METROLINX

– AND –

TORONTO TRANSIT COMMISSION

OPERATIONAL SERVICES AGREEMENT

MADE PURSUANT TO THE MASTER E-FARE COLLECTION OUTSOURCING AGREEMENT DATED: NOVEMBER 28, 2012

DATED AS OF NOVEMBER 28, 2012

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OPERATIONAL SERVICES AGREEMENT

THIS OPERATIONAL SERVICES AGREEMENT is made as of the 28th day of November, 2012

BETWEEN:

METROLINX

an agency of the Government of Ontario under the *Metrolinx Act, 2006* ("**Metrolinx**")

- and -

TORONTO TRANSIT COMMISSION

a corporation existing under the *City of Toronto Act, 2006* ("**TTC**")

IN consideration of the mutual covenants herein contained and for other good and valuable consideration (the receipt and sufficiency of which are acknowledged by both Parties), the Parties hereby covenant and agree with each other as follows:

ARTICLE 1 BACKGROUND & INTERPRETATION

1.1 Terms of Master Agreement

- (a) This Operational Services Agreement is ancillary to the Master Agreement. The terms of the Master Agreement, as amended from time to time, are incorporated herein by reference – including, for greater certainty, Section 5.3 (Audits), Article 13 (Limitation of Liability), Article 16 (Force Majeure) and Article 17 (General Provisions) thereof. For greater certainty, Section 13.2 of the Master Agreement shall be applied without duplication.
- (b) Further to and as contemplated in the Master Agreement, this Operational Services Agreement sets out additional rights and obligations of the Parties with respect to the provision by Metrolinx of the Operational Services.

1.2 Definitions

All capitalized terms used in this Operational Services Agreement, and not otherwise defined herein, have the meaning ascribed to such terms in the Master Agreement, unless the context otherwise requires. Terms that are defined for the purpose of this Operational Services Agreement are set out in the definitions schedule (Schedule 1.2).

1.3 Schedules & Attachments

The following are the schedules and attachments attached to and forming part of this Operational Services Agreement:

Schedule Description of Schedule

- 1.2 Definitions for this Operational Services Agreement
- 2.1(f) Operational Reporting
- 2.2 Framework for Service Level Agreements
- 2.2(b) Terms and Conditions for Suspension
- 2.5 SLA and Appropriate Compensation
- 2.6 Incident/Problem Management Procedure
- 3.1 TTC Dependencies (Operational)
- 3.2(b) RASCI PRESTO System Operations

Attachment Description of Attachment

- A Description of PRESTO Equipment and Services
- B Business Continuity Plan and Disaster Recovery

ARTICLE 2 SERVICES

2.1 **Operational Services**

Metrolinx shall perform the following Operational Services for TTC in accordance with this Operational Services Agreement in order to meet the TTC Business Requirements:

- (a) Provide, maintain, update, repair (including applicable refreshes) and operate PRESTO NG (as it has been implemented and deployed pursuant to the Project Plan) in accordance with TTC Business Requirements;
- (b) perform the Fare Collection Services,
- (c) Procure, provide, operate, update, maintain, repair and service such PRESTO Equipment and Services as is determined by Metrolinx to be required for the provision of the Operational Services in order to meet TTC Business Requirements, agreed upon Performance Requirements and in accordance with Schedule 3.2(b) (RASCI - PRESTO System Operations);
- (d) provide training services as set out in Section 2.11 and the TTC Business Requirements;
- (e) provide, in addition to such financial reporting as is provided pursuant to the Funding and Financial Reporting Agreement, the reporting with respect to the Operational Services set out in Schedule 2.1(f) (Operational Reporting) and the TTC Business Requirements; and
- (f) such additional services as are reasonably required to meet the TTC Business Requirements and Performance Requirements.

2.2 Service Level Agreement

- (a) The Parties hereby agree to develop the SLA in accordance with phased implementation of PRESTO NG, and, upon completion and upon receipt of approval under section 28 of the *Financial Administration Act*, such agreed-upon SLA will immediately form part of this Operational Services Agreement. In developing the SLA, the Parties agree to be informed by industry best practices and to otherwise follow the framework set out in Schedule 2.2. If the Parties are unable to reach agreement, either Party may refer the outstanding issues with respect to the SLA to the Expert Panel in accordance with Exhibit 1 to Schedule 2.2 and the decision of such Expert Panel shall be final and binding.
- (b) The agreed-upon SLA will establish criteria (including defining unacceptable levels of operational ineffectiveness) and failure thresholds, that if and when met, will permit TTC to suspend the Operational Services, or part thereof, in order to permit Metrolinx to better resolve the problems creating the failures and to lessen any impact on the TTC and its customers. Any exercise of the right of suspension is subject to the terms and conditions set out in Schedule 2.2(b). If Metrolinx disagrees that such criteria and failure thresholds have been met, TTC may suspend the Operational Services, but Metrolinx is entitled to refer the issue of whether TTC was entitled to suspend to arbitration and to seek compensation from the arbitrator for any wrongful exercise of such right.

2.3 **Performance in Accordance with Performance Requirements**

Metrolinx shall perform the Operational Services in accordance with, and in a manner that meets or exceeds, the Performance Requirements and shall comply with the other provisions of the applicable performance measures as set out in the TTC Business Requirements in all material respects.

2.4 Service Level Measurement and Reporting

Metrolinx takes seriously its obligation to perform in accordance with the Performance Requirements. Metrolinx shall measure and report its performance against the Performance Requirements, in such detail and form and with such frequency as is set out in Schedule 2.1(f) (Operational Reporting) and the TTC Business Requirements.

2.5 Service Level Agreements and Appropriate Compensation

As contemplated by Section 2.4 of the Funding and Financial Reporting Agreement, a failure of Metrolinx to provide the Managed Services in substantial compliance with the Service Levels and Service Level Targets in the SLA may result in a material adverse impact on TTC's Gross Receipts (as defined in the Funding and Financial Reporting Agreement). Subject to the limitations set out in Section 2.4 of the Funding and Financial Reporting Agreement the Parties shall, in the event of such failure, utilize the mechanism attached as Schedule 2.5 hereto to determine the amount, if any, to be paid by Metrolinx to TTC in accordance with the terms thereof. In developing this mechanism, the Parties agree that such mechanism will be based on incidents and normal volumes of traffic, and will set a minimum limit to avoid nuisance claims.

