

Chapter 4

Financial Systems and Controls

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4.0 GENERAL POLICY STATEMENTS

- Central financial system(s) shall be designed, developed, maintained, and managed by the Department of Finance to fulfill its responsibilities under the Financial Administration Act for accounting, control and reporting for the Consolidated Revenue Fund and the Public Accounts. All departments are required to use these central systems.
- Individual departments are responsible for developing, maintaining and managing unique systems/sub-systems required for their operations to assist managers in meeting their financial administration, reporting, and program delivery responsibilities. Notwithstanding this requirement, departmental financial systems shall be complementary to and compatible with the central systems.
- Central and departmental financial systems shall be developed and implemented with adequate and cost-effective internal controls. Central and departmental systems and controls shall be evaluated periodically jointly with Internal Audit to ascertain their adequacy and effectiveness.
- Additions and changes to departmental financial systems directly or indirectly impacting on the central systems shall be subject to review by the Department of Finance, and approval of departmental executive group.
- The Department of Finance, as the central agency, and other departments shall ensure that qualified and adequately trained staff are available in their financial operation areas to effectively utilize central and departmental system facilities and to properly carry out their functions in financial operations.
- Departmental Financial Officers shall ensure implementation of proper accounting controls on the basis of a thorough understanding of provisions in the FAA, MBD and this manual, as well as an understanding of the reporting requirements and the services provided by Department of Finance.

4.1 INTRODUCTION

The central financial systems provided and maintained by the Department of Finance are the principal systems of the government. These systems process transactions maintain the financial records of the government and provide the data used in the preparation of interim financial statements and the public accounts. These systems also assist in departmental financial operations by providing information for monitoring and control of expenditures against appropriations of the Legislature.

Departments establish and maintain sub-systems to manage financial resources within their own areas. Such systems include those that are directly or indirectly linked with the central systems and are mainly used in budget preparation and analysis, in the tracking of authorizations and recording of expenditures, in recording and collection of revenues and in reporting financial and non-financial information for the evaluation of the efficiency with which departmental programs and activities are carried out.

Departmental systems/sub-systems are generally designed to provide additional information to assist managers in their effort to meet program objectives and to supply data/information required by central agencies. To this end, departmental financial systems may be considered as extensions of, and complementary to, the central systems.

YTG's Financial Information System is operated in a computerized environment with Mainframe applications and Micro facilities. Mainframe applications consist of packaged software and in-house-developed systems that are being used primarily for financial applications.

Without detailing the functions of specific systems or how they should be used, this section of the manual provides an overview of the systems. This overview outlines the policies and guidelines relating to data capture, controls and reporting considerations to assist users in planning, coordinating and implementing financial operations and systems activities within the computerized environment.

4.2 SYSTEMS OVERVIEW

YTG's overall budget, commitment and actual expenditure transactions are collected and maintained in a General Ledger System managed by the Department of Finance. Prior to being captured in the

G/L, external charges and commitments are received, approved and coded by individual departments and are then processed through the Accounts Payable and Commitment Systems. Employee labour time and related costs are captured and processed in the Payroll System using appropriate codes for subsequent distribution to the General Ledger System. An automated system utilizing SAS programs and CMS files is used for compiling departmental budgets and for budget input to the G/L system.

Standard reports are produced from each sub-system on completion of job cycle runs and from the General Ledger System after month-end closing. On-request reports can be generated according to the desired needs of users, applying SAS programs, from transaction files provided and maintained by the Department of Finance.

A direct payroll deposit system, automated cheque reconciliation and equipment and labour cost distribution facility are also part of the computerized financial systems environment.

The General Ledger System and its related feeder systems are designed with adequate manual and automated control features, such that data integrity, completeness of information and maintenance of back-up files are established routines.

4.3 FUNCTIONAL RESPONSIBILITIES OVERVIEW

Under the existing operating environment, responsibilities for database maintenance, processing and reporting activities which form the overall financial system(s) are assigned as outlined below.

FUNCTIONAL RESPONSIBILITIES

SYSTEM/ACTIVITY	DEPARTMENT OF FINANCE	USER DEPARTMENTS
Budget Process	<ul style="list-style-type: none"> • Compile and prepare consolidated budget using SAS/CMS facilities. • Load budget to G/L database. • Variance analysis and reporting. • Advising MB on financial planning and control 	<ul style="list-style-type: none"> • Prepare detailed departmental budgets using posting level accounts, and utilizing computerized facilities. • Provide departmental budget data to Finance as per directives. • Variance analysis and reporting to departmental managers and central agencies.
Disbursement	<ul style="list-style-type: none"> • Process payments in accordance with established procedures and controls for all departments. • Monitor implementation of signing authorities as per MB directives. • Centralized maintenance of vendor master file. • Generate disbursement and distribution entries to G/L. • Maintain manual files for all paid documents. • Monitor and maintain systems effectiveness. 	<ul style="list-style-type: none"> • Preparation of cheque requisitions using appropriate distribution codes and in accordance with directives for authorization. • Application of control procedures. • Verification of payments against records/documents of request. • Maintenance of manual files for all commitment documents.
Payroll Processing	<ul style="list-style-type: none"> • Maintain Payroll Master File, process payroll and deposit pays to employee accounts for all government employees. • Maintain detailed payroll records. • Generate payroll distributions to the G/L system. • Remit payroll deductions to respective agencies. • Issue annual T-4s. • Monitor and maintain system effectiveness. 	<ul style="list-style-type: none"> • Provide accurate and timely employee payroll data including related distribution accounts. • Verify accuracy and reconcile reports with contents of related accounts in G/L. • Perform labour costs analysis.

