
3 Governance and Control Framework



Summary

Substantial investment activity is conducted through the Liability Management and Treasury Services Division of the Department of Finance, and monitored for compliance by the Department's Compliance and Reporting Division. The Liability Management and Treasury Services Division's transactions are accounted for by the Department's Capital Markets Administration Division.

We conducted an audit of the governance and control framework in these divisions in 2011. Our audit was a follow-up to a 2004 audit on this framework performed by a private-sector audit firm. That audit resulted in a denial of opinion. We repeatedly recommended that the province engage a private-sector firm to conduct a follow-up audit to determine if the deficiencies leading to the denial of opinion had been resolved.

We concluded the deficiencies had been substantively resolved. The governance and control framework in these divisions provides for the identification of major risks that impact investment activity. These risks are controlled through policies related to borrowing limits and credit ratings; compliance with these policies is monitored on a daily basis. In addition, the province's Debt Management Committee provides adequate oversight and challenge to the activities of these divisions, and reports its results to the Minister of Finance on an annual basis.

We further concluded that controls over transactions are adequate, but we made recommendations for improvement. A risk assessment should be prepared to determine if certain risks, such as lack of segregation of duties, have been adequately addressed through current processes. We have also recommended the need to independently calculate interest income related to sinking fund investments, and that there be evidence that reconciliations to custodian statements have been reviewed.



3 Governance and Control Framework

Background

- 3.1 In 2004, an external audit firm conducted an audit of the governance and control framework of the Investment Management, Liability Management and Treasury Services, and the Capital Markets Administration Divisions of the Department of Finance. The resulting report, issued in December 2004, identified several control weaknesses which resulted in a denial of opinion. The auditors categorized the significant deficiencies as follows:
- deficiencies related to the governance model including the need for an oversight body in both the Liability and Treasury Management and Investment Management divisions, and a more comprehensive risk management plan for the Liability Management and Treasury Services Division; and
 - deficiencies related to internal controls including improved segregation of duties in each of the Liability and Treasury Management, Investment Management and Capital Markets Administration divisions.
- 3.2 Substantial investment activity is conducted through the Liability Management and Treasury Services Division. In addition, this Division and the Capital Markets Administration Division are responsible for \$14.6 billion in debt in the province's general revenue fund, approximately \$4.7 billion in derivative instruments, and \$2.4 billion in sinking fund assets.
- 3.3 In 2007, the Internal Audit Centre conducted a follow-up to the 2004 audit of these Divisions. The objective of that engagement was to determine whether the 2004 audit recommendations had been implemented, or if not implemented, that strategies had been developed to mitigate related weaknesses or risks. The results of the follow-up noted the divisions were moving in the direction of addressing the recommendations. One significant issue from the 2004 audit was resolved through the establishment of the Compliance and Reporting Division. This Division functions to ensure that investment and debt management activities comply with legislation and Department of Finance policies. However, because the transactions processed by these divisions are significant and complex, we repeatedly recommended in past reports of the Auditor General that an audit by an external, experienced private sector firm be conducted to determine whether the deficiencies identified in 2004 have been corrected to the extent necessary for an unqualified audit opinion. In 2011, we undertook this audit ourselves in order to provide an independent opinion on the adequacy of the governance and control framework in these significant divisions.



