TORONTO

AUDITOR GENERAL'S
REPORT
ACTION REQUIRED

Governance and Management of City Computer Software Needs Improvement

Date:	January 7, 2011
To:	Audit Committee
From:	Auditor General
Wards:	All
Reference Number:	

SUMMARY

The objective of our review was to determine the adequacy of controls over the administration of information technology software owned by the City.

Our review identified opportunities for strengthening controls over information technology software. Specifically, the City should develop a comprehensive software governance plan to address the Information and Technology Division's overall program for acquiring and managing computer software used throughout the City.

Our audit also identified other areas where computer software management needs improvement. Implementation of the 14 recommendations contained in this report will align City processes more closely with best practices related to computer software management, increase efficiency and improve management control.

RECOMMENDATIONS

The Auditor General recommends that:

1. The City Manager provide clarification to City divisional management regarding the role and responsibility of the Chief Information Officer as the single point of authority for managing City-wide and division-specific software.

2. The City Manager, in consultation with the Chief Information Officer and the City's Agencies, Boards, Commissions and Corporations, review the need for the development of closer coordination in the acquisition and management of

software. Closer coordination with the Agencies, Boards, Commissions and Corporations has the potential for significant cost savings.

3. The Chief Information Officer prepare a Software Asset Management Plan. Such plan to address the role of information technology governance committees, accountability, policies, procedures, practices and divisional coordination related to managing software.

4. The Chief Information Officer ensure the City Information Technology Risk Management Program includes a periodic risk assessment to identify, assess and implement processes to address software related risk.

5. The Chief Information Officer review existing City information technology related policies, procedures and software asset management best practices. Additional policies, procedures and processes should be implemented where needed, to ensure City software is managed in a consistent, cost-effective and controlled manner.

6. The Chief Information Officer determine resources and processes necessary to update and maintain the Information Technology Asset Management System prior to implementation.

7. The Chief Information Officer ensure project goals, benefits and expectations for the Information Technology Asset Management System are clear, measurable and documented.

8. The Chief Information Officer provide regular reports to the Business Advisory Panel on project progress.

9. The Chief Information Officer review current practices followed by divisions and take steps to standardize management controls to ensure effective processes are in place to track, reconcile and monitor City-wide software compliance**.**

10. The City Manager:

    a. communicate to staff regarding the need to comply with the 2007 directive to summarize software license agreement terms and conditions; and

    b. instruct divisional management to provide contract summaries to the Corporate Information and Technology Division.

11. The Chief Information Officer develop a plan for the Finance and Administration Unit to effectively promote good contract management practices for software license agreements.

12.	The Chief Information Officer include software management service level expectations in formal service level agreements between operating divisions and the Information and Technology Division.

13.	The Chief Information Officer clarify the respective roles and responsibilities of divisional and corporate staff responsible for managing compliance with software agreement provisions.

14.	The Chief Information Officer implement:

   a.	a formal City-wide process for granting system administrative rights and privileges; and

   b.	formalize a system for reviewing system administrative access rights and privileges on a periodic basis.

Financial Impact

Implementing the recommendations contained in this report will strengthen controls, improve compliance with software licensing agreements and result in greater efficiencies. The extent of any resources required or potential cost savings resulting from implementing the recommendations in this report is not determinable at this time.

ISSUE BACKGROUND

This report provides the results of the Auditor General's review of City information technology software management practices. The review was conducted as part of the Auditor General's 2010 Annual Work Plan.

The City invests significant funds in software purchases and related licensing and maintenance costs. Challenges facing the City in managing software include:

- Excessive software license costs
- Lack of sufficient licenses to meet operational needs
- Non-compliance with software agreements resulting in financial penalties
- Reputational damage

Adhering to generally accepted software asset management practices helps reduce these risks.

COMMENTS

The Auditor General's report entitled "Governance and Management of City Computer Software Needs Improvement" is attached as Appendix 1. Management's response to the report is attached as Appendix 2.

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SIGNATURE

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Jeff Griffiths, Auditor General

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ATTACHMENTS

Appendix 1:   Governance and Management of City Computer Software Needs
                Improvement

Appendix 2:   Management's Response to the Auditor General's Review of Governance
                and Management of City Computer Software Needs Improvement