4.3 Functional Responsibilities (Continued)

SYSTEM/ACTIVITY	DEPARTMENT OF FINANCE	USER DEPARTMENTS
Commitment Processing	<ul style="list-style-type: none"> • Monitor system and data integrity. • Manage access and maintenance controls. 	<ul style="list-style-type: none"> • Record (input) commitments using affected budgetary accounts to assist managers in making decisions with respect to expenditures. • Ensure completeness and accuracy of commitment data in the system.
General Ledger Control	<ul style="list-style-type: none"> • Ensure integrity of financial database. • Maintain accounts and relationships. • Input/Output control. • Maintain regular and monthly processing and reporting schedules. • Liaise with and assist users in all aspects of database maintenance. • Monitor and ensure accuracy of balances in balance sheet accounts. 	<ul style="list-style-type: none"> • Develop required chart of account per coding guidelines and information requirements. • Ensure accuracy and appropriateness of G/L contents in departmental accounts. • Correct coding and other entry errors in departmental accounts.
Financial Reporting	<ul style="list-style-type: none"> • Develop, maintain and distribute standard management reports. • Prepare and issue annual financial statements. • Provide detail transaction files accessible by all users for their reporting needs. 	<ul style="list-style-type: none"> • Develop and implement SAS report programs to meet specific departmental requirements and to provide information to central agencies. • Provide financial reports as per requirements of central agencies.

4.4 CLASSIFICATION AND CODING OF FINANCIAL INFORMATION

4.4.0 Coding Policy

- The Department of Finance, in conjunction with departments and agencies, shall develop the system for coding transactions to capture financial data in the General Ledger and is responsible for the maintenance of the chart of accounts such that the needs of users are met within the limitations of the entire system.
- All financial transactions of departments and agencies, except those excluded by legislation, shall be recorded in the central systems using the coding structure provided by Department of Finance. For purposes of this requirement, budgets shall constitute financial transactions.
- Departmental senior managers shall ensure that personnel involved in financial operations are familiar with the framework governing classification and coding of financial data for departmental and global reporting.

4.4.1 Background

The financial coding structure was introduced in April 1980 and revised in April 1986 as part of the Financial Management Information System implementation. The coding structure is designed to satisfy legislative requirements for financial reporting and control and to meet the information needs of departments and central agencies.

This section outlines the relationship of the account classification structure to the organizational structure and information requirements of the Government. It also describes how the coding system can meet the needs of the various users and authorities.

Conceptually, the design of the G/L database depicts the shape of a pyramid with a hierarchical structure of accounts. At the bottom of the hierarchy, posting level accounts accept transactions and provide the system with its basic level of detail. From this level, links are established between a number of base accounts and higher level summary accounts to provide summarization as defined by account relationships.

An all purpose 13 digit account code structure consisting of department, vote, program, activity, element, and object has been developed for use by all departments regardless of the nature of their operational functions.

In addition to the relationship approach, aggregation and disaggregation is also made possible based on account breakdown pattern.

More details on the coding structure and departmental classification of accounts are provided in the Coding Manual issued by Department of Finance under separate cover.

4.4.2 Major Classifications of the Chart of Accounts

The General Ledger developed for the Government contains three major categories of accounts.

Assets and Liability accounts

Revolving funds

Revenues / Recoveries and Expenditure accounts

Segregation of these groupings within the chart of accounts has been designed such that;

- assets and liabilities are identified by the first two numeric characters of account codes being '99' and followed by an '8' or '9' respectively,
- revolving funds are identified by the first two characters of account codes being in the range of 41 to 49 inclusive, and
- revenues/recoveries and expenditure accounts start with two digit numeric department codes followed by further breakdowns representing classifications discussed below under "account number structure".

The approach taken in the development process has been such that the chart of accounts comprises all possible major categories in each class (i.e. assets, liabilities, income and expenditures) with finer classifications within each class to meet legislative and operational reporting requirements. The design approach includes considerations to maintain an effective self-balancing set of accounts.

4.4.3 Account Number Structure

The account numbering structure consists of seven distinct elements, each of specific significance to the financial operations/activities of the Government. Coding of financial transactions for data capture, and subsequent reporting requirements at different levels, are met by the definition assigned to each element in the structure. The seven elements are entity (department), vote, program, activity, element, object and sub-ledger.