Audit Objectives and Scope

- 3.4 In 2011, we conducted a follow-up audit to the 2004 audit of governance and control framework of certain divisions of the Department of Finance. We contracted with a private-sector firm to perform certain aspects of the fieldwork, and completed the remainder ourselves.
- 3.5 Our audit focused on two of the three divisions included in the 2004 audit scope: Liability Management and Treasury Services; and Capital Markets Administration. In addition, we included the Middle Office Compliance and Reporting Division which did not exist in 2004, but which was created in response to the 2004 audit. The Investment Division, which had been responsible for investments in the Province's funded pension plans, was transferred to the Nova Scotia Pension Agency in 2006, and was excluded from the scope of our follow-up audit. This audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act as well as the Canadian Institute of Chartered Accountants' *Section 5025 – Standards for Assurance Engagements*.
- 3.6 The objectives of the audit were to determine whether the following elements of a governance and control framework exist.
- The divisions' objectives, policies and procedures contribute to the achievement of the goals in the Department of Finance's 2010-11 Business Plan.
 - Major risks that may impact the divisions' ability to achieve their objectives or goals have been identified and controls are in place to ensure the risks are mitigated to an acceptable tolerance level.
 - Divisional internal controls over transaction initiation, approval, recording, reporting, and custody of assets are designed in a manner to protect related financial assets and promote the accuracy and completeness of liabilities.
 - The divisions are subject to monitoring from a centralized function.
 - Roles and responsibilities of committees, management, and staff are well understood and capabilities exist to achieve objectives.
 - There are appropriate reporting structures and performance measures to support achievement of the goals and objectives.
- 3.7 Generally accepted audit criteria consistent with the objectives of this audit existed for certain of the above objectives. For those objectives for which criteria did not exist, audit criteria were developed by this Office. These criteria were discussed with, and accepted as appropriate by, senior staff within the three divisions.
- 3.8 The audit approach included conducting interviews with staff from the three divisions and reviewing policies, procedures and other relevant documentation.



We determined whether the identified criteria were valid statements and supported related objectives. Walkthroughs were performed as at March 31, 2011 to determine if identified controls were operating as described. In addition, we tested a sample of transactions between January and November 2011 to determine if the described controls operated throughout that period.

Significant Audit Observations

Conclusions and summary of observations

We concluded that objectives related to the governance and control framework have been met, although we have identified deficiencies in certain reconciliation processes. Major risks that impact the ability of the province's investment and treasury functions have been identified and are controlled and monitored through policies related to borrowing limits and credit ratings. Compliance with these policies is monitored on a daily basis. In addition, the Debt Management Committee provides adequate oversight and challenge and reports the results of its activities to the Minister on an annual basis.

- 3.9 *Division objectives, policies and procedures* – The Liability Management and Treasury Services Division and the Capital Markets Administration Division have each adopted the mission of the Department of Finance as reflected in the Department's 2010-11 Business Plan. While the Liability and Treasury Division has a specified mandate, neither the Capital Markets Administration Division nor the Compliance and Reporting Division have established formal mandates. However, the role of each Division is noted on the Department of Finance's website.
- 3.10 Outcomes in the Business Plan have been used by Liability and Treasury Division management in establishing policies related to credit limits and risk tolerances. These divisional policies are included in the Treasury Management Policy.
- 3.11 The Division also has a compliance manual which establishes the policies and procedures to be used by the Compliance and Reporting Division to ensure Liability and Treasury Division activity is in compliance with legislation and policies. The Capital Markets Administration Division has a manual which includes the procedures for settling and accounting for transactions. Neither the capital markets manual nor the compliance manual includes specific divisional goals; however, a review of the policies indicates they support the described role of each division.
- 3.12 Policies and procedures are subject to internal review to ensure their legitimacy, and alignment with the Department of Finance mandate. Each division submits its policies to the Debt Management Committee for review and to the Minister for



approval. Once approved, policies and procedures are communicated to division personnel and to internal and external stakeholders if appropriate.

- 3.13 *Risk management* – One of the key findings from the 2004 audit related to risk management:

“There are currently insufficient risk management policies and procedures within the Division [LMTS] for the debt management function of the Province. As such, risk tolerances, targets or performance benchmarks for assessing the effectiveness of the portfolio management activities, and liquidity guidelines against which the portfolio can be assessed have not been formalized or approved.”

