3 GOVERNMENT SYSTEMS AND CONTROLS

BACKGROUND

3.1 Government financial, program and other management activities are facilitated or supported by a variety of systems and control processes. These include a number of corporate or government-wide systems (e.g., Corporate Financial Management System - CFMS/SAP; Human Resources Management System - HRMS) or processes (e.g., annual business planning, budgeting and accountability reporting; procurement). There are also numerous entity or program level systems and processes.

3.2 Government's business systems and technology initiatives are subject to oversight review by the Business Technology Advisory Committee (BTAC). Initiatives within crown entities are also overseen by the respective governing board or other appropriate body.

3.3 Although not specifically quantified, the costs of acquiring, implementing, operating and maintaining systems and control processes within the Provincial public sector would be significant. However, a more important factor is the quality and cost-effectiveness of the systems and control processes in mitigating financial and other risks of managing government programs and services.

RESULTS IN BRIEF

3.4 The following are our principal observations presented in this chapter.

■ Government, with specific leadership from the Department of Finance, is taking action or has plans to address CFMS/SAP control concerns raised in our 2003 Report.

■ An independent audit commissioned in 2003-04 by new senior management at Finance indicated, in our view, that there had been inadequate due regard for economy and efficiency for the pension administration system implementation project. This project commenced in 1998, is four years overdue, and has incurred costs of more than three times the original budget.

■ The results of the annual independent audit of control procedures in place for processing on government's large mainframe computer systems provide reasonable, but not absolute, assurance on the adequacy of controls. The audit deals with control procedures at a specific point in time, and only those that are the responsibility of the contracted service organization. There are significant matters not covered by the audit which are government's specific and direct responsibility.

■ An independent consultant's report issued in December 2003 on a review of government's procurement processes identified a number of recommendations for improvement.

■ The House of Assembly and the Executive Council have significant roles to perform in monitoring the level of control over the use of public funds and resources. Increased reporting on controls by government management against established and recognized standards or framework should be considered.

SCOPE

3.5 The Auditor General Act provides broad mandates for the Office to examine and report on the use and control of public funds or resources by government, its entities, and recipients of financial assistance. For example, Section 8 of that Act indicates that we may examine whether:

- accounts have been faithfully and properly kept;

- all public money has been fully accounted for, and the rules and procedures applied are sufficient to secure an effective check on the assessment, collection and proper allocation of the capital and revenue receipts;

- money which is authorized to be expended by the Legislature has been expended without due regard to economy or efficiency;

- money has been expended for the purposes for which it was appropriated by the Legislature and the expenditures have been made as authorized; and

- essential records are maintained and the rules and procedures applied are sufficient to safeguard and control public property.

3.6 The purpose of this chapter is to provide summary observations and information on the government's systems and control processes in order to assist the House of Assembly, and its Public Accounts Committee, to hold government accountable for the adequacy of systems and controls over the use of public funds or resources. Other chapters of this Report may also include related observations as a result of audit examinations in specific areas or entities.

PRINCIPAL FINDINGS

CFMS and SAP Control Initiatives

3.7 The 2003 Report of the Auditor General (Chapter 3) included the results to date of our examination of selected aspects of the government's SAP central financial management system (CFMS). We identified a number of significant control concerns and 20 specific recommendations for consideration by Finance

management. Certain of those recommendations require consideration on a government-wide basis, not just by Finance.

3.8   Finance management have committed to addressing the control concerns reported, and undertook to develop an action plan to identify and assess alternatives for each of our recommendations. On March 3, 2004, Finance management tabled a summary analysis of the status of action taken or planned, on the concerns we reported, with the Public Accounts Committee. The Department's plans include arranging for an annual service auditor report on controls for the centralized SAP infrastructure and support functions performed by Finance for a number of public sector entities.

3.9   A steering committee was established in April 2004 to oversee the action taken or planned to address our recommendations and other relevant matters. The Director of Finance's Corporate Information Systems (CIS) division will be reporting regularly to this committee on planning of the remediation efforts as well as the execution of those efforts.

3.10   On a related matter, a separate audit of aspects of the SAP implementation in school boards was completed in March 2003 by an external firm with support from government's Corporate Internal Audit Division. A final report dated January 5, 2004 was titled *Nova Scotia School Boards - Post Implementation Review of System Access Controls*. That report included several recommendations to improve controls, especially in relation to segregation of duties for this new SAP system implementation.