2.6 Incident and Problem Management Analysis and Resolution

- (a) Each incident of technical failure of the PRESTO Equipment and Services will generate an incident report. Each incident will be ranked in priority from P1 to P4. Any P1 incidents will result in Metrolinx invoking the critical incident management procedure for the Operational Services set out in Schedule 2.6 (Incident/Problem Management Procedure) to resolve such problems. All incident reports will be tracked and where a pattern of incidents is noted, a problem will be identified.
- (b) Promptly after Metrolinx's discovery of, or, if earlier, Metrolinx's receipt of a notice from TTC regarding, Metrolinx's failure to provide any of the Operational Services in accordance with the applicable Performance Requirements, Metrolinx shall conduct an analysis to identify the cause of such failure and:
 - (i) without limiting Metrolinx's obligations to meet the Performance Requirements, Metrolinx will use all reasonable efforts to effect the resolution of all failures as soon as reasonably possible; and
 - (ii) any failure to meet the Performance Requirements will be addressed at the next scheduled meeting of the PRESTO Operations and Deployment Committee ("**ODC**") as set out in the PRESTO Governance Schedule. The ODC will deal with any systemic failure to meet the Performance Requirements as part of considering Service Levels on a global basis across SPs. Metrolinx shall propose an appropriate plan to address any identified failures, bearing in mind the severity and impact of each such category of failure.
- (c) In addition to the remedies set out in the Performance Requirements, the Parties acknowledge that deficiencies in the Operational Services that have a material adverse impact on the TTC may be escalated in accordance with the PRESTO Governance Schedule and if not resolved or fully addressed at such level shall be addressed by way of escalation in accordance with the dispute resolution provisions of Article 14 of the Master Agreement.

2.7 Responsibility for Failures and Mitigation

TTC acknowledges and agrees that Metrolinx shall not be responsible for:

- (a) a Force Majeure Event;
- (b) failures of the Operational Services due to the negligent or otherwise inappropriate acts or omissions of the TTC or any person for whom TTC is responsible at law including incomplete performance of one or more TTC Dependencies; or
- (c) any costs, loss or other damages resulting from any TTC decisions regarding the waiver of fares, save and except for any decision regarding the waiver of fares to the extent that TTC can reasonably demonstrate to Metrolinx that such waiver was caused by the failure of Metrolinx to provide the Managed Services, or any part thereof, in compliance with the Service Levels and the Service Level Targets of the SLA.

2.8 Good Repair of PRESTO Equipment and Services

Metrolinx shall maintain the PRESTO Equipment and Services in a state of good repair, reasonable wear and tear excepted, in order to continually meet TTC Business Requirements and Performance Requirements and shall repair and refresh such PRESTO Equipment and Services as needed to maintain same in such state of good repair.

2.9 Periodic Updates

Subject to the PRESTO governance model and as more fully described in Schedule D to the Master Agreement, pursuant to the Metrolinx release management plan for PRESTO NG, Metrolinx will, from time to time, deploy new releases of PRESTO NG to the SPs. Such new releases will be developed in accordance with Schedule 2.1(b) (RASCI for PRESTO System Development) and Schedule 2.1(c) (RASCI for Civil Works Requirements) to the Project Management Agreement (hereby incorporated by reference), and deployed to all SPs on a PRESTO NG wide basis and issues with respect to the deployment of same (including scheduling and functionality) will be addressed pursuant to the PRESTO Governance Schedule. Nothing herein shall relieve Metrolinx of the obligation to provide the Operational Services in accordance with this Operational Services Agreement, including implementation and deployment of PRESTO NG. The Parties will act reasonably to plan and coordinate planned service downtime/interruptions in accordance with TTC policies and TTC Business Requirements that are required to facilitate any PRESTO NG system updates, as part of the Operational Services.

2.10 Process for Development and Implementation of Changes

Where a Change is agreed to be implemented pursuant to an approved Change Order, Metrolinx shall:

- (a) follow the solution development process set out in Schedule 2.1(b) (RASCI for PRESTO System Development) and Schedule 2.1(c) (RASCI for Civil Works Requirements) to the Project Management Agreement;
- (b) update the existing PRESTO NG release management plan to incorporate the changes thereto that will be required pursuant to such Change;
- (c) perform the Change in accordance with the Change Order with the cooperation and input of TTC; and
- (d) conduct the acceptance testing of the affected PRESTO NG components and system in accordance with Article 3 of the Project Management Agreement and the Test Plan Strategy set out in the Project Management Agreement, which are hereby incorporated by reference into this Operational Services Agreement, *mutatis mutandis*.

2.11 Training

Training will be provided in accordance with Schedule 4.6 of the Project Management Agreement, the Project Plan, and the TTC Business Requirements.

2.12 Additional Metrolinx Responsibilities

- (a) <u>Use of TTC Premises</u>. Any use of the TTC Premises by or on behalf of Metrolinx shall be for the sole and exclusive purpose of providing the Operational Services. Use of the TTC Premises or any of the premises owned, leased or controlled by the TTC by Metrolinx does not constitute a leasehold interest in favour of Metrolinx. TTC acknowledges and agrees that such PRESTO Equipment and Services as are affixed to or in any premises owned, leased or controlled by TTC does not constitute any property interest in favour of TTC and all such PRESTO Equipment and Services shall remain the sole property of Metrolinx.
- (b) <u>Use of City Premises</u>. Metrolinx acknowledges and agrees that any use of City Premises by or on behalf of Metrolinx shall be for the sole and exclusive purpose of providing the Operational Services. Use of the City Premises or any of the premises owned, leased or controlled by the City of Toronto by Metrolinx does not constitute a leasehold interest in favour of Metrolinx. Notwithstanding any Applicable Law to the contrary, Metrolinx shall own all PRESTO Equipment and Services whether same is installed and/or affixed in any premises owned, leased or controlled by the City of Toronto.
- (c) <u>Manner of Use</u>. Metrolinx and its personnel shall keep the TTC Premises in good order, not commit or permit waste or damage to such TTC Premises, not use the TTC Premises for any unlawful purpose or act, and shall (i) conduct themselves in a businesslike manner at all times, and (ii) comply with all written requests, reasonable policies, procedures and standards of TTC as communicated to Metrolinx from time to time regarding access to and use of the TTC Premises, including in respect of safety, health, security, personal and professional conduct.
- (d) Injury and Property Damage. Metrolinx shall exercise due care and diligence to prevent any injury to person or damage to property while on or in the TTC Premises or City Premises. Metrolinx shall be responsible for the repair, which repair shall be performed promptly, at its cost, of any physical damage caused to the TTC Premises or City Premises by its acts or omissions or those acts or omissions of its contractors or subcontractors, unless and to the extent caused by the acts or omissions of the TTC or the City of Toronto. Such repairs will restore such premises to substantially the same or better standard as existed on the date of installation or affixation of the PRESTO Equipment and Services or the commencement of such other activity by Metrolinx which resulted in such damage, reasonable wear and tear excepted, using materials of substantially the same or better quality as exist already at such premises, which material is to be promptly approved by TTC. TTC shall approve, in advance, all such TTC Premises where PRESTO Equipment and Services will be installed, restored or affixed. Upon reasonable prior notice by TTC, except in the case of emergency repairs where such notice may be in arrears, if Metrolinx does not promptly perform such required repair to remedy such damage to the TTC Premises, TTC shall perform such repairs and provide Metrolinx with a reasonably detailed invoice setting out: (i) the details of the repair, (ii) the costs to perform such repair, and (iii) the dollar amount of the preapproved 15% administration fee, and Metrolinx shall pay to the TTC the invoiced amount within a reasonable period after the receipt of such invoice.