4.4.3.0 Position and Meaning of “Elements” in the Account Structure

Position: 1 2 3 4 5 6 7 8 9 10 11 12 13 14. ...22

Element: AA B CC DD EE FFFF XXXXXXXX

AA	Represents a distinct reporting entity/department . The structure permits the establishment of 01 to 99 functional areas as separate entities within the G/L system.
B	Represents a vote being part of an Appropriation Act authorizing payment of public money for specific purposes.
CC	Represents programs which consist of groups of related activities designed to achieve specific objectives.
DD	Represents operational activities that are the basis on which departments request funds for programs and serve as the basis for planning and decision-making to achieve program objectives.
EE	Represents “elements” within activities, being sub-activities which serve as the basis for cost control and evaluation of efficiency by operational-level managers.
FFFF	Represents objects, being basic elements of cost (i.e. labour, material, etc.) into which financial information can be broken down for purposes of analysis and decision-making with respect to the operation of programs. It is the level at which budgets are reviewed to evaluate the impact of Government spending on the national economy.
XXXXXXXX	Represents sub-ledger field to facilitate data capture by unique departmental information requirements.

4.4.3.1 Account Break-out Pattern

The account number break-out pattern has been formatted as follows:

AAB-CCDDEE-FFFF-XXXX-XXXXX

This format allows for the listing of the entities (departments) sequentially in the order of codes assigned and performs department “breaks” when a sequential list of the Account Master is requested. Based on control record parameters, it is also possible to achieve totals and page breaks either where “-” is shown or other desired levels.

4.4.4 Coding Guidelines

In general, the coding system and account structure will be common to all departments utilizing the central financial information system of the Government, and will be used as the level of input for Public Accounts reporting process.

Since day-to-day departmental operations involve extensive use of the revenue/expenditure category of the chart of accounts, the focus in this section is to outline the guidelines for coding transactions affecting that category.

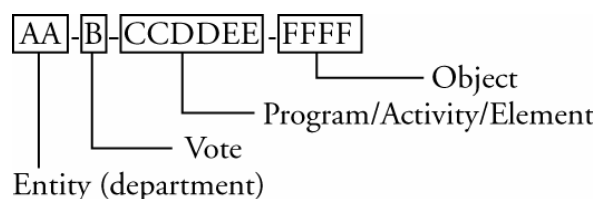
The classification structure for recording revenue and expenditure transactions consists of mandatory and optional fields. Mandatory coding classification fields reflect the organizational structure of the Government and the way funds are allocated by the Legislative Assembly to carry-on activities of the Government. This classification is aimed at identifying the sources and purposes of transactions and the nature of resources acquired or services rendered.

Optional coding classification fields (sub-ledger fields), on the other hand, are not pre-defined and may be used by departments for further breakdown of activities to meet information requirements in a uniquely aggregated or disaggregated manner.

Within the framework of the classification logic discussed above, the following guidelines apply to all users of the central systems.

4.4.4.0 Mandatory Classification Requirements

Governmental responsibilities are carried out through departments and agencies which execute program activities funded by votes of the Legislative Assembly. Financial transactions must, therefore, be identified to originating functional areas and traced to specific classification fields to establish accountability for financial operations and for reporting. Therefore, departments are required to use the first six elements in the account structure (department, vote, program, activity, element, object) in coding all financial transactions affecting revenues/expenditures as illustrated below.



4.4.4.0 Mandatory Classification Requirements (Continued)

i) Classification by Entity (department)

As financial transactions/operations need to be identified with department/agencies to which funds are allocated by the Legislative Assembly, the element in the account structure representing department becomes a required field in coding financial transactions.

ii) Classification by Vote

Since the Legislative Assembly authorized funding of programs by "vote", and because departments are accountable for recording and reporting their financial operations within each "vote", the second element in the account structure shall be used for this purpose.

iii) Classification by Program

Programs are the basic expenditure grouping debated in the Legislature and must be financed by at least one "vote". Financial transactions on all votes relating to program(s) need to be captured and reported such that financial information for a program is made available in total. The third element in the account structure shall be used for this purpose.

iv) Classification by Program-Activity

Since programs embrace sizeable areas of operation and require many resources, they are broken down into "activities" for presentation to the Legislative Assembly, recording of transaction and subsequent reporting. "Activity" levels represent identifiable levels of output for which costs can be determined thus providing the basis for planning and control of program operations. The fourth element in the account structure shall, therefore, be used to identify "activities".

v) Classification by Activity-Element

Breakdown of programs into activities cannot always meet the necessary or desirable attributes of the program. Therefore, it is necessary to further refine activities into "elements" to provide details to operational- level managers for exercising effective operational control and evaluation of efficiency.

4.4.4.0 Mandatory Classification Requirements (Continued)

vi) Classification by Object Code

Using “object” code classification, financial information is broken down into types of resources required for the operation of programs. “Object” codes identify the nature of goods and services for which funds are expended or the nature of government services rendered in exchange for funds. “Object” codes essentially represent economic objects and are the required level of information for economic analysis. Therefore, departments must ensure that financial transactions are coded to this level.

4.4.4.1 Optional Classification

This classification is often referred to as the sub-ledger field and consists of the last nine characters in the account structure. Classification by sub-ledger is useful for identification and reporting of measurable output of program objectives where coding of such factors at the mandatory classification level has not been met.

The lowest level of measurable output for which cost should be determined can vary between departments and even between programs within a department. Output may refer to units of production, operations, processes, projects, geographical regions, locations, etc.

