

THALES

Thales Canada, Transportation Solutions

105 Moatfield Drive
 Toronto, Ontario
 Canada
 M3B 0A4
 Tel. (+1) 416-742-3900
 Fax (+1) 416-401-3732
 www.thalesgroup.com

OLRT Constructors

1600 Carling Avenue, Suite 450
 PO Box 20
 Ottawa, On K1Z-1G3
 Attention: Matthew Slade
 Director Rail & Rail Systems
 mslade@ellisdon.com
 cell: (416) 902-6362

Via E-mail

DATE: 18 October 2018

Letter Reference: OLRT-THALES-0950

Ref. Subcontract No. 507528-P002 for the Supply of Automatic Train Control Systems Subcontracted Works for the Ottawa Light Rail Transit Project ("Subcontract")

Reference: OLRT-THALES-0939, Pre-Trial Running Delay Confirmation, 7 September 2018
 OLRT-THALES-0911, Dependency Delays & LD Relief, 6 July 2018
 OLRT-THALES-0903, Acceleration Dependency Delays, 11 June 2018
 OLRT-THALES-0920, Zone 2A Wayside PICO Results Status, 20 July 2018
 OLR-THA-00631, Variation Certificate #12 Acceleration/Prolongation, 18 April 018

Subject: Extension of Time (EOT) – Additional Claim

Matthew,

Thales CBTC Test & Commissioning schedule, under the terms of Variation Order No.12 Acceleration Plan, has been frustrated due to OLRT-C inability to meet the agreed Contractor's (OLRT-C) Inputs dependencies as defined in Schedule 2 of the Acceleration Variation Order. The key Contractor's inputs below illustrate the delinquency of OLRT-C inputs that correlate to the frustrated progress of Thales CBTC Test & Commissioning.

Acceleration Variation Schedule 2: Contractor's Inputs

Milestone	Contractor Inputs	Due Date	Actual
6	Issue the Final Wayside PICO results for Zone 1	5 February 2018	August 2018
7	Issue the Final Wayside PICO results for Zone 2A	15 February 2018	September 2018

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Milestone	Contractor Inputs	Due Date	Actual
9	Issue the Final Wayside PICO results for Zone 3	15 February 2018	July 2018
12	GIDS, Fire & Smoke systems are connect and operational	19 February 2018	August 2018
14	Wayside PIS/PAS connected and operational	21 February 2018	September 2018
15	Operational Scenario comments / acceptance	26 January 2018	6 Sept 2018 [line assignments added]
16	Confirm no change to speed limit	28 February 2018	TBD [OLR-THA-0699 – 20 Sept 18]
17	Handover and exclusive use of Vehicle 11, designated as Golden Vehicle for ASC Tuning	10 February 2018	9 October 2018 [temporary, non-exclusive]
18	Reliable two way communications for Tunnel testing	18 April 2018	September 2018
22	Confirm Mainline and Yard Speed limits	28 February 2018	TBD [OLR-THA-0699 – 20 Sept 18]
23	Entire Guideway, end to end for ASC testing and tuning	June 2018	October 2018
28	Train slow speed braking curves mod	7 March 2018	TBD

Under Variation Certificate #12 - Acceleration plan, Thales should have completed all CBTC Correspondence, SAT, ASC and Capacity/Load testing to complete our Safety Certificate by 10 August 2018 and Handover to OLRT-C for Trial Running. Unfortunately, most of the critical dependencies under the control of OLRT-C failed to meet the specified due date and therefore directly affected Thales access to completed infrastructure and vehicles to perform CBTC Test & Commissioning.

Thales Test & Commissioning team has demonstrated flexibility to work around partially completed guideway and limited access to Alstom vehicles with the objective to make some progress with access provided by OLRT-C. Unfortunately, access to qualified Alstom vehicles have been erratic, intermittent and not in accordance with the Acceleration plan guideway and vehicle access conditions. While some progress was made under these restrictions, it has been inefficient from both a cost and schedule perspective.

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As previously advised, Automatic Speed Control (ASC) testing was the Critical Path activity that posed the greatest threat to completion of CBTC Test & Commissioning. OLRT-C was unable to provide the necessary prerequisites for the scheduled commencement of ASC testing.

