work program status?

If so, are there well-defined work program progress measurement criteria?

Are physical indicators used as well as financial data in progress reports?

How frequently are work program status reports received from line ministries/ spending units?

Is past work program data used in reviewing current year programs?

Are there any specialized tools used in comparing current work program data against expected work program progress? If so, please provide details.

Where does the primary responsibility reside for preparing corrective plans in case of deviations in actual program progress from plan?

How are these corrective plans communicated to the agencies?

5. Nature of Information Systems Support for Treasury Processes and Technology Architecture

Level I Summarized Monitoring

What is the status of Information Systems established to support Treasury processes?

Case I: Rudimentary and partially manual systems operational at Treasury HQ and Branches. Systems enable distribution of information on budget appropriations, spending limits, and warrants to Treasury offices and for checking against these limits prior to authorizing payments.

Case II: Systems at Treasury HQ and Treasury offices branches connected via basic telecommunications that enable the Central and regional offices to get periodic summary information (e.g. via email) from their subordinate offices on the status of budget execution.

Case III: A Treasury system with enhanced functionality (e.g. some elements of commitment control) is operational at Treasury and branches that includes, in addition, a Treasury general Ledger and enables exchange of actual transaction data.

Case IV: Full function Treasury System implemented across Treasury network including, budget management, commitment management purchasing, fixed assets, accounts payable/receivable, general ledger and fiscal reporting. Main spending units may be connected to the system.

Level III Additional Information Required for Investment Program Design

Describe *the technical architecture* adopted/envisaged for the Treasury system.

Case I: The Treasury system operates in a centralized architecture with the application software being resident at the central treasury and subordinate offices connected to the central servers via on-line connections for transaction processing.

Case II: The Treasury system operates in a two tier partially centralized architecture with the application software being resident on servers located at the Provincial/Oblast/Regional level. Lower level treasury offices connect to these servers via on line telecommunication connections and transaction processing is carried out at the oblast level.

Case III: The Treasury system operates in a distributed architecture with each treasury office operating a copy of the application software and all transaction processing is carried out on local servers. A batch file data exchange process enables data from the lower level to be consolidated at the higher level.

What is the *nature of the interface from the Line Ministries/*first level budget holders to the Treasury System? How many first level budget holders are there?

Case I: The Treasury system is operated by the Treasury and line ministries send their transactions (either paper based or on electronic media such as diskettes) to the relevant treasury office, which then enters these transactions to the system;

Case II: Line Ministries have direct access to the Treasury system and can directly enter transactions (e.g. commitment and payment transactions or warrant transactions for their subordinate units);

Case III: Line Ministries have direct access to the system but only for report writing/query purposes.

What is *the nature of the interface from the spending units* to the Treasury System? How many spending units are there subordinate to the first level budget holders?

Case I: The Treasury system is operated by the Treasury and spending units send their transactions (either paper based or on electronic media such as diskettes) to the relevant treasury office, which then enters these transactions to the system;

Case II: Spending units have direct access to the Treasury system and can directly enter transactions (e.g. commitment and payment transactions);

Case III: Spending units have direct access to the system but only for report writing/query purposes.

What is the present *status of the inter bank payment clearing system?*

Case I: Inter-bank clearing operations are carried out manually;

Case II: An automated electronic system is operational but does not operate in real time mode—time required for clearing a check is—on average and—as a maximum;

Case III: A RTGS system is operational.

How wide spread is the access to the electronic inter bank clearing system?

How many Banks and approximately how many total number of branches of these banks are connected to the electronic payment system?

Is the Treasury directly connected to the Inter bank clearing system?

If this is so, is the connection only at the head quarters level, or are the provincial (second tier) level branches of the treasury connected to the clearing system.

What is the nature of the connection between Treasury offices and the inter-bank clearing system? Does the Treasury have correspondent accounts with the Central Bank? If yes does it have separate accounts at the provincial level branches also?

Does the Treasury have direct access to the electronic payment system to transfer balances between any of its accounts at the center and the provinces or does it have to perform this function by making a request to the Central Bank?

In case the spending units are required to route their transactions through their parent ministries, what is the nature of the interface form the spending units to the parent ministries?

Case I: electronic with direct access to the parent ministry system;

Case II: electronic/paper based transactions are sent to the line ministry system, which then enter it into its own system and subsequently transfers it to the treasury system.

Interface with the Budget Preparation System

Is there an automated budget preparation system in use?

Does it interface directly with the Treasury system to first transfer approved budget appropriations and subsequently changes in these allocations during the course of the year?

Interface with the Human Resources Information System (HRIS) and Payroll System

Is a human resources information system (HRIS) operational and integrated with the financial management information system (FMIS)?

If yes, does the HRIS generate transactions based on personnel actions such as hiring/separation, promotions, etc. for the payroll/financial management system?

Is there an automated payroll system in use at the center or at the spending units?

If yes does the payroll system interface directly with the Treasury system.

- It is fully integrated with the Treasury system
- It operates in stand alone mode but can generate a list of transactions that can be sent electronically to the Treasury system
- The payroll system calculates a SUs payroll, but a separate transaction for the total amount to be paid for that unit has to be separately entered into the Treasury system.

Interface with the Debt Management System

Is there an automated debt management system in place?

Does the system automatically notify the responsible parties of approaching maturity and payments due?

Does it generate payment transactions relating to debt servicing that can be entered into the Treasury system? Does it capture new debt inflows?

Size of the Network

What is the total number of sites where the Treasury system has been or will be implemented?

What is the number of end users that would need to be connected to the system?

Please divide the total number of sites into large, medium, small and very small sites based on the number of end users that would connect to the system at that site and estimate the number of sites in each category.

Estimate the number of end users for each category of site, i.e. large, medium, small and very small.

Status of Telecommunications

Describe the nature of telecommunications links that are or will be used to transfer data or for connections between different levels.

Please give the status of telecommunications network in the country.

What is the nature of Telecommunications facilities available between the center, the provincial headquarters, the major cities, the towns, the district level where the second/third tier Treasury offices would be located?

Please specify the following for each category of connections

- Bandwidth—64kbps, 128kbps, 256kbps,1MB
- Nature of connection: Leased lines/dial up
- Protocol: Frame relay, x.25 other
- Medium: Fiber optic,/copper/satellite etc.
- Service provider. (Government/private sector)

Are there existing networks that could be used to piggyback Treasury transactions, e.g. owned by the Central bank etc.?

Are there any other multi node countrywide information systems that are already functioning in e.g. the banking sector, other government departments, the private sector?

What is the nature of information security that has been or can be implemented over the network? Are encryption/decryption facilities available? Does the Central bank specify the security guidelines for connecting to the Inter bank payment system/its information systems? If so what are the requirements?

Are there ISPs operating in the country?

What is their coverage in terms of number of towns cities etc?

Can/is access to the system be web based, i.e. access to the system is obtained by connecting to an ISP which in turn establishes the connection to the system.

Are there any legal restrictions to using ISPs and a web based interface to the Government Treasury system?

Technical Staffing Capacity

Is IT systems support primarily done by in-house staff or has this function been outsourced.

If the former, how many technical staff are employed by the Treasury for this purpose?

Please describe the status of technical staffing within the Treasury. How many staff are there in each of the following areas?

- Application software development and maintenance,
- Systems software
- Hardware maintenance
- Networking
- Information security
- End User support

Does the Treasury have, in addition to the above, contracting arrangements with service providers to provide additional staffing capacity as required?

If technical maintenance and support are out sourced then what are the annual charges for this service?

Has the present system been custom developed or is it based on an off the shelf application software package?

If it has been developed using an off the shelf application software package then please provide details, such name of package used, etc.

If the Treasury system is not based on an off the shelf application software package then describe the application software development environment used for its development.

Does the system fulfill all Treasury requirements? If not can it be enhanced to meet the remaining requirements or would a new system need to be developed/procured?

How long has it taken for the system to be implemented?

Has it been developed/implemented in phases—e.g. an interim system was first developed with limited functionality and then later expanded/replaced by a full function Treasury system?

What has been the cost of systems implementation—that is the cost of the hardware, the application software and the technical and end user training required to implement the system?

Has this cost been Government financed or through bilateral/international funding? Please identify the donors if any.

CHAPTER 2

TREASURY SYSTEMS COST ESTIMATION MODEL

This section presents a simple Excel-based model to estimate the investment cost of setting up a Treasury system under a given set of circumstances. It is expected that some of the initial data required for estimating these costs will have been gathered as part of the exercise of completing the Treasury Diagnostic Questionnaire given in Chapter 1.

The cost model starts with an assessment in Table 3 of the number of Treasury offices that will need to be set up and whether these offices would be organized in a two or a three-tier structure. Offices at each level are then subdivided into categories according to their size in terms of the numbers of transactions they are required to process and therefore the number of staff they employ and the number of end users of the systems that will be hooked up to the system at that site.

These numbers are first used to develop an estimate of the number of staff that would need to be trained in various categories and the costs associated with this training. This includes training costs for end users, financial managers, technical staff. These numbers are automatically transferred to Table 5 which develops over all project costs.

The number of system end users is also transferred to Table 4 that develops the detailed hardware software and implementation costs of the system at the various sites.

Table 4 lists the various elements of cost that would be required in setting up a two/three-tier countrywide network of Treasury offices and connecting these offices via telecommunications facilities. In Table 4, the number of work stations required at each type of office is picked up from Table 3. However, completing this table requires that a choice be made of the size and numbers of servers and printers that will be needed at each location, LAN and WAN characteristics, application software and systems software costs, site preparation and implementation costs, from a given set of options. The spreadsheet then uses this information to develop total hardware, software and implementation costs.

To make reasonable choices from the menu of options presented in the table it would be necessary to have an idea of transaction volumes and number of users of the system at various

sites. This information will have been gathered as part of the Treasury Systems Diagnostic Questionnaire. The unit costs used in Table 5 can be changed to reflect current prices of hardware/software.

Information from Table 4 is automatically transferred to Table 5 which additionally develops estimates of consultancy costs and recurring expenses, and provides an overall estimate of project costs.

For illustration purposes this model has been used to develop an estimate of costs for a three-tier network of Treasury offices, comprising a central office, 20 second-tier offices, and 200 third-tier offices. These results are shown in the Tables 3, 4 and 5 that are attached.

TABLE 3. BASIC PARAMETERS OF THE TREASURY NETWORK

Type of Sites	Total No. of Staff	Number of Workstations to be supplied	Number of Concurrent Users	No of Sites	Total Staff	Total Number of workstations to be supplied	Concurrent Users	Total Users	Unit Cost for Site (US$)
Very Large (Central) Sites	256	172	128	1	256	172	128	256	4,448,584
Very Large Second Tier Offices	128	86	64	1	128	86	64	128	685,792
Large Second Tier Offices	64	43	32	3	192	129	96	192	341,896
Medium Second Tier Offices	32	21	16	8	256	172	128	256	200,848
Small Second Tier Offices	32	21	16	8	256	172	128	256	131,948
Large Third Tier Offices	32	21	16	20	640	429	320	640	123,948
Medium Second Tier Offices	16	11	8	40	640	429	320	640	56,224
Small Third Tier Offices	8	5	4	60	480	322	240	480	34,112
Very Small Third Tier Offices	4	3	2	80	320	214	160	320	19,056
Totals				**221**	**3,168**	**2,123**	**1,584**	**3,168**	**17,121,552**

Training Costs	**Costs**	**No of Staff**
End User Training in Systems @US$200 per end user	$424,512.00	**2,123**
Training for Technical staff @US$1500 per technical staff	$366,000.00	335
Training for Finance managers @US$500 per manager	$179,000.00	596
Study Tours/Seminars etc. (lump sum)	$100,000.00	
	$1,069,512.00	

TABLE 4. DETAILED COST CALCULATIONS FOR HARDWARE, SYSTEMS SOFTWARE, DBMS AND APPLICATION DEVELOPMENT TOOLS, APPLICATION SOFTWARE, LAN AND WAN NETWORKING, SITE PREPARATION/INSTALLATION

(ALL COSTS ARE IN US$)

	Cost	QTY	Treasury Headquarters	QTY	Very Large oblast Moscow	QTY	Large oblast	QTY	Middle oblast	QTY	Small oblast	QTY	Large Rayons
Number of sites			*1*		*1*		*3*		*8*		*8*		*20*
Server-1	300,000	*0*	0		0		0		0		0		0
Server-2	100,000	*0*	0	*0*	0		0		0		0		0
Server-3	65,000	*2*	130,000	*1*	65,000		0		0		0		0
Server-4	35,000		0	*1*	35,000	*1*	35,000	0	0	*0*	0	*0*	0
Server-5	15,000	*0*	0	*0*	0	*1*	15,000	2	30,000	*1*	15,000	*1*	15,000
Server-6	5,000	*1*	5,000	*1*	5,000	*0*	0	0	0	*1*	5,000	*1*	5,000
Work stations	1,200	*172*	205,824	*86*	102,912	*43*	51,456	*21*	25,728	*21*	25,728	*21*	25,728
Work stations	1,500		0		0		0		0		0		0
Subtotal:			**340,824**		**207,912**		**101,456**		**55,728**		**45,728**		**45,728**
Printers—Type 1	7,500		0		0		0		0		0		0
Printers—Type 2	4,500	*3*	13,500	*3*	13,500	*2*	9,000	1	4,500	*0*	0	*0*	0
Printers—Type 3	2,500	*1*	2,500	*1*	2,500	*0*	0	1	2,500	*2*	5,000	*1*	2,500
Printers—Type 4	2,000		0	*0*	0	*0*	0	0	0	*0*	0	*0*	0
Subtotal:			**16,000**		**16,000**		**9,000**		**7,000**		**5,000**		**2,500**
Operating System—Server-1	20,000	*0*	0	*0*	0	*0*	0	*0*	0	*0*	0	*0*	0
Operating System—Server-2	10,000	*0*	0	*0*	0	*0*	0	*0*	0	*0*	0	*0*	0
Operating System—Server-3	5,000	*2*	10,000	*1*	5,000	*0*	0	*0*	0	*0*	0	*0*	0
Operating System—Server-4	3,000	*0*	0	*1*	3,000	*1*	3,000	*0*	0	*0*	0	*0*	0
Operating System—Server-5	2,000	*0*	0	*0*	0	*1*	2,000	*2*	4,000	*1*	2,000	*1*	2,000
Operating System—Server-6	1,000	*1*	1,000	*1*	1,000	*0*	0	*0*	0	*1*	1,000	*1*	1,000
Subtotal:			**11,000**		**9,000**		**5,000**		**4,000**		**3,000**		**3,000**
Office S/W ($200)	200	*172*	34,304	*86*	17,152	*43*	8,576	*21*	4,288	*21*	4,288	*21*	4,288
Network/tel connection ($500)	300	*172*	51,456	*86*	25,728	*43*	12,864	*21*	6,432	*21*	6,432	*21*	6,432
Subtotal:			**85,760**		**42,880**		**21,440**		**10,720**		**10,720**		**10,720**
Network Operations Control Center, WAN & Secure Information Transfer Costs Central Site and Very large Sites (300–400 w/s)	1,000,000	*1*	1,000,000		0		0		0		0		0
WAN & Secure Information Transfer Costs Very Large Sites (150–350 w/s) Moscow region	250,000		0	*0*	0	*0*	0		0		0		0
WAN & Secure Information Transfer Costs Large Sites (150–350 w/s)	100,000		0	*1*	100,000		0	0	0		0		0
WAN & Secure Information Transfer Costs Medium Sites (75–100 w/s)	50,000		0		0	*1*	50,000		0	*0*	0		0
WAN & Secure Information Transfer Costs Small Sites (25–50 w/s)	25,000		0		0		0	1	25,000	*0*	0	*0*	0
WAN & Secure Information Transfer Costs Very Small Sites (<15 w/s)	7,500	*0*	0		0	*0*	0		0	*1*	7,500	*1*	7,500
WAN & Secure Information Transfer Costs Very Small Sites (<15 w/s)	2,500	*0*	0		0	*0*	0		0		0	*1*	2,500
Subtotal:			**1,000,000**		**100,000**		**50,000**		**25,000**		**7,500**		**10,000**