The choice as to whether or not a department should use the sub-ledger field is dependent upon the nature of financial information required by different levels of its management. Where aggregation/disaggregation of data for reporting and classification for cost allocation are required in addition to the use of mandatory fields, the sub- ledger is a useful tool.

4.4.4.2 Application

- i) The account classification and structure shall be used by all users of the FMIS in all transaction coding including budgets, commitments and actuals.
- ii) Departments and “votes” are created by statute or the Cabinet/Management Board. Program/activity/element fields are identified within departmental boundaries and are defined by departmental authorities. “Object” codes are defined by the Department of Finance in co-operation with the users. Full or partial use of the sub- ledger code field is left to the discretion of the users.

4.4.4.2 Application (Continued)

- iii) Where financial sub-systems are used by a department for such items as inventory, accounts receivable, grants/contributions, securities, etc., control accounts should be set up in central systems following the classification and structure format requirements.

4.4.4.3 Maintenance Responsibility

User departments should submit request for creation, change or inactivation of accounts via a standard maintenance form issued by the Department of Finance. The actual account maintenance in the Account Master File is the responsibility of the Department of Finance to ensure consistency in the application of the rules in structure and relationship.

All account maintenance requests should be approved by individuals at the financial operations management level of the user department and reviewed by the Department of Finance.

4.5 CONTROLS IN FINANCIAL SYSTEMS

4.5.0 Overview

The usefulness of any financial system is dependent not only upon its performance efficiency and ability to provide information, but also on the effectiveness of controls that should be developed and exercised as an integral part of the system. Appropriate standards of organizational responsibility, authority, completeness and accuracy need to be established and applied with consistency to ensure legitimacy and usefulness of financial information, and to safeguard the assets of the organization.

Adequate controls have to be implemented based on a thorough assessment of their significance in terms of their contribution to meeting financial control requirements identified in related Acts, Directives and Regulations of the Government, and on the efficiency/effectiveness with which they can be applied.

Where financial systems are computerized, electronic controls are designed with complementary manual controls to ensure that there are no gaps; with due considerations to avoiding duplications and to achieving desirable levels of effectiveness as economically as possible.

Controls are established concurrently with the development of systems (manual or automated) and need to be maintained through all stages of manual, mechanical and electronic processing.

Control considerations in financial systems generally include:

- i) Application control procedures which involve:
 - Assignment of authority and responsibility with respect to activities resulting in financial transactions;
 - Determination of flow and appropriate sequencing of transactions processing;
 - Application of pre-processing checks and verification procedures;
 - Application of post-processing checks and balancing procedures;
 - Periodic testing and check of the control features of each system; and
 - Analyzing errors and taking remedial actions to maintain effectiveness.
- ii) General EDP controls which provide a framework of controls for systems development/acquisition, systems conversion, organization of users and systems activities, data/information processing, system security and documentation.

Since details of accounting/administrative control procedures are covered in other chapters of this manual, the emphasis in this section is to outline the considerations relating to the above areas.

4.5.1 Objectives

The material in this section is aimed at identifying control responsibilities with respective functional areas, and at providing guidance to financial and EDP personnel involved in the development and maintenance of financial systems to ensure that appropriate controls are implemented as standard practices within YTG's operating environment.

4.5.2 Policy

4.5.2.0 Responsibility

- i) The Department of Finance is responsible for ensuring adequacy and effectiveness of controls in the central financial systems and for monitoring their performance. Enhancements and revisions to central systems or sub-systems shall be developed and implemented under the supervision of the office of the Deputy Minister of Finance.
- ii) Senior departmental managers are responsible for ensuring adequacy and effectiveness of controls in systems developed and used for their unique requirements, and for monitoring performance of such systems. They must actively participate in the planning, development and implementation of controls in central and departmental systems.
- iii) Systems and Computing Services is responsible for the planning, co-ordination and monitoring of existing and proposed EDP facilities and resources for the government to provide assurance that:
 - Appropriate EDP facilities and resources are made available to users in the most cost effective manner;
 - Alternatives are adequately evaluated so that the best solutions are selected in view of relevant technical and cost considerations.
- iv) All additions and enhancements to the central financial systems including additions and enhancements to a department's system that interface with any of the central systems shall be subject to approval of the Department of Finance.



4.5.2.1 Internal Controls

Central and departmental financial systems shall be developed and implemented with adequate and cost effective internal controls to achieve:

- Completeness and accuracy in processing only authorized transactions;
- Regular and timely processing of data, and availability of meaningful financial reports;
- Safeguarding of assets.

4.5.2.2 Audit Trail

Central and departmental systems/sub-systems shall provide an audit trail of all transactions processed.

4.5.2.3 Organization

Senior managers are responsible for establishing organization plans that ensure segregation of duties and responsibilities. In a computerized financial systems environment, such plans include:

- i) Segregation of users, systems development, processing/operation and system support activities and responsibilities;
- ii) Ensuring that transactions are processed against properly tested and approved programs only;
- iii) Ensuring that personnel familiar with processing or development functions do not bypass security and control procedures to change programs or data;
- iv) Ensuring that personnel responsible for protecting data integrity cannot process live data or change programs.

