



## Provision of Non-Competitive Proprietary Software Licenses from SAP Canada Inc. for the SAP Enterprise HANA Solution

**Date:** November 6, 2019

**To:** General Government and Licensing Committee

**From:** Chief Technology Officer and Chief Purchasing Officer

**Wards:** All

### SUMMARY

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The purpose of this report is to request City Council authority to enter into a non-competitive contract with SAP Canada Inc. to procure SAP proprietary software licenses for the SAP Enterprise HANA solution of the City's Database Migration Strategy in the amount of \$957,419 net of Harmonized Sales Tax (\$974,270 net of Harmonized Sales Tax recoveries).

The City's existing SAP Platform currently uses an Oracle database, which limits the City's capabilities to provide analytics via SAP technologies. Procuring HANA Enterprise software licenses will replace the existing Oracle database and will allow for full capabilities of the SAP Enterprise HANA. SAP Enterprise HANA provides full support for advanced analytics that can be leveraged across the enterprise.

City Council approval is required in accordance with the City of Toronto Municipal Code Chapter 195, Purchasing, where the current non-competitive procurement request exceeds the Chief Purchasing Officer's authority of the cumulative five-year commitment limit under Article 7, Section 195-7.3(D) of the Purchasing By-law or exceeds the threshold of \$500,000 net of Harmonized Sales Tax allowed under staff authority, as per the City of Toronto Municipal Code Chapter 71, Financial Control, Section 71-11A.

### RECOMMENDATIONS

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

1. City Council authorize the Chief Technology Officer to negotiate and enter into a non-competitive agreement with SAP Canada Inc. to procure SAP proprietary software licenses for the SAP Enterprise HANA solution in the amount of \$957,419 net of Harmonized Sales Tax (\$974,270 net of Harmonized Sales Tax recoveries),

on terms and conditions satisfactory to the Chief Technology Officer and in a form satisfactory to the City Solicitor.

## **FINANCIAL IMPACT**

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The total cost to migrate to SAP Enterprise HANA software licenses is \$957,419, net of Harmonized Sales Tax (\$974,270 net of Harmonized Sales Tax recoveries).

However, if the City were to continue using the Oracle database, this would result in estimated costs of \$2,457,000 over the next five years. In addition, this option does not provide the City with the benefit of a more mature database/platform to support future transformation work.

This presents a cost avoidance to the City in that the SAP Enterprise HANA software licenses would be less costly to the City and result in additional operational benefits.

The total cost to acquire the SAP Enterprise HANA software license of \$957,419 net of Harmonized Sales Tax (\$974,270 net of Harmonized Sales Tax recoveries) is available in the 2019 Approved Capital Budget for Information and Technology in projects confirmed as cancelled or complete.

Funding will be re-allocated to provide funds for the SAP non-competitive procurement cost net of Harmonized Sales Tax recoveries as detailed below:

**Table 1 – Funding Re-allocation for SAP Non-Competitive Procurement Cost**

Year	Cost Centre/WBS Element	Cost Element	Net of Harmonized Sales Tax Recoveries
2019	CIT045-02-10	3420 (Software Licenses)	\$974,270

This contract will result in annual software operating costs of \$210,540 net of Harmonized Sales Tax recoveries beginning in 2020 for SAP software licenses and operational and maintenance support. When taking into account the licenses that will be decommissioned as a result of the procurement of SAP Enterprise HANA, the net increase to the SAP license operating cost is \$25,820 net of Harmonized Sales Tax recoveries.

Funding in the amount of \$25,820 net of Harmonized Sales Tax recoveries have been requested in the Information and Technology 2020 Operating Budget submission. Future years' operating funding will be reviewed each year and considered as part of the annual Operating Budget process in the Information and Technology Operating Budget.

The City has negotiated a conversion credit for existing SAP HANA Runtime for BW licenses. This credit is used to upgrade to SAP Enterprise HANA licensing edition (refer to Table 2).

**Table 2 – Conversion Credit for existing SAP HANA Runtime for BW licenses**

Price List Item	Volume	Net Total Price
SAP HANA, Enterprise Edition (+ 2 existing units)	3.7TB (58 Units)	\$2,324,035
Conversion of Existing SAP HANA BW Runtime		(\$1,366,616)
<b>Net Enterprise HANA Cost</b>	<b>3.84TB (60 Units)</b>	<b>\$957,419</b>

**Table 3 – SAP License Operating Costs**

SAP Enterprise HANA Software Operating Costs (Net of Harmonized Sales Tax Recoveries)		
Operational Term	2020	2021
SAP Software Operational/ Maintenance Cost	\$210,540	\$210,540

The Information and Technology Division performs ongoing reviews of their SAP license utilization. As a result, licenses that are no longer utilized can be terminated. The procurement of SAP Enterprise HANA results in the decommissioning of these licenses.

Table 4 illustrates the net increase to the SAP license operating cost.