- 3.14 In the 2004 audit, risk management was assessed only in relation to the Liability Management and Treasury Services Division. We agree with that decision as this Division has the most significant risk exposures and these exposure relate to factors external to the Division. The Division’s mandate notes that it is responsible for *“ensuring effective money management, maximizing return on investments and minimizing debt servicing costs within risk tolerances acceptable to government.”* It is evident that risk management is critical to the success of the Division.

- 3.15 The significant risks the Division manages are as follows.

- interest rate risk – risk due to variability in interest rates
- credit risk – risk due to a counterparty’s ability to meet its obligations
- liquidity risk – risk that there is inadequate cash (including cash equivalents) on hand to meet liquidity needs
- foreign currency risk – risk that an exchange rate will change unfavourably over time

- 3.16 We concluded that the Liability Management and Treasury Services Division has adequate risk management policies that provide a framework for identifying, prioritizing, managing, and reporting and monitoring major risks to the Division. This framework includes the establishment of risk tolerances. The Division’s Treasury Management Policy addresses numerous risk elements including target exposures for currency, interest and liquidity risks, and credit limits with specified issuers.

- 3.17 The Treasury Management Policy is approved by the Minister and is subject to annual review. Revisions to policies are brought forward to the Debt Management Committee (this Committee’s role and responsibilities are discussed later in this Chapter) by Division management after an environmental scan and review has taken place. Changes are recommended by the Deputy Minister of Finance (who



chairs the Debt Management Committee) for approval by the Minister of Finance. During the year, the Debt Management Committee receives regular reports on the Liability Management and Treasury Services Division's activities. These results assess the effectiveness of risk management processes by demonstrating how the Division has met established targets and benchmarks.

- 3.18 Another key risk for the Liability Management and Treasury Services Division is compliance risk – the risk that the Division is not complying with established legislation and policies. The Compliance and Reporting Division (the Middle Office) was created in response to a finding from the 2004 audit which noted that compliance risk had not been considered. The role and responsibilities of this Division are discussed in greater detail later in this Chapter.
- 3.19 *Internal controls* – In the 2004 audit, the following findings were noted related to internal controls.
- There was need to develop a monitoring and compliance function for both the Liability Management and Treasury Services Division and Investment Divisions to ensure compliance with policies and procedures, including risk limits.
 - There was a lack of segregation of duties for certain incompatible functions.
 - Certain key controls were not documented in operational policies and procedures.
- 3.20 The first deficiency was addressed by the creation of the Compliance and Reporting Division. We examined this Division and concluded there is still a need for improved internal controls. More detailed observations on the Compliance and Reporting Division are provided later in this Chapter.
- 3.21 We discussed internal controls over transaction initiation, approval, recording, reporting, reconciling, and custody of assets with management and staff within the three Divisions. We conducted walkthroughs and detailed tests of these controls. We determined that the controls as described are designed effectively.
- 3.22 We tested 30 trade tickets issued between January and November 2011 to ensure controls related to their processing were operating effectively during that time. There were no errors in any of the processes related to short-term investing and borrowing for transactions in the general revenue fund. Controls exist to ensure assets are completely and accurately recorded in the Province's general ledger (SAP) and that they are appropriately safeguarded.
- 3.23 We found deficiencies in the reconciliation processes related to sinking fund assets. Interest income is entered into SAP from the custodian's statements. This differs from the processes for recording interest income and expense for short-term



investments and borrowing in the general revenue fund as these are calculated by the Millennium Treasury Management System and reconciled to the custodian statements each month. This provides an independent calculation of the interest amounts. There is no independent calculation of interest in the sinking funds portfolio. In addition, the Capital Markets Administration Manual describes the current process of transposing interest from the custodian statements as a reconciliation. This is inaccurate and should be corrected.