4.5.2.4 Systems Development

An established systems development methodology must be in place and followed such that:

- i) Development or change requirements are approved at the appropriate level after review and evaluation of cost/benefit analysis;
- ii) Required additions and changes are selected or developed in accordance with established standard and user objectives;

- iii) Implementation occurs only after adequate testing and conversion processes prove the efficiency and effectiveness of processing, operation and controls.

4.5.2.5 Security

All users, system support personnel, programmers and operations staff are responsible for observing security guidelines provided in this section with respect to application systems, and those issued by S&CS on the use of computer facilities and systems software.

4.5.2.6 Training

Departments are responsible for ensuring adequacy of training of their employees in financial operations and for the effective use of the financial systems in place by providing in-house training in conjunction with the Department of Finance, and by making available up-to-date systems, procedures and policy manuals to all functional areas involved.

4.5.2.7 Documentation

Departments are required to develop and maintain systems and procedures documentation for all financial systems/sub-systems under their ownership and responsibility. Documentation on systems/sub-systems interfaced with any of the central systems shall be reviewed by the Department of Finance to ensure compliance with requirements of the related central system(s). Copies of all departmental financial systems/sub-systems documentation, whether or not directly related to the central systems, shall be provided to Department of Finance for use as sources of reference for requirements analysis in current/future systems development efforts.

4.5.3 Control Guidelines

4.5.3.0 Nature & Scope

The material in this section outlines the general control guidelines and does not cover detailed control procedures. Since accounting/administrative guidelines are addressed in other relevant sections, more emphasis is given here to application and EDP controls. Detailed procedures covering all aspects of control will be made available in a "Financial Systems and Control Procedure Manual".

4.5.3.1 Responsibility

Senior level managers of departments using computerized financial information systems, facilities and resources should develop written statements identifying assignment of responsibility for specific activities within their various functional areas.

In the YTG environment, the Department of Finance should develop and provide such written statements with respect to the central systems.

In general, control responsibility at a higher level may be assigned as follows:

- i) Senior management should be responsible for defining overall objectives of systems, for preparing strategic and operational plans and for monitoring processing and security activities;
- ii) User managers should be responsible for defining their information needs and for designing and monitoring control procedures to ensure completeness, accuracy, authorization and timeliness of data and information;
- iii) System managers should be responsible for developing and supporting systems, monitoring and evaluating systems performance, providing systems and detailed procedures manuals and for researching and identifying ways to improve services to the organization.

4.5.3.2 Control Considerations

a) General

User control procedures at the application level, programmed application controls and general EDP controls provide the framework for effective financial systems control in a computerized environment. Once developed and implemented, their use and effectiveness must be reviewed regularly. Detail procedures need to be developed along control guidelines and made available to users at the operational level. Guidelines and detail procedures have to be updated concurrently with changes in policies, operations and systems.

b) Organizational Controls

A system of internal controls which allows for the segregation of duties and responsibilities within user and processing departments, and which provides for effective application controls, is required.

- i) There should be adequate segregation of duties and responsibilities within user departments:
 - For custody of assets and their related record-keeping and to prevent situations where an individual may initiate transactions and approve payments;
 - To provide for physical arrangements that prevent unauthorized access to assets and accounting records;
 - To facilitate proper supervision of work performed in daily operations and to allow the use of work performed by one person to be used as a check on the work of another;
 - Providing for specific responsibilities for initiation and maintenance of transactions and accounting records.
- ii) There should be adequate segregation of duties within computer processing activities such that:
 - Processing support personnel may not update data files or run application programs;
 - Maintenance personnel have no access to and do not run systems in production;
 - Data processing, maintenance and development functional areas are separate.
- iii) Application controls must include the following considerations:
 - That all transactions are initially approved and recorded;
 - That all recorded transactions are authorized;
 - That all transactions authorized and recorded are processed accurately;
 - That all outputs are reviewed by users for completeness, accuracy and consistency;
 - That controls are properly enforced.

c) Input/Output Controls

Manual and automated input/output controls have to be developed as an integral part of each system/sub-system and exercised regularly to ensure accuracy and completeness. Techniques such as data validation, batch balancing, programmed checks, job scheduling, authorization checks and the use of prenumbered forms should be considered in developing detailed input/output control procedures.

4.5.3.2 Control Considerations (Continued)

- Input data should be initially recorded in a manner allowing for an audit trail, subjected to independent verification and edited/validated prior to being accepted into the financial database.
- Input/output control logs, data transmittal forms, independent verification and subsequent balancing procedures should be developed and used on an ongoing basis.
- Automated systems should have features for data validation, input/output record count and batch balancing.
- Input/output cycles should follow established processing schedules and cut-offs to ensure that all period transactions have been received and entered on time.
- In addition, an organized system of physical maintenance of input/output documents and reports should be in place for user and audit reference.

d) Processing Controls

Processing steps and procedures should be designed with a view to establishing controls through the segregation of duties and responsibilities.

Procedures should be established such that appropriate controls are exercised through all stages of receipt of source documents, input preparation, data entry and output verification

The flow of documents and data through the various stages in processing have to be controlled using special purpose forms. Establishing processing time frames and job scheduling that permit efficient utilization of resources, and that ensure availability of financial information on a timely basis, are essential considerations.

