



Supply, Installation, and Maintenance of Fare Gates for PRESTO – Contract Amendment

Date: June 12, 2018
To: TTC Board
From: Chief Executive Officer

Summary

The purpose of this report is to obtain authorization to exercise the option and the expenditure of funds for maintenance service for fare gates until 2025 and for additional fare gate implementation services. As the software and many of the fare gate components are proprietary, these services would be provided by the original equipment supplier Scheidt & Bachmann GmbH (S&B) under a Service Level Agreement (SLA).

Once the fare gates are fully implemented there will be over 1,000 gates in service. With an estimated 539.4 million rides in 2018, and approximately 41% of the rides starting at a subway or SRT station, fare gate reliability is essential in order to ensure a better customer experience, access control and revenue collection.

The procurement of maintenance service from S&B, until the end of 2025, will not only allow access to parts, services and technical expertise, but it will also allow the TTC to take advantage of the manufacturer's predictive maintenance life-cycle program further increasing the reliability of the fare gates.

Recommendations

It is recommended that the TTC Board:

1. Approve the award of a contract amendment increasing the upset limit by \$54.7M (to a total of \$92.4M which includes the purchase of the fare gates) for the provision of maintenance services until the end of 2025 and additional implementation services from S&B, in accordance with the TTC's contract with S&B for the Supply and Install of Fare Gates, including services as follows:
 - a. \$51.3M of operating cost for maintenance services until the end of 2025.
 - b. \$3.4M of capital cost for backend system, networking set-up and other implementation costs including change notices.

Financial Summary

The total cost of the current contract with S&B is \$37.7M of which \$17.1M was approved by the Board in July 2015 and \$20.6M was approved by the Board in May 2016 for approximately 1,100 fare gates. This report seeks approval of a contract upset limit increase of \$3.4M for network and backend system set-up, and implementation costs which, when combined with TTC costs for civil works at subway stations necessary for the implementation of the fare gates and the initial years of maintenance, will bring the total cost of the fare gate installation project to approximately \$60.8 M. Sufficient funds were included in the TTC's 2018-2027 Capital Budget, which was approved by Council on February 12, 2018.

In addition, this report seeks approval for the costs of ongoing operation and second line maintenance for a period of 8 years for a total of \$51.3M, inclusive of HST. Of the expected 2018 operating costs of \$4.7M (net of HST rebate), \$4.3M was included in the 2018 TTC Operating Budget as approved by City Council on February 12, 2018. The \$0.4M 2018 increase will be funded through offsets in other areas. Annual costs will increase in 2019 with the anticipated completion of fare gate installation and the availability of the new networking solution and managed services are expected to be \$5.6M in total, net of HST rebate.

Sufficient funds will be requested in future budgets to cover these expenditures.

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

Equity/Accessibility Matters

Current fareline configurations for subway station entrances include a single accessible gate at some farelines. The new fareline configurations incorporating fare gates will include two fully accessible aisles at most station entrances. This will provide redundancy and ease customer flows by providing dedicated entry and exit pathways.

The new fare gates are wider than TTC's current turnstiles and this will improve the customer experience across the entire subway network and increase accessibility for all customers requiring more space (e.g. mobility devices, customers with small children, walking aids, strollers, bikes etc.)

Decision History

Details in Appendix 1.

Issue Background

In June 2015, TTC staff informed the Board of plans to replace all existing turnstiles and fareline equipment with new fare gates (approximately 1,100 new fare gates in total including TYSSE). This initiative was identified as key to the TTC's plan to modernize the system and improve the overall customer experience. The fare gates include integrated PRESTO readers and are integral to the TTC's overall efforts to implement PRESTO system-wide.

In July 2015, the Board approved the initial purchase of fare gates from S&B who were identified and sourced through the Metrolinx competitive procurement process and subsequently awarded a contract. As part of a public procurement for PRESTO equipment, including fare gates, Metrolinx required the successful proponent to offer the TTC the ability to enter into a separate contract for equipment based on the same pricing as provided to Metrolinx. As part of the approval at the July 2015 Board meeting, staff identified the next steps as:

- Negotiating an agreement and contract with S&B for the supply of fare gates, and associated implementation work, licence fees, TTC legacy fare media add-ons, maintenance, software and hosting, using the Metrolinx contract award to S&B as the basis; and
- Confirming the detailed schedule for the PRESTO implementation.

Comments

Staff has negotiated a SLA with S&B for a term of five years (2016 to 2020), with options to extend the contract for an additional five years, bringing the contract term to a total of ten years (2016 to 2025). The additional expenditure of funds is for maintenance until 2025. An option to extend an additional five-year period (2026 to 2030) would remain at the sole discretion of the TTC.