QTY	Middle rayon	QTY	Small rayon	QTY	Very small rayon	Total Net	VAT (20 %)	Total custom duties, 10%	Total with Total VAT and customs duties	VAT and customs duties	
	40		***60***		***80***						
	0		0		0	0	0	0	0	0	***COMPUTER EQUIPMENT***
	0		0		0	0	0	0	0	0	
	0		0		0	195,000	42,900	19,500	62,400	257,400	
	0		0		0	140,000	30,800	14,000	44,800	184,800	
0	0	**0**	0		0	705,000	155,100	70,500	225,600	930,600	
1	5,000	**1**	5,000	**0.5**	2,500	850,000	187,000	85,000	272,000	1,122,000	
11	12,864	***5***	6,432	***3***	3,216	2,547,072	560,356	254,707	815,063	3,362,135	
	0		0		0	0	0	0	0	0	
	17,864		**11,432**		**5,716**	**4,437,072**	**976,156**	**443,707**	**1,419,863**	**5,856,935**	
	0		0		0	0	0	0	0	0	***Printers***
0	0		0		0	90,000	19,800	9,000	28,800	118,800	
1	2,500	**0**	0	**0**	0	215,000	47,300	21,500	68,800	283,800	
0	0	**1**	2,000	**1**	2,000	280,000	61,600	28,000	89,600	369,600	
	2,500		**2,000**		**2,000**	**585,000**	**128,700**	**58,500**	**187,200**	**772,200**	
0	0	***0***	0	***0***	0	0	0	0	0	0	***OPERATING SYSTEMS***
0	0	***0***	0	***0***	0	0	0	0	0	0	
0	0	***0***	0	***0***	0	15,000	3,300	1,500	4,800	19,800	
0	0	***0***	0	***0***	0	12,000	2,640	1,200	3,840	15,840	
0	0	***0***	0	***0***	0	94,000	20,680	9,400	30,080	124,080	
1	1,000	***1***	1,000	***1***	500	170,000	37,400	17,000	54,400	224,400	
	1,000		**1,000**		**500**	**291,000**	**64,020**	**29,100**	**93,120**	**384,120**	
11	2,144	***5***	1,072	***3***	536	424,512	93,393	42,451	135,844	560,356	***OFFICE Software and LAN Installation***
11	3,216	***5***	1,608	***3***	804	636,768	140,089	63,677	203,766	840,534	
	5,360		**2,680**		**1,340**	**1,061,280**	**233,482**	**106,128**	**339,610**	**1,400,890**	
	0		0		0	1,000,000	220,000	100,000	320,000	1,320,000	***TELECOMMUNICATION EQUIPMENT (WAN)***
	0		0		0	0	0	0	0	0	
	0		0		0	100,000	22,000	10,000	32,000	132,000	
	0		0		0	150,000	33,000	15,000	48,000	198,000	
	0		0		0	200,000	44,000	20,000	64,000	264,000	
0	0	0	0	0	0	210,000	46,200	21,000	67,200	277,200	
1	2,500	1	2,500	1	2,500	500,000	110,000	50,000	160,000	660,000	
	2,500		**2,500**		**2,500**	**2,160,000**	**475,200**	**216,000**	**691,200**	**2,851,200**	

(*Continued*)

TABLE 4. DETAILED COST CALCULATIONS FOR HARDWARE, SYSTEMS SOFTWARE, DBMS AND APPLICATION DEVELOPMENT TOOLS, APPLICATION SOFTWARE, LAN AND WAN NETWORKING, SITE PREPARATION/INSTALLATION (*Continued*)

	Cost	QTY	Treasury Headquarters	QTY	Very Large oblast Moscow	QTY	Large oblast	QTY	Middle oblast	QTY	Small oblast	QTY	Large Rayons
Total application licenses (*)		*128*		*64*		*32*		*16*		*16*		*16*	
Application Software type 1	3,000	*85*	256,000	*43*	128,000	*21*	64,000	*10*	28,800	*11*	32,000	*12*	36,000
Application Software type 2	1,500	*43*	64,000	*21*	32,000	*11*	16,000	*6*	9,600	*5*	8,000	*4*	6,000
Application Software type 3	1,000		0		0		0		0		0		0
Application Configuration and Extensions	*2,500,000*	*1*	2,500,000										
Subtotal:			**2,820,000**		**160,000**		**80,000**		**38,400**		**40,000**		**42,000**
DBMS & Application development Tools—type 1	250,000	*0*	0		0		0		0		0		0
DBMS & Application development Tools—type 2	150,000	*0*	0	*0*	0		0		0		0		0
DBMS & Application development Tools—type 3	75,000	*1*	75,000	*0*	0	*0*	0		0		0		0
DBMS & Application development Tools—type 4	50,000		0	*1*	50,000	*0*	0	0	0		0		0
DBMS & Application development Tools—type 5	25,000		0		0	*1*	25,000	0	0		0		0
DBMS & Application development Tools—type 6	10,000	*0*	0		0		0	1	10,000	*1*	10,000		0
Subtotal:			**75,000**		**50,000**		**25,000**		**10,000**		**10,000**		**0**
Misc. (UPS—Site Prep/Installation at Very Large sites)	250,000	*0*	0	*0*	0		0		0		0		0
Misc. (UPS—Site Prep. Installation at Large Sites)	100,000	*1*	100,000	*1*	100,000	*0*	0		0		0		0
Misc. (UPS—Site Prep Installation at Medium Sites)	50,000		0		0	*1*	50,000	1	50,000	*0*	0	*0*	0
Misc. (UPS—Site Prep Installation at Small Sites)	10,000		0		0		0	0	0	*1*	10,000	*1*	10,000
Misc. (UPS—Site Prep Installation at V. Small Sites)	2,000		0		0		0		0		0		0
Subtotal:			**100,000**		**100,000**		**50,000**		**50,000**		**10,000**		**10,000**
Total for office			4,448,584		685,792		341,896		200,848		131,948		123,948
Total			**4,448,584**		**685,792**		**1,025,688**		**1,606,784**		**1,055,584**		**2,478,960**

QTY	Middle rayon	QTY	Small Srayon	QTY	Very small rayon	Total Net	VAT (20 %)	Total custom duties, 10%	Total with Total VAT and customs duties	VAT and customs duties	
8		***4***		***2***		0	0	0	0	0	
											APPLICATION
6	18,000	***3***	9,000	***1***	4,000	3,362,400	739,728	336,240	1,075,968	4,438,368	***SOFTWARE***
2	3,000	***1***	1,500	***1***	1,000	694,800	152,856	69,480	222,336	917,136	
	0		0		0	0	0	0	0	0	
						2,500,000	500,000	0	500,000	3,000,000	
	21,000		**10,500**		**5,000**	**6,557,200**	**1,392,584**	**405,720**	**1,798,304**	**8,355,504**	
											DMBS TOOLS
	0		0		0	0	0	0	0	0	***SOFTWARE***
	0		0		0	0	0	0	0	0	
	0		0		0	75,000	16,500	7,500	24,000	99,000	
	0		0		0	50,000	11,000	5,000	16,000	66,000	
	0		0		0	75,000	16,500	7,500	24,000	99,000	
	0		0		0	160,000	35,200	16,000	51,200	211,200	
	0		**0**		**0**	**360,000**	**79,200**	**36,000**	**115,200**	**475,200**	
											Site
	0		0		0	0	0	0	0	0	***Preparation***
	0		0		0	200,000	44,000	20,000	64,000	264,000	
	0		0		0	550,000	121,000	55,000	176,000	726,000	
0	0		0		0	280,000	61,600	28,000	89,600	369,600	
3	6,000	2	4,000	1	2,000	640,000	140,800	64,000	204,800	844,800	
	6,000		**4,000**		**2,000**	**1,670,000**	**367,400**	**167,000**	**534,400**	**2,204,400**	
	56,224		34,112		19,056						
	2,248,960		**2,046,720**		**1,524,480**	**17,121,552**	**3,716,741**	**1,462,155**	**5,178,897**	**22,300,449**	

TABLE 5. TOTAL PROJECT COST
(Cost Estimates in US$ for a Treasury Project)

Component	Total Cost (US$)	Duties & Taxes	Govt. Financing Excl. Taxes	TOTAL Govt. financing	Bank-financing (US$)
I. Consulting Services					
(a) Policy and design: (i) Review of existing budget classifications and design of a revised chart of accounts conforming with the IMF GFS classification methodology; (ii) Development of the legal regulatory and operational framework, including guidelines, procedures, regulations, forms and operating manuals for budget execution expenditure forecasting, fiscal reporting; cash management and payroll management and audit; (iii) Design and & development of functional specifications for the TLS and associated technology architectures;	4,200,000	700,000	0	700,000	3,500,000
Design and Development of legal and regulatory framework and associated operating instructions and manuals	600,000	100,000		100,000	500,000
Design & development of functional specifications and associated technology architectures	3,600,000	600,000		600,000	3,000,000
(c) Technical support and implementation services required for the implementation of the new Treasury system.	1,200,000	200,000	0	200,000	1,000,000
Data conversion and interfaces with other systems	600,000	100,000	0	100,000	500,000
Systems implementation	600,000	100,000	0	100,000	500,000
(d) Project management	300,000	50,000		50,000	250,000
II. Equipment and Software					
(a) Equipment (servers, workstations and associated peripherals and associated systems, office and network software) for the central facilities at the Treasury headquarters, Second Tier and Third Tier Treasury offices.	13,469,745	3,265,393	0	3,265,393	10,204,352
Computer Equipment (work stations, servers)	5,856,935	1,419,863		1,419,863	4,437,072
Operating system	384,120	93,120		93,120	291,000
Office Software and LAN Installation	1,400,890	339,610		339,610	1,061,280
Printers and Office Equipment	772,200	187,200		187,200	585,000
Site Preparation	2,204,400	534,400		534,400	1,670,000
WAN & Secure Information Transfer Costs	2,851,200	691,200		691,200	2,160,000

TABLE 5. TOTAL PROJECT COST (*Continued*)
(Cost Estimates for a Treasury Project)

Component	Total Cost (US$)	Duties & Taxes	Govt. Financing Excl. Taxes	TOTAL Govt. financing	Bank-financing (US$)
(b) Application Software for treasury system, application development tools, at the center, regional and district units and spending units as necessary.	8,830,704	1,913,504		1,913,504	6,917,200
Application software licenses, configuration and extension	8,355,504	1,798,304		1,798,304	6,557,200
DMBS & Application development Tools	475,200	115,200		115,200	360,000
III. Training					
(a) Training courses to cover specific technical and functional areas;	1,283,414	213,902	0	213,902	1,069,512
End User Training in Systems Use	509,414	84,902		84,902	424,512
Technical Systems Courses*	439,200	73,200		73,200	366,000
Training for Finance Managers	214,800	35,800		35,800	179,000
Study Tours/seminars etc. for senior managers	120,000	20,000		20,000	100,000
Total Investment Cost	**29,283,863**	**6,342,799**	**0**	**6,342,799**	**22,941,064**
Recurrent Costs	**3,000,000**	**0**	**3,000,000**	**3,000,000**	**0**
(a) H/W, S/W Maintenance, S/W License Fees	2,000,000	0	2,000,000	2,000,000	0
H/W maintenance and warranty costs beyond three year warranty period @ 10% of installed capacity	1,000,000		1,000,000	1,000,000	
Software license fees at 20% of installed costs of software	1,000,000		1,000,000	1,000,000	
(b) Telecommunications Costs (line lease)	500,000		500,000	500,000	
(c) Other operational expenses during project Implementation	500,000		500,000	500,000	
Total Project Costs	**32,283,863**	**6,342,799**	**3,000,000**	**9,342,799**	**22,941,064**

CHAPTER 3

APPLICATION SOFTWARE DIAGNOSTIC QUESTIONNAIRE

A questionnaire to determine the goodness of fit between application software packages and Treasury functional and implementation requirements

Part I—Implementation Arrangements and Technology Architecture

a. Implementation of the Package in a Given Organizational Setting

Describe how your package would be implemented in the specific institutional setting for the Treasury envisaged for this country. A schematic of various commonly occurring institutional settings is given at annex 2.

Describe which modules will need to be accessible by/implemented at various locations: Spending Unit, MOF, Treasury head office, Treasury subordinate office, Line Ministry, Spending unit.

b. Interface with the Banking System

Describe how your package would interface with the banking system to enable payments from the Treasury to be transmitted to the TSA Bank and to record information from the TSA bank on revenue receipts.

c. Technology Architecture

Describe the technical architecture recommended for your application software package when used as the Treasury system.