To ensure effectiveness and efficiency in processing, senior managers are required to conduct regular reviews of:

- processing requirements to assess whether or not system facilities and resources satisfy present and future financial information needs;
- Systems operations to ensure that effective processing and maintenance controls are in place, and that transactions are processed accurately on a timely basis;
- Use of systems facilities to ensure systems are accessed only by authorized personnel with adequate training;
- Overall processing activities and procedures in view of changing operational conditions.

4.5.3.2 Control Considerations (Continued)

e) Error Handling

Financial systems and procedures should be developed such that instructions on error detection, handling of corrections and resubmission of corrected data/transaction are clearly identified and understood by users. These requirements should be reassessed periodically to ensure effectiveness and timeliness with which errors are being handled. Periodic analysis of error frequency and status follow-up procedures should be adopted for the determination of systematic corrective measures. Steps should be taken to avoid potential errors and irregularities in reprocessing source documents, incorrect input coding, submission of unauthorized input or loss of input/output.

f) Development Controls

Systems development plans should be prepared for each new financial system/sub-system and for each major addition and revision to existing systems. Such a plan should, in general, include:

- Statement of objectives of the project;
- Description of the components and phases of the project;
- Indication of timing considerations for each phase of the project including staff training;
- Indication of estimated cost savings by project phase and in aggregate;
- Indication of the level of involvement of the Department of Finance.

The project plan is useful in monitoring progress during development/enhancement and for establishing accountability. To this effect, the plan should:

- Assign defined project responsibilities to groups and individuals;
- Require re-evaluation of anticipated benefits and costs at the completion of each phase of the project;
- Provide for submission of progress reports and for final report to management on completion.

Department of Finance will base the degree of involvement to monitor development/enhancement of departmental financial systems on:

- Objectives of the system;

4.5.3.2 Control Considerations (Continued)

- Nature and degree of impact on the central system(s); and
- Adequacy of resource at its disposal for assignment to such development, testing, and implementation efforts.

Senior management should provide the following approvals for all systems development projects, depending on their significance in terms of requirements and objectives:

- Approval in principle after review of project objectives and development plans;
- Approval after completion of each phase of the project;
- Final approval after sufficient testing and implementation of the overall system.

g) Testing

Computer systems and programs should be adequately tested prior to implementation using:

- i) Integrated tests which are performed by users applying data designed to test an entire system to ensure that:
 - The system is operating as expected and can process anticipated volumes;
 - Interfaces are operating properly with all modules functioning as desired;
 - Reports generated meet information requirements of users properly;
 - Adequate back-up and recovery procedures are available.
- ii) Acceptance tests which are performed by users and operations to test the adequacy of operating procedures applying simulated transactions to ensure that:
 - The system effectively processes transactions in the user environment;
 - Required controls and procedures are in place and work effectively;
 - Users are adequately trained and familiar with the detail controls and procedures.

h) Conversion

Conversion of existing data to a new or modified system should be controlled to ensure the data is completely and accurately transferred.

4.5.3.2 Control Considerations (Continued)

Successful completion of a conversion process usually involves the following considerations:

- Assignment of conversion responsibility to specific individuals;
- Developing time schedules for the conversion and establishing a cut-off date so that all transactions are processed to proper accounting period;
- Taking printed copy of data stored on the existing system immediately before conversion and comparing to data on new or modified system;
- Running parallel for a reasonable period subsequent to conversion to ensure processing accuracy and completeness by the new or modified system; and
- Obtaining formal sign-off from user managers to indicate system acceptance.

i) Security

Security policies and procedures should provide assurance that:

- Only authorized users can access systems;
- Adequate safeguards are provided to prevent accidental errors or deliberate actions that result in loss of data/information or cause damage to systems;
- Only authorized transactions are processed on systems;
- Updates to system programs are made only by authorization and that adequate safeguards exist to prevent unauthorized changes;
- Adequate emergency back-up and recovery plans are established and well understood by personnel responsible for performing the functions; and
- Adequate safeguards are provided to avoid damage or destruction to physical facilities.

j) Documentation

Financial Systems procedure documentation must be tailored to meet the requirements of specific systems and the user departments. Although all systems and procedures have individual requirements and additional documentation may be needed, on average, consideration should be given to including:

- Systems Narrative which describes a system from the point of view of the user;

4.5.3.2 Control Considerations (Continued)

- Interface Description which narrates how the system relates to other systems;
- Production Timetable listing all jobs within the system and showing when they should be run;
- Description of user procedures and tasks dealing with details of functions and identifying responsibility for each activity;
- Description of valid input data and forms to be used, including detailed instructions on how to handle different scenarios and use the required forms;
- Error recognition and correction procedures which should list all error messages and describe edits and error reports as well as corrective actions;
- Report descriptions of all printed outputs including explanations of purposed and uses of the reports;
- Descriptions of systems controls and audit features which should include detailed instructions on how to use them.

In addition, there should also be complete sets of system documentations and operations manuals, which are technical in nature, for use in managing the systems and for personnel in operations.

k) Maintenance

System software and hardware maintenance activities must be carried out based on plans and schedules. Maintenance contracts should be reviewed regularly to ensure adequacy of services and to investigate better alternatives.

