



## STAFF REPORT ACTION REQUIRED

### Procurement Authorization VoIP Upgrade Program

<b>Date:</b>	July 12, 2017
<b>To:</b>	TTC Board
<b>From:</b>	Chief Executive Officer

### Summary

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The purpose of this report is to obtain procurement authorization for the award of a single source contract for the provision of voice communication services consisting of legacy voice services (Centrex 1.0) and Voice over Internet Protocol (VoIP) telephony (Centrex 2.0) services, in the upset limit of \$19,500,000 for a 5 year term with an option for two extensions of 1 year, effective October 1, 2017.

The adoption of VoIP telephony services is in line with TTC's 5 Year Corporate Plan to modernize the TTC and will serve multiple purposes. First, it will alleviate the current shortage of phone numbers that are required as a result of increasing demand from TYSSE, unknown requirements of projects (McNicol Bus Garage, Scarborough Subway Extension, etc.), general growth and contingency. Second, it will provide upward of 40% cost relief per VoIP migrated user, over the current legacy voice services. Lastly, leveraging the modernization of telephony services enables the TTC to be at par with the latest trending technology.

### Recommendations

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It is recommended the Board:

1. Authorize the award of a single source contract for voice communications services, for Centrex 1.0 (Legacy) and Centrex 2.0 (VoIP) to Bell Canada in the total amount of \$19.5 million, inclusive of applicable taxes.

### Financial Summary

Sufficient funds were included in the 2017 TTC Operating Budget as approved by the TTC Board on November 21, 2016 and City Council on February 15, 2017. In 2017, for this budgeted line item, TTC expects to spend approximately \$ 2.7 million.

The migration to VoIP will be a phased approach with most of the upgrades occurring within the first 2 to 3 years of implementation. Of the approximate 7000 phone lines currently in use across TTC, a 50% conversion to VoIP would represent an estimated cost savings to the TTC of \$50,439 per month. Over the 7 year contract period, a total savings of approximately \$5.7 million is achievable. A comparison of the existing contract (Legacy) to the proposed single sourced contract (VoIP) is shown below:

### Contract Cost Comparison

Telephony Services – 7 Year Outlook	VoIP (50% implemented)	Legacy
Monthly Cost	\$170,778	\$221,217
7 Year Cost	\$14,345,352 (\$2,049,336 annually)	\$18,582,296 (\$2,654,613 annually)
Growth and Contingency	\$2,869,070	\$3,716,459
Sub-Total	\$17,214,422	\$22,298,755
HST	\$2,237,874	\$2,898,838
Total	\$19,452,297	\$25,197,593
		<b>Savings \$5,745,296</b>

The Chief Financial & Administration Officer reviewed this report and agrees with the financial impact information.

### Accessibility/Equity Matters

Voice communication services will continue to meet the Accessibility for Ontarians with Disabilities Act, 2005, S.O. 2005, c. 11 requirements as it relates to voice communication (TTY, TDD, etc.).

### Decision History

In January 2009, the City of Toronto issued a competitive request for proposal (RFP) for the acquisition of an Integrated Telecommunications Infrastructure and related services (ITI) agreement. At the City's January 13, 2010 Government Management Committee meeting, the City selected Bell Canada as the successful bidder and subsequently entered into a five year ITI agreement effective October 1, 2010. The ITI agreement included an option for a five-year contract term extension, and allowed the City's Agencies to enter into separate agreements with Bell Canada on the same terms, conditions and pricing.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2010.GM27.13>

At the June 8, 2011 TTC Board Meeting, the Commission approved an award under the City of Toronto's ITI agreement with Bell Canada for voice communications services.

[https://www.ttc.ca/About\\_the\\_TTC/Commission\\_reports\\_and\\_information/Commission\\_meetings/2011/June\\_8\\_2011/Reports/PA\\_Voice\\_Data\\_Teleco.pdf](https://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2011/June_8_2011/Reports/PA_Voice_Data_Teleco.pdf)

Following the June 8, 2011 decision, TTC entered into a separate agreement with Bell Canada under the same terms and conditions as the master agreement between Bell Canada and the City.