Case I: The Treasury system should operate in a centralized architecture with the application software being resident at the central treasury and subordinate offices connected to the central servers via on-line connections for transaction processing.

Case II: The Treasury system should operate in a two tier partially centralized architecture with the application software being resident on servers located at the Provincial/Oblast/Regional level. Lower level treasury offices connect to these servers via on line telecommunication connections and transaction processing is carried out at the oblast level.

Case III: The Treasury system should operate in a distributed architecture with each treasury office operating a copy of the application software and all transaction processing is carried out on local servers. A batch file data exchange process enables data from the lower level to be consolidated at the higher level.

Describe, in brief, the hardware/software platform required to operate your package as the Treasury system (for example, size of servers, nature of operating system, DBMS, client operating system; nature of LAN/WAN, etc.).

Describe the nature of telecommunications connections required to transfer data or for connections between different levels. (leased lines/dial up), (frame relay, x.25 other), (fiber optic,/copper/satellite etc.)

Is the system access web based. e.g. access to the system is obtained by connecting to an ISP which in turn establishes the connection to the system?

What languages does your package support? Is full end user documentation/technical documentation available in these languages?

What technical support arrangements/network do you have for supporting your software internationally?

d. Cost, Time Required for Implementation

What is the initial license fees/user for the modules that would be necessary to operate the Treasury functions described in this document. What Volume discounts are available?

Do you have a policy of site/organization wide/licenses?

What would be the approximate time required for implementing the system at a Treasury Head office and say 100 subordinate offices—about 500 users?

Do you have a pre-configured version available that would support the core Treasury functional processes described in this document?

If yes would the time and costs for implementation be reduced significantly for installation of such a system; by how much?

Please give names and addresses of sites where your application software is currently being used to support Treasury functions.

Part II—Treasury Functional Processes

a. Systems Modules

What are the principal modules of the system?

Budget management,
Commitment management,
Purchasing,
Fixed Assets,
Accounts Payable,
Accounts Receivable,
General Ledger,

Fiscal reporting;
Other.

b. Management of Budget Authority

Budget Classification Structure

Can a budget classification structure that is conformant with the IMF's GFS be supported by the application software package. For example, can it support a budget classification structure consisting of the following segments?

Fund
Function
Organization
Program
Project
Economic classification (Object of Expenditure)

What are the limitations on the total number of segments in the budget classification structure and on the size of each segment?

If the system has been pre-configured for a given budget classification structure, such as above, can this be changed easily in the light of actual country requirements. How long will it take to make these changes?

Budget Load Facility

Is there a facility available to upload the annual approved budget into the system as is normally required at the start of the year?

What is the required format of the input file, for example, can this upload be done from an Excel file?

What other formats are available?

Expenditure Plans Recording Facility

Does the system have a facility to record ministries/spending units expenditure plans (prepared on e.g. a monthly or a quarterly basis) at the start of the fiscal year? Is there a facility available to upload expenditure plans from external files? Any restrictions on format?

Describe/demonstrate how changes to these expenditure plans can be made in the system?

Budget Apportionment and Allotment

Demonstrate how the process of budget apportionment (for ministries) and allotment (for spending units) can be carried out in the system?

Does the system have a facility to set spending limits (apportionments/allotments) equal to the ministry/spending unit expenditure plans?

Can they be set by prorating the overall approved budget amount, for example, by month?

Warrant and Sub Warrants

Describe how the system would support the warrant and sub-warrant processes.

Can the warrant/subwarrants be set equal to the Spending Unit expenditure plans?

What are the controls in place on the releases of warrants/sub-warrants?

What kinds of controls are imposed to ensure that total sub warrants do not exceed total warrants and the total warrants do not exceed the apportionments/allotments? Are the controls imposed for every budget line item?

Budget Transfers

What are the facilities in the system to make transfers of budget allocations from one category to another?

What controls are in place?

Can specific agencies be given the authority to make these transfers, for example, different authorities to be exercised at the spending unit level, at the line ministry level and the MOF?

Supplementary Budgets

What facilities are in place to support the supplementary budget process?

c. Commitment of Funds

Can the system support the commitment process?

If yes, what are the controls in place for approving commitments?

Is the commitment request checked against the budget appropriation, apportionment or against the available warrant allocation before approval?

Can thresholds/other criteria be set for approval of commitment requests to be applicable at the spending unit, parent ministry and at the MOF level?

Does the system have a facility to review budget data on available funds and existing commitments prior to approving new commitments?

Does the line ministry/spending unit making the commitment need to have direct access to the commitment module of the Treasury system to record commitment requests?

If not, how can commitment requests and approvals (to and from line ministry/spending agency) be transmitted to the Treasury?

a. Computer compatible medium
b. Manually by paper
c. Both

What is the stage during the procurement process that a commitment is recorded in the system?

Is it at the stage of the procurement request or the actual placement of a PO.?

Does the system have a facility to track the progress of a purchase order?

d. Payments Management

Verification of goods receipt

Please describe how the system supports the receiving process. Does the system provide the receiving department viewing access to the PO for validation purposes?

Is the receiving department able to confirm receipt—enter data—directly into the contract management module (against POs, contracts, authorization)?

How does the system confirm the receipt of goods/rendering of service?

Is there an interface between the receiving system and procurement system? Is it able to flag discrepancies between existing purchase orders and actual receipts?

Payment Authorization

Describe how the system supports the payment process. Is the system automatically able to check total funds available against the budget prior to authorizing payment? Does it check against budget authorization, apportionment or warrant before authorizing payment?

How are payments authorized?

Signature
Secure ID code (electronic)
Both

Is there a requirement for an existing PO, contract, or authorization prior to payment?

How can payment requests be tracked electronically?

Are POs, contracts or authorizations available online?

What mechanisms are in place to flag authorizations that overdraw the budget?

Payments against Invoices

Is there a facility for setting payment thresholds for various levels, for example, Ministries or spending units?

Is there a facility for tracking payment requests ?
Is invoice detail captured on the payment?
Is invoice detail captured when PO updates are made?

Is payment confirmation information accurately captured and available for viewing by staff? How?

a. Electronically
b. Report
c. On request by line ministry/spending unit
d. Other?

How is the payment progress tracked?

Are payments in different currencies pooled in the payment schedule?

What facilities are in place to record payment confirmations received from the Bank?

a. Instantly
b. Daily
c. Other

Do commitment and expenditure updates occur simultaneously as payment are made?

Payroll and Benefits Payments

Does the system have a payroll module?

Does the system have facilities to accept input form another payroll system if one is not available in the package?

What are the controls in place prior to making payroll payments?

(a) Can the total salary bill of a unit checked against available budget?

(b) Can the system check for existence of a sanctioned position for each position in a spending unit prior to making the payment?

How can payroll payments be made?

a. Electronic deposit
b. Check
c. Cash
d. Combination

Scheduling payments

How can payments be prioritized (by size, by currency, recurring vs. one-time, vendor, etc.)?

How are these priorities set can they be restricted to a specific agency, for example, Treasury/spending unit?

Does the system have facilities for making the payment pipeline available to the line or spending agency for viewing?

Payment processing

Does the system have facilities for making payments by:

a. EFT?
b. By check?
c. In cash?

How are payments monitored and tracked?

How is payment completion transmitted to the Treasury from the bank for reconciliation against the budget, PO, payment authorization? What Bank reconciliation facilities are available in the system?

Describe the nature of the interface between the system and the Inter bank clearing system.

Does the system have facilities to create a fixed asset record after the purchase of a item from the procurement system? Describe these facilities.

e. Receipts Management

What facilities does the system have to support the receipt management processes?

Describe how will the system enable the tax/customs receipts information to be recorded in the Treasury system in the following cases?

a. Tax Receipts are first deposited in Bank accounts controlled by the State Tax Administration Department and are subsequently transferred to the Treasury Account on a periodic basis. The TSA Bank informs the Treasury of deposits.

b. Tax receipts are directly deposited by tax payers into the TSA or accounts controlled by the Treasury. The TSA Bank informs the Treasury of the deposits.

What facilities does the system have to transmit data on tax/customs collections to the tax/customs departments?

Revenue Sharing

Describe the process of revenue sharing (for example, computing, verifying request, process payment order).

During the verification process does the system automatically to check revenue sharing requests against revenue rules?

How would the Treasury transmit/transfer shared revenue?

a. Check
b. EFT

How is revenue sharing information communicated?

a. Electronically
b. Printed report
c. Both
d. Not communicated

f. Cash Management

Revenue and Expenditure Forecasts

What facilities re available for preparing the revenue forecasts?

What facilities are available for preparing cash requirements forecast?

What kinds of tools are used to determine trends, compare data and arrive at forecasts?

Monitoring Cash Balances in Treasury Accounts

What facilities are available for monitoring balances in Government Bank accounts?

Is it possible to receive TSA balance information electronically?

Reconciling TSA and sub account balances

What facilities are available for reconciling TSA and subaccount?

Monitoring payables

How are payables monitored and evaluated? Is this process automatic or manual?

Can payable information be compared with receivables?

Monitoring Receivables

Please describe the receivables aging process.

Can receivable information be compared with payables?

g. Debt and Aid Management

New Debt Agreements

Is there an automated debt management system available?

Does the system automatically notify the responsible parties of approaching maturity and payments due?

Does it generate payment transactions relating to debt servicing that can be entered into the Treasury system?

Foreign Aid and Grants Receipts

What are the facilities for tracking foreign aid/grants terms and conditions?

How are aid/grants received by the central bank?

How are funds transmitted by the donor to the bank?

a. EFT
b. Check
c. Cash

Describe the process of transmitting receipts information from the Central Bank/TSA Bank to the Treasury system?

New Debt Inflows

Describe how your system would support the process of transmitting receipts information from the Central Bank/TSA Bank to the Treasury system?

Debt Service Payments

Does the system have a facility to receive bills from lenders?

a. Electronically (SWIFT, etc.)
b. Paper (mail, fax, telex, etc.)
c. Both

Is there an automated debt management system in place?

Does the system automatically notify the responsible parties of approaching maturity and payments due?

Does it generate payment transactions relating to debt servicing that can be entered into the Treasury system?

Are payment and maturity terms for each instrument readily available?

h. Budget Review and Fiscal reporting

Describe the system's fiscal reporting facilities?

Revenue Monitoring

What facilities are available for revenue monitoring?

Is past collection data used in reviewing current year collections?

If so, how many years of past data is used in comparing trends?

Are there any specialized tools used in comparing current collections against expected collections? If so, please provide details.

Expenditure Monitoring

What facilities are available for expenditure monitoring?

Is past expenditure data used in reviewing current year expenditures?

If so, how many years of past data used in comparing trends?

How many years of past data is stored in the system?

Are there any specialized tools used in comparing current expenditures against expected expenditures? If so, please provide details.

Work Program Monitoring

What facilities are available for work program monitoring?

Are work program progress/status reports used in monitoring program status?

Is past work program data used in reviewing current year programs?

If so, how many years of past data is used in comparing trends?

How many years of past data is stored in the system?

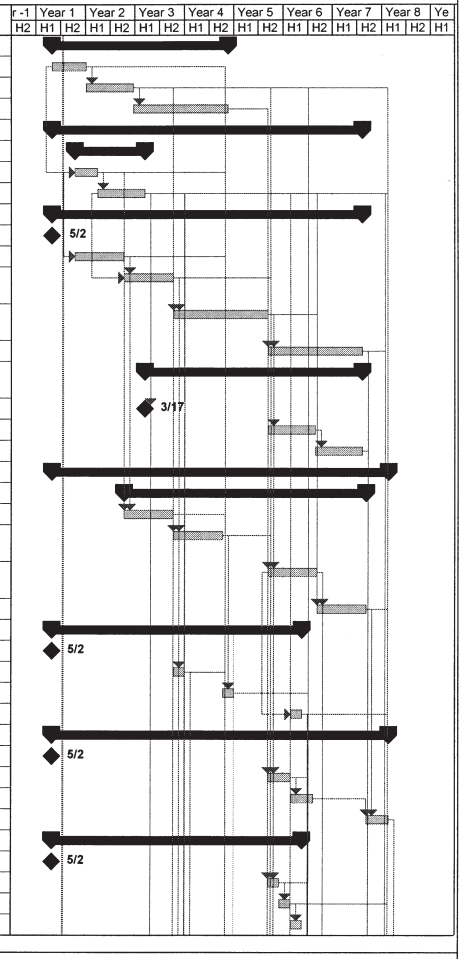
Are there any specialized tools used in comparing current work program data against expected work program progress? If so, please provide details.