4.5.3.3 Role of Internal Audit

While primary responsibility for the establishment and operation of a system of internal controls is that of Department of Finance, with Departmental Managers and Financial Officers being responsible for ensuring application, Internal Audit performs evaluation of systems as an independent body. Although the nature and scope of its activities depend on management directives, it should in general:

- Review, evaluate and report on the adequacy of the financial control framework;
- Examine and evaluate performance in relation to the established control framework and report the extent of compliance or non-compliance;

4.5.3.3 Control Considerations (Continued)

- Review, in advance, any system being developed to ensure that designers have provided adequate consideration of audit trails and internal controls; and
- Appraise and evaluate reliability of accounting systems, degree of adherence to policies and legislations and provisions for the protection of assets.

4.6 FINANCIAL REPORTING

4.6.0 Policy Statements

- As a central agency with responsibility for the monitoring and control of overall financial activities, as well as for the operation and maintenance of the central financial systems, the Department of Finance shall provide the global reports and statements required by different levels of government and external agencies.
- Individual departments and agencies shall be responsible for providing detail and summary financial reports required by their management and by central agencies.
- The Department of Finance will assist and advise departments in the development of reports and the application of reporting facilities. Primary responsibility for using available financial reporting sources and services, however, rests with the user departments.
- Financial reports produced by central systems shall include information on budgets, actuals and commitments. In addition to information extracted from the central systems, reports produced by individual departments shall include details for items such as inventory, forecasts and statistical data.
- Although the extent to which accrual accounting is practiced by individual departments during the year is left to their discretion, it is mandatory that year-end financial reporting be on an accrual basis.
- It shall be a requirement that all financial reports meet standards defined in this section.
- The Department of Highways and Public Works, through its Information and Communications Technology branch, shall ensure availability and maintenance of adequate reporting facilities and will assist users in the application of such facilities.

4.6.1 Introduction

This section outlines the data sources for reporting, the reporting process, standards and responsibilities. These sources and processes are addressed with the assumption that transaction data will be maintained in the database(s) in accordance with classification requirements outlined in the preceding section. Thus, the usefulness of information reported is closely linked to the accuracy and consistency of classification applied during data capture.

Within the limitations of available sources and facilities, financial reports are generated to meet information needs of users at different levels of the organization. In general, the principal reporting objectives are:

4.6.1 Introduction (Continued)

- to facilitate operational control by providing detailed and current information on a regular and timely basis;
- to enhance operational management decision making and control processes by periodically providing comparative data on budgeted and actual performance;
- to meet the strategic information needs of management by providing summary-level actual, budgeted, and forecast data on a quarterly or as required basis.

The Financial Management Information System(s) has been designed in light of these objectives and to accommodate specific departmental requirements so that information needs can be extracted in formats desired by users.

4.6.2 Reporting Sources/Facilities Overview

A number of standard and customized reports are produced from central financial systems files. While some of these reports are generated as a result of regular transaction processing, others are user initiated period-end reports.

A variety of detail and summary level account balances and comparative reports can be extracted from the data bank of the G/L which contains budgetary data allocated to periods based on anticipated actuals for each period, commitment balances by account, cash receipts, expenditures and transfers between appropriations. This data bank is the source for producing trial balances for reporting in the Territorial Accounts and for extracting specialized financial reports required at the management level.

The Central Systems, which include the G/L and its sub-systems (A/P, Payroll, Fund Accounting) containing detail transactions, provide the database from which reports required for monitoring and control of financial activities can be generated.

Standard reports from the central systems are initiated by the Department of Finance and distributed to users on a regular basis. Such reports include those that are system-generated and global management reports developed by the Department of Finance.

On-request reports can be initiated by departmental users depending upon their security level of access to each application system.

Customized and ad-hoc type reports can be created by individual users through SAS applications from daily-updated data warehouse. The Department of Finance assists in such endeavors based on analysis of requirements.

In addition to printed reports, on-line inquiry facilities are available to users for viewing data/information in the G/L, A/P and Fund Accounting Systems.

A diagrammatic overview of the financial systems and reporting basis is included at the end of this section as appendix A.

4.6.3 Information Requirements Overview

Financial information requirements include those that are relevant for decision-making processes at different levels of responsibility centres in the organization and those that serve day-to-day operational needs.

Depending on organizational structure and the nature of the operations of individual departments/agencies, the concept of responsibility centre may apply to a Program, Project within Program, Activity, Element, or a combination of any of these levels in the account structure. While information requirements of Responsibility Centre Managers may vary depending on the scope of accountability based on departmental organizations, it is assumed that the current system of transaction coding and data storage will meet their needs. This section outlines the basic information requirements as follows:

INFORMATION REQUIREMENTS

INFORMATION REQUIREMENTS	PURPOSE	USERS	FREQUENCY
Year-to-date budgets, commitments, and actuals summarized by activity/ element and object breakdown for each program. Comparisons of year-to-date actuals and planned expenditures.	For control of expenditures and determination of corrective measures.	Responsibility centre managers	Monthly and on-request
Summary financial transactions by activity, element, and object for each level of responsibility centre.	To ensuring spending activities remain within budgetary constraints and to evaluate performance in terms of expectations.	Functional area supervisors	Monthly and on-request