Recommendation 3.1

We recommend government ensure adequate, cost-effective controls exist and operate for CFMS and its other SAP systems.

Pension Administration System

3.11   In 1998, Finance's Pension Services Group (PSG) undertook to implement a new pension administration system as a result of a reorganization of the PSG which brought together the administration of the Nova Scotia Teachers' Pension Plan and the Public Service Superannuation Plan. There was also a need for a system that would be Year 2000 compliant.

3.12   A request for proposals was issued in January 1998 for a vendor to provide a new system. PSG originally wanted the new system implemented by March 31, 2000. The original project budget was estimated as $1,208,000. Although elements of the planned system are being used by PSG, the project is still in process because there are identified system deficiencies and outstanding deliverables.

3.13   During 2003-04, the new Executive Director of the PSG approached Corporate Internal Audit to audit the project implementation. Corporate Internal Audit in turn contracted a public accounting firm to perform the requested audit.

3.14   The objectives of the audit were to identify whether the:

-   project had clearly defined objectives, responsibilities and ownership;

-   costs and benefits were clearly determined and properly monitored;

-   project was completed successfully in line with the plan, on time, and on budget; and

-   procurement practices and processes at the time of contract award were followed.

3.15   The report from this audit, issued in March 2004, included serious findings related to the management and control of the project. Based on our review of the report and related information, in our view, there has been inadequate due regard for economy and efficiency in the new pension administration system implementation project.

3.16   The project is four years overdue and has incurred costs of more than three times the original budget. Information available indicates that the costs of the project to January 2004 exceed $4.5 million. This includes $4.4 million paid to the selected vendor (including costs of web-based functions not part of the original project scope), and $181,000 paid to consulting companies for project management services.

3.17   Since the release of the report in March 2004, the PSG Executive Director established a new steering committee to oversee the project's completion. As well, Finance started to define the remaining requirements to complete the project, including estimates of the associated costs.

3.18   The new system is intended solely for the administration of the pension plans. In our view, the Trustee of the plans should ensure that the project costs charged to them are fair and reasonable. For example, this would include determining whether the plans should bear all the additional costs incurred. In this regard, we note that the Trustee (i.e., the Minister of Finance) is also responsible for the government's Consolidated Fund which would have to bear any costs not charged to the plans.

Recommendation 3.2

We recommend the pension administration system implementation project be reviewed by the Trustee to ensure costs charged to the pension plans are fair and reasonable.

Provincial Data Centre Services

3.19   In the 1990s, government entered into contract arrangements to outsource its Provincial data centre processing requirements. Those arrangements require an annual audit by an independent auditor of the contracted service provider's control procedures for the resources used for processing government's mainframe computer systems. This audit is performed in accordance with CICA standards and provides reasonable, but not absolute, assurance to government that the contracted service organization has in place appropriate control procedures for those matters that are its responsibility as at the date of the audit.

3.20   Since the programs, processing and data for significant government systems reside at the data centre (including payroll, drivers' licensing, vehicle registration, property assessment, justice), the results of an independent control audit may be of interest to the Members of the Legislature. Exhibit 3.1 on page 22 is an extract from the most recent auditors' report on control procedures of the contracted services provided to government at the data centre. Control objectives referred to in that report, which are the responsibility of the service provider, include the following:

1. Security Organization - An information security function exists and develops and implements policies and procedures to protect facilities, operations and data and programs.

2. Logical Access - Effective logical access mechanisms exist to restrict access of service organization personnel to the data and programs.

3. Business Continuity Planning - Effective mechanisms exist to ensure that critical information systems will continue to be available in the event of a disaster.

4. Operations - Controls are in place to prevent or detect errors within the operations area.

5. Facilities - There are adequate facilities and physical security over computer hardware, programs, on-site data tapes and files.

6. Data Communications - Controls provide reasonable assurance over the integrity of data in the telecommunications network.

7. Maintainability - System development and maintenance activities are authorized, adequately tested, reviewed, approved and implemented.

3.21   The report identifies the control procedures in place at the time of the review to support achievement of each of the above control objectives. The report also identifies a number of significant matters that are the specific and direct responsibility of government, which are not covered by the annual review and reporting.

