



MEMO / NOTE DE SERVICE

To / Destinataire Mayor and Members of Council File/N° de fichier: 13-2022

From / Expéditeur Director, Rail Construction Program
Transit Services Department

Subject / Objet Public Release of the Stage 2
Confederation Line and Trillium Line
Project Agreement Schedule 14 –
Testing and Commissioning Date : May 27, 2022

The purpose of this memo is to advise the Mayor and Members of Council that the unredacted versions of the Stage 2 O-Train Confederation Line and Trillium Line Project Agreement (PA) Testing and Commissioning schedules (Schedule 14) are now available on Ottawa.ca and to provide a brief overview of how various lessons learned from the testing and commissioning and trial running of the Line 1 Confederation Line are being implemented into the Stage 2 Trillium Line requirements.

Schedule 14 documents were originally redacted in full when the Stage 2 PA documents were released to the public to be consistent with procurement industry standards and the City's obligation to protect third-party, performance, financial, and commercially sensitive information. As part of the City's ongoing commitment to transparency and public access to information, a legal review of Schedule 14 was completed and determined that the redactions were no longer required.

The PA Schedule 14 describes the testing and commissioning requirements for both projects. As the Stage 2 South extension project has entered the early phase of testing and commissioning, a comparative summary was prepared of the PA requirements and how lessons learned from the Stage 1 Confederation Line are being implemented into the Stage 2 Trillium Line extension. The following table provides a side-by-side comparison to assist with reviewing the Schedule 14 requirements of both projects.

Schedule 14 Requirement Area	Stage 1 Confederation Line Testing and Commissioning	Stage 2 Trillium Line Testing and Commissioning
Testing and Commissioning Scope	Rideau Transit Group (RTG) is responsible for the testing and commissioning of the complete integrated system (civil infrastructure, systems, vehicles, etc).	TransitNEXT is responsible for the testing and commissioning of the complete integrated system (civil infrastructure, systems, vehicles, etc.), except the communication system components, subsystems and equipment installed by the City at the Transit Operations Control Centre

Schedule 14 Requirement Area	Stage 1 Confederation Line Testing and Commissioning	Stage 2 Trillium Line Testing and Commissioning
		(TOCC) and the Back-up Control Centre (BCC), at Bayview station, and along the Confederation Line alignment.
Testing and Commissioning Team Members	<ul style="list-style-type: none"> • RTG representative • City representative • RTG Commissioning Coordinator • The Independent Certifier • Vehicle and Equipment manufacturer representatives, where applicable 	<ul style="list-style-type: none"> • TransitNEXT representative • City representative • TransitNEXT Testing and Commissioning Coordinator • Independent Certifier • Vehicle and equipment manufacturer representatives, where applicable
Coordination	The RTG Commissioning Coordinator will co-ordinate with the City and the Independent Certifier.	<p>The TransitNEXT Testing and Commissioning Coordinator will co-ordinate as applicable with representatives from:</p> <ul style="list-style-type: none"> • The City • Systems Integration Verifier • Canadian National Railway • VIA Rail • National Research Council • Airport Authority • The Independent Certifier
Training	As part of the testing and commissioning requirements, RTG is responsible for system operations and maintenance training.	As part of the testing and commissioning requirements, TransitNEXT is responsible for system operations and maintenance training.
Systems Integration Verifier	N/A	<p>The City will appoint a Systems Integration Verifier to:</p> <ul style="list-style-type: none"> • Provide a fast-track dispute process • Review and comment for compliance on submittals
Trial Running	RTG is responsible to conduct Trial Running when the integrated system has been tested and is essentially ready for revenue service.	<p>TransitNEXT will conduct Trial Running when:</p> <ul style="list-style-type: none"> • Integrated system infrastructure has been tested

Schedule 14 Requirement Area	Stage 1 Confederation Line Testing and Commissioning	Stage 2 Trillium Line Testing and Commissioning
	<p>Trial Running will be the final step in confirming readiness for revenue service.</p>	<ul style="list-style-type: none"> • The complete fleet is fully tested and ready for passenger service • The complete signalling and train control system and associated TOCC equipment is fully tested and ready for passenger service • There are no outstanding defects affecting rail systems functionality • There are no major defects, safety defects or incomplete vehicle modification programs • All stations are substantially complete with only Minor Deficiencies remaining • TransitNEXT is fully mobilized and ready to commence maintenance services • TransitNEXT has submitted the maintenance & rehabilitation compliance verification & validation matrix • The City is fully mobilized, trained and ready to operate the System <p>Trial Running will be the final step in confirming readiness for revenue service.</p>
Length	12 consecutive days	21 consecutive days
Scope	<p>Trial Running will operate a full regular scheduled service on the full line using the peak and non-peak schedules for an extended period.</p> <p>The tests will include a variety of failure management scenarios that could reasonably be expected to occur in regular revenue service.</p>	<p>Trial Running will operate a full regular scheduled service on the full line for a 14-day period.</p> <p>Additional tests during the 21-day period will include a variety of failure management scenarios that could reasonably be expected to occur in regular revenue service.</p>
Performance Criteria	<p>The Trial Running of the system will demonstrate to the satisfaction of the Independent Certifier that the specified travel times, headways and operational</p>	<p>The Trial Running of the system will demonstrate to the satisfaction of the Independent Certifier that the specified travel times, headways and</p>

Schedule 14 Requirement Area	Stage 1 Confederation Line Testing and Commissioning	Stage 2 Trillium Line Testing and Commissioning
	performance requirements can be achieved.	<p>operational performance requirements can be achieved.</p> <p>TransitNEXT will achieve the Service Reliability Standard wherein 98.5% on-time performance must be achieved over a 14-day period within the 21-day Trial Running period.</p> <p>TransitNEXT will demonstrate that the integrated system (vehicles, stations, and infrastructure) performs reliably through the Trial Running period such that the performance criteria for Trial Running are achieved and that would otherwise lead to zero performance deductions during the maintenance period.</p>

As outlined above, staff applied various lessons learned from the testing and commissioning and trial running of the Line 1 Confederation Line into the Stage 2 Trillium Line extension requirements, including longer trial running period, improved performance criteria and inclusion of a systems integration verifier to oversee the works.

Should you have any questions about the information provided in this memo, please do not hesitate to contact me at extension 52718.

*Original signed by
Michael Morgan*

Cc: Senior Leadership Team
Transportation Services Departmental Leadership Team
Director, Public Information and Media Relations