Recommendation 3.1

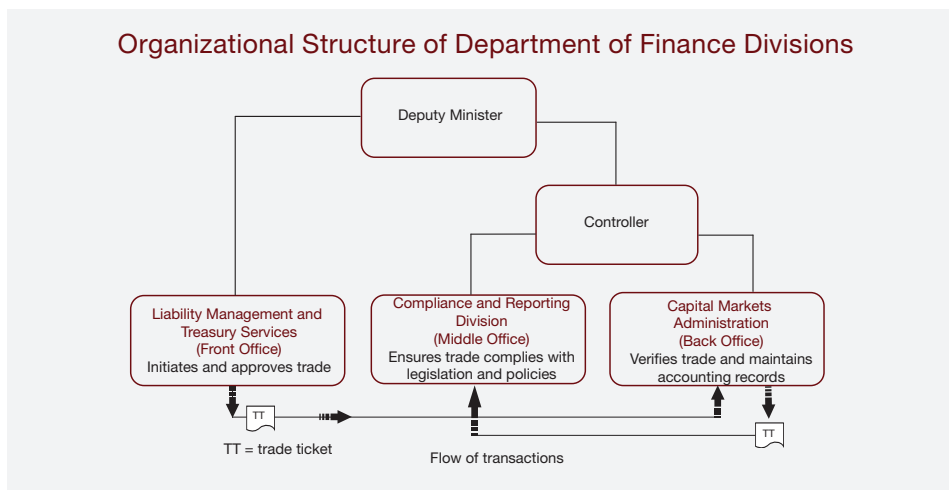
The Department of Finance's Capital Markets Administration Division should perform an independent calculation of interest activity in the province's sinking fund accounts and reconcile these calculations to the custodian statements. The Capital Markets Administration Manual should be updated to include accurate reconciliation processes.

- 3.24 During this audit, we tested certain controls as required to conclude whether they were designed effectively, and operating during our testing period. We also tested controls during our audit of the March 31, 2011 Public Accounts. At that time, we noted that reconciliations of sinking fund accounts to custodian statements were not being completed on a timely basis. This finding is discussed in greater detail in Chapter 2 – Results of Financial Audits and Reviews – of this Report. We have recommended that these reconciliations be performed.
- 3.25 In addition, we noted there was no evidence that reconciliations prepared by the Capital Markets Administration Division were being reviewed. This monitoring control ensures that reconciliations are performed accurately and on a timely basis. Without documentation such as reviewer's initials, there is no evidence to ensure the review is being completed. This increases the risk of inaccurate balances in the general ledger.

Recommendation 3.2

Management of the Department of Finance's Capital Markets Administration Division should ensure the review of reconciliations is documented.

- 3.26 Daily trades such as short-term investments and borrowings originate in the Liability Management and Treasury Services Division and are approved by authorized staff. The information is entered into the Treasury Management System (Millennium). The trade ticket that Millennium produces becomes the source document used by staff in the Compliance and Reporting Division to ensure the trade complied with approved policies. The trade ticket is also used by the Capital Markets Administration Division to settle and account for the transaction. The following exhibit provides overall details of the functions of each Division.



- 3.27 There are approximately 125 functions available to users in the Millennium system. Access to each function is controlled by the system administrator. Both the system administrator and the individual who provides backup to the administrator have full access to all functions within Millennium. This super-user access increases the risk of unauthorized transactions. In addition, the system administrator role is performed by staff in the Compliance and Reporting Division who monitor compliance with the parameters established in the Treasury Management Policies. This is an inappropriate segregation of duties.
- 3.28 Risks related to inappropriate segregation of duties are to be mitigated by access and other controls in the Millennium system. These controls are also important because the Director of the Capital Markets Administration Division and the Compliance and Reporting Division is the same individual, which is a further example of inappropriate segregation of duties. However, the access controls prevent users in the Capital Markets Administration Division and the Compliance and Reporting Division from having access to functions for which the Director is ultimately responsible.
- 3.29 The Millennium system produces a daily report which details activity by user for transactions as well as for changes to access privileges. This daily report is reviewed by the system administrator. The Millennium system also produces a weekly report by user which is reviewed by the Director.
- 3.30 It is not uncommon for there to be a super-user with conflicting responsibilities in an operation with few staff, as is the case with these three divisions. However, the responsibilities of these divisions are significant. We believe a risk assessment of the roles and responsibilities of positions within the divisions should be prepared to ensure identified risks are sufficiently mitigated.