3.22 This annual audit only relates to controls over government's mainframe computer systems, not the government's SAP systems or Department of Health's Meditech system. The SAP systems are to be subject to a separate annual service audit commencing in 2004.

Recommendation 3.3

We recommend government consider increased use of independent service audit arrangements to ensure data processing service providers have adequate functioning controls in place.

Recommendation 3.4

We recommend government assess the adequacy of its own control procedures associated with data processing service provider arrangements.

Procurement Administrative Review

3.23 The Departments of Finance and Transportation and Public Works contracted an external firm to perform a procurement administrative review of the *procure to pay* process stream within government. The review concentrated on the procurement of goods, services, and construction, covering the entire *procure to pay* process stream (i.e., approval; requisition; purchasing; receiving; payment; reporting; and compliance reviews). The key objectives of the review were to:

- *"Assess and present recommendations regarding the existing "procure to pay" business processes in the context of existing government policies, reporting requirements and compliance reviews requirements;*

- *Review and comment on the current application of the procurement website, the SAP Procurement function and their integration with the Province's financial system;*

- *Identify and present other public sector procurement and payment practices;*

- *Identify and present recommendations to address deficiencies, redundancies and inefficiencies in current practice in the Province of Nova Scotia; and*

- *Assess and present recommendations regarding the existing structure and reporting relationships between the Procurement Branch and end-user Departments."*

3.24 The external firm's final report was dated December 2003 and issued to government. It included a number of findings and recommendations to be addressed by a steering committee established by the Office of Economic Development in May 2004.

Available Guidance and Standards

3.25　　The House and Executive Council have significant roles to play in monitoring government operations, including the adequacy of the level of control exercised over the use of public funds and resources. These roles are, in some regards, similar to those of a governing body in the corporate sector. CICA has developed a series of key/significant questions for governing bodies to consider in their oversight of an entity's control or other activities. For example, CICA's 20 *Question Series* publications are available in the following areas which may be of interest:

- executive compensation
- information technology
- pension governance
- privacy
- management of risk

3.26　　Other sources are also available which are supported by international organizations and widely used around the world. As suggested in previous reporting, government needs formal standards or a framework for management and staff within the Provincial public sector to use as a reference when designing, implementing or assessing the appropriate level of control.

CONCLUDING REMARKS

3.27　　In the recent past, there has been a great deal of public and media attention on matters reported to the Parliament of Canada about the controls and other activities related to the Federal "sponsorship" program. The magnitude of such matters, in relative terms, in Nova Scotia equates to less than $1 million per year. The question that needs to be asked is whether Nova Scotia's public sector management and control systems and processes are sufficient to prevent or detect such issues.

3.28　　Good systems and controls are costly, while too many or less than optimized controls can also be costly. Government's challenge is to ensure that the risks of loss or misuse are appropriately identified and that decisions made about the level of control to be in place appropriately mitigate risks on a cost-benefit basis. The goal is not more or too many controls, but rather cost-effective optimization of control against risks.

Exhibit 3.1

Auditor's Report on Control Procedures

We have examined the accompanying description of the stated internal control objectives of the [service organization] and the control procedures designed to achieve those objectives and have performed tests of the existence of those control procedures as at March 5, 2004. Our examination was made in accordance with Canadian generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

Our examination was limited to control objectives relating to the mainframe partition used by the Government of Nova Scotia.

In our opinion, the control procedures included in the accompanying description were suitably designed to provide reasonable, but not absolute, assurance that the stated internal control objectives described therein were achieved and the control procedures existed as at March 5, 2004.

As we tested the existence of the control procedures only as at March 5, 2004, we do not express an opinion on whether the control procedures existed at any other time.

The description of stated internal control objectives at the [service organization], and the control procedures designed to achieve those objectives is as of March 5, 2004. Any projection of that description to the future is subject to the risk that, because of change, the description may no longer portray the control procedures in existence. The potential effectiveness of specific control procedures at the [service organization] is subject to inherent limitations and, accordingly, errors or fraud may occur and not be detected. Furthermore, the projection of any conclusions, based on our findings, to future periods is subject to the risk that changes may alter the validity of such conclusions.

This report is intended solely for the use of the Government of Nova Scotia.

Halifax, Canada
March 5, 2004