Under the agreement, S&B is responsible for the supply and installation of the fare gates, as well as providing training, remote monitoring systems and backend support, and maintenance services. This would include:

- Provision of spare parts and repairs of defective parts;
- Operation of a service desk to respond to TTC calls, assess problems, and dispatch technicians;
- On-site maintenance visits to address issues that TTC personnel are unable to resolve (i.e. second line maintenance activities);
- Life-cycle maintenance of the fare gates and its components to enhance reliability of the fare gates; and
- Provision, operation and maintenance of separate backend environments to support station operations and ongoing testing and training needs. This includes the required networking and communications for these environments.

The annual S&B cost for the ongoing operation and maintenance of the fare gates is \$5.6M at full implementation and is subject to an estimated two percent Consumer Price Index (CPI) adjustment annually.

The reliability of fare gates has improved to greater than 95% availability since the rollout commenced. Additional software updates are planned in 2018 to continue to improve fare gate reliability and availability. The additional backend environments provide a critical resource to test and validate future fare gate updates.

A schedule for the implementation of fare gates has been developed between TTC, PRESTO and S&B. The fare gate installations are planned to be completed mid-2018. Currently all 75 stations are equipped with fare gates at a minimum of one entrance and 70 stations have fare gates at all entrances.

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Signature

James Ross
Chief Operating Officer (Acting)

Attachments

Appendix 1 – Decision History

Appendix 1

Decision History

May 2012 – Framework for Agreement between TTC and Metrolinx/PRESTO. TTC Board (Commission):

Reaffirmed the framework and general principles for implementing Metrolinx/PRESTO fare collection system on TTC premises (including vehicles, as applicable), that were approved by the Commission on November 23, 2011;

Delegated authority to the Chief Executive Officer to continue to negotiate with Metrolinx and execute any and all necessary agreements with Metrolinx related to the design, implementation and operation of the PRESTO Services.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2012/May 1/Supplementary Agenda Other/Supplementary Agenda.jsp](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2012/May%201/Supplementary%20Agenda%20Other/Supplementary%20Agenda.jsp)

December 2012 – TTC/Metrolinx Agreement. The TTC entered into the Master E-Fare Collection Outsourcing Agreement (the Agreement), dated Nov. 28, 2012 with Metrolinx to implement the PRESTO farecard system at the TTC. The Agreement includes provisions for Metrolinx to design, procure, build, install, operate, service and maintain the PRESTO farecard system consistent with agreed upon TTC business and performance requirements. Metrolinx will retain 5.25% of revenue collected by the PRESTO system. The TTC's scope of work within the Agreement includes supporting Metrolinx activities and the overall project management and oversight to ensure the PRESTO farecard system fully meets TTC's business requirements.

http://www.metrolinx.com/en/projectsandprograms/presto/presto_reports.aspx

August 2014 – The Board received a status update on the implementation of PRESTO at the TTC. The presentation included a new plan for farelines that would include both fare gates and integrated turnstiles. The presentation identified that 60 fare gates were to be acquired from Metrolinx through a special arrangement between TTC and Metrolinx.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2014/August 19/Agenda/index.jsp](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2014/August%2019/Agenda/index.jsp)

January 2015 - Metrolinx Contract Award. Metrolinx awarded contracts to S&B for the design, development, installation and maintenance of three categories of Electronic Fare Management devices.

January 2015 - Confirmation of PRESTO Program Implementation Targets on TTC. TTC and Metrolinx jointly developed a PRESTO implementation target program that includes: all legacy streetcars by the end of 2015, all TTC stations and transit modes to be PRESTO-enabled by the end of 2016.

<http://www.ttc.ca/News/2015/January/index.jsp>

June 2015 - Board report provided PRESTO implementation update and discussed changes to station operations that would be supported by installation of fare gates.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2015/June 22/Agenda/index.jsp](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2015/June%2022/Agenda/index.jsp)

July 2015 – Board approved a contract up to a maximum value of \$17.1 million for the purchase of up to 450 fare gates from S&B, including associated implementation work and one year of maintenance support. Report also authorized staff to negotiate and execute an acceptable agreement with S&B (based on the terms of the Metrolinx Master Agreement) and conditions acceptable to TTC’s General Counsel.

[http://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2015/July 29/index.jsp](http://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2015/July%2029/index.jsp)

May 2016 – Board approved a contract amendment to a maximum value of \$20.6M for the purchase of up to an additional 600 fare gates from S&B, including associated implementation work and maintenance.

[https://www.ttc.ca/About the TTC/Commission reports and information/Commission meetings/2016/May 31/Reports/15 Procurement Authorization Fare gates PRESTO_FINAL.pdf](https://www.ttc.ca/About%20the%20TTC/Commission%20reports%20and%20information/Commission%20meetings/2016/May%2031/Reports/15%20Procurement%20Authorization%20Fare%20gates%20PRESTO_FINAL.pdf)