(Continues)

4.6.3. Information Requirements Overview (Continued)

Appropriations/allotments, disbursements to date, commitments and free balances for each responsibility centre by allotments.	As a basis for cash forecasts and expenditure control at department level. To monitor global expenditures by allotment within appropriations. For Legislative Assembly review.	Financial Officers Dept. of Finance Legislative Assembly	Monthly and on-request
Variance analysis of planned and actual expenditures on periodic and cumulative basis for each responsibility centre, department and global with narrative explanations.	For analysis of causes and future impact of variances, for the projection of year-end positions and to initiate measures to prevent over expenditures.	Res. Centre Man. Financial Officers Finance	Quarterly and on-request
Summary of financial resources, commitments and obligations by date/due date.	For cash management	Dept. of Finance	Weekly, monthly, and as required
Detail financial transactions, account balances and system edit/audit.	To verify accuracy of all other reports and for detailed analysis. Maintenance of system integrity and data accuracy.	Managers Financial Officers Operational staff at all levels	Daily and as required
Financial Statements	For overall evaluation of financial performance and to meet statutory reporting requirements.	Legislative bodies Dept. of Finance External agencies	Annually

The above outline is an overview of information requirements that would, in one form or another, be necessary in the financial operation process of the government. Detailed descriptions of report formats and contents are to be provided in "Systems & Procedures Manuals".



4.6.4 Reporting Standards

Reports are the tool for the conversion of financial data into information, for the expression of the accountability of different levels of management and for exercising financial operations control.

In order for financial reports to be of maximum benefit to users, the following basic standards should be met.

Completeness

Reports should provide complete information for period(s) covered. For example, report cut-off dates that do not coincide with accounting period-end dates can result in the omission of significant information, or relevant explanations may be missing. Reports should be developed with a view to providing complete information to satisfy the objectives they are required for.

Accuracy

All financial data presented must be checked and verified for accuracy prior to distribution.

Reliability

Reliability of information in a report has to be established by cross references to sources and other related reports.

Usefulness

Reports should cover the information requirements of users at desired levels and be available on time for their needs. They should provide a clear picture of performance and serve as guides to action.

Timeliness

To be of maximum use, financial information should be in the hands of users as promptly as possible.

Reports that relate to a specific period need to be produced and made available to users immediately after that period end. Reports required daily for monitoring and control of transactions and system activities should be produced and made available routinely.

Consistency

Terminologies should be established and used consistently to promote clarity and usefulness. Changes in accounting policies and methods should be explained along with their impact on the information reported. Comparisons must be based on criteria applied consistently.

Simplicity

Reports should present information concisely and avoid unnecessary details. Supporting details should be available in format(s) easy to relate to the contents of reports.

Accountability

Responsibility should be clearly shown on all reports by including originating functional areas as part of the report title or at the bottom of the report.

Disclosure

Any limitations and recent changes should be clearly disclosed to the users.

4.6.5 The Reporting Process

Data is input to the central systems for processing based on approved transactions. Edit reports are generated for verification of accuracy and input-output reconciliations are performed by users. Errors are identified and corrections are initiated for input. At this stage, input control logs, along with transaction documents and edit reports, provide the basic control information at the operational level.

Once all errors are corrected and further processing has occurred, other standard and on- request systems reports as well as management reports developed by Finance are produced and distributed to users.

Application systems reports from G/L, A/P, Payroll and commitments include information on current and historical detail transactions by distribution account and commitment type. The standard management reports developed by Finance consist of "Statement of Appropriations", "Statement of Allotments" and "Expense Analysis".

Departments can create customized reports using CMS/SAS facilities to meet financial information requirements of their different functional areas. for this purpose, the Department of Finance provides computer data files which contain:

- Current and previous year actuals and budgets with current year commitments for each account, by period
- Current year detail G/L transactions.
- Current year detail disbursement transactions and obligations.
- Current year detail commitment transactions.

In addition to financial information that departments can extract from these files in formats and levels of detail desired by specific users, they can also create their own SAS data files for statistical reporting.

The standard application systems reports are produced at the end of each successful processing while the on-request systems reports are user-initiated. The standard management reports are produced monthly. Reports developed by departments can be produced as required.

With the exception of reports from the commitment system which are routed to departmental printers, all standard reports from other central systems are produced at the main computer area and issued to users based on distribution lists.

Information extractions from the computer data files via reports created by departments can be executed at any time for printing and distribution in their own areas.

4.6.6 Responsibilities

Financial information reporting and report maintenance responsibilities rest with:

- i) Department of Finance to the extent of designing and developing standard management reports, preparation of statements on Public Accounts and distribution of reports to users; for the retention of all financial transactions data, statements and reports as required by policies and regulations.
- ii) Individual Departments and Agencies to the extent of identifying special information requirements of their functional areas and central agencies, developing reports to meet the requirements identified and the retention of reports as sources for reference in financial operations, control and budget preparation.
- iii) Information & Communication Technology Branch of the Department of Highways and Public Works to the extent of ensuring that adequate and cost-effective facilities are available for the retention of financial data and production of information as per user specifications