



Procurement Authorization – Telecommunication and Network Connectivity Services

Date: July 17, 2024
To: TTC Board
From: Chief Financial Officer

Summary

The purpose of this report is to obtain the Board's authorization to award a contract to Bell Canada for \$18,159,000, inclusive of HST, for a five-year term, commencing on September 27, 2024, with two optional, one-year extension terms, to be exercised at the TTC's sole discretion.

The TTC relies on robust telecommunication and network connectivity services to ensure seamless collaboration and efficient operations. These services, including VoIP, analog phone lines and network extensions, are vital for internal and external communications and connecting multiple sites across Toronto.

The TTC has historically used Bell Canada's analog phone lines, which are directly connected to Bell's central office through underground copper cables. These lines provide the highest level of reliability, essential for the TTC's safety-critical operations. Bell Canada remains the sole provider of these analog services.

The TTC's current contract with Bell Canada for these services was awarded in 2017 and expires on September 26, 2024. The TTC has negotiated a new agreement with Bell Canada. This renewal maintains current rates and includes a provision that will mitigate the impact of disconnection fees as the TTC reviews its needs.

This renewal ensures that the TTC's current and future telecommunication needs are met, maintaining high service reliability and operational continuity.

TTC Board approval is required as this contract award exceeds the Chief Executive Officer's delegated authority limit of \$5 million for the award of contracts for budgeted goods and services.

Recommendations

It is recommended that the TTC Board:

1. Authorize the award of a contract for Telecommunication and Network Connectivity Services to Bell Canada in the amount of \$18,159,000, inclusive of HST, on a sole source basis, for a five-year term, commencing on September 27, 2024, with two optional, one-year extensions terms at the TTC's sole discretion.
2. Delegate authority to the TTC's Chief Executive Officer to execute the first one-year term extension option valued at \$3,681,000, inclusive of HST, and the second one-year term extension valued at \$3,691,000, inclusive of HST.

Financial Summary

The total value of the Telecommunication and Network Connectivity Services contract award for the initial five-year term, commencing on September 27, 2024 to September 26, 2029, is \$18,159,000, inclusive of HST. The contract also includes two optional, one-year extension terms. The first extension, covering the period from 2029 to 2030, has a value of \$3,681,000, inclusive of HST, while the second extension, spanning the term from 2030 to 2031, has a value of \$3,691,000, inclusive of HST.

Table 1 below, summarizes the total contract value of the initial and optional extension terms.

Table 1: Contract Value of Initial and Extension Terms

Service	Initial 5-Year Term Sept 27, 2024 to Sept 26, 2029	Option Year 1 Sept 27, 2029 to Sept 26, 2030	Option Year 2 Sept 27, 2030 to Sept 26, 2031	Total
Telecommunication Services	13,234	2,691	2,699	18,624
Network Connectivity Services	2,836	567	567	3,970
Total (not including HST)	16,070	3,258	3,266	22,594
HST Non-Rebatable (1.76%)	283	57	57	398
Total (including Non-Rebatable HST)	16,353	3,315	3,324	22,991
Rebatable HST	1,806	366	367	2,540
Total Authority (including HST)	18,159	3,681	3,691	25,531

(in thousands)

The operating expenditures to be incurred over the term of the contract represent the fees for telecommunication and network connectivity services to be used by the TTC. The operating expenditures for each year of the contract are outlined in Table 2 below:

Table 2: Operating Expenditures by Year

Service	2024 Sep 27 – Dec 31	2025 Jan 1 – Dec 31	2026 Jan 1 – Dec 31	2027 Jan 1 – Dec 31	2028 Jan 1 – Dec 31	2029 Jan 1 – Dec 31	2030 Jan 1 – Dec 31	2031 Jan 1 – Sep 26	Total
Telecommunication Services	654	2,621	2,636	2,651	2,665	2,680	2,693	2,024	18,624
Network Connectivity Services	142	567	567	567	567	567	567	425	3,970
Total (not including HST)	796	3,188	3,203	3,218	3,232	3,247	3,260	2,450	22,594
HST Non-Rebatable (1.76%)	14	56	56	57	57	57	57	43	398
Total (including Non-Rebatable HST)	810	3,245	3,259	3,274	3,289	3,304	3,317	2,493	22,991
Rebatable HST	89	358	360	362	363	365	366	275	2,540
Total Authority (including HST)	900	3,603	3,619	3,636	3,652	3,669	3,684	2,768	25,531

(in thousands)

Funding

Funding in the amount of \$2,998,000 is included in the TTC's 2024 Operating Budget for expenses associated with services being procured through this contract. The TTC Board received budget approval at its meeting on December 20, 2023 and by City Council at its meeting on February 14, 2024.