- (e) <u>Vehicle Operation</u>. The operation of Metrolinx vehicles or private vehicles of Metrolinx personnel on TTC property shall conform to posted and other regulations and safe driving practices. Vehicular accidents on TTC property and involving Metrolinx personnel shall be reported promptly to the appropriate TTC security personnel.
- (f) <u>Alterations</u>. Metrolinx shall not make any improvements or changes involving structural, mechanical or electrical alterations to the TTC Premises without TTC's prior written approval, which shall not be unreasonably withheld or delayed.

2.13 Annual Review

The Parties agree to review and discuss, from time to time, but not less frequently than once per year, the provision of the Operational Services (including the Performance Requirements and, pursuant to the Fare Collection Services, the E-Fare Revenue sharing and other funding and financial matters arising under the Funding and Financial Reporting Agreement) and other matters pertaining to the Managed Services.

ARTICLE 3 TTC OBLIGATIONS

3.1 Access and other TTC Dependencies

Metrolinx shall be responsible for all Operational Services, except as otherwise set forth in this Operational Services Agreement. TTC has the responsibilities set out in this Section 3.1 in connection with the Operational Services. Commencing on the Effective Date and continuing for so long as Metrolinx requires the same for the performance of the Operational Services, TTC shall, acting reasonably, be responsible to Metrolinx for the following TTC Dependencies, at no cost to Metrolinx and in a timely fashion taking into account the TTC operational requirements to operate a local passenger transportation system:

- (a) provide access to and use of the TTC Premises and assets during the Term as necessary to install, run and support the Operational Services in accordance with the TTC Business Requirements and Performance Requirements;
- (b) provide access to all PRESTO Equipment and Services in accordance with TTC Business Requirements and TTC policies, which PRESTO Equipment and Services are located on TTC Premises or property;
- (c) Unless otherwise agreed upon, refrain from directly or indirectly affecting the Operational Service, or making changes to any part of PRESTO NG; and
- (d) such other TTC Dependencies as are set out in Schedule 3.1 (TTC Dependencies (Operational)),

in each case, as is required for the purpose of providing the Operational Services. TTC acknowledges and agrees that it has experience and expertise in obtaining the necessary approvals from the City of Toronto for civil works and it agrees to provide all reasonable

assistance to Metrolinx in the development of a civil works approach to ensure that Metrolinx may obtain all necessary approvals and agreements from the City of Toronto to permit the continued operation of the Operational Services as contemplated herein.

3.2 TTC Obligations

- (a) <u>Injury and Property Damage</u>. TTC shall exercise due care and diligence to prevent any injury to Metrolinx personnel or damage to any Metrolinx property, including the PRESTO Equipment and Services, including while same is on any TTC Premises. The Parties acknowledge that certain PRESTO Equipment and Services are located in publicly accessible areas and TTC is unable to guarantee that no damage will be caused to such PRESTO Equipment and Services by members of the public over whom TTC has no control;
- (b) <u>Alterations</u>. TTC shall not move, alter or otherwise handle any PRESTO Equipment and Services, unless required to do so in order to perform TTC functions as contemplated in Schedule 3.2(b) (RASCI - PRESTO System Operations), without Metrolinx's prior written approval;
- (c) <u>Security</u>. TTC agrees to comply with mutually agreed security policies with regard to the PRESTO Equipment and Services. TTC shall also assist Metrolinx in any investigation in the event PRESTO Equipment or Services are being misused or vandalized; and
- (d) <u>Use of PRESTO Equipment and Services</u>. TTC shall exercise due care in ensuring that the PRESTO Equipment and Services are not misused.

ARTICLE 4 APPLICABLE POLICIES

4.1 Policies

With respect to the provision, or receipt, as applicable, of the Operational Services and access to the premises, property and employees of the other Party, each Party shall comply with such applicable policies of the other Party as are provided to the first Party in writing and in advance. Each Party may, from time to time, amend its policies or add new policies, by providing notice to the other Party of such requirement. Each Party acknowledges that changes to the policies may constitute a Change. If the amendment or new policy does not require a Change, then the Parties shall, promptly following such determination by the Designated Representatives, comply with such amended or new policy. If the amendment or new policy does require a Change, then such Change shall be made in accordance with the applicable requirements of the Change Order Procedure set out in the Master Agreement.

ARTICLE 5 TERM AND TERMINATION

5.1 Term

- (a) This Operational Services Agreement shall commence on the Effective Date and shall continue for an initial term which shall end fifteen (15) years from the Effective Date, subject to any extension in accordance with the Master Agreement or any Ancillary Agreement (the "**Term**"), and the Term shall renew as follows:
 - (i) Renewal in the sole discretion of Metrolinx for a term not to exceed one (1) year, based on the time required to recover the incremental costs associated with retrofitting the light rail vehicles and the replacement of any agreed-upon freewheeling turnstiles pursuant to Section 2.1(b) of the Funding and Financial Reporting Agreement. If Metrolinx elects for such renewal, Metrolinx shall provide written notice to TTC no later than the tenth (10th) anniversary of this Operational Services Agreement, along with evidence of such incremental costs; and
 - (ii) Automatically for one (1) subsequent term, of a period of five (5) years less any amount renewed by Metrolinx pursuant to Section 5.1(a)(i) above, unless either Party gives the other Party twenty-four (24) months prior notice of its desire not to renew.
- (b) No later than twenty-five (25) months prior to the expiration of the Initial Term either Party may notify the other Party that it desires to review the terms and conditions of this Operational Services Agreement as they will apply in the renewal term. Such notice shall describe the applicable provisions which the notifying Party wishes to review and promptly after receipt of such notice, the Parties shall jointly review such provisions in good faith.
- (c) If a Party's performance of any of its obligations pursuant is prevented, hindered or delayed by reason of one or more Force Majeure Events pursuant to Article 16 of the Master Agreement, and if such Force Majeure Event(s) results in an aggregate delay in performance greater than one month, the Parties may extend the Term of this Operational Services Agreement by the extent of such delay, with such extension being rounded to the nearest full month.