**Table 4 – Net Increase to SAP License Operating Cost**

Software	Operating Cost
SAP HANA Enterprise Edition	\$210,540
Terminated SAP Software	(\$184,719)
<b>Net Increase to SAP License Operating Cost</b>	<b>\$25,820</b>

The annual operating costs for SAP software licenses (refer to Table 3, SAP HANA Software Operating Costs from Year 2, 2020 onwards) has and will be covered under annual maintenance costs for SAP proprietary technology (City Council adopted Item GM8.8, with amendments, Proprietary Information Technology Maintenance and Support Contracts 2016-2020, in December 2015). As is standard practice for all Information and Technology projects, these annual maintenance costs are requested as additions to the Operating Budget in future years. This is the standard practice for all projects.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.GM8.8>

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

## DECISION HISTORY

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The City of Toronto has a long history with implementing SAP. City Council approved the original SAP Implementation back in 1998.

City Council, at its meeting of May 18, 19 and 20, 2004 adopted Clause 12 b) of the Administration Committee entitled "Moving Forward with SAP", and in doing so, among other things, endorsed the strategic direction, governance structure and continuous service improvement framework and process for the future of the SAP information system as described in the "Moving Forward with SAP at the City of Toronto" report: <http://www.toronto.ca/legdocs/2004/agendas/council/cc040518/admcl012b.pdf>

In an April 4, 2003 report to Audit Committee, the Auditor General delivered the results of an audit on the "SAP Financial and Human Resources/Payroll Information Systems – Post Implementation Review", which included among other things, a recommendation for the Chief Administrative Officer to develop an SAP First Policy. [http://www.toronto.ca/audit/2003/sap\\_final\\_apr4\\_2003.pdf](http://www.toronto.ca/audit/2003/sap_final_apr4_2003.pdf)

City Council approved the original SAP Implementation back in 1998:  
<http://www.toronto.ca/legdocs/1998/agendas/council/cc/cc980729/cs10rpt/cl001.htm>  
<http://www.toronto.ca/legdocs/minutes/council/cc980729.htm>

## COMMENTS

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The City is currently licensed for SAP HANA Runtime for Business Warehouse (BW). This licensing does not allow for the use of current HANA database for the entire SAP platform. With the existing licensing model, the HANA platform is only for use on BW.

The existing SAP Platform is currently using the Oracle database, which limits the SAP capabilities to provide analytics via SAP technologies. Analytics are also limited to SAP BW.

Therefore, the procurement of HANA Enterprise software licenses is required to allow for full capabilities of the HANA. SAP Enterprise HANA provides full support for advanced analytics that can be leveraged across the enterprise.

Advantages of SAP HANA Enterprise Edition compared to the current HANA Runtime Edition include:

- Operational cost savings from SAP migration off of Oracle platform<sup>1</sup>, the current cost of operating SAP on an Oracle Database is expensive and inefficient
- HANA Enterprise supports big data, agile data virtualization and operational reporting. This will allow the City to provide Divisions the capability of using the data directly. This will also serve the strategic goal of making data available to divisions to provide the opportunity to make informed decisions.
- HANA Enterprise edition supports building applications (SAP or non-SAP)

The City will benefit from a single copy of data. The City can then develop unique applications, fundamentally different to anything possible on another platform. The current Data structure will be less complex and will not limit the City to structure the data on its use.

To summarize, SAP HANA Enterprise edition will enable the City to:

- Migrate all back-end SAP solution databases from Oracle to SAP
- Free up Oracle database licenses for re-deployment or decommissioning
- Continue implementing SAP modernizations and innovations enabled by HANA

### **Strategic Implications**

The City has established a strategic direction for its Enterprise Resource Planning system to maximize its current investment in SAP. The SAP Roadmap strategy focuses on transitioning to system process and technology best practices. These include human resources, payroll, procurement, facilities, real estate, financial planning, accounting and treasury functions. The City's systems must be rationalized to improve, streamline and consolidate its existing SAP environment. Core capabilities will be enhanced and technology adopted to lay the foundation that meets the City's strategic goals. SAP Enterprise HANA is the foundational support for these requirements. Software licenses can only be purchased directly from SAP Canada Inc. as no other vendor resells this software on their behalf.

In addition, the City is in preliminary planning stages for a financial systems transformation project, with the objectives of:

- Streamlining processes and systems,
- Developing a single authoritative source of financial information, and
- Providing value added financial analytics and timely information to support decision making.

The migration to the HANA Database sets the City on the path towards a modernized financial system, by providing an integrated source of information that brings together financial and non-financial data to help inform decisions, creating operational transparency, and enabling the City to monitor controls in a mature fashion.

The Fair Wage Office has reported that SAP Canada Inc. has reviewed and understood the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully.

## **CONTACT**

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## **SIGNATURE**

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Lawrence Eta  
Chief Technology Officer

Michael Pacholok  
Chief Purchasing Officer

## **ATTACHMENTS**

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Appendix A - "SAP Oracle Solaris" vs. "HANA on IBM Power Systems" - Cost Model on TIS Server Infrastructure and Oracle Database Software