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The Corporation of the City of London IT Security Assessment : Agencies, Boards, Commissions and Corporations

Audit Performed: July 2019 - August 2019

Report Issued: November 2019

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Executive summary

Introduction

As part of the 2019 Internal Audit Plan, Information Technology Services leadership requested that an Information Technology Security Assessment be conducted for the City of London's Agencies, Boards, Commissions and Corporations, as well as certain Divisions that manage interconnected IT systems. This review considered the use of technology at the City of London related agencies, boards, commissions and corporations that provide specific and/or specialized services to the London community. The agencies, boards, commissions, and corporations included in this review are as follows:

- London Convention Centre Corporation;
- Corporate Security Division;
- Roadways, Lighting, and Traffic Control Division;
- Housing Development Corporation;
- London Economic Development Corporation;
- London Tourism;
- Museum London;
- Regional Water Supply;
- Centennial Hall;
- Eldon House Corporation;
- London Arts Council;
- · London Heritage Council;
- London Hydro Inc.;
- London Transit Commission;
- South London Neighbourhood Resource Centre;
- W12A Landfill Site.

The purpose and objective of this review was to assess the information technology processes and controls surrounding the agencies, boards, commissions and corporations in order to determine whether the processes and controls have been designed and implemented appropriately, and are operating effectively; and are in compliance with City of London policy and procedures.

Scope

Based on the objectives of our review, our scope and procedures focused on the following areas:

- Reviewed and assessed the compliance to the City of London's Use of Technology Policy;
- o Reviewed and assessed the general computer controls currently implemented; and
- Reviewed and assessed the training and education provided to staff with respect to IT Security procedures.

The detailed internal audit scope can be found in **Appendix 1** of this report.

Key strengths



Administrative Practice and Procedures: The City's policies and procedural documents are available on City of London's portal – CityHub, and readily accessible to staff and personnel of the Agencies, Boards, Commissions and Corporations. Additionally, relevant polices like Use of Technology policy provides guidance on the acceptable use of corporate technology which includes but not limited to software, network, hardware, etc. provided by or accessed through the City of London services.



ITS Service Portal: The Information Technology Services [ITS] service portal is a central hub managed by the City of London ITS that is readily available to most Agencies, Boards, Commissions and Corporations of the City of London to initiate and track different categories of request including user maintenance (access request / modification / removal) on City of London services; software and hardware implementation etc.

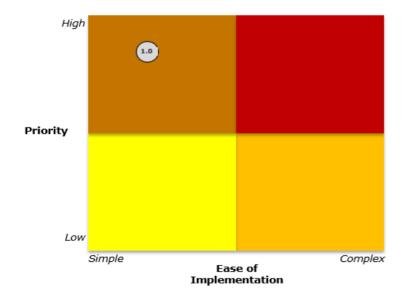
Key observations

Deloitte's review of the IT Security practices identified one observation in the following area.

Priority	High	Medium	Low	Leading Practice
Observations	0	1	0	0

Observation item	Observation description	Priority	Responsible Party	Timing
ITSA 1.0	Little or no awareness of the Use of Technology Policy (UoT) and its requirements at some of the Agencies, Boards, Corporation and Commissions of the City of London.	Medium	ITS coordinating ABC implementation	09 -2020

Priority heat map



Conclusion

Based on our assessment of the City's IT Security procedures and practices, we noted one medium priority issue with the potential to impair the effectiveness of current processes. The issue noted in the report should be addressed in a timely manner to enhance current controls and mitigate relevant risks.

Management is in agreement with the finding and have developed a detailed action plan noted in the 'Detailed observations and recommendations' section.

The following scale depicts our overall process conclusion as it relates to the scope of areas audited as outlined above:



escription	Definition
Α	No or insignificant process control or efficiency weaknesses identified
В	Minor process control or efficiency weaknesses identified
С	Moderate process control or efficiency weaknesses identified
D	Significant control process or efficiency weaknesses identified Impairing the effectiveness of the process

Detailed observations and recommendations

Observation ITSA 1.0 - Use of Technology Policy (UoT)

Observation

Implication

Recommendation

Management comments and action plan

Responsible party and timing

ITSA 1.0 Use of Technology Policy

City of London has documented a Use of Technology (UoT) policy to address the acceptable use, restrictions on use, and usage procedures for users of Corporate Technology of City of London. The policy is accessible on the CityHub portal to staff, agencies, boards, commissions and corporations. However, we noted that some of the staff of agencies, boards, commissions and corporations have little or no awareness of this policy and its requirements e.g. on access security, operations.

ITSA 1.0 Use of Technology Policy

Risk of misuse of the Corporate Technology of City of London is increased, when users do not know or have clarity on the security and operation requirements of the technology services. This misuse may be targeted by malicious individuals to create reputational damage to City of London

ITSA 1.0 Use of Technology Policy

Management should ensure more involvement in the IT Governance process of agencies, boards, commissions and corporations (ABCs) to ensure that the requirements of the Use of Technology policy are communicated and clarified to ABC management and staff in order to assess compliance.

ITSA 1.0

ITS to coordinate a communication around UoT and related policies for ABCs by June 2020, with communication and follow-ups occurring by Sept 2020 with the support of the City Senior Leadership Team (SLT) and ABC leadership.