5.2 Termination

Termination of this Operational Services Agreement will occur in accordance with Article 15 of the Master Agreement.

5.3 Orderly Transition

Upon termination or expiration of this Operational Services Agreement, Termination/Expiration Transition will be done in accordance with Section 15.3 of the Master Agreement. In the case of such Termination/Expiration Transition, TTC will provide access to all relevant TTC Premises to extract PRESTO Equipment and Services, unless otherwise agreed or otherwise in accordance with Section 15.3 of the Master Agreement.

5.4 Survival

The provisions of Sections 5.3, 5.4, and Article 1 and Article 6 shall remain in effect after the termination or expiry of this Operational Services Agreement, until such time as the Parties mutually agree to the release of the obligations contained therein. No termination of this Operational Services Agreement by any Party shall affect the rights and obligations of any Party which have accrued as of the date of such termination.

ARTICLE 6 GENERAL PROVISIONS

6.1 Invalidity

If any of the provisions or part thereof contained in this Operational Services Agreement is found to be invalid, illegal or unenforceable in any respect, the validity, legality or enforceability of the remaining provisions or parts thereof contained herein shall not be in any way affected or impaired thereby.

6.2 No Amendment

No supplement, modification or termination of this Operational Services Agreement shall be binding unless executed in writing by the Party to be bound thereby.

6.3 No Waiver

No waiver of or consent to depart from the requirements of any provision of this Operational Services Agreement shall be binding against either Party unless it is in writing and is signed by the Party giving it. Such waiver or consent shall be effective only in the specific instance and for the specific purpose for which it has been given and shall not be deemed or constitute a waiver of any other provisions (whether or not similar) nor shall such waiver constitute a continuing waiver unless otherwise expressly provided. No failure on the part of either Party to exercise, and no delay in exercising, any right under this Operational Services Agreement shall operate as a waiver of such right. No single or partial exercise of any such right shall preclude any other or further exercise of such right or the exercise of any other right.

6.4 Counterparts

This Operational Services Agreement may be executed in any number of counterparts. Either Party may send a copy of its executed counterpart to the other Party by facsimile transmission instead of delivering a signed original of that counterpart. Each executed counterpart (including each copy sent by facsimile transmission) shall be deemed to be an original; all executed counterparts taken together shall constitute one agreement.

[Signature Pages Follow]

IN WITNESS WHEREOF this Operational Services Agreement has been executed by the Parties as of the Effective Date.

METROLINX

By: Name: B McCuaig Title: President and Chief Executive Officer

TORONTO TRANSIT COMMISSION

By:

Name: Andy Byford Title: Chief Executive Officer

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IN WITNESS WHEREOF this Operational Services Agreement has been executed by the Parties as of the Effective Date.

METROLINX

By:

Name: Bruce McCuaig Title: President and Chief Executive Officer

TORONTO TRANSIT COMMISSION

By:

Name: Andy Byford Title: Chief Executive Officer

SCHEDULE 1.2 DEFINITIONS FOR THIS OPERATIONAL SERVICES AGREEMENT

Note: All capitalized terms used in this Operational Services Agreement, and not otherwise defined herein, have the meaning ascribed to such terms in the Master Agreement, unless the context otherwise requires.

"City Premises" means City of Toronto owned or leased properties where PRESTO Equipment and Services are located or to which Metrolinx otherwise requires access in order to perform the Operational Services. City Premises may include such on-street areas as are used by the TTC to provide service within the TTC Transit System.

"**Incident/Problem Management Procedure**" means Schedule 2.6 (Incident/Problem Management Procedure), attached hereto.

"Master Agreement" means the Master E-Fare Collection Outsourcing Agreement between Metrolinx and TTC dated November 28, 2012.

"**Operational Reporting**" means such reporting as set out in Schedule 2.1(f), attached hereto and in accordance with TTC Business Requirements.

"**Operational Services**" means such services to be provided by Metrolinx as set out in Section 2.1 of this Operational Services Agreement.

"**Operational Services Agreement**" means this Operational Services Agreement between Metrolinx and TTC.

"**Performance Requirements**" means the Service Level Targets and any other performance baselines for the Operational Services, as set out in the SLA.

"RASCI for PRESTO System SLA Framework" shall mean the framework for developing the Service Level, SLA and Service Level Targets attached hereto as Schedule 2.2.

"Service Level" means any service level specified in the SLA.

"Service Level Targets" mean the target at which (or range within which) a given Service Level will be met as set out in the SLA.

"SLA" means the service level agreement between Metrolinx and the TTC that describes the processes and methods that are used to measure and report on the performance of the Operational Services and the Managed Services, and which sets out Service Levels and Service Level Targets, and which will be attached as Schedule 2.5.

"Term" has the meaning ascribed thereto in Section 5.1.

"TTC Dependency" means an activity that Metrolinx requires the TTC to perform on a timely basis in order to permit Metrolinx to perform the Operational Services as described in Schedule 3.1.

"**TTC Premises**" means the TTC owned, leased or contracted for properties where PRESTO Equipment and Services are located or to which Metrolinx otherwise requires access in order to perform the Operational Services. TTC Premises includes transit vehicles (e.g. buses, streetcars, light rail vehicles, rapid transit vehicles and subway cars, and other vehicles performing services to TTC under contract) used by the TTC within the TTC Transit System.

SCHEDULE 2.1(F) OPERATIONAL REPORTING

Operational monitoring and operational reporting are Metrolinx responsibilities as part of the Operational Services.

Metrolinx will maintain responsibility for conducting operational monitoring and performing necessary operational level reporting for the TTC based on TTC Business Requirements to support the Operational Services.

SCHEDULE 2.2 FRAMEWORK FOR SERVICE LEVEL AGREEMENTS

Roles and Responsibilities for SLA Framework and Processes

Definitions

The roles and responsibilities have been cast in a standard RASCI notation where for each activity stated, both TTC and PRESTO roles are defined. Specifically the following Role definitions are used:

Role	Description
Responsible	The Party that is identified as being responsible shall carry out the work/activity.
Accountable	The Party that is identified as being accountable shall delegate the work to the party that is identified as being Responsible but shall remain Accountable for the correct and thorough completion of the activity.
Consulted	The Party that is identified as being consulted must be consulted before a decision is taken. Consultation is a two way conversation but the consent of the Consulted Party is not required.
Informed	The Party that is identified as being informed must be updated on progress of an activity. This is a one way conversation and the consent of the Informed Party is not required.
Support	The Party that is identified as supporting the activity is to be involved, in some capacity in the activity. The degree of involvement will be mutually agreed upon by all Parties. Support includes both Consulted and Informed.
Mutual Agreement	Where an activity is said to require Mutual Agreement, the Parties involved (TTC and PRESTO) must agree on the result of the activity and agree to proceed to the next step (i.e. it represents a gate in the process). Mutual Agreement must be documented.
Sign Off	Where an activity is said to require Sign-Off, an Acceptance/Approval of a completed (end state) activity or deliverable is required from the Party having Sign Off authority. Sign Off must be documented.