**Recommendation 3.3**

Management of the Department of Finance's Liability Management and Treasury Services, Capital Markets Administration, and Compliance and Reporting Divisions should complete a risk assessment of roles and responsibilities and ensure controls exist to mitigate identified risks.

3.31 In addition, staff in the Compliance and Reporting Division make changes to the limits they monitor. During our testing we did not detect any errors in the initiation, approval and monitoring of transactions. However, the ability of the Compliance and Reporting Division to enter and change the limits and other parameters it monitors in Millennium increases the risk that trades which do not comply with approved policies could occur. We understand these changes to limits and parameters would be reported in the daily and weekly activity reports. Although these changes are reviewed by the Director of the Compliance and Monitoring Division, they should be verified to the Millennium system. This would maintain the integrity of the compliance function.

Recommendation 3.4

The Department of Finance's Liability Management and Treasury Services Division should verify that changes made to limits and other parameters in the Millennium system are accurate.

3.32 The Director of the Capital Markets Administration Division and the Compliance and Reporting Division is the same individual. During our review of Millennium access, we determined that the Director has super-user access to all functions within Millennium. This reduces the impact of the controls provided in the Millennium system. The Director is responsible for the review and approval of activities in the Divisions and there is no requirement for the Director to have this level of access to the Millennium system.

Recommendation 3.5

The Director of the Department of Finance's Capital Markets Administration Division and the Compliance and Reporting Division should have read-only access to the Millennium system.

3.33 The Millennium system is a stand-alone system used to enter daily trade information. Millennium does not interface with any other systems. The system is being upgraded to a new version called WallStreet. We discussed, but did not audit, the processes being used to convert to the new system and note that they appear adequate to ensure a seamless transition to the upgrade.

3.34 *Centralized monitoring* – Industry practice requires three functions related to debt and investment activities: front office, which initiates transactions; middle office, which focuses on compliance with debt and investment policies, including risk limits; and back office which settles and records transactions.



- 3.35 A finding from the 2004 audit was that there was no middle office and therefore compliance with policies was not being monitored. Soon after that audit was completed, a middle office function was established – the Compliance and Reporting Division. The Division’s primary focus is to ensure Liability Management and Treasury Services is in compliance with Department, Division, and legal requirements. As noted above, we tested 30 transactions from January to November 2011 to ensure certain controls were operating, including controls in the Compliance and Reporting Division. We found no errors in the controls related to this Division.
- 3.36 The Division prepares a monthly report on the results of monitoring activities. This report is provided to the Debt Management Committee each month.
- 3.37 The Division’s policies and procedures are detailed in the Compliance Manual. However, the Compliance Manual is not fully aligned with the policies and procedures of the Liability Management and Treasury Services, which are detailed in the Treasury Management Policy Manual. This increases the risk that policies will not be fully monitored and that reporting of monitoring activities will not be complete.

Recommendation 3.6

Management of the Department of Finance’s Compliance and Reporting Division should update the Compliance Manual to ensure it reflects the complete range of debt and investment policies to be monitored.

- 3.38 *Roles and responsibilities* – A significant finding from the 2004 audit related to the role of the Debt Management Committee. At that time, the Committee was assigned management responsibilities and therefore its ability to provide oversight to the debt management function was compromised.
- 3.39 The role of the Committee is defined in its current Governance Guidelines as
- “... to provide independent advice necessary to foster the long-term success of efforts by the Minister, Deputy Minister and Management to prudently manage the financial assets and liabilities of the General Revenue Fund. The Committee has no executive authority, and is therefore only advisory...It is the responsibility of Management to ensure that the Committee are kept well informed of changing risks.”*
- 3.40 The Committee currently consists of full committee members and ex-officio committee members; the Guidelines note that full committee members cannot be management. The Guidelines specify that at least one member of the Committee has, among other competencies, an understanding of fiduciary duty; financial literacy or accreditation; and knowledge or understanding of the role played by each of the three divisions. We reviewed the current membership of the Committee



and note that there are three full members external to the Department of Finance with one of these members being independent of government. The other full members are with the Department, but not management in the Divisions.

