



STAFF REPORT ACTION REQUIRED

16.

Intrusion Prevention Solution – Award of Contract

Date:	October 29, 2018
To:	Toronto Public Library Board
From:	City Librarian

SUMMARY

The purpose of this report is to seek Toronto Public Library (TPL) Board approval for an award of contract to replace the existing Intrusion Prevention Solution (IPS).

The IPS continually examines the contents of network traffic searching for threats and vulnerabilities 24 hours-a-day, 7 days-a-week, 365 days-a-year. The current IPS monitors a full spectrum of cyber threats and, based on a twelve-month average, it prevents approximately 6.5 million security incidents from developing into potential full-blown security breaches.

RECOMMENDATIONS

The City Librarian recommends that the Toronto Public Library Board:

1. approves the award of contract to Information Systems Architects Inc. for the supply, installation, maintenance of an Intrusion Prevention Solution for a three-year term with an option for two one-year extensions, at the Library's sole discretion, with a total value of approximately \$1,412,560, excluding Harmonized Sales Tax (HST), comprised of:
 - 1.1 capital implementation costs estimated at \$398,078; and
 - 1.2 total operating costs over 2019 to 2023 estimated at \$1,014,482.

FINANCIAL IMPACT

Capital implementation costs for the IPS implementation is estimated at \$398,078, to be funded by the approved 2018 Technology Asset Management Program (TAMP) capital budget.

After considering the current annual operating cost of \$149,350 for the existing IPS maintenance and co-managed services, the net operating budget pressure will be \$26,937 for 2019, and this is included in the operating budget submission. The cumulative total budget pressure impact will be \$267,732 for 2019 to 2023 as shown in the table below. These annual budget pressures will be part of future year budget submissions.

	Total 5 Year Cost (Award of Tender)	Total Capital Costs (includes 1st year of maintenance) 2018	2019 Operating Costs	2020 Operating Costs	2021 Operating Costs	2022 Operating Costs	2023 Operating Costs	Total 2019-2023 Operating Costs	
Award of Tender	ISA IPS	\$1,412,560	\$398,078	\$176,287	\$204,950	\$207,241	\$211,022	\$214,982	\$1,014,482
	Current IPS Operating Costs			\$149,350	\$149,350	\$149,350	\$149,350	\$149,350	\$746,750
	Net Increase in Operating Costs			26,937	\$55,600	\$57,891	\$61,672	\$65,632	\$267,732

The Director, Finance and Treasurer has reviewed this financial impact statement and agrees with it.

BACKGROUND

An IPS is a network security and threat prevention technology that examines network traffic flows to detect and prevent malicious attempts to target and attack computer applications. Attackers are typically attempting to interrupt and gain control of a computer application or machine. The Library's current IPS examines the contents of network traffic at the speed of 10 Gigabytes per second (GBps) as it continually searches for threats and vulnerabilities 24 hours-a-day, 7 days-a-week, 365 days-a-year. It monitors a full spectrum of cyber threats and, based on a twelve-month average, it prevents approximately 6.5 million security incidents from developing into potential full-blown security breaches. An effective IPS safeguards the Library's computer network and applications from a range of threats such as denial of service attacks that have been commonly experienced by other library systems.

The Library ran a competitive request for proposal (RFP) in late 2017 for IPS replacement that was cancelled for business reasons. The existing contract was extended under the City

Librarian's delegated authority. The Library's IPS is approaching end of life and needs to be replaced.

COMMENTS

Benefits of New IPS

Information Systems Architects' proposed IPS is expected to deliver several benefits to the Library, including:

- Detecting and stopping attacks that other security controls cannot;
- Reducing the amount of network traffic reaching other security controls, which both lowers the workload for those controls and protects those controls from direct attacks;
- Resource Management – the frequency of problem reoccurrence continues to be reduced until it is eliminated; and
- Performance Management – the time it takes to detect and respond to threats continual improves.

Procurement and Evaluation Process

In 2018, as part of an ongoing initiative to improve procurement processes, the Library formally engaged BDO Canada to provide fairness commissioning services for a number of competitive RFP processes planned for 2018 and 2019. During the procurement process for the IPS staff from the purchasing department as well as the fairness monitor were present during all stages of the RFP preparation and subsequent evaluation to observe and facilitate the process and ensure that it was fair and transparent to all bidders.

The Library publically posted RFP TPL 017-2018 to the Biddingo and MERX bid posting websites in early August 2018. Thirteen proponents attended the mandatory information session, and the Library subsequently received four compliant proposals by the submission deadline in late August.

An evaluation team comprised of IT staff reviewed and scored the proposals based on the information provided for hardware/software, proponent capabilities and service. Following the initial technical and pricing evaluation, the three highest scoring proponents were shortlisted and invited to make a formal presentation to the team. The team reviewed and scored the presentations. Following the final evaluation of the presentations, Information Systems Architects (ISA) was selected as the preferred proponent having achieved the highest aggregate overall score. ISA is a leading provider of IPS with clients such as RBC and Canadian Tire. It provides security software that is ranked in the first tier according to Gartner.

CONTACT

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SIGNATURE

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