RASCI for SLA Frameworkⁱ

ID	Activity	PRESTO		Mutual
		Role	TTC Role	Agreement
1.0 Pre-	SLA Management and Monitoring Ac	ctivities – To be	e part of the Pr	oject Plan ⁱⁱ
1.1	Develop a SLA Management and Monitoring System ⁱⁱⁱ	Responsible, Accountable	Support	
1.2	Perform RASCI for SLA Definition Process			~
1.3	Ensuring the SLA Management and Monitoring System is capable of accommodating additions, deletions, and changes to the SLAs, Service Levels and Credits	Responsible, Accountable	Informed	
1.4	Acceptance of a SLA Management and Monitoring System			~
1.5	Operating and maintaining the SLA Management and Monitoring System	Responsible, Accountable	Informed	
1.6	Provision of a PRESTO NG SLA Manager	Accountable, Responsible, Accountable	Informed	
1.7	Provision of a TTC SLA Manager	Informed	Accountable, Responsible	
1.8	Develop a process and methodology for setting Credits for a Service Level Failure(s) ^{iv}			~
1.9	Acceptance of a process to setting Credits for Service Level failure.			~
1.10	Use the Provincial PRESTO Service Priority Definitions (Severity Levels)			~
1.11	Establish criteria for Service Level Severity Levels ^v			~
1.12	Acceptance of Severity Levels and criteria			✓
1.13	Establishing a process to determine relevance of a SLA and Service Level			
1.14	Defining a process for readjustment of a Service Level			✓ ✓
1.15	Establishing a process for identifying new SLAs and associated Service Levels			~
1.16	Development of SLAs via the RASCI for SLA Definitions Process			· · ·

ID	Activity	PRESTO		Mutual
		Role	TTC Role	Agreement
1.17	Determination of Initial SLAs and			
	Service Levels			•
1.18	Determination of an initial Service			
	Level Baseline Period			✓
1.19	Start of SLA Management and			
	Monitoring			✓
2.0 SLA	Measurement and Reporting			
2.1	Collection of Raw Data used in SLA	Responsible,	Informed	
	calculations	Accountable		
2.2	Storing of Raw Data used in SLA	Responsible,	Informed	
	calculations	Accountable		
2.3	Storing of all additional data, tables,	Responsible,	Informed	
	assumptions, configurations, etc. used	Accountable		
	in SLA Calculations			
2.4	Maintaining accurate data records and	Responsible,	Informed	
	logs	Accountable		
2.5	Allowance for the use of new or			
	different measurement tools and or			
	methodologies			✓
2.6		Responsible,	Informed	
2.0	Calculation of all Service Levels	Accountable	mormed	
2.7		Responsible,	Informed	
2.1	Reporting of all Service Levels	Accountable	mormed	
2.8	Development of a Service Level	Responsible,	Support	
2.0	Development of a Service Level dashboard(s)	Accountable	Support	
2.0			Informed	
2.9	Maintaining / Updating a Service	Responsible,	Informed	
2.10	Level dashboard(s)	Accountable	Informed	
2.10	Performing Trend Analysis of Service Levels	Responsible, Accountable	mormeu	
2.11		Responsible,	Informed	
2.11	Monthly reporting of all SLA Credits	Accountable	mormed	
2.12	Acceptance of SLA Credit			+
2.12	Calculations			✓
2.13	Ensure all Service Levels and reports	Responsible,	Informed	
2.13	for all SLAs can be independently	Accountable	mormeu	
	calculated from data stored in Data	. iceountuole		
	Mart			
2.14	Allowance for collecting, calculating,	Responsible,	Informed	
	monitoring and reporting on metrics	Accountable		
	other than SLAs			
2.15	SLA Monthly meeting	Responsible,	Support	
		Accountable		

ID	Activity	PRESTO		Mutual
2.0.CT	vi vi	Role	TTC Role	Agreement
	Incident ^{vi}	A (11	G (
3.1	Identification of an SLA Incident	Accountable, Responsible	Support	
3.2	Notification of an SLA Incident	Responsible, Accountable	Informed	
3.3	Generation of Alerts	Responsible, Accountable	Informed	
3.4	Classification of Service Level Severity Level			~
3.5	Prioritization of Service Level Failures			~
3.6	Conduct Post Incident Review (PIR) ^{vii}	Responsible, Accountable	Support	
3.7	Conduct PIR Meeting	Responsible, Accountable	Support	
3.8	Produce a PIR Report (including responses to questions, concerns, issues etc.)	Responsible, Accountable	Informed	
3.9	Acceptance of the PIR Report			✓
3.10	Development of SLA Incident Correction Plan	Responsible, Accountable	Support	
3.11	Acceptance of SLA Incident Correction Plan			~
3.12	Implement SLA Incident Correction Plan	Responsible, Accountable	Support	
3.13	Verify SLA Incident is Corrected	Responsible, Accountable	Support	
3.14	Acceptance that the problem has been corrected			~
4.0 Serv	vice Level Failures			
4.1	Calculating Credits for a Service Level Failure	Responsible, Accountable	Informed	
4.2	Monthly reporting of Credits due including a Credits report.	Responsible, Accountable	Informed	
4.3	Acceptance of Credits report and Credits due			~
4.4	Payment of SLA Credits	Responsible, Accountable	Informed	
4.5	Tracking of month by month Service Level Failures and Credit	Responsible, Accountable	Informed	

ID	Activity	PRESTO		Mutual
		Role	TTC Role	Agreement
5.0 Mod	lifications and Improvement of SLAs			
5.1	Development of TTC Customer and	Accountable	Responsible	
	TTC Business Service Level			
	satisfaction surveys			
5.2	Conducting Service Level satisfaction	Accountable,	Support	
	surveys	Responsible		
5.3	Analysis of Service Level satisfaction	Accountable,	Support	
	surveys	Responsible		
5.4	Conducting annual /semi-annual	Responsible,	Support	
	Service Level review meeting ^{viii}	Accountable		
5.5	Determining the relevance of each			
	SLA and Service Level			✓
5.6	Readjustment of the Service Level for			
	an SLA			✓
5.7	Adding new SLAs and associated			
	Service Levels			✓
5.8	Developing a process and plan for			
	applying SLA changes			✓
5.9	Modifications to SLA Management	Responsible,	Support	
	and Monitoring as a result of SLA	Accountable	11	
	e e			
	and Service Level changes			