The City recently extended its ITI agreement until September 2022, under the same terms and conditions. TTC is negotiating an extension to the current contract with Bell because it is expiring in September 2017. This extension is necessary until such time VoIP is at 50% implementation.

## **Issue Background**

In June 2014, the Auditor General's report titled "Controls over Telecommunications Expenses Need Improvement" recommended the City's Agencies review the findings and recommendations of the report and consider the relevance of the findings. The report emphasized possible Voice over Internet Protocol (VoIP) in place of the legacy system.

In 2014, the IBI Group assisted TTC with various studies with respect to the implementation of VoIP. The studies included a network readiness assessment in order to validate the TTC's network capability to support VoIP infrastructure.

In January 2015, IBI produced a report and found underutilized bandwidth across the TTC network which would support a VoIP implementation. The implementation of VoIP across TTC was included in the 2016 – 2025 Capital Budget and Plan under Program 7.1 Systems and Infrastructure Projects (City Project # CTT061) and it was approved by City Council on February 17, 2016.

## **Comments**

Currently, there are only 100 phone numbers of the 7000 allotted available for new line deployment. With TTC's current demands for additional phone lines, it is critical TTC transitions to VoIP. The migration to VoIP is important as it provides cost savings and improves functionality. Additionally, it frees-up legacy (416) 4-digit dialing phone numbers to be reused/recycled to locations where VoIP (5-digit dialing) is not practical such as wayside tunnel phones and known safety zones.

VoIP telephony reuses existing network infrastructure commonly found in TTC offices. Such infrastructure is absent in the tunnels and is seen as impractical and cost prohibitive to the TTC. Analog phones are used in the subway tunnels and are known to be reliable (zero down time), maintenance free, simple to operate, require no software updates, and

are self-powered by the Central Office (CO) independent of the TTC. In the event of power outages, these analog phones will not be affected and service will remain.

There are multiple telecommunication providers who only focus on VoIP and computer telephony. The TTC’s environment is legacy-driven with a business-need-reliance on older, tried, tested and true legacy telephone sets. This business requirement is unique to the industry and sets TTC apart from the City’s Agencies. The legacy technology holds key advantages over VoIP, particularly for the subway tunnels and emergency/known safety zones.

Due to TTC’s unique needs, TTC needs a provider that owns the switch fabric, telephony backbone. The only provider with this capability is Bell Canada. With a single vendor maintaining both environments (Legacy and VoIP) cost containment can be realized. TTC undertook discussions with Bell to negotiate reasonable costs. Upgrade to VoIP allows for approximately 40% per line reduction over the current contract.

Over the course of negotiations the following reductions were realized:

<b>Item</b>	<b>Current</b>	<b>Final Proposal</b>	<b>\$ Savings</b>
Centrex 1.0 (Legacy) (Per month / per line)	\$23.88	\$21.00	\$2.88
Centrex 2.0 (VoIP) (Per month / per line)	N/A	\$14.00	N/A
Legacy 1FL (Per month / per line)	\$26.22	\$25.00	\$1.22
MegaLink (Per month / per T1 voice line)	\$547.81	\$500.00	\$47.81
Voice Mail (Per month / per line)	N/A (\$12.50)	\$0.75	N/A

Additional business advantages are:

- ELN (Essential LiNe feature) - feature prioritizing the PSTN (Public Switching Telephone Network) service to provide the line priority in the event of an emergency that floods the network – essential to TTC
- Bell Canada provides performance thorough comprehensive SLA’s (Service Level Agreements) backed by 24/7 monitoring, including reports
- Bell Canada’s VoIP infrastructure has fail-over standbys across Canada in the event of disaster or terrorism; no other telephone carrier has this capability or thoroughness
- Internal dialing plans’ simplicity is dependent on Bell Canada owning both telephony environments

A side effect in moving to VoIP will be the assignment of new phone numbers. Critical known numbers will not be subjected to change. Examples of these numbers include Wheel Trans, hotlines, product support, and customer service. There will be impact and minor inconvenience to those who receive new numbers as follows:

- New business cards to reflect updated contact information
- Updating online databases and directories
- Newer 5-digit dialing, over the current 4-digit system
- Short term 10-digit dialing between the two environments (Legacy and VoIP)

## **Contact**

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