The 2024 expenditures based on current contract pricing from January 1, 2024 to September 26, 2024 are anticipated to be \$2,322,000, including non-rebatable HST, and \$810,000 for the new contract to be awarded from September 27, 2024 to December 31, 2024. This has resulted in a budget shortfall of \$134,000, which is being offset by underspending within the IT Services operating budget.

This level of expenditure for 2024 is consistent with prior-year spending given that rates have not changed from the current to the proposed contract.

Additional funds will be requested in subsequent future operating budget submissions based on each year's anticipated spending requirements, as noted in Table 2 above. It is anticipated that an additional \$134,000 will be required in the 2025 Operating Budget submission to cover the increased costs and align the budget with actual expenses for voice communications and network connectivity.

Savings

Conversion of Analog Lines to VoIP

In 2017, the TTC embarked on transitioning its legacy analog phone lines to modern Voice over Internet Protocol (VoIP) lines. This initiative aimed to modernize the communication infrastructure, improve operational efficiency and reduce costs. The

move to VoIP represents a shift toward leveraging advanced digital technologies to enhance communication capabilities within the TTC.

VoIP technology offers several advantages over traditional analog phone lines. One of the primary benefits is cost-effectiveness. VoIP systems are generally cheaper to operate and maintain due to lower per-line costs and reduced need for physical infrastructure.

The TTC's conversion process began in 2018, with the successful migration of 3,900 phone lines to the new VoIP system. As of today, there are 4,500 VoIP lines, which has resulted in a yearly savings of \$412,000 when compared to analog lines.

A total of 2,700 analog lines remain in operation. It is important to note that some analog lines located within tracks and tunnels will continue to be maintained for safety and emergency purposes. The reliability of analog lines in critical and emergency situations, where immediate and uninterrupted communication is paramount, is a key factor in retaining these lines. The TTC will continue to assess these 2,700 analog lines for further opportunities to convert and achieve additional savings.

Workplace Transformation

Workplace transformation brought about by the COVID-19 pandemic, including the shift to remote work and the adoption of new technologies, have led to changes in communication patterns within the TTC. With unified and streamlined communication platforms, such as MS Teams becoming the primary mode of interaction, VoIP systems and cell phones are not being utilized to the same extent as before.

To adapt to these changing dynamics and optimize IT asset allocation, the TTC is undertaking a thorough analysis of current usage patterns, job role requirements and available communication options. The aim is to establish a Voice Communication Standard that corresponds to the evolving requirements of the TTC, while optimizing productivity, efficiency and cost-effectiveness. This standard will delineate the voice communication methods designated for each job role, thereby eliminating instances where an individual may be allocated both a VoIP phone and a cellphone, or dispensing with a VoIP phone if their duties do not necessitate external communication beyond the TTC.

Equity/Accessibility Matters

A cornerstone of the TTC's Corporate Plan is equity and accessibility, and as a proud leader in providing accessible public transit in the city of Toronto, one of the TTC's service objectives is a commitment to ensure reliable, safe and inclusive transit services for all our customers, moving Toronto toward a more equitable, sustainable and prosperous future. The services being procured through this contract award allow for more flexibility and accessibility, therefore promoting productivity with less geographical constraints, and catering to the needs of our employees who may require better accommodation arrangements.

Additionally, these services will continue to meet the Accessibility for Ontarians with Disabilities Act (AODA) as it relates to remaining compliant with Telecommunication Device for the Deaf (TDD) and Text Telephone (TTY) standards, providing essential communication support for individuals with hearing and speech impairments.

Decision History

At its meeting on January 13, 2010, the City of Toronto's Government Management Committee approved an award of contract for Integrated Telecommunications Infrastructure (ITI) and related services to Bell Canada, for an initial term of five years effective October 1, 2010, with additional optional extension terms. The ITI agreement allowed the City's agencies to enter into separate agreements with Bell Canada on the same terms, conditions and pricing.

[GM27.13 – Contract Award – Request for Proposal \(RFP\) 2104-09-3006 for Integrated Telecommunications Infrastructure](#)

At its meeting on June 8, 2011, the TTC Board approved an award to Bell Canada, which leveraged the City of Toronto's ITI agreement for telecommunications and data services. The contract was effective July 1, 2011 to September 30, 2015, with two, one-year options.