- 3.41 We conducted a brief survey of a sample of current Debt Committee Members to determine whether the members felt that the Committee as a whole has sufficient expertise or knowledge to challenge information presented to it by management. We also asked whether the Committee felt it was provided with sufficient information in order to fulfill its advisory role to the Minister.
- 3.42 The responses from the members were generally positive with respect to both questions asked. In particular, the expertise of the external, independent member of the Committee was noted.
- 3.43 Although Committee members are required to sign off on a code of conduct, they are not required to acknowledge their understanding of their roles and responsibilities, and we suggested this be done. We are pleased to note that, in accordance with good governance practices, the Committee completes an annual self-assessment. In addition, the Committee prepares an annual report of its activities and provides this to the Minister of Finance.
- 3.44 The Governance Guidelines do not include the Committee's responsibilities for receiving and reviewing the results of compliance work performed by the Compliance and Reporting Division. Without proper documentation of its responsibilities there is a risk that the Committee compliance review activities may not happen or that new members may be unaware of their responsibilities. If a thorough review is not conducted by the Debt Management Committee there is a risk that noncompliance activities are not being properly addressed and corrected.

Recommendation 3.7

The Department of Finance's Liability Management and Treasury Services Division should update the Governance Guidelines to indicate the review processes to be conducted by the Debt Management Committee with respect to the reports received from the Compliance and Monitoring Division.



Response: Department of Finance

The recommendations highlighted below are from the Auditor General's final draft report on the Governance and Control Framework follow up audit completed in 2011.

Recommendation 3.1

The Department of Finance's Capital Markets Administration Division should perform an independent calculation of interest activity in the province's sinking fund accounts and reconcile these calculations to the custodian statements. The Capital Markets Administration Manual should be updated to include accurate reconciliation processes.

CMA agrees with this recommendation and it has been implemented.

Recommendation 3.2

Management of the Department of Finance's Capital Markets Administration Division should ensure the review of reconciliations is documented.

CMA agrees with this recommendation and it has been implemented.

Recommendation 3.3

Management of the Department of Finance's Liability Management and Treasury Services, Capital Markets Administration, and Compliance and Reporting Divisions should complete a risk assessment of roles and responsibilities and ensure controls exist to mitigate identified risks.

Management agrees with this recommendation and an implementation plan will be developed.

Recommendation 3.4

The Department of Finance's Liability Management and Treasury Services Division should verify that changes made to limits and other parameters in the Millennium system are accurate.

Management agrees with this recommendation and it has been implemented.

Recommendation 3.5

The Director of the Department of Finance's Capital Markets Administration Division and the Compliance and Reporting Division should have read-only access to the Millennium system.

Administrator access will be removed from the Director, however, the Director requires limited access for operational purposes, ie. trade verification.



Recommendation 3.6

Management of the Department of Finance’s Compliance and Reporting Division should update the Compliance Manual to ensure it reflects the complete range of debt and investment policies to be monitored.

The Compliance Manual has always provided complete compliance coverage of the debt and investment policies monitored. Management will add a table to the front of the Compliance Manual mapping the debt and investment policies to the compliance program.

Recommendation 3.7

The Department of Finance’s Liability Management and Treasury Services Division should update the Governance Guidelines to indicate the review processes to be conducted by the Debt Management Committee with respect to the reports received from the Compliance and Monitoring Division.

Management agrees with this recommendation and will recommend the appropriate change to the Governance Guidelines.