

TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: March 30, 2012

SUBJECT: PROCUREMENT AUTHORIZATION - DESIGN, SUPPLY & INSTALL
SIGNAL SYSTEM FOR YUS LINE PHASES 2, 3, AND 4 AND TYSSE

ACTION ITEM

RECOMMENDATION

It is recommended that the Commission authorize:

1. A total expenditure up to \$60,168,140.46 (CAD) to Design, Supply & Install a Signal System on the Yonge University Spadina (YUS) Line (Phases 2, 3, and 4) and on the Toronto York Spadina Subway Extension (TYSSE) as set out below and detailed in Appendix A:
 - (a) The award of a contract to Ansaldo STS Canada Inc. (Ansaldo) in the amount of \$30,272,838.99 (CAD), inclusive of HST, for a Contract to Design & Supply a Signal System for YUS Line Phases 2, 3, and 4;
 - (b) The expenditure of funds in an amount up to \$3,219,383.56 (CAD), inclusive of HST, (Option Price No. 2) for Computer Based Interlocking (CBI) on an Engineering Test Track at Wilson Yard to support the design and installation; and
 - (c) The award of a contract to Ansaldo in the amount of \$26,675,917.91 (CAD) inclusive of HST, for a Contract to Design, Supply & Install a Signal System on the TYSSE.

FUNDING

Sufficient funds are included in the 2012-2016 TTC Capital program as approved by City Council on January 17, 2012. Funds for the YUS line phases 2, 3, & 4 work have been included in Project 2.4, YUS ATC Re-signalling (WO# 7733) in the State of Good Repair/Safety category and funds for the TYSSE portion of this work have been included in the Expansion category of the TTC Capital Program.

BACKGROUND

The Resignalling of the YUS subway line utilizing Automatic Train Control (ATC) will improve safety, capacity, operating efficiencies and cost effectiveness throughout the length of the line. This state of the art technology allows trains to travel closer together increasing both service carrying capacity and flexibility.

To allow trains and workcars not equipped with ATC equipment to operate over the YUS Line and the new TYSSE, and to mitigate against delay in the event of an ATC system failure, a new conventional auxiliary wayside signalling system using Computerized Based Interlocking (CBI) is being installed. On TYSSE, the conventional auxiliary wayside signal system will be used for revenue service until it is ATC equipped.

The South Yonge portion of the YUS line from Lawrence Station to St. Andrew Station (Phase 1) is currently undergoing a signal system replacement. The signal system replacement is now being extended into the balance of the YUS line: St. Patrick to Eglinton West (Phase 2), Eglinton West to Downsview (Phase 3) and Lawrence to Finch (Phase 4). The TYSSE area includes the area from Downsview to Vaughan Corporate Centre.

DISCUSSION

The Contract includes provision of new microprocessor based control CBI systems, new computer based Local Control Panels at interlocking areas, new instrument case layouts, new track circuits, provision of design support and information to the Commission for use by the ATC Contractor, and provision of system testing and commissioning of the fixed block auxiliary wayside signal systems. The Commission will provide installation of the equipment supplied by the Contractor for the YUS portion of the work. The Contractor will provide the installation work on the TYSSE. A five year warranty is provided for all work.

Specifications and drawings for Proposal P31PV11825 were prepared and a Request for Proposals (RFP) was issued only to the two pre-qualified proponents for this work, Alstom Signaling Inc. (Alstom) and Ansaldo on October 12, 2011 with a closing date of January 16, 2012. The Proposal Documents state that the intent of the Commission is to award all the work to one company with two separate contracts being entered into: (1) one for the Design & Supply of a Signal System for the YUS Line Phases 2, 3 and 4 and (2) one for the Design, Supply and Installation of a Signal System on the TYSSE. The RFP called for separate pricing documents to be submitted specifically for each of the YUS Line Phases 2, 3 and 4 and for TYSSE, consisting of Price Schedules and Optional Pricing which will remain valid to be exercised at the sole discretion of the Commission for up to 48 months from the Notification of Award. If required, authorization for the optional work will be obtained in accordance with the Authorization for Expenditure Policy.

The recommended proponent will be required to provide a Labour and Material Payment Bond and a Performance Bond each in the amount of 50% of the contract value.

The Proposal Documents specified a Four Step evaluation process to determine a Preferred Proponent. The evaluation required that a Proponent pass each step before proceeding to the next step. These steps were as follows:

- Step 1 - a commercial compliancy review;
- Step 2 - a pass/fail criteria test (for critical design and project management provisions);
- Step 3 - a technical evaluation assessment (all proponents who scored 75% or higher were deemed to be equal) ; and

- Step 4 - an evaluation of the separately submitted sealed pricing information.

The Proponent that passed Steps 1, 2 and 3 and had the lowest evaluated price was determined to be the Preferred Proponent.

Once a Preferred Proponent was determined based on the Four Step evaluation process, the TTC reserved the right to negotiate any aspect of the Preferred Proponent's Proposal including any amendments to the Proposal that were reasonably required to accommodate the design and performance intent of the Contract.

Alstom failed to pass three of the seven technical mandatory criteria stipulated in the Step 2 assessment as set out in the RFP. Consequently, Alstom's proposal was not considered further.

Ansaldo's proposal passed all the proposal evaluation steps. Ansaldo submitted all the pricing documents required and as the sole Proponent at this stage was determined to be the Preferred Proponent.

Ansaldo is currently executing similar work for Phase 1 of the South Yonge portion of the YUS.

After concluding the evaluation of the bids and determining that Ansaldo was the Preferred Proponent, meetings were held with Ansaldo, in accordance with the express terms of the RFP, to negotiate certain aspects of its proposal. Ansaldo's proposal meets the requirements of the RFP and is considered commercially and technically acceptable and therefore recommended for award.

Fairness Monitor, PPI Consulting Limited (PPI) was engaged by the TTC to provide an independent third party observation to ensure that the procurement process proceeded in accordance with the established requirements as set out in the RFP and to ensure fairness and transparency during the process. The report provided by PPI confirms the fairness of the process based on their observations.

JUSTIFICATION

The award of the CBI signalling Contract to Ansaldo is an integral part of the resignalling of the YUS subway and the TYSSE. This signalling system is necessary to allow mixed mode operation and mitigate against delay in the event of an ATC system failure.

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Attachment: Appendix A

APPENDIX A

PRICE SCHEDULE BREAKDOWN - ANSALDO

A. Contract for Design & Supply Signal System for YUS Line Phases 2, 3, and 4

i. Base Proposal Price	\$27,117,742.26 CAD
ii. Option Price No. 1 for a Factory Integration & Validation Platform	\$2,325,977.31 CAD
iii. Option Price No. 4 - Wilson Yard Connection	<u>\$829,119.42 CAD</u>
Award Value for YUS Line Phases 2, 3, and 4	\$30,272,838.99 CAD
iv. Option Price No. 2 – Computer Based Interlocking (CBI) for an Engineering Test Track at Wilson Yard	\$3,219,383.56 CAD

B. Contract for Design Supply & Install Signal System for TYSSE

i. Base Proposal Price	\$26,312,050.00 CAD
ii. Option Price No. 5 for Installation of Speed Control Devices in Instrument Cases	\$233,338.22 CAD
iii. Option Price No. 6 – Provide Computer Based Zone Control Panel to Replace the Existing Panel at Downsview	<u>\$130,529.69 CAD</u>
Award Value for TYSSE	\$26,675,917.91 CAD

TOTAL AUTHORIZATION **\$60,168,140.46 CAD**