

TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: November 26, 2008

SUBJECT: PROCUREMENT AUTHORIZATION FOR OPERATOR BARRIER
KITS FOR ORION VII BUSES

ACTION ITEM

RECOMMENDATION

It is recommended that the Commission approve:

- 1) An award to Daimler Buses North America Ltd. (Daimler) in the amount of \$3,672,000 including all taxes for the supply of 1,360 Bus Operator Safety Barrier kits for all Orion VII buses.
- 2) An additional amount of \$702,000 required for the installation of operator barriers in 1,360 Orion VII buses by the TTC workforce over and above the approved amount that was included in the 2009 – 2013 Capital Program as approved by the Commission on August 27, 2008.

FUNDING

Funds in the amount of \$3,921,000 for the purchase and installation of Bus Operator Barriers are included in the TTC 2009 – 2013 Capital Program as part of projects 4.11 Bus Purchases and 4.13 Bus Overhaul. It is currently estimated that this work will cost \$5,207,000. Every effort will be made to accommodate the estimated \$1,286,000 over expenditure within the 2009 – 2013 Capital Program as approved by the Commission on August 27, 2008.

BACKGROUND

As a result of an increase in assault incidents against TTC operators over the years, and the subsequent introduction of the TTC Operator Assault Task Force (OATF), a recommendation was made by the OATF to investigate the feasibility of installing a mid-height hinged door in buses and streetcars.

At its meeting of August 30, 2006, the Commission approved proceeding with the continued development, fabrication and installation of protective barriers on all surface revenue vehicles. A Task Force was initiated in March, 2006 to develop a prototype barrier for evaluation. Participation by a number of groups, including various departments at TTC and surface operators, resulted in the development and release of a number of in-house prototypes for evaluation in a bus in August/September, 2006 and again in November/December, 2006. As a result of this consultative process which included static displays, in-service testing and surveys, input was received from Task Force members and a

number of operators and, as a result, major changes were implemented to improve the barrier design and functionality. A final in-house prototype was fabricated and released for further testing in May, 2008.

Concurrently in May 2008, Daimler undertook the development of a product that could be provided as kits for field installation by TTC workforce for all Orion VII buses. Daimler provided 2 prototypes for evaluation, one similar to the TTC design prototype, and the other consisting of a barrier with a lower door that could be kept closed even though the upper barrier was latched in the open position.

Favourable comments were received from the majority of operators surveyed during the final evaluation in June 2008, including support for implementation of a barrier and, in particular, a stated preference for the Daimler prototype barrier consisting of a split-door arrangement whereby a lower door could be kept closed even though the upper barrier was latched in the open position. Staff worked with Daimler to finalize their design based on TTC's needs. This prototype and its related components addressed operator issues that resulted from earlier surveys and in-service testing. In September 2008, a prototype was installed on an Orion VII NG bus for final testing and deemed acceptable for installation on all Orion VII buses. This includes buses that will be manufactured by Daimler in 2009, but will not be fitted to the buses during the production process. Any additional buses awarded to Daimler for delivery beyond 2009 will have driver barriers installed during the production process.

The 2009 – 2013 Capital Program project 4.13 Installation of Operator Protection Barriers on TTC Surface Vehicles was prepared with the expectation of installing barriers on 812 Orion VII buses currently in the fleet at a budgeted amount of \$1,932,000 for the barriers. The 2009 – 2013 Capital Program project 4.11 Bus Procurement was prepared with the intent of having the driver barriers installed on the new Orion VII buses as a production item at a total budgeted amount of \$1,156,000 for the barriers. The cumulative total cost budgeted for the barriers is \$3,088,000. However, more up-to-date information indicated that the cost of the barriers would be higher than originally anticipated. New information from the manufacturer showed that the cost of 1,360 barriers at a cost of \$2,700 including PST per barrier would result in a total cost of \$3,672,000 resulting in an over budget amount of \$584,000.

Workforce for the installation of bus driver barriers was budgeted in the 2009 – 2013 Capital Program in the amount of \$833,000 and approved by the Commission on August 27, 2008. However, more up-to-date information indicated that a total of \$1,535,000 would be required to complete the installation of driver barriers on the Orion VII buses resulting in an over budget workforce amount of \$702,000.

The TTC's existing bus fleet includes approximately 1,230 diesel and hybrid electric Orion VII buses with an anticipated delivery of 130 Orion VII buses, equipped with Lithium-Ion batteries, in 2009, for a total of 1,360 Orion VII buses.

DISCUSSION

Daimler was requested to submit a Proposal for the supply of 1,360 Bus Operator Safety Barrier kits on the basis of single source, as they are the original equipment manufacturer (OEM) and only approved source of supply for these safety barriers.

Daimler submitted an original offer totalling \$4,764,080 for the total number of required kits including taxes, however staff contacted Daimler to negotiate reduced pricing. As a result of negotiations, total pricing was reduced to \$3,672,000, including taxes, which represents a cost avoidance to the TTC of approximately 19% (\$922,080). Daimler was unable to reduce their pricing any further. The initial delivery will commence within 16 weeks from notification of award of a contract and with scheduled deliveries occurring monthly thereafter.

Daimler complies with TTC's Terms and Conditions without exception or qualification and is considered commercially and technically compliant and therefore, is recommended for award.

TTC employees will undertake the installation, and it is anticipated that work will begin upon receipt of the kits in early 2009. Due to the complexity of the work, and the total number of buses to be completed, it is expected that the program will be in effect during 2009 and in 2010.

TTC Engineering staff is in the process of designing protective barriers for the remaining bus and streetcar fleet, and any required purchases will be the subject of a future report.

The projected completion date for implementation of barrier doors on the entire bus and streetcar fleet is estimated to be late 2010.

JUSTIFICATION

The implementation of Operator Safety Barriers will serve to provide an improvement in operator security and protection from potential assault activity. In a Safety Systems and Culture Assessment of the Toronto Transit Commission conducted in March, 2008 by Behavioral Science Technology, Inc. (BST), a number of TTC employees identified assault as a key area of concern for Operators and the need to improve physical security systems on the buses, including protective barriers.

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