

Accountability Policies, Procedures and Enforcement Guidelines to Support the Future Purchase of Proprietary IT Software and Systems

Date: April 12, 2021

To: General Government and Licensing Committee

From: Chief Technology Officer and Chief Procurement Officer

Wards: All

SUMMARY

This report is pursuant to a City Council decision under GL16.5 - Renewal of Proprietary Technology Maintenance Contracts Supporting the City Services from 2021-2025 at its meeting on October 27, 28 and 30, 2020. At this meeting, City Council requested the Chief Technology Officer and the Chief Procurement Officer to report to the April 2021 General Government and Licensing Committee meeting on accountability policies, procedures, and enforcement that ensures proper business plans are provided for the future purchase of proprietary IT software and systems.

A proprietary Information and Technology (IT) system or software is a system, application or tool that is owned by a private individual or corporation that holds exclusive legal rights to it as an intellectual property under a trademark or patent. Businesses and governments leverage such systems to improve their products and services and deliver a good customer experience.

In 2020, Technology Services Division developed a governance framework and principles to manage city-wide technology procurements. This framework is supported by policies, procedures, and enforcement mechanisms to ensure future city-wide IT purchases fall within the oversight of the Chief Technology Officer and align with approved Division business plans. This will enable the Chief Technology Officer to provide an expanded City-wide scope and provide, oversight, alignment and direction on standards, practices and policies to all City divisions with respect to all technology assets, goods, and services as mandated by City Council in October 2019.

Governance Framework:

1. Launch of an Intake Procedure and appointment of an Enterprise Architecture Review Board to control future city-wide purchases of all IT software and systems: Technology Services has launched an Intake procedure to manage the incoming technology work requests, including procurement, from all clients. This procedure will be utilized to evaluate all business requests and determine if they align to business plans and if the functional requirements can be met by IT platforms¹ that already exist, are planned or are being implemented. This will manage the reduction of technology sprawl, the over lapping abundance of various technology applications, by limiting duplication of efforts and application systems.

Technology Services has also internally launched an Enterprise Architecture Review Board (EARB) which is a governing body to evaluate the architecture for new and existing IT platforms which also includes any integration to City Corporate technology environment from a strategic and operational perspective.

2. Partner with other City Divisions to ensure that their division IT business plans align with the City's overall technology strategy, plans and goals.

Procedures:

1. Technology Authorization Procurement Procedure (ITAPP): ITAPP enables the procurement of Technology software and systems. Through this procedure, city-wide technology procurements are reviewed and approved by the Chief Technology Officer and strategically procured with the approval of the Chief Procurement Officer.

2. Technology Rationalization Procedure: Identification of existing proprietary IT platforms in the City and determination of the platforms that should be maintained, replaced, retired, or consolidated. This procedure will support standardizing platforms within a specific set of business capabilities (such as service delivery management, financial management, risk management, etc.) and associated business processes.

Principles:

The governance framework and supporting procedures will be guided by the principle that future investments in enterprise IT platforms must ensure stability, scalability, solutioning and sustainability ('4S').

The COVID-19 pandemic provided an opportunity to Technology Services to provide leadership within a city-wide role and demonstrate its corporate value by enabling a remote workforce and accelerating the delivery of digital services. Technology Services Division will continue to broaden and expand its existing processes for city-wide application in accordance with the Council mandate to implement a centralized model for technology.

¹ Platform is any hardware or software used to host an application or service, or any technology on which other technologies are built.

RECOMMENDATIONS

The Chief Technology Officer and the Chief Procurement Officer recommend that:

1. The General Government and Licensing Committee receive this report for information.

FINANCIAL IMPACT

The establishment of these accountability policies, procedures and enforcement guidelines does not result in a financial impact. However, decisions to rationalize or migrate applications to enterprise platforms in accordance with these guidelines may result in financial implications which will be presented in future year budget requests and/or future staff reports for consideration and approval.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

On October 27, 28, and 30, 2020, City Council granted the authority under GL16.5 for Technology Services Division and the respective City Divisions to renegotiate and renew Proprietary Technology Maintenance Contracts supporting the City Services (includes software, hardware, and subscriptions) and enter into agreements with the respective vendors for a period of five (5) years from January 1, 2021 to December 31, 2025. The following is the link to City Council Decision Document:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.GL16.5>

At this meeting Council also requested the Chief Technology Officer and the Chief Procurement Officer to report to the April 2021 General Government and Licensing Committee meeting on accountability policies, procedures, and enforcement that ensures proper business plans are provided for the future purchase of proprietary IT software and systems.

On October 29, 2019, City Council directed the Chief Technology Officer to take on an expanded City-wide scope and mandate providing support, oversight and direction on standards, practices and policies to all City divisions and the listed agencies and corporations, with immediate effect with respect to all technology assets, goods, and services. The following is the link to City Council Decision Document:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2019.AU4.1>

COMMENTS

City Council on October 27, 28 and 30, 2020 authorized the Chief Technology Officer, subject to budget approval, to renegotiate and renew 187 contracts for maintenance of proprietary technology (which includes software, hardware, and subscriptions), that support City services and a well-run City for a period of up to five (5) years from January 1, 2021 to December 31, 2025. City Council also authorized the appropriate City Division Heads and the Chief Technology Officer to enter into and execute new contracts or to renew and extend existing contracts for this period of up to five (5) years in accordance with City policies and procedures, and in a form satisfactory to the City Solicitor.