- Entire guideway complete by June 2018
- Golden vehicle (LRV11) for exclusive ASC testing 10 February 2018
- No restrictions of mainline guideway operating speed

The entire guideway has only been available for end-to-end vehicle running since late September 2018, but there remain operating speed restrictions due to trackwork concerns from various Stakeholders, and the Alstom Golden vehicle (LRV11) remains unstable, breaking down and returning to Alstom for repairs on multiple occasions.

Schedule

Thales estimate and the basis of the Extension of Time claim assumes CBTC Safety Case Certificate release by year-end December 2018, Trial Running support and completion of all Alstom vehicle DPICOs by 31 March 2019.

Pricing

The table below indicates the applicable price(s) pertaining to this Variation.

Description	Price (CDN \$)
Extension to Acceleration & Prolongation from November 2018 to March 2019	\$ Component pricing

The Total Firm Lump Sum Price for the Variation to Thales' Scope of Work is \$ Component pricing Canadian Dollars, exclusive of HST. All prices in this Variation Report are indicated in Canadian Dollars.

Terms of Payment

OLRT shall pay Thales the Variation Prices in accordance with the terms set out herein Payment Milestone Plan:

No.	Payment Milestone Description	Payment Milestone Amount	Milestone Completion Date
30%	With variation order release	\$ Component pricing	November 2018
60%	CBTC Safety Certificate release	\$ Component pricing	March 2019

Upon Thales' achievement of a payment milestone as set forth in the Payment Milestone Plan above, Thales will no later than the 25th of the month in which the payment milestone is

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achieved or such sum becomes due, deliver a payment application to OLRT in a form and substance reasonably acceptable to the OLRT.

OLRT shall pay Thales by Bank Transfer in respect of all amounts due by irrevocable bank transfer to Thales' designated account NET thirty (30) days of OLRT's receipt of Thales' complete payment application (invoice).

Terms and Conditions

This Variation Report is submitted in accordance with Article 14 of the Subcontract. All Terms and Conditions are identical to those stated within the Subcontract except as otherwise stipulated within this Variation Report.

Coming into Force

Thales and OLRT shall use commercially reasonable efforts to reach mutual agreement on the prices, applicable terms and conditions and other information contained in the Variation Report.

Thales shall have no obligation to mobilize or to commence the performance of the Variation, and shall have no liability whatsoever for failure to do so, until Thales has received its written acceptance/confirmation of a Variation Certificate (which Variation Certificate has been mutually agreed to between Thales and OLRT including pricing and all applicable terms and conditions).

Limitation of Scope of Work

Thales' scope of work for this Variation is limited to the scope of work and terms and terms and conditions as defined within this Variation Report (and Annex to this this Variation Report if applicable) and is exclusive of any other scope of work and does not include any costs or services that are deemed by Thales to be within the scope of work of OLRT and/or the vehicle supplier and/or any third party. Any other scope of work (that are not identified within this Variation Report) shall be the sole responsibility of the OLRT and/or vehicle supplier and/or third party without any burden to Thales.

Validity

This Variation Report and its pricing is valid only for the Variation to Thales' scope of work, schedule and the terms and conditions as identified within this Variation Report. Thales reserves the right to revise or withdraw this Variation Report in the case of ORLT's non acceptance of any part of this Variation Report, and/or any further variations made by OLRT to Thales' scope of work and/or design documents, and/or technical specifications and/or drawings.

This Variation Report including any attachments (if applicable) shall cancel and supersede all prior offers, representations, statements and understandings whether oral or in writing.

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Unless otherwise specified, this Variation Report shall be valid until 30 November 2018 whereupon the Variation Report and prices shall expire, or be subject to an upward adjustment at Thales' sole discretion.

Should OLRT have any further questions relating to this matter, please do not hesitate to contact the undersigned.

Sincerely,



Michael Burns
Project Manager

michael.burns@thalesgroup.com

tel: +1 (416) 742 3900, ext. 4019680

cell +1 647 680-5542

cc. A. Cruz
M. Al Kayyali

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