Annex A

Treasury Reform Program—Typical Steps

Annex A: Treasury Reform Program- Typical steps

ID	Task Name	Duration	Predecessor Steps
1	**Legal Framework**	**930 days**	
2	Treasury decree/initial set of regulations	**36 wks**	
3	Budget law/more comprehensive regulations	**50 wks**	**2**
4	Improved budget law/full set of regulations	**100 wks**	**3**
5	**Infrastructure**	**1640 days**	
6	**Treasury organization**	**370 days**	
7	Treasury Offices at HQ and some branches	**24 wks**	**2SS+24 wks**
8	Complete network of Treasury Offices	**50 wks**	**7**
9	**Nature of Treasury Systems support**	**1640 days**	
10	No support	**0 days**	
11	Rudimentary- Distribute spending limits and warrants	**52 wks**	**7SS**
12	Systems at HQ and branches exchange summary information	**52 wks**	**11,8SS**
13	Enhanced functionality and systems exchange transactions data	**100 wks**	**12,3**
14	Full function systems	**100 wks**	**13,4**
15	**Connection between Treasury system and banking system**	**1150 days**	
16	Manual	**0 days**	**8**
17	Electronic exchange of payments and receipts information	**50 wks**	**13**
18	Treasury acts as node on the EPS	**50 wks**	**17**
19	**Treasury Coverage**	**1780 days**	
20	**Treasury Control over finances**	**1280 days**	
21	Control over some SU accounts	**52 wks**	**7,11**
22	Control over most SU accounts/multiplicity of Accounts per SU still exists	**52 wks**	**8,12**
23	Control over most SU Accounts/ consolidation of accounts in progress	**52 wks**	**8,22,13**
24	Full Control, TSA established	**52 wks**	**8,13,23**
25	**Coverage of Central Budget**	**1320 days**	
26	Not covered	**0 days**	
27	Covers some payment and receipt transactions	**12 wks**	**21**
28	Covers most Payment and receipt transactions	**12 wks**	**22**
29	Covers all payment and receipt transactions	**12 wks**	**23SS+24 wks**
30	**Coverage of EBFs**	**1780 days**	
31	EBFs not covered	**0 days**	
32	Some Transfers to and from EBFs covered	**24 wks**	**8,13**
33	All Transfers to and from EBFs covered	**24 wks**	**32**
34	EBF transactions covered and consolidated in TSA	**24 wks**	**33,24**
35	**Coverage of OBFs**	**1320 days**	
36	OBFs not covered	**0 days**	
37	Some covered	**12 wks**	**8,13**
38	Most OBFs covered	**12 wks**	**37**
39	All Covered	**12 wks**	**38**

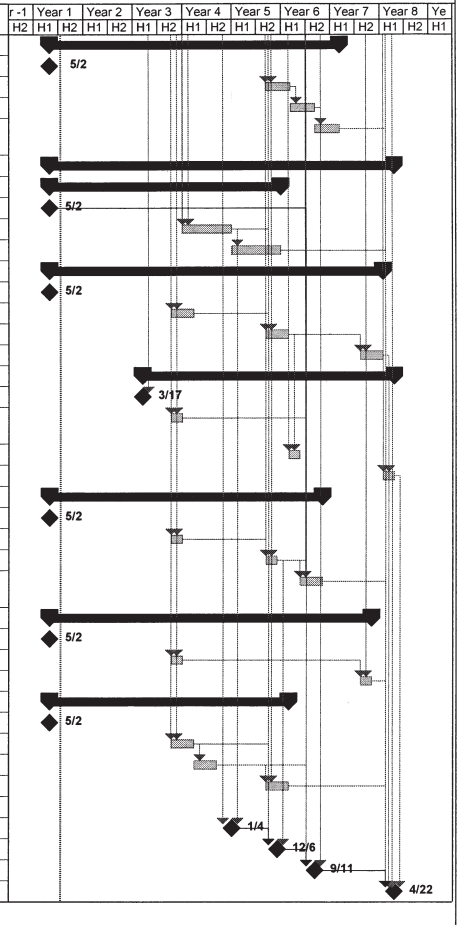


Project: Treasury Milestones4
Date: Wed 7/16/03

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline | SS – Start to Start relationship

Annex A: Treasury Reform Program- Typical steps

ID	Task Name	Duration	Predecessor Steps
40	**Coverage of Sub National governments**	**1530 days**	
41	Not covered	**0 days**	
42	Some Revenue transactions covered	**26 wks**	**8,13**
43	Some Expenditure transactions covered	**26 wks**	**42**
44	All transactions covered or Parallel sub-national Treasuries set up	**26 wks**	**43**
45	**System functionality**	**1820 days**	
46	**Budget management**	**1220 days**	
47	Budget classification structure is not GFS compliant	**0 days**	
48	GFS compliant structure implemented	**52 wks**	**8,27**
49	Advanced features implemented	**52 wks**	**48**
50	**Commitment Management**	**1760 days**	
51	No commitment control	**0 days**	
52	Selective commitment recording but no automatic control	**24 wks**	**8,12**
53	Selective recording and control	**24 wks**	**52,13**
54	Full commitment control	**24 wks**	**53,14**
55	**Payment Management**	**1330 days**	
56	No Control by treasury	**0 days**	**8**
57	Payments checked against Budget appropriations and warrants	**12 wks**	**8,12**
58	Also checked for prior commitment	**12 wks**	**8,13,53**
59	Establishment control in place	**12 wks**	**8,14,54**
60	**Receipts Management**	**1440 days**	
61	Treasury has no role	**0 days**	
62	Some receipts deposited through treasury	**12 wks**	**8,12**
63	Most receipts routed through Treasury	**12 wks**	**8,13,62**
64	All receipts, Tax and customs receipts deposited in treasury accounts	**24 wks**	**63,29**
65	**Cash management**	**1700 days**	
66	No Control	**0 days**	
67	Treasury receives periodic information from Banks	**12 wks**	**8,12**
68	Online access to TSA balances and active role	**12 wks**	**67,18**
69	**Fiscal reporting**	**1260 days**	
70	MOF relies on reports from Spending agencies	**0 days**	
71	Partial coverage	**24 wks**	**8,12**
72	Fairly complete reports	**24 wks**	**71**
73	Full and comprehensive reporting	**24 wks**	**13,72**
74			
75	***Level I system complete***	***0 days***	***2,7,27,48,57,62,67,11,21***
76	***Level 2 system complete***	***0 days***	***75,3,8,48,52,63,67,71,12,22,28,57***
77	***Level 3 system complete***	***0 days***	***3,8,23,32,43,47,53,57,67,76,13,72,28,37,63***
78	***Level 4 system complete***	***0 days***	***3,8,24,29,34,38,44,49,54,59,64,68,73,77***



Project: Treasury Milestones4
Date: Wed 7/16/03

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone | SS – Start to Start relationship

ANNEX B

INSTITUTIONAL ARRANGEMENTS FOR PAYMENT PROCESSING

Treasury Based Expenditure Processing

A commonly occurring institutional setting for a Treasury is one in which (a) all payments from line agencies are channeled through the Treasury; (b) the Treasury is responsible for making payments from the Treasury single account (TSA) which is held at the Central Bank; and (c) the Central bank is responsible for retail banking operations associated with government payments and receipts.

The centralization of all government payments through the Treasury enables a second check to be made by the Treasury to ensure that these payments are made in accordance with budget appropriations. The consolidation of spending unit bank accounts into a treasury single account under control of the treasury, enables efficient cash management and avoids a situation in which there is a buildup of large idle balances in spending unit bank accounts, even though the Ministry of Finance experiences a cash deficit in overall terms.

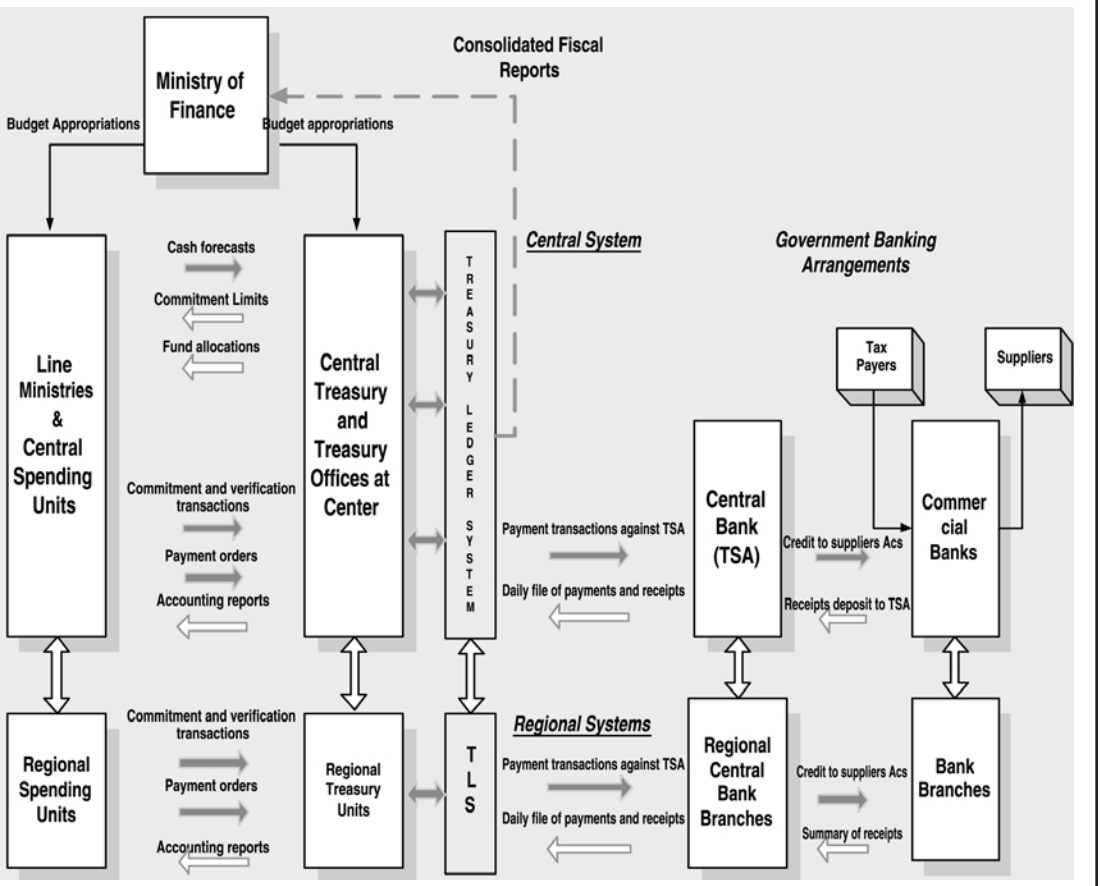
The organizational structure required for the treasury to implement this business model typically consists of a main treasury office at the center, second tier treasury offices at provincial/regional headquarters and possibly third tier offices at the district. In some cases this structure is compressed to only two levels, namely the center and the provincial level. Line ministry head offices process payment transactions at the central level treasury office and their subordinate spending units process these transactions at the nearest regional/district office. Spending units send their expenditure transactions to the nearest treasury office for payment. These offices send the approved expenditure transactions to the nearest branch of the Central Bank where the TSA is held, for payment to the vendor.

The main information flows between the various agencies involved in payment processing under these arrangements are shown in Figure B1 and the organizational arrangement in Figure B2.

Alternative Institutional Models for Expenditure Processing: Spending Unit and Line Ministry Based Expenditure Processing

In those countries where the Treasury and the necessary legal framework for budget preparation and execution are in place and functioning efficiently, alternative institutional arrangements for

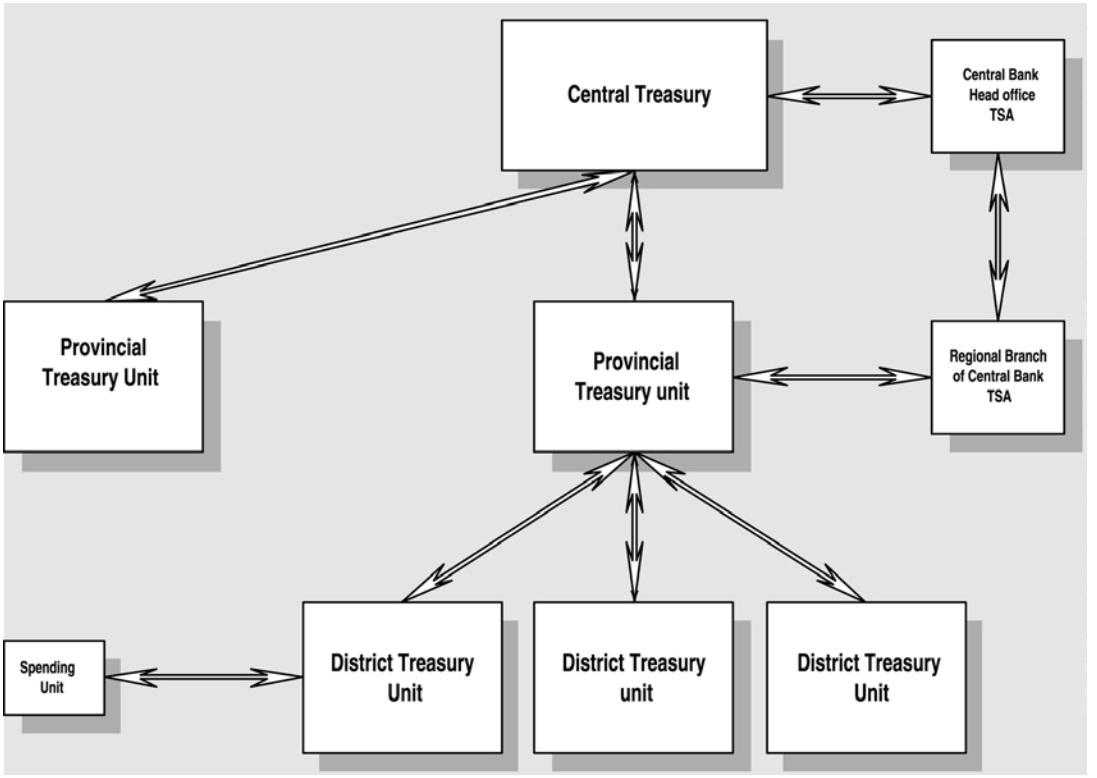
Figure B1. Treasury System: Core Functional Processes and Information Flows
Case1: Treasury is Directly Responsible for Making Payments; Central Bank Responsible for Banking Operations



expenditure processing may be used. In some countries, ministries and spending units are directly responsible for making payments from the TSA instead of payments being channeled through the Treasury. The TSA is nevertheless still held at the Central Bank, which continues to be responsible for retail banking operations related to government payments and receipts. The MOF must ensure that necessary controls are adhered to by the agency prior to making a payment. Budgetary control can be exercised by officers from the central treasury who are out-posted to the line agency or line agency finance and accounting staff. The TSA Bank may also be advised of overall limits for expenditures by spending units. However, since the TSA bank cannot be expected to ensure adherence to spending limits by each economic category, the responsibility for detailed expenditure control rests with the spending unit and parent ministry. In these arrangements, the spending units and their parent ministries also have greater responsibility for maintaining their accounts and government-wide accounts are based on periodic reports received from the spending units and their parent ministries.

These institutional arrangements are shown schematically in figures B3 and B4.

FIGURE B2. TREASURY ORGANIZATION STRUCTURE



Banking Arrangements

Normally the Treasury single Account is held at the Central Bank. However, alternative banking arrangements are sometimes put in place—usually where the Central Bank does not have an adequate network of branches or capacity to handle large volumes of payment and receipt transactions. In such cases, the Central Bank then delegates the responsibility of retail banking operations to one or more fiscal agents such as authorized commercial bank(s) who make payments on behalf of the Treasury, receives government revenues and makes daily deposits to the TSA in the Central Bank. The use of fiscal agents is possible in both centralized and decentralized payment arrangements (where payments are channeled through Treasury) or where spending agencies are directly responsible for authorizing payments.