			TTC	Mutual
ID	Activity	PRESTO Role	Role	Agreement
A.0 Es	stablishing SLAs	-		
A.1	Establish Service Level Objectives and the need for performance measures ^{ix} .			~
A.2	Evaluation of Service Level Objectives ^x			~
A.3	Selection of SLA from Service Level Objectives			~
A.4	Selection of Key Performance Indicators from SLAs			~
A.5	Acceptance of identified SLA(s)			~
B.0 Es	stablishing SLA Parameters			
B.1	Establish SLA Name			~
B.2	Identify SLA Category			~
B.3	Establish SLA scope			~
B.4	Establish Assumptions and Responsibilities			✓
B.5	Establish whether or not a Service Level Baseline Period applies to this SLA			✓
B.6	Establish Targeted Service Limit for the Baseline Period (if applicable).			✓
B.7	Determine Service Level after Baseline Period (if applicable).			✓
B.8	Determine specific exclusions in calculating the Service Level for this SLA			~
B.9	Establish time frame for during which the defined Service Level is to be measured.			~
B.10	Establish when Preventative Maintenance can be done without impacting the Service Level calculation			~
B.11	Establish impact of Corrective Maintenance to Service Level calculation			~
B.12	Define Measurement Process			~

RASCI for SLAs Definition Process

		TTC	Mutual
Activity	PRESTO Role	Role	Agreement
Selection of measurement tools and	Responsible,	Informed	
methodologies that meet industry standards	Accountable		
Acceptance of measurement tools and			
methodologies			✓
Define available data sources used to calculate			
SLA Service Level			•
Establish what available Raw Data,			
configurations, tables etc. will be used for the			✓
			✓
			✓
			✓
			✓
1			
			✓
Establish Notification List			✓
Use the process and methodology for setting	Responsible	Support	
	-	Support	
	recountable		
•			✓
	Selection of measurement tools and methodologies that meet industry standards Acceptance of measurement tools and methodologies Define available data sources used to calculate SLA Service Level Establish what available Raw Data,	Selection of measurement tools and methodologies that meet industry standardsResponsible, AccountableAcceptance of measurement tools and methodologiesAccountableDefine available data sources used to calculate SLA Service LevelSLA Establish what available Raw Data, configurations , tables etc. will be used for the calculation of the Service LevelSLA Establish frequency of the data used in the Service Level CalculationEstablish a formula for the calculation of the Service Level.Service Level is calculated.Establish the frequency that the Service Level is calculated.Service Level is calculated.Determine the reports and dashboards generated for the Service LevelResponsible, AccountableUse the process and methodology for setting Credits for a Service Level failure previously establish the desired behaviour for meeting theResponsible, Accountable	ActivityPRESTO RoleRoleSelection of measurement tools and methodologies that meet industry standardsAccountableInformedAcceptance of measurement tools and methodologiesAccountableInformedDefine available data sources used to calculate SLA Service LevelInformedInformedDefine available data sources used to calculate stablish what available Raw Data, configurations , tables etc. will be used for the calculation of the Service LevelInformedInformedEstablish frequency of the data used in the Service Level CalculationInformedInformedInformedEstablish frequency of the data used in the Service Level.InformedInformedInformedEstablish the frequency that the Service Level is calculated.InformedInformedInformedEstablish the frequency that the Service Level is reported.InformedInformedInformedDetermine the reports and dashboards generated for the Service LevelInformedInformedInformedUse the process and methodology for setting Credits for a Service Level failure previously establish the desired behaviour for meeting theResponsible, AccountableSupport

ⁱAn SLA Consultant may be used by PRESTO and TTC. Costs to be shared by both Parties.

^{iv}This process and methodology may include but not be limited to:

Providing example calculations for Credits due to Service Level Failures

^vIn addition to the Provincial PRESTO Service Priority Definitions, TTC and PRESTO may further develop criteria for establishing the Severity level of Service Level Failures based on impact to TTC business, operations and customers.

ⁱⁱNote that this section defines activities that need be included in the Project Plan. Also note that these activities are not necessarily in logical order.

ⁱⁱⁱAll SLAs will be measured, monitored, managed, recorded and reported on by the SLA Management and Monitoring System throughout the Term.

Establishing defined Credit tables / calculations based on Severity Level of Service Level Failure; Establishing Credit increases for consecutive monthly Service Level Failures of the same SLA;

Establishing Credit increases for repeated Service Level Failures of the same SLA within a year (i.e. not necessarily consecutive months)

Establishing maximum monthly Credits limit where the Credits due are summed Credits for all Service Level Failures for that month

^{vi}The PRESTO Incident/Problem Management Procedure will be used where applicable, in conjunction with the SLA Incident process outlined here.

^{vii}PIR may include:

An investigation of the SLA Incident and of the Problem given rise to the SLA Incident;

A root cause analysis;

An impact analysis of the SLA Incident; and

Other investigations deemed necessary to understand and resolve the SLA Incident

viiiReview of the current Service Level, Credits, processes etc. This annual/semi-annual review may include:

determining the relevance of each SLA and Service Level;

adjustment of a Service Level for an SLA;

identifying additional SLAs and associated Service Level;

defining (in detail) additional SLAs and associated Service Levels;

removing SLAs and associated Service Levels determined to no longer be relevant; and

results of Service Level satisfaction surveys.

^{ix}TTC, with the support of PRESTO will establish Service Level Objectives (SLO) focused on TTC business needs and aligned with TTC business strategy.

^xThe detailed list of SLOs will be evaluated. Evaluation criteria may include determining if the SLO is fit to be a Key Performance Indicator (KPI):

Attainable; Repeatable; Measurable; Meaningful; Controllable; Affordable; and Mutually Acceptable The result of this process will be a list of ranked SLOs which includes all business unit mapping, categories and other SLO information.