The proprietary technologies supported by these contracts were procured over the years through competitive processes, non-competitive process or by utilizing the Province of Ontario's Agreements. 71 of the 187 contracts (38%) for the hardware, software or cloud solutions were initially awarded through competitive procurements or utilising the Province of Ontario's contracts available to the 'Broader Public Sector Organizations'. 116 of the 187 contracts (62%) were awarded as non-competitive procurements.

Of the 187 proprietary technology contracts, 72 (38%) belong to Infrastructure & Development Services, 42 (23%) belong to Corporate Services, 41 (22%) belong to Community & Social Services, 15 (8%) belong to Finance & Treasury Services and 17 (9%) belong to other divisions including Accountability Offices. This distribution among various service areas demonstrates the wide-ranging services and critical management activities that the City performs. It also depicts the support provided by proprietary technologies to enable enterprise wide and division specific business capabilities and processes to deliver a good citizen and customer experience.

To support a centralized approach to technology investments, in partnership with Purchasing & Materials Management, Technology Services has developed the following governance framework, policies, procedures, and enforcement mechanisms.

Governance Framework:

1. Launch of the internal Technology Intake Process and appointment of an Enterprise Architecture Review Board (EARB) to control future city-wide purchases of all IT software and systems:

Over the past few months, the Office of the Chief Technology Officer has been overseeing the streamlining of processes within the Technology Services Division (TSD). One of the key processes where gaps were seen was the intake of TSD work requests. Previously client requests were not tracked in a centralized manner, leading to inconsistent practices and increased effort to manage information. A formal internal Technology Intake Process has now been launched to initiate an assessment of all work requests submitted to TSD.

The internal Technology Intake Process will ensure that divisional requests for IT platforms pass through a single funnel and are triaged and assigned by the Technology Intake Team to the designated technology subject matter expert.

New requests for IT platforms will be evaluated by the EARB, which is a governing body guided by the '4S' principles (defined below) and directed to leverage an enterprise platform, where feasible. The EARB will be comprised of technical subject matter experts who will approve the architecture for new and existing technology solutions from a long-term strategic perspective. It helps ensure alignment of projects to overall business plans and goals.

Future purchases of proprietary IT platforms (competitive or non-competitive) will be in accordance with decisions made by EARB. These decisions will enable TSD and PMMD strategically procure solutions that align with the City's Technology Strategy and overall business goals with the approval of both the Chief Technology Officer and the Chief Procurement Officer. This procedure will be actioned and enforced by ensuring that the procurement intake documents, and contract awards reference the divisional business plans and decision of the EARB. Evaluating future purchases of proprietary IT platforms through the Technology Intake process and EARB will help control and limit the expanding technology footprint in the City.

2. Strategically partner with City Divisions and ensure divisional technology business plans align with the City's Technology Strategy and Enterprise Architecture.

This procedure will be actioned through the established client relationship management practice within Technology Services Division.

Procedures:

1. Technology Authorization Procurement Procedure (ITAPP):

This procedure will ensure that future city-wide technology procurements have been reviewed through the governance framework, reviewed and approved by the Chief Technology Officer in accordance with business plans and goals. It will also ensure that technology solutions are strategically procured in accordance with the approval of the Chief Procurement Officer.

2. Rationalize existing proprietary software in the City by standardizing them within a standard set of business capabilities and associated business processes.

Technology Rationalization involves identifying and building an inventory of existing software applications and determining which applications should be kept, replaced, retired or consolidated. This initiative will facilitate the planning of rationalizing and/or decommissioning applications with similar capabilities. It will also provide opportunities for leveraging/scaling existing enterprise proprietary IT software to reduce the City's technology footprint and ensure such opportunities are included in divisional business

plans. The division has partnered with city divisions and identified a majority of the existing applications and work is ongoing to achieve the objectives of this initiative.

Principles:

Future investments in both proprietary and standard IT platforms must ensure stability, scalability, solutioning and sustainability; these are known collectively as the '4S' principles.

The 4S principles can be further defined as follows:

- Stability: Technology is well architected and implemented to ensure it is highly available and operational.
- Scalability: Technology can meet the City's evolving demand by increasing or decreasing capacity as required.
- Solutioning: Technology can be integrated to provide uniform solutions.
- Sustainable: Technology that is scalable, stable and secure that operates efficiently and effectively

Conclusion:

The above governance framework, accountability policies, procedures, and enforcement guidelines for the future purchase of all IT software and systems are supported by business plans and will help limit the technology sprawl in the City.

They also align with the City Council decision in October 2019 mandating the Chief Technology Officer to provide support, oversight and direction on standards, practices and policies to all City divisions with respect to all technology assets, goods, and services and the recommendation in this report more specifically with respect to proprietary technology.

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SIGNATURE

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ATTACHMENTS

Appendix 1: Technology Intake Procedure and the Enterprise Architecture Review Procedure.