These arrangements have the advantage of providing more expeditious payments to government creditors and a reduction of float[1] in view of the greater capacity of commercial banks to process these transactions. Three processes are important for the efficient functioning of the system.

- The float of all payments transferred to the TSA should be as small as possible;
- The Bank accounts should continue to be under the control of the Treasury even though they may be operated by the agencies; and

1. That is the value of issued but unprocessed checks or payment orders, which may lead to a discrepancy between bank records and TLS accounts.

FIGURE B3. ALTERNATIVE ARRANGEMENTS FOR PAYMENT PROCESSING

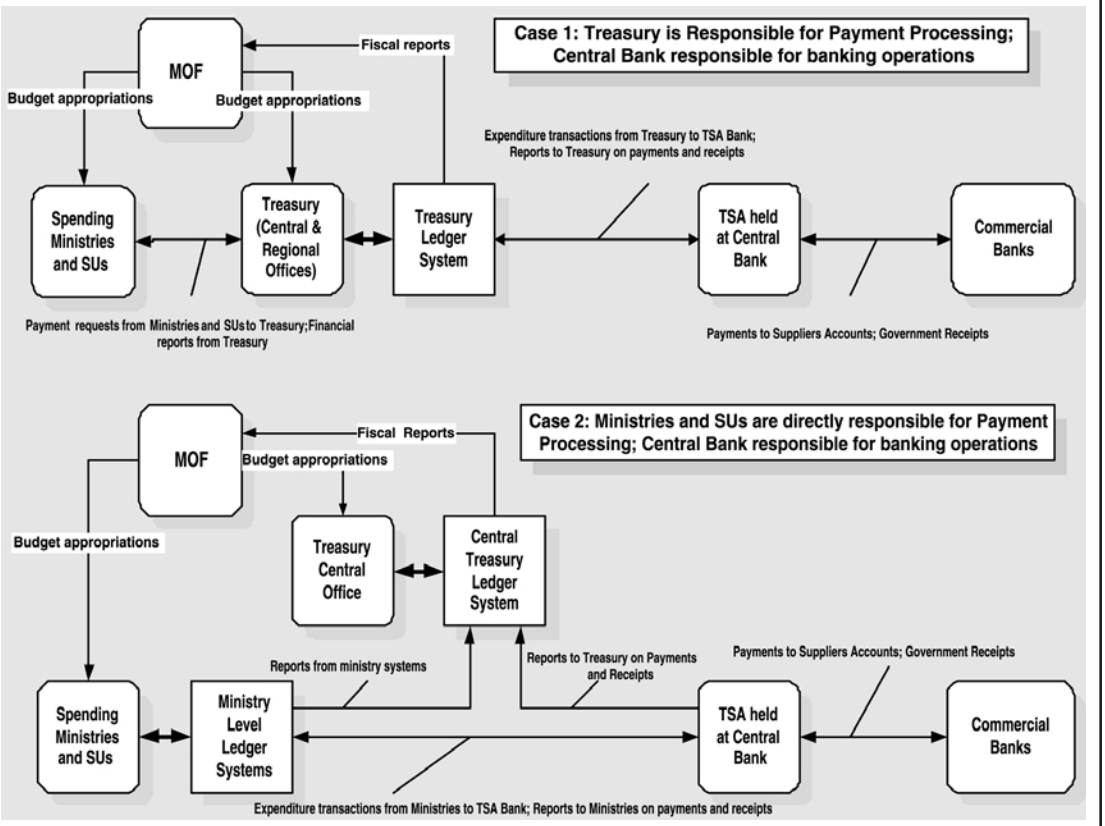
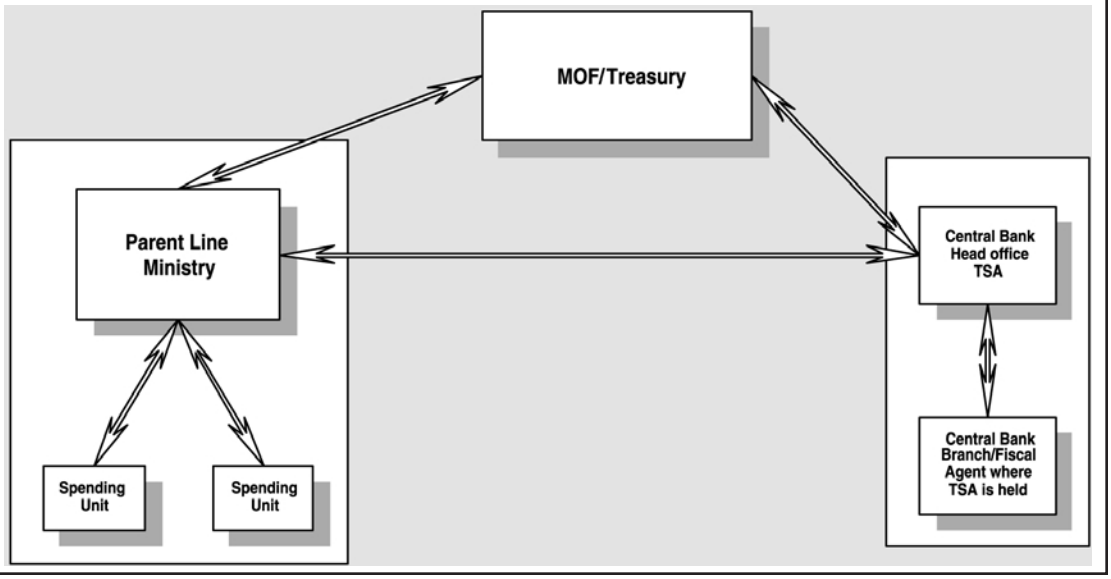


FIGURE B4. TREASURY ORGANIZATION STRUCTURE III

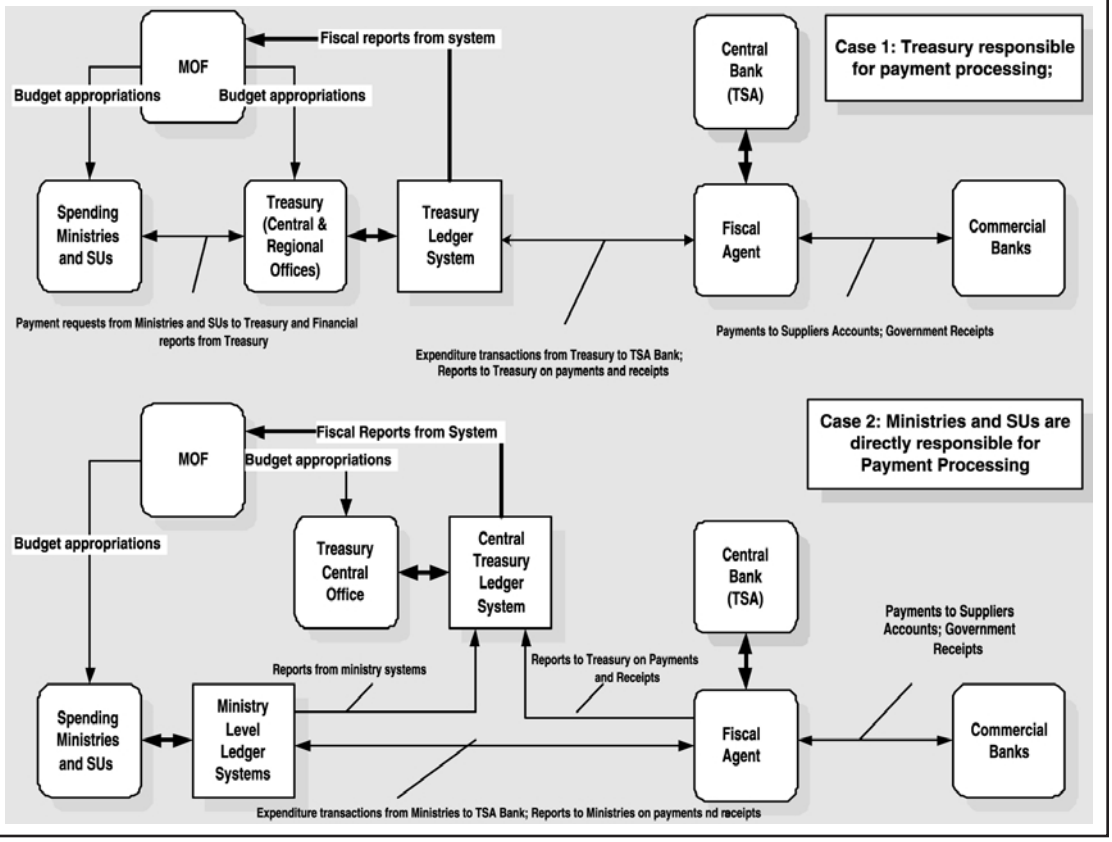
Line Ministries/Spending Units Send their Transactions to the TSA Bank Directly and only Provide Periodic Reports to Treasury/MOF on Expenditures



- Account balances should be cleared to the TSA periodically to ensure that the government's cash position is known accurately in a timely manner and borrowing strategies can be optimized.

The alternative banking arrangements are shown in Figure B5.

FIGURE B5. ALTERNATIVE BANKING ARRANGEMENTS
(Banking Operations Carried out by a Commercial Bank Acting as a Fiscal Agent of the Central Bank)



ANNEX C

TREASURY FUNCTIONAL PROCESSES

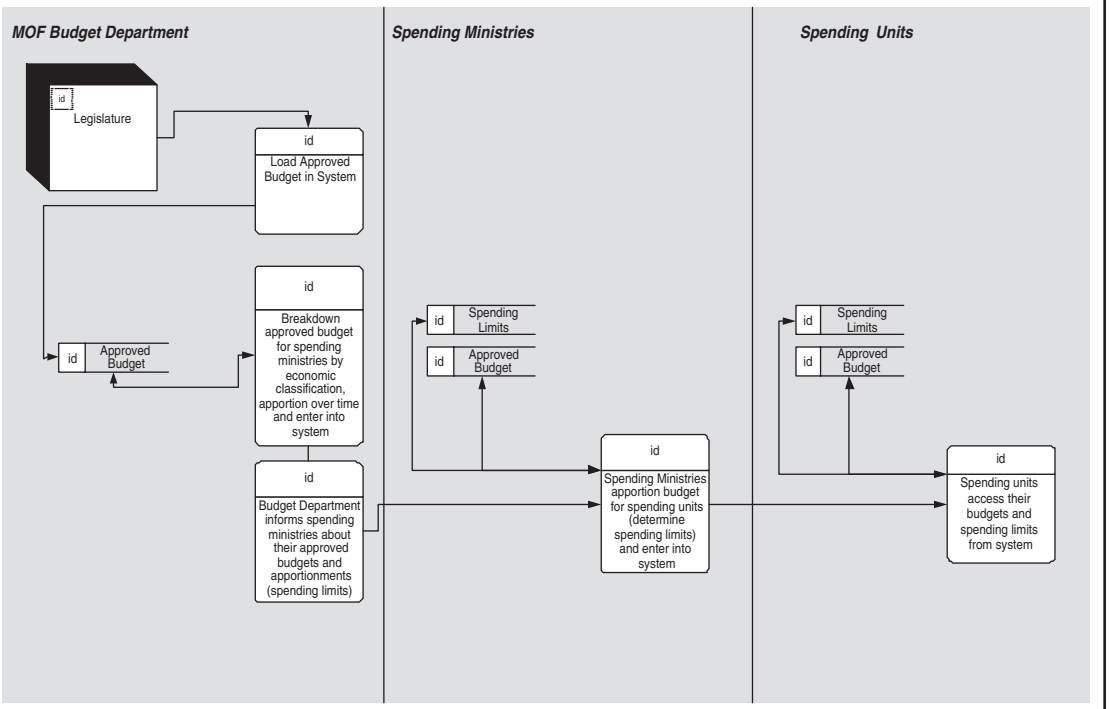
This section describes the main treasury functional processes and gives process flow charts showing the information flows between the various departments/agencies as the process is carried out. The corresponding section of the questionnaire is designed to assess how these processes will be implemented by a particular application software package.

Management of Budget Authority

Apportionment and Allotment. After approval of the annual budget by Parliament it is loaded into the system by the Budget Department of the MOF. The approved budget for spending ministries is then broken down to the detailed level of economic classifications and is apportioned over time (quarters and months) and is registered in the system by the MOF and communicated to the spending ministries. The spending ministries, in turn, register the detailed budget for their subordinate spending units and communicate the allotments to the spending units. These are the spending limits for the spending ministries and spending units by quarter/month for the fiscal year. Spending limits may be varied during the course of the year in accordance with the results of monthly or quarterly reviews of budget performance. For example changes may be caused by variations in the revenue forecasts, commitment and expenditure patterns, etc (Figure C1).

Warrant Allocation. Each year, expenditure plans detailing projected outlays and receipts are developed by spending units and ministries. As the year progresses, sector agencies prepare periodic requests for funds by economic category, which are also captured. The MOF then issues warrants to ministries for each category of spending. From these amounts the ministries issue subwarrants for their spending units and advise the appropriate spending units. These processes take place periodically through out the year. The warrant and sub warrant amounts need to be within the amounts specified in the spending limits for these organizational units. Warrant amounts are determined in the light of the results of periodic budget reviews, revised revenue forecasts and cash balances (Figure C2).

FIGURE C1. MANAGEMENT OF BUDGET AUTHORITY—APPORTIONMENT AND ALLOTMENT



Budget Transfers and Virements

Normally the budget law permits the MOF, the spending ministries, and the spending units to shift the approved budget between organizational and object classifications within restrictions set by the relevant laws. Shortfalls identified by spending units in one or more economic categories may be met from excesses in other economic categories in their budget. For this, a budget transfer request needs to be processed. For some items and within certain thresholds, spending units may have the financial powers to make the transfer themselves. For these cases, they will update the budget data base in the system. For cases which are beyond their financial powers, they will request the parent ministry or MOF to process the transfer, depending on the type of transfer. If approved, the Ministry/MOF will process the transfer and update the database. The spending unit will be informed of the decision on the request (Figure C3).