ITSA 1.0

Mat Daley, Director of ITS (Communication by June 2020)

ABC Leadership (Implementation by Sept 2020)

Appendix 1: Internal Audit detailed scope

Specifically, the internal audit addressed the following areas:

Reviewed and assessed the compliance to the City of London's Use of Technology Policy:

- Gained an understanding of the agencies, boards, commissions and corporations' familiarity with the Use of Technology policy, and assess its implementation at the agency, board, commission or corporation, including in the onboard and off-board of individuals;
- Reviewed and assessed the compliance of procedures outlined in the Use of Technology Policy, specifically mobile equipment, software licenses and copyrights, social media, passwords, screensavers, storage of files on local drives, storage of personal files, internet, and emails and other messaging systems; and
- Reviewed and assessed monitoring activities established to determine whether policies and procedures are achieving desired outcomes of reducing risk in Information Technology.

Review and assess the general computer controls currently implemented:

- Reviewed and assessed the process to grant access to new users, to ensure that only the authorized individuals have the access required to complete their day-to-day activities;
- Reviewed and assessed the process to remove access from terminated users, to ensure that only the authorized individuals have the access required to complete their day-to-day activities;
- Reviewed and assessed the physical security of telecommunications closets to ensure access is protected from unauthorized users;
- Reviewed to ensure access security and operations policies are outlined; and
- Reviewed and assess the processes in place to procure and/or append new technologies to the network.

Reviewed and assessed the training and education provided to staff with respect to IT security procedures:

- Reviewed and assessed the training activities to familiarize the staff at the agency, board commission or corporation with the policies and procedures required by the City's ITS department; and
- Reviewed and assessed the method to communicate changes related to Use of Technology Policy.

Appendix 2: Internal Audit rating scale

Individual observation prioritization

Internal Audit has prioritized each observation and recommendation within this report using a four point rating scale. The four point rating scale is as follows:

Description	Definition	
High	Observation is high priority and should be given immediate attention due to the existence of either significant internal control risk or a potential significant operational improvement opportunity.	
Medium	Observation is a moderate priority risk or operational improvement opportunity and should be addressed in the near term.	
Low	Observation does not present a significant or medium control risk but should be addressed to either improve internal controls or process efficiency.	
Leading Practice	Consideration should be given to implementing recommendations in order to improve the maturity of the process and align with leading practices.	

Appendix 3: Stakeholder involvement

In conducting this review, the following management and staff were interviewed to gain an understanding of the City's consultant selection/engagement and construction procurement processes and practices.

Stakeholder	Position	Division	
Mat Daley	Director, Information Technology Services	Central ITS	
James McCloskey Manager, Network & Information Security		Central ITS	
Stefan Loker	Director of Corporate Services	London Convention Centre Corporation	
Mike Bessegato	Manager, Corporate Security	Corporate Security Division	
Shane Maguire	Division Manager	Roadways, Lighting, and Traffic Contro Division	
Stephen Giustizia CEO		Housing Development Corporation	
Kapil Lakhotia President		London Economic Development Corporation	
Melissa Deluca Director of Communication, Research 8 Membership		London Tourism	
Brian Meehan Executive Director and Chief Curator		Museum London	
Andrew J. Henry Director, Regional Water Supply		Regional Water Supply	
Greg Jones Office Manager		Centennial Hall	
Tara Wittmann Curator Director		Eldon House Corporation	
Robin Armistead Manager, Culture Office		London Arts Council	
Andrea McNaughton Executive Director		London Heritage Council	
Jelena Kosarac	Director, IT Infrastructure	London Hydro Inc.	
Patrick Cormier	Manager of Information Services	London Transit Commission	
Jim Yanch Technical Services Specialist		South London Neighborhood Resourc Centre	
John Whitworth	Manager, Solid Waste Facilities	W12A Landfill Site	

Appendix 4: Audit procedures performed

As part of the IT Security Assessment the following procedures were performed:

Phase 1: Planning

- Conducted a planning meeting with the Director, Information Technology Services and Manager, Network and Information Security;
- Developed and validated project methodology, milestone and reporting methods;
- Reviewed background documentation for the Agencies, Boards, Commissions and Corporations practices, policies and procedures;
- Created Interview Schedule and Request for Information document;
- Updated and issued a finalized Project Charter and request for information.
- Developed the testing template with relevant test procedures required for assessment of the relevant Project Charter Objectives.

Phase 2: Execution

- Conducted interviews with relevant stakeholders to understand the activities, processes and practices, and the IT control environment of the Agencies, Boards, Commissions and Corporations;
- Performed an onsite walkthrough of selected Agencies, Boards, Commission and Corporations;
- Requested and obtained evidences for review from the agency, boards, commissions and corporations such as the Use of Technology policy (UoT), Procurement policy, screenshots of city hub and ITS portal, sample evidence of user provisioning and deprovisioning request etc.
- Tested relevant controls for agency, boards, commissions and corporations to assess design and implementation effectiveness as well as operating effectiveness;
- Documented results and identified areas of strengths and draft areas of improvement in the IT control environment;

Phase 3: Reporting

- Drafted preliminary observations and verified observations with management;
- Received management comments and compiled final report.
- Conducted a closing meeting with key management stakeholders to validate and communicate our findings;
- Issued this internal audit report with our detailed observations.

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