Definitions

Term	Meaning
Baseline Period	Means with respect to a SLA, the period, if any, for which no Credits are eligible for PRESTO's failure to meet or exceed the applicable Service Level. The Baseline Period is used to benchmark Service Levels on 'live' production systems, services, Hardware and Software. At the end of the Baseline Period a mutually agreed Service Level is set based on the benchmark measure as well as the measure that needs to be achieved in order to meet TTC business needs.
Credits	Means the monetary payments calculated due to Service Level Failures.
SLA Incident	Means the failure to meet a Service Level
SLA Incident Correction Plan	Means a detailed plan outlining how the Problem giving rise to the SLA Incident will be corrected. This plan includes effort and timing of fix as well as verifying the fix.
Key Performance Indicator	A critical SLA
Measurement Tools	All Hardware and Software used to calculate Service Levels.
Post Incident Review	Means the process of evaluating an SLA Incident that has just occurred.
Raw Data	Means the source data that has not been processed for meaningful use.
Resolution	Means the correction or elimination of an SLA Incident through a temporary or permanent fix or by-pass so that, following the Resolution, the SLAs meet the applicable Service Levels.
Service Level Failure	Has the same meaning as SLA Incident.
Service Level Objective	Means the measurable characteristics of a service or system, such as availability, throughput, response time, uptime, wait time etc. that are align with the business needs and business strategy.
Service Levels	Means the qualitative and quantitative performance standards applicable to an SLA.
Severity Level	Means, with respect to an SLA Incident, the highest priority level that is applicable based on a mutually agreed set of classifications.
SLA Category	Means the grouping of individual SLAs by Service Level Objective
SLA Consultant	has significant experience in the setting of service levels for services that are similar in scope to the Managed Services; is not a TTC Affiliate or a Vendor Affiliate; does not compete directly with Vendor by providing services that are substantially similar in scope to the Managed Services; and is willing to execute a confidentiality agreement in a form

	acceptable to the parties thereto, acting reasonably.
SLA Manager	Means the PRESTO person who is the primary point of
	contact between the Parties in dealing with all SLA and SLA
	management issues, reviews, and Resolutions.
SLA Management and	As defined in Exhibit I – TTC Business Requirements
Monitoring System	Definitions
Provincial PRESTO	As defined in Schedule 2.6 in the Operational Services
Service Priority Definitions	Agreement.

EXHIBIT 1 TO SCHEDULE 2.2

REFERENCE TO EXPERT PANEL

1. Definitions:

In this Expert Panel Protocol, words with initial capitals shall have the following meanings:

"**Reference**" means any matter pertaining to the sort to be resolved by this Expert Panel Protocol in accordance with the provisions of Section 2.2 of the Operational Services Agreement.

"Expert Panel" means collectively, the individuals selected by the Parties.

"Notice of Referral" means a notice in writing from a Party to the JEC with a copy to the other Party specifying the nature of the Reference with reasonable particularity and the relief or remedy sought.

2. Principles:

(a) The Parties will endeavour to remedy or resolve References in good faith by amicable negotiations and to facilitate a resolution. Each Party shall provide frank, candid and timely disclosure of relevant facts, information and documents. The Parties agree that all References will be resolved in accordance with this Expert Panel Protocol, subject to the provisions of Section 2.2 of the Operational Services Agreement, and that they will not have recourse to the courts or to any other form of resolution in respect of any such Reference.

(b) No action or failure to act by a Party shall constitute a waiver by such Party of a Reference nor shall any such action or failure to act constitute an approval or acquiescence in respect of a Reference except as agreed to in writing or resolved in accordance with this Expert Panel Protocol.

(c) Activities shall continue during the subsistence and pending the resolution of a Reference.

(d) The Parties agree that timely resolution of any Reference is mutually beneficial and that, accordingly, the time limits set out herein will be strictly enforced unless otherwise agreed to by all Parties.

3. The Expert Panel:

(a) Each of the potential members is an independent, impartial, neutral, qualified and experienced professional, knowledgeable and experienced in the design and operational matters, as applicable, pertaining to the Managed Services, has either technical, legal, contractual or procedural skills and expertise, and who has provided the Parties with a written statement that he/she has no interest, financial or otherwise, in the Managed Services or in the business and affairs of any of the Parties or in any contractor or consultant retained by or on behalf of Metrolinx in respect of the Program.

(b) In the event either Party invokes Section 2.2 of the Operational Services Agreement, Metrolinx shall select an individual and the TTC shall select an individual, and the two individuals so selected shall select a third individual, which three individuals collectively shall constitute the Expert Panel, provided however that if an individual resigns, is unavailable, or fails to carry out his/her duties and responsibilities as required, the Party who selected such individual will replace him/her with another individual or, in the case of the jointly-chosen individual, the two other remaining panelists will, jointly, select a new individual.

(c) Each individual so selected from time to time and constituting the Expert Panel shall enter into an agreement substantially in the form of the agreement attached as Addendum 1 hereto.

(d) The Expert Panel is intended to be knowledgeable about the progress of design, operation and other pertinent matters including major developments regarding the Managed Services and for such purpose will be provided with such documents, material and information from time to time and on an on-going basis in order to keep it informed and up-to-date and better able to deal with References when they arise expeditiously and effectively. In addition to the foregoing, brief status meetings and site tours will be held on a regular basis. Criteria to be considered by the Expert Panel may be mutually agreed to by the Parties and submitted to the Expert Panel.

(e) In addition to the primary function of the Expert Panel as set out in Section 5, the Expert Panel, at the request of the Parties, may provide informal advice and solutions on potential References.

4. Referral to JEC:

Where a Party wishes to refer a Reference it shall deliver a Notice of Referral to the JEC, and the Parties shall not have recourse to the courts or otherwise in respect of References. The JEC shall meet within 3 Business Days of receipt of a Notice of Referral to it and attempt to negotiate a resolution of the Reference within 10 days (unless a Party notifies the members of the JEC and the other Party that the Reference must be dealt with on an urgent basis, in which case the JEC shall endeavour to resolve the Reference on an expedited basis). If the JEC is unable to resolve the Reference within the time stipulated above, the JEC shall refer the Reference to the Expert Panel. Deliberations of the JEC shall be on an entirely without prejudice basis in any subsequent proceedings. During the subsistence of a Reference the work pertaining to the Managed Services shall continue uninterrupted.

5. Referral to Expert Panel:

If the JEC is unable to resolve the Reference within the time stipulated in Section 4 above, the JEC may refer the Reference to the Expert Panel. The Expert Panel shall meet as soon as possible after the Reference has been referred to it and shall make a determination in respect of the Reference as quickly as possible but in any event within 30 days and the Reference being referred to it. The decision of the Expert Panel shall be immediately implemented and final and binding upon the Parties, with no appeal or recourse to the courts or to any other Reference resolution process in respect of any such decision. Each Party shall be conclusively deemed to

have accepted the decision of the Expert Panel and to have expressly waived and released each other Party from any claims in respect of the Reference.