Supplementary Budgets

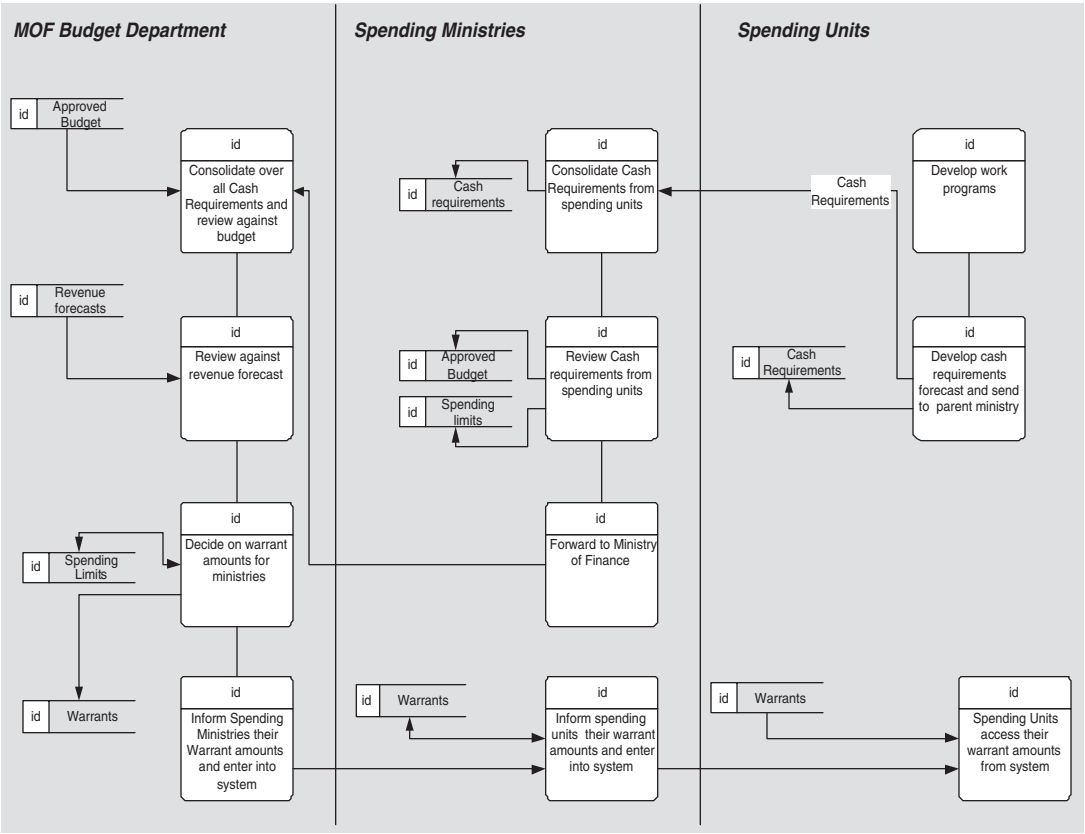
During the course of the year revisions to the approved budget may be carried out by the Parliament. These revisions are carried out in accordance with the procedures for finalizing the original budgets. The process of preparing supplementary budgets covers the preparation, routing and approvals of requests for a supplementary budget. Supplementary budgets are normally presented to the Parliament for approval at mid year (Figure C4).

Commitment of Funds

Procurement of Goods and Services

The case shown in Figure C5 is one in which Spending units process transactions directly through regional treasury offices. As the year progresses, spending units process requests for goods and ser-

FIGURE C2. MANAGEMENT OF BUDGET AUTHORITY—WARRANT ALLOCATION



vices. After verifying the appropriateness of the expenditure and availability of budget and spending limit, the spending unit will process the procurement request according to prescribed procedures and place a purchase order on a vendor for the procurement of goods and services. The vendor should be registered in the database of vendors. The spending unit will then register a commitment in the system and block the corresponding amount from the available budget and spending limit. The commitment transaction is forwarded to the parent ministry and the MOF-Treasury regional office that will process the payment against this commitment (Figure C5).

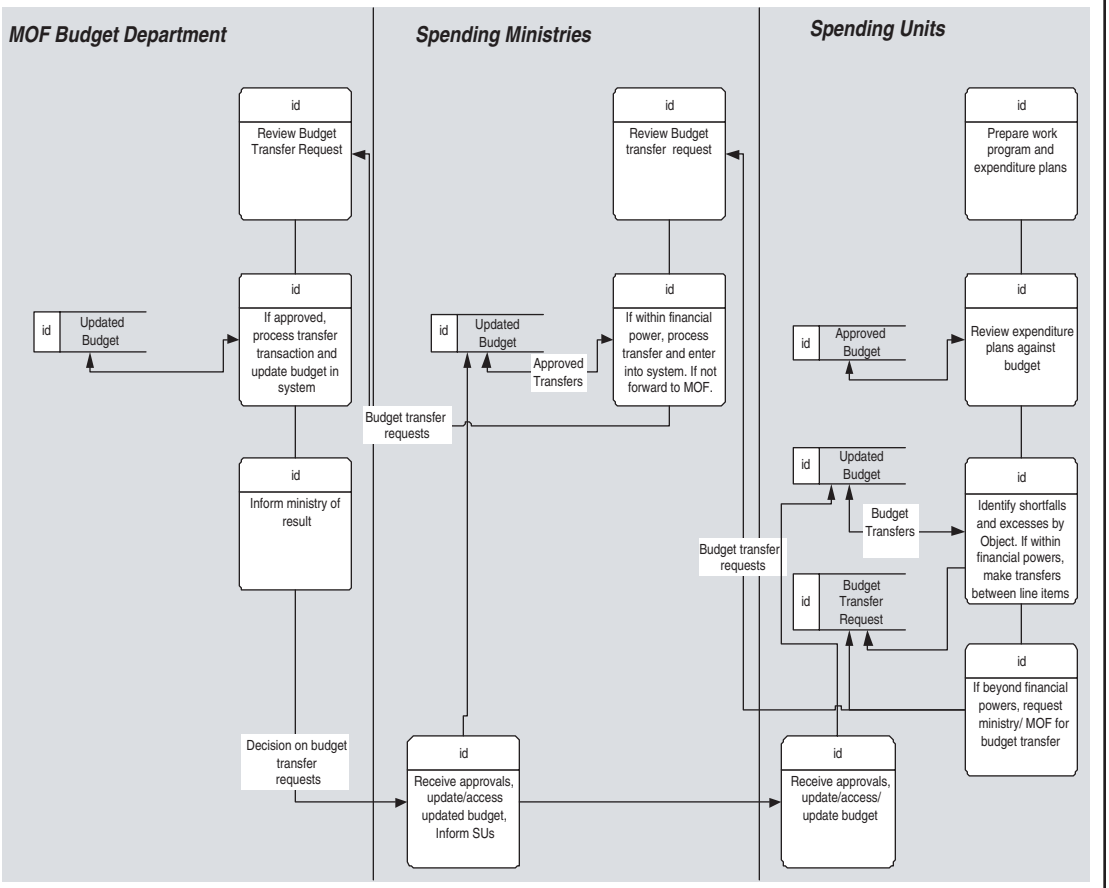
Salary and Payroll Commitments

The spending Unit calculates the payroll commitments on the basis of staff on board and the authorized pay and allowances for staff. These are checked against budget availability and then advised to the spending agency and the MOF. Salary commitments may be advised only once a year on an estimated basis and adjusted as necessary during the year. Changes would be necessary if the pay and allowance structures change, staff on board are promoted, new staff are added or staff reductions occur.

Creation of a New Staff Position and Recruitment to this Position

The Creation of a new staff position and recruitment to this position impacts the total salary bill for an agency. Normally commitments related to staff salaries are communicated to the MOF at the start of the year and then subsequent changes to these commitments are recorded in the system.

FIGURE C3. MANAGEMENT OF BUDGET AUTHORITY—BUDGET TRANSFERS AND VIREMENTS



The Spending agency prepares the position description and requests the line ministry for approval. The line ministry reviews from a requirements stand point and forwards the request to the MOF. The MOF approves after reviewing against budget availability. After the position has been created, the spending unit may carry out recruitment to this position in consultation with the parent ministry. After recruitment, the personnel database and the commitment amount relating to monthly salary and benefits for the spending unit need to be updated.

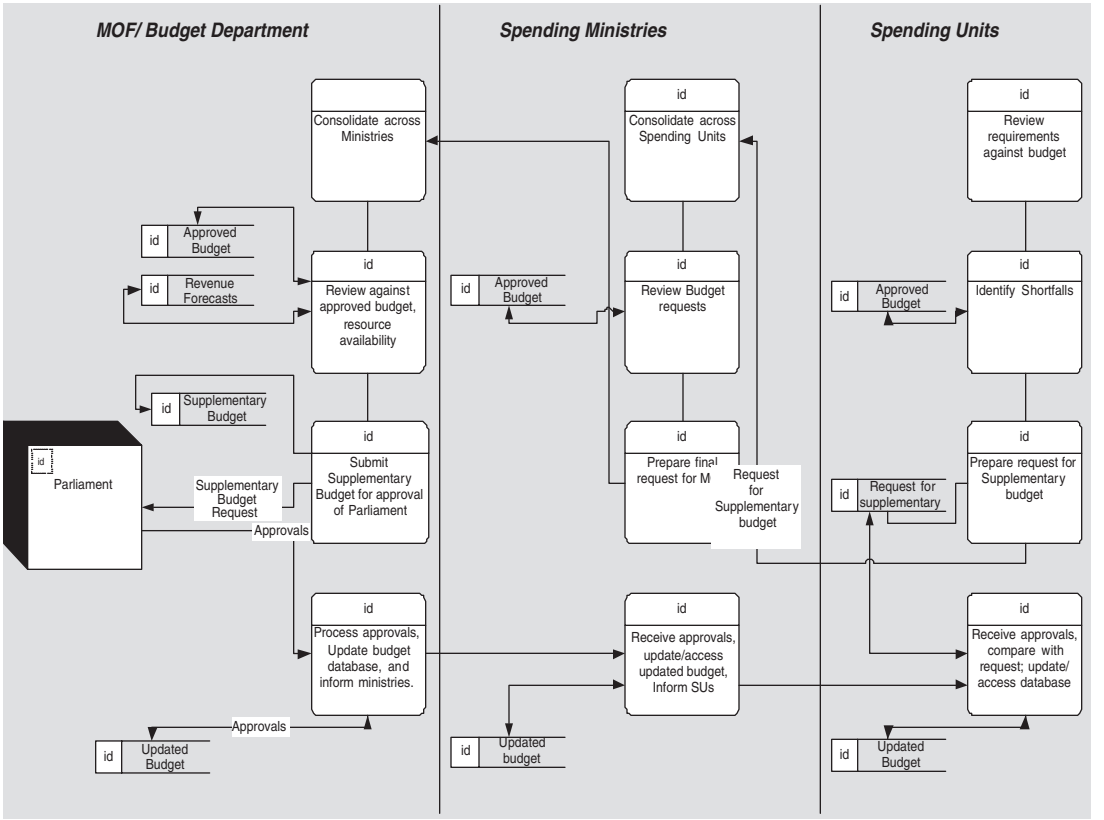
Changes to the Payroll and Benefits Structure

Periodically Government makes changes to the payroll and benefits structure to keep them in line with prevailing market conditions and to account for inflation. These changes require changes in the salary commitments already recorded in the system.

Payments Management

Verifications of goods and services receipt and payments. The case shown is one in which Spending units route their transactions through the relevant Treasury office which, after examination, sends a payment order to the bank where the TSA is held. The process starts with the receipt of goods

FIGURE C4. MANAGEMENT OF BUDGET AUTHORITY—SUPPLEMENTARY BUDGETS



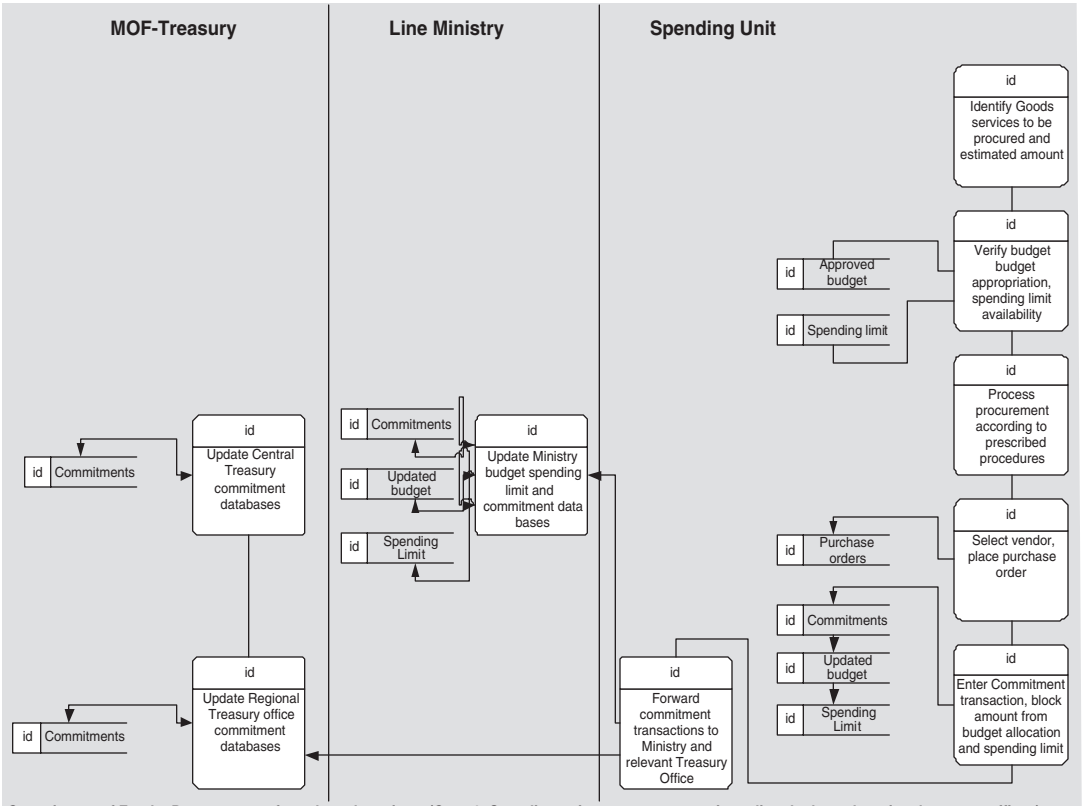
and services. These need to be validated against the purchase order and a verification of receipts report is generated and entered into the system. On receipt, the invoice from the vendor is checked against the receipts report, the purchase order and the payment approval process commences. The requests for payment are examined with reference to the available budget (spending limits, warrants) and the existence of a prior commitment. After approval, the request is sent to the cash management section and scheduled for payment. The list of completed payments received from the TSA Bank (normally the Central Bank) is used for reconciliation of records at the Treasury and the Spending Unit (Figure C6).