[Procurement Authorization – Voice/Data](#)

At its meeting on July 12, 2017, the TTC Board approved the award to Bell Canada for the provision of telecommunication and data services, in the upset limit of 19,500,000 for a five-year term, with an option for two extensions of one-year, effective October 1, 2017. This contract award included the adoption of VoIP telephony services, which was part of the TTC's modernization of telephony services.

[Procurement Authorization – VoIP Upgrade Program](#)

Issue Background

For organizations like the TTC to thrive, employees and partners must collaborate efficiently and exchange information seamlessly. Effective collaboration and productivity require employees at various sites to work together as if they were physically present in the same location. They must be able to securely access identical computing resources and applications, and communicate with one another, regardless of their geographic location.

Telecommunication services, such as VoIP and analog phone lines, facilitate seamless communication both within the TTC and with external stakeholders. These services are critical for maintaining the efficiency and responsiveness of TTC operations.

Network connectivity services, such as LAN extensions, allow the TTC to extend its private network beyond its physical boundaries and connect multiple locations and buildings dispersed throughout the city of Toronto. This connectivity is vital for ensuring that all parts of the TTC can operate cohesively and effectively.

Currently, the TTC relies on Bell Canada for its telecommunication and network connectivity services. The most recent contract between the TTC and Bell Canada was awarded in 2017 for a five-year term, with an option for two additional one-year extensions.

The bulk of the TTC's telecommunications infrastructure is situated underground and directly linked to Bell Canada, guaranteeing physical isolation and boasting a reliability of 99.999%. This high level of reliability is ideal for the deployment of the TTC's safety-critical emergency phones, as it would mitigate the opportunities for operational failure irrespective of local power failures.

The current agreement with Bell Canada, which provides these critical services, is set to expire on September 26, 2024. To ensure uninterrupted operations and maintain the high level of service reliability required, it is necessary to renew the agreement with Bell Canada.

Comments

As the contract expiry approaches, the TTC is recommending establishing a new contract with Bell Canada to maintain uninterrupted access to existing telecommunication and network connectivity services.

The TTC has historically relied on analog lines provided by Bell Canada, which are physically connected to Bell's central office. These copper lines, buried underground, offer the highest level of reliability essential for the safety-critical operations of the TTC. Bell Canada remains the sole provider of these analog services, as any comparable alternative would necessitate a substantial overhaul of the TTC's telecommunications infrastructure, involving significant effort, time and cost to transition from copper to fibre.

TTC staff and Bell Canada entered into negotiations and have come to an agreement on the following terms:

1. Rates for the telecommunication and network services remain unchanged for the five-year term of this contract commencing September 27, 2024 to September 26, 2029.
2. Provisions to mitigate unnecessary disconnection service fees, which will allow TTC staff to disconnect phone lines based on the TTC's new voice communication standards at a reduced cost.

In summary, this agreement provides the TTC with the following telecommunication and network connectivity services:

Telecommunication services:

- **Analog Telephone Lines (Centrex 1.0):** Used for safety-critical and emergency phone lines.
- **VoIP Telephone Lines (Centrex 2.0):** Cost-reduced phone lines used within the office environment.
- **Specialized Analog Phone Lines:** Individual phone lines for the TTC's fax equipment.
- **T1 Trunk Lines:** Multi-channel telephone lines that support the TTC's call centres.
- **Alarm Monitoring:** Provides event monitoring to Transit Control of safety-critical equipment, such as power substations and fire alarm panels.

Network connectivity services:

- **Fibre Optic Network Connectivity Services:** Provides high-speed fibre connectivity between the TTC's two main sites.
- **Internet Dedicated Services:** Provides internet connectivity for digital signage and TVs on the subway platforms.
- **Ethernet Inter-networking Services:** Provides fibre local network connectivity for TTC office buildings.

In addition, Bell Canada's service and operations provide the TTC with the following key advantages that support TTC's business continuity needs:

- In the event of disaster recovery, Bell is the only provider with fail-over redundant backbone infrastructure Canada-wide.
- Bell Canada provides performance through comprehensive direct access to all circuits and SLAs (Service Level Agreements) backed by 24/7 monitoring, including reports.
- Bell Canada owns and operates all aspects of the telephony infrastructure throughout the TTC, and as a result has more control over the performance, maintenance and management of their network.
- Essential Line (ELN) feature – This feature within the telecommunication services provides line priority in the event of an emergency.

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