Payroll and Benefits Payments

The Spending Unit computes the salary of the employees on its rolls. This involves, updating the data base for three types of change:

(a) Changes to the employee's data that would impact the salary. This includes changes such as promotions, addition of new allowances etc.
(b) Changes to the employees general data such as transfers, change of address, account number etc. and,
(c) Changes that would impact the employee salary only in the current month.

FIGURE C5. COMPLEMENTARY FUNDS—PROCUREMENT OF GOODS AND SERVICES



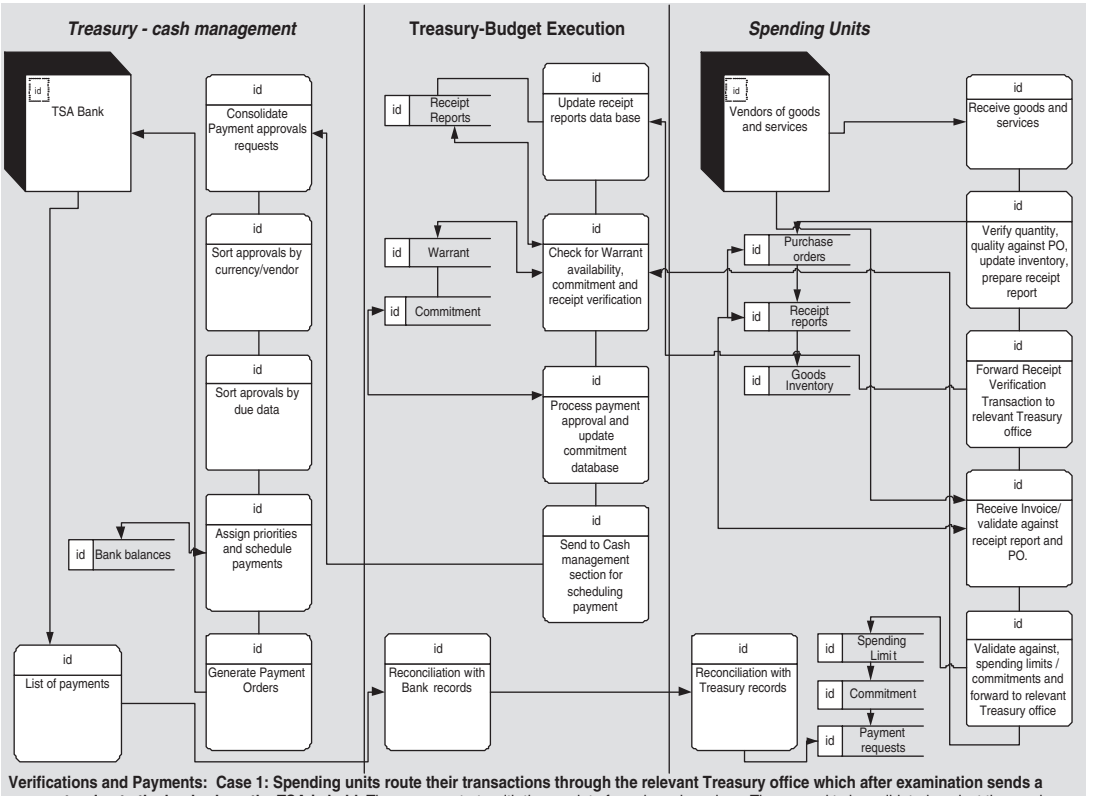
Commitment of Funds: Procurement of goods and services. (Case 1: Spending units process transactions directly through regional treasury offices). As the year progresses, spending units process requests for goods and services. After verifying the appropriateness of the expenditure and availability of budget and spending limit, the spending unit will process the procurement request according to prescribed procedures and place a purchase order on a vendor for the procurement of goods and services. The vendor should be registered in the database of vendors. The spending unit will then register a commitment in the system and block the corresponding amount from the available budget and spending limit. The commitment transaction is forwarded to the parent ministry and the MOF-Treasury regional office that will process the payment against this commitment.

After these updates, the spending unit computes the payroll. This is validated against the authorized position list for the spending unit. The request for payment is then forwarded to the Treasury for approval and payment. The Treasury approves this request after checking the available budget (spending limits, warrants) and the authorized position list. The request is then sent to the cash management section and a payment order is sent to the TSA Bank to deposit the appropriate amount in the employee's Bank account. In case employees do not have bank accounts, the TSA bank may make the cash available to the spending unit for the payment of salaries.

Receipts Management

Government receipts are paid through payment orders issued by the payee on his Bank. The Bank transfers the payment to the Treasury single Account at the Central bank. The Treasury monitors the deposits of Government receipts through daily statements received from the Bank. The Treasury implements any revenue sharing arrangements that are in place between the central government and the subnational governments, etc., and posts the detailed revenue category wise figures in the General Ledger and informs the relevant spending unit or revenue collection department of the receipts (Figure C7).

FIGURE C6. PAYMENTS MANAGEMENT—VERIFICATION AND PAYMENTS



Verifications and Payments: Case 1: Spending units route their transactions through the relevant Treasury office which after examination sends a payment order to the bank where the TSA is held. The process starts with the receipt of goods and services. These need to be validated against the purchase order and a verification of receipts report is generated and entered into the system. On receipt, the invoice from the vendor is checked against the receipts report, the purchase order and the payment approval process commences. The requests for payment are examined with reference to the available budget (spending limits, warrants) and the existence of a prior commitment. After approval, the request is sent to the cash management section and scheduled for payment. The list of completed payments received from the TSA Bank (normally the Central Bank) is used for reconciliation of of records at the Treasury and the Spending Unit.

Cash Management

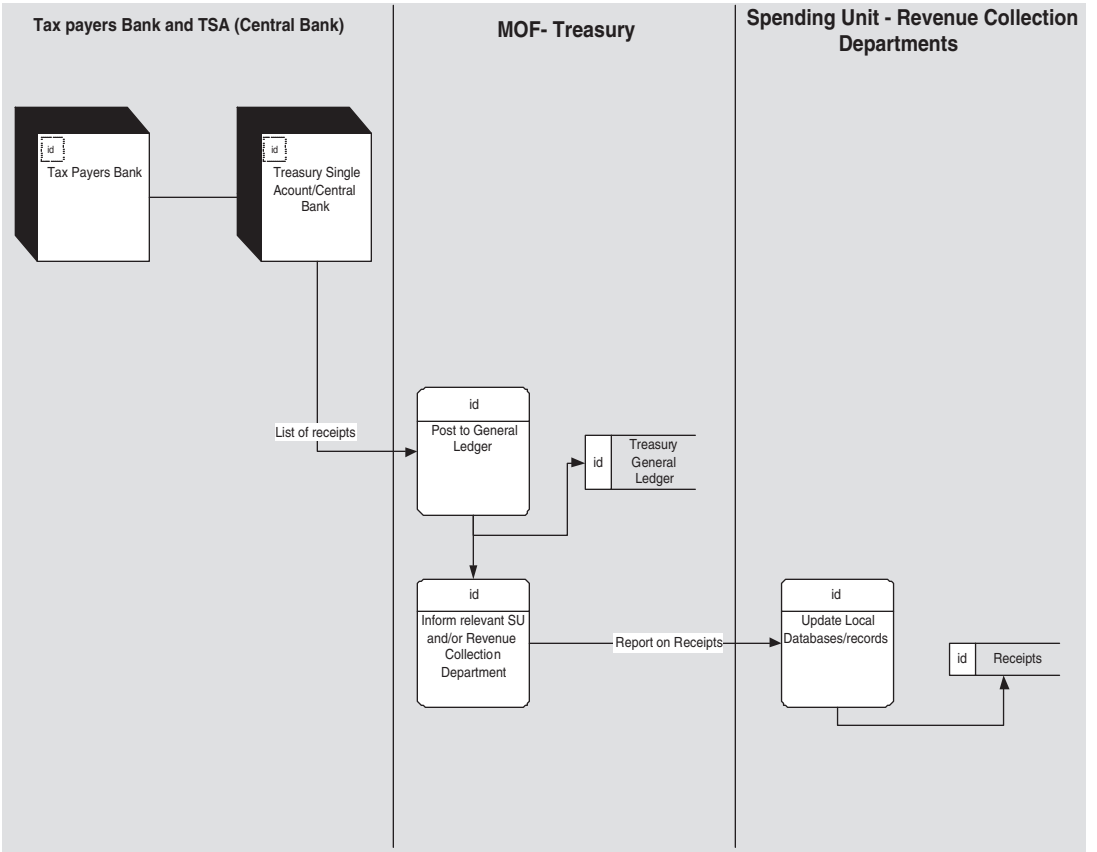
Expenditure and Revenue Forecasting, Cash Monitoring, Borrowing Strategy

The cash management department receives expenditure and revenue forecasts from the spending ministries and from the debt management department on debt servicing expenditures. The revenue collection agencies prepare revenue forecasts. The Cash management department examines this data with respect to the accounting data booked in the TGL, the Debt management database and the cash balances in the TSA and its component subaccounts. This enables it to determine the liquidity position of the government and shortfalls/surpluses. This information form the basis of the MOF determining the borrowing requirements and the spending limits and warrants for spending ministries and units (Figure C8).

Debt and Aid Management

1. *Debt Recording and Servicing.* The debt management department receives the loan agreements form the donor/lending agencies and registers the loan details in the system, including the disbursement and debt servicing schedules. The debt management department also records commitments related to debt servicing. On receipt of debt service bills, the depart-

FIGURE C7. RECEIPTS MANAGEMENT

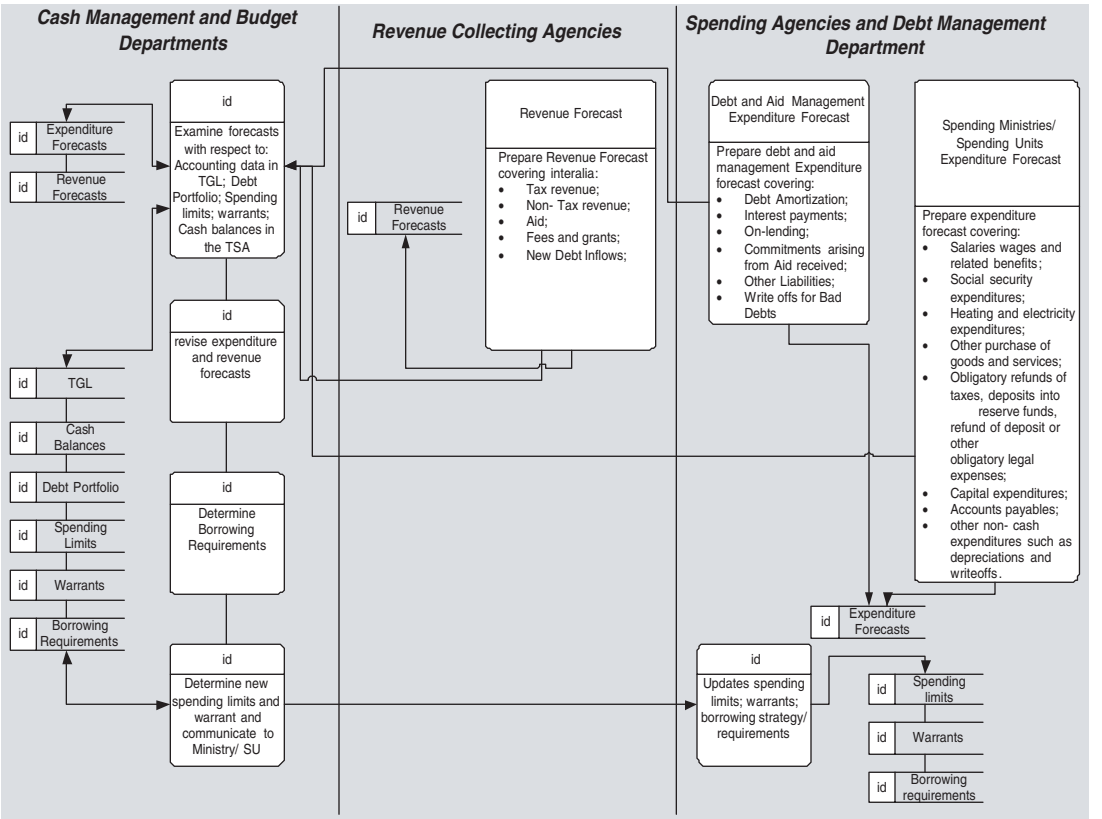


Receipts : Government receipts are paid through payment orders issued by the payee on his Bank. The Bank transfers the payment to the Treasury single Account at the Central bank. The Treasury monitors the deposits of Government receipts through daily statements received from the Bank. The Treasury posts the detailed revenue category wise figures in the General Ledger and informs the relevant SU or revenue collection department of the receipts.

ment verifies receipts and payments due against the debt portfolio and forwards it the bills to the Treasury for payment. The Treasury processes these payment requests in a similar manner to that for other payment requests. On conclusion of the transaction the paying bank sends a list of payments to the Treasury which in turn sends the list of debt related payments to the debt management department. These are used for re-conciliation purposes (Figure C9).

2. *Loan Receipts.* The Debt management department and/or the spending ministry receives information from donor agencies about loans given to government. The Debt Management Department registers the loan agreement and the schedule of trance releases for the loan. The money is deposited by the donor in the TSA Bank. Receipts are recorded by the treasury in the general ledger. Information on receipts is passed on by Treasury to the Debt management department which in turn passes it on to the concerned ministry/spending unit (Figure C10).
3. *Grant Receipts.* The Debt management department and/or the spending ministry receives information from donor agencies about grants given to government. The ministry forward the grant agreement to the Debt management department. The DMD registers the grant agreement and the schedule of tranche releases for the grant. The money is deposited by the donor in the TSA Bank. Receipts are recorded by the treasury in the general ledger.

FIGURE C8. CASH MANAGEMENT



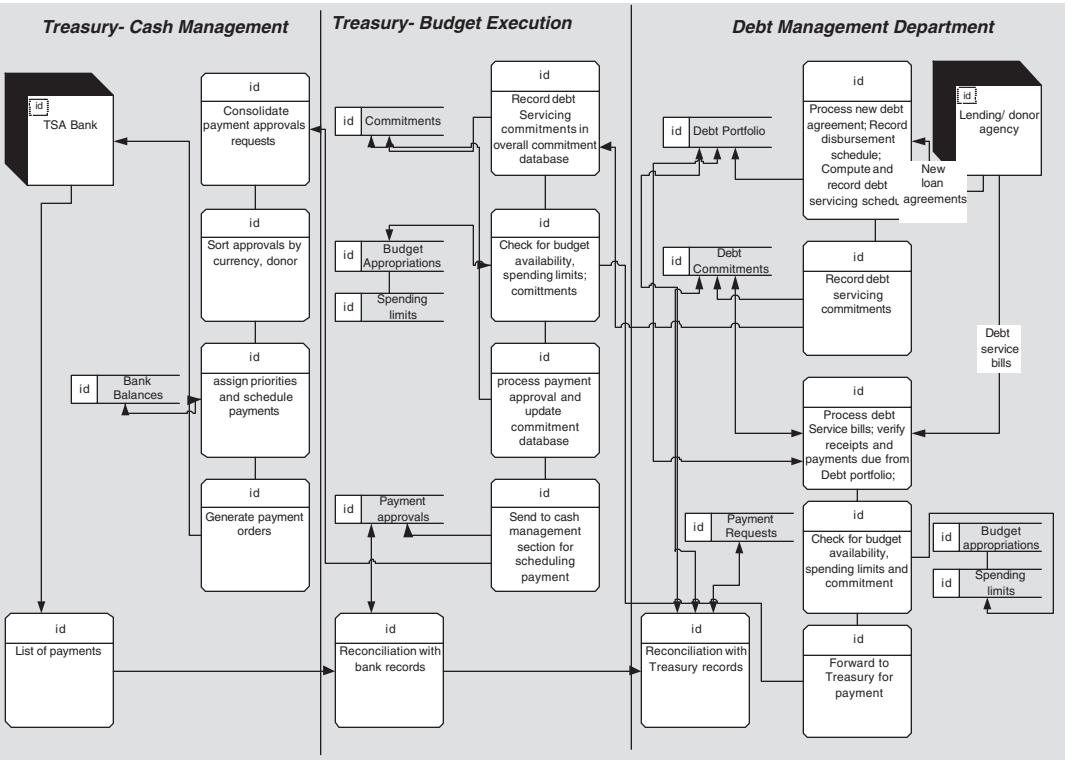
Cash Management: *The cash management department receives expenditure and revenue forecasts from the spending ministries and from the debt management department on debt servicing expenditures. The revenue collection agencies prepare revenue forecasts. These form the basis of the MOF determining the borrowing requirements and the spending limits and warrants for spending ministries and units.*

Information on receipts is passed on by Treasury to the Debt management department which in turn passes it on to the concerned ministry/spending unit (Figure C11).

Budget Review and Fiscal Reporting

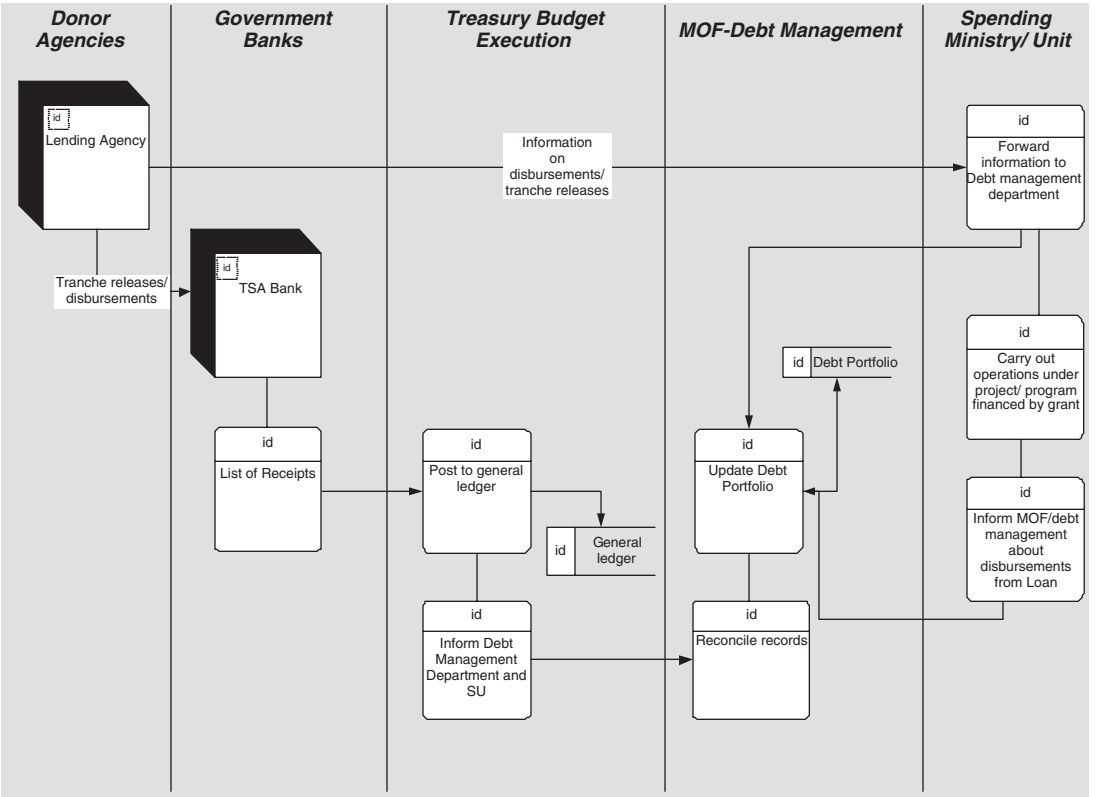
The Treasury System is used to produce periodic fiscal reports that give a consolidated picture of all receipts and expenditures and progress against budget targets. For these reports to be comprehensive, all items of receipts and expenditure need to be captured. The Government Chart of Accounts is the basis of the fiscal reporting process. These include the Fund, organizational, functional and economic classifications structure of the budget and the classification of account groups, assets and liabilities. As line ministries and spending agencies carry out their work programs, expenses and receipts are posted to the General Ledger by the Treasury system by budget object. Ministry systems record physical on programs and projects. This information is forwarded to the MOF. The Treasury General ledger records receipts of various types of tax revenues, loan/aid receipts, and debt servicing expenses. On the basis of this data the MOF can prepare overall fiscal reports that compare actual expenses and receipts with the budget estimates. These reports provide a status report and recommendations and action plans for corrective action during the course of the year. These could include revisions to spending limits, warrants, etc (Figure C12).

FIGURE C9. DEBT MANAGEMENT



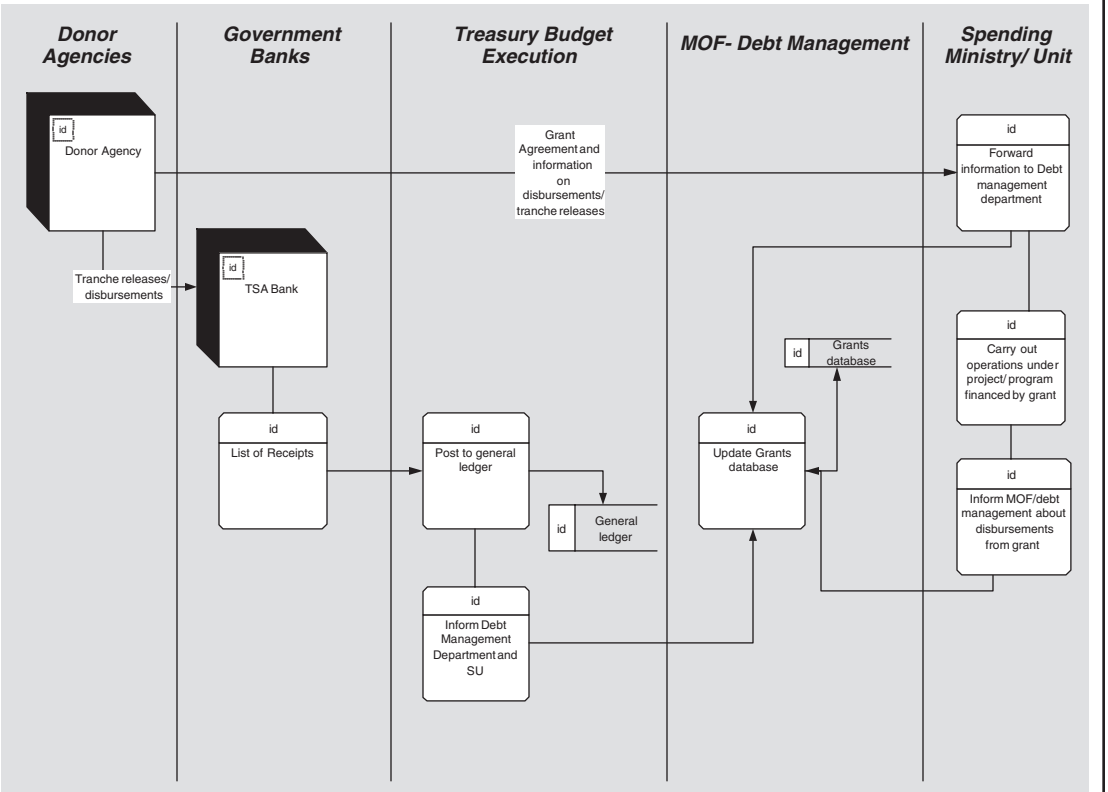
Debt Management: The debt management department receives the loan agreements form the donor/ lending agencies and registers the loan details in the system, including the disbursement and debt servicing schedules. The debt management department also records commitments related to debt servicing. On receipt of debt service bills, the department verifies receipts and payments due against the debt portfolio and forwards it the bills to the Treasury for payment. The Treasury processes these payment requests in a similar manner to that for other payment requests. On conclusion of the transaction the paying bank sends a list of payments to the treasury which in turn sends the list of debt related payments to the debt management department. These are used for re-conciliation purposes.

FIGURE C10. DEBT MANAGEMENT—LOAN RECEIPTS



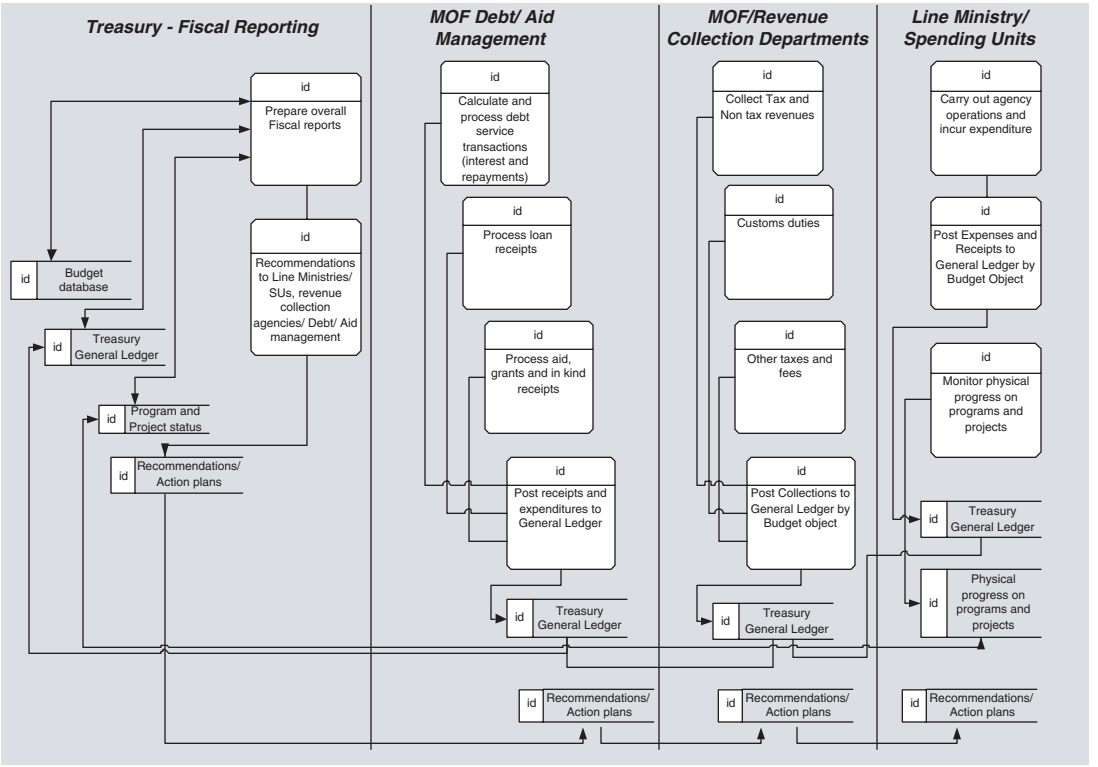
Loan: Receipts: *A process similar to grant receipts is followed as shown above.*

FIGURE C11. DEBT AND AID MANAGEMENT—GRANT RECEIPTS



Grants : Receipts: *The Debt management department and/or the spending ministry receives information from donor agencies about grants given to government. The ministry forward the grant agreement to the Debt management department .The DMD registers the grant agreement and the schedule of tranche releases for the grant. The money is deposited by the donor in the TSA Bank. receipts are recorded by the treasury in the general ledger. Information on receipts is passed on by Treasury to the Debt management department which in turn passes it on to the concerned ministry/ spending unit.*

FIGURE C12. BUDGET REVIEW AND FISCAL REPORTING



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Improvement in the management of public finances in developing countries has been an increasingly important focus of World Bank and IMF assistance to member countries. A key element of such assistance is the development of effective treasury systems, which form the backbone for recording and processing all financial transactions related to government budgets. The establishment of an effective, integrated treasury system helps manage public monies with greater financial control, improved monitoring, better planning, better fiscal reporting, and better data for budget formulation, while also improving transparency and accountability of government.

This toolkit consists of three parts: (1) a treasury systems questionnaire to be used as a diagnostic tool in assessing the status of treasury functions, (2) a costing model using information in the aforementioned questionnaire to estimate the likely costs of a comprehensive investment program, and (3) an application software questionnaire intended to help managers select appropriate application software, focusing on treasury-specific requirements.

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