5. Procedures and Procedural Matters:

The following procedures and procedural matters shall apply to the Expert Panel and the Parties:

(a) *Jurisdiction:* The Expert Panel may rule on its jurisdiction to hear the Reference (including the scope of the Reference);

(b) *Date, Time, Place:* The Expert Panel shall select the date, time and place of the meetings, with regard to the objective of resolution of the Reference on an immediate and urgent basis;

(c) *Conduct of Proceedings:* The Expert Panel may conduct its investigation and meetings in any manner that it reasonably considers to be appropriate (the rules of evidence are not necessarily applicable), including meeting privately with any Party, but will treat each Party fairly and give each Party an opportunity to present its views regarding the Reference. Each Party is expected to participate fully and to make full and frank disclosure to the Expert Panel, and to provide all relevant information and documents, including information and documents in the possession or control of a Party, as specifically requested by the Expert Panel (information and documents may and shall on request be disclosed by the Expert Panel to the other Parties);

(d) *Legal Representation:* Any Party may be accompanied by legal counsel at meetings between such Party and the Expert Panel;

(e) *Expert Witnesses:* The Expert Panel may ask questions of any witness or expert witness to assist in and facilitate the resolution of the Reference but shall not retain any experts unless the Parties consent in writing in advance, and if the Parties so consent and an expert is retained, such expert shall be required to provide a written report/summary of its evidence, which shall be made available to all Parties;

(f) *Interim Decisions:* The Expert Panel may make interim decisions pending final resolution of the Reference;

(g) *Transcripts:* The Expert Panel shall determine whether or not its meetings and proceedings shall be transcribed, but if transcribed, copies of the transcripts shall be made available to the Parties;

(h) *Confidentiality:* Unless agreed to in writing by all Parties, the Parties and the Expert Panel shall keep confidential all matters, hearings, information and documents disclosed in connection with resolution of the Reference except where disclosure is necessary to implement a decision or required by law.

(i) *Failure to Cooperate:* If a Party fails to co-operate or comply with the requirements of the Expert Panel following written notice of non-compliance by the Expert Panel, the Expert Panel may make its determination without regard to the evidence of or participation by such Party; and

(j) *Determination:* The decision or determination regarding resolution of a Reference shall require agreement by a majority of the members of the Expert Panel. Any such determination or decision shall be in writing, shall state the reasons upon which it is based, and shall be signed and dated by each member of the Expert Panel.

(k) *Costs:* All costs of the Expert Panel, including without limitation, expert witness called by it, shall be borne and paid for by the Parties to the Reference equally.

(1) *Implementation:* A decision or determination of the Expert Panel shall be effective and implemented immediately.

(m) *Release:* The Parties will agree to release and save harmless any member of the Expert Panel from any liability arising from his/her actions made in good faith in carrying out the prescribed duties, if required.

ADDENDUM 1 TO EXHIBIT 1 TO SCHEDULE 2.2

EXPERT PANEL AGREEMENT

Made the \bullet day of \bullet , 20 \bullet .

BETWEEN:

METROLINX

("Metrolinx")

and

TORONTO TRANSIT COMMISSION

(the "**TTC**")

and

THE MEMBERS OF THE EXPERT PANEL, WHO ARE SIGNATORIES TO THIS AGREEMENT

(each a "Member" and collectively the "Members" or the "Expert Panel")

RECITALS:

A. Metrolinx and TTC have entered into an Operational Services Agreement dated as of November 28, 2012 (the agreement including the schedules to it, as may be amended from time to time, the "Operational Services Agreement") to provide for, inter alia, certain matters pertaining to the design and development of the Managed Services.

B. In accordance with the provisions of the Operational Services Agreement, an Expert Panel ("Expert Panel") to assist in and facilitate the avoidance of References and the timely and impartial resolution of References that are referred to it is required to be constituted from time to time.

C. Each member of the Expert Panel is required to enter into this Reference Resolution Board Agreement.

D. All terms with initial capitals, unless otherwise defined herein, shall have the meanings ascribed to such terms in the Operational Services Agreement.

FOR VALUABLE CONSIDERATION, the Parties covenant and agree as follows:

1. SCOPE OF WORK

(a) General: The Expert Panel shall:_(i) stay abreast of developments with respect to the Projects by means of periodic meetings and site visits, review progress reports, meeting minutes and other job documents and materials provided to it and by other means as mutually agreed by the Parties; and (ii).examine specific problems relating to an existing or potential Reference, unless such examination is not practical, or, in the judgment of the Parties, would result in delay to the Managed Services.

(b) Expert Panel Operating Procedures: The individual selected jointly by the Metrolinx appointee and by the TTC appointee shall serve as Chair. At its first meeting, the Expert Panel shall establish operating procedures mutually agreeable to the Parties, including administrative duties, content and format of information which may be presented at Expert Panel hearings, conduct of hearings, and invoicing details and procedures. The Expert Panel shall initiate new procedures or modify existing procedures as mutually agreed to by the Parties from time to time in order to facilitate the efficient and expeditious conduct of its work, and shall provide Metrolinx and TTC with the operating procedures, including all modified procedures, in written form.

(c) Resolution of References: Upon referral of a Reference to it, the Expert Panel shall schedule and conduct a hearing within the time required by the Operational Services Agreement. When proper evaluation of the Reference requires expertise that is not within the collective experience of the Expert Panel, the Expert Panel shall engage the services of one or more outside consultants as needed to advise it. The Expert Panel shall convene internal meetings as needed to review and discuss the Reference, and to formulate its report, and when the Expert Panel has made a determination in respect of a Reference, the Expert Panel shall issue a timely written report specifying the reasons for its determination (and shall include the report and rationale for any dissenting view). The report shall be signed by each member of the Expert Panel.

2. SERVICES AND RESPONSIBILITIES:

(a). Responsibilities of the Members: Each Member is required:

(i) to maintain impartiality, avoid conflicts of interest and promptly advise Metrolinx, TTC and other members of the Expert Panel upon becoming aware of any development that could be perceived as a conflict of interest;

(ii) to keep confidential and not discuss, individually or collectively, issues with Metrolinx and TTC, that could possibly be constructed as compromising the Expert Panel's ability to impartially resolve future References, such as the conduct of work and the resolution of problems;

(iii) not to express individually or collectively, opinion(s) of merit, in whole or in part, for any potential or other Reference at any time prior to the issue of a report except if an advisory opinion is sought by Metrolinx and TTC;

(iv) except as required when performing the duties of the Chair or conducting a hearing which any of Metrolinx or TTC does not attend, not to communicate with Metrolinx or TTC in the absence of the others unless agreed to by Metrolinx and TTC;

(v) to consider the facts and conditions forming the basis for a referred Reference impartially, and independently and to evaluate the merits based on careful consideration of all circumstances of the Reference and not to: (i) ignore or undermine the clear intent of the Operational Services Agreement, or disregard or alter any requirements of the Operational Services Agreement or allocation of risk specified therein, or (ii) supplant or otherwise interfere with the respective rights, authority, duties, and obligations of Metrolinx and TTC as set forth in the Operational Services Agreement; and

(vi) to make every effort to reach unanimous recommendations but if this cannot be accomplished, to include written minority recommendations and supporting rationale with its determination.

(b). Responsibilities of Metrolinx and TTC: Metrolinx and TTC are required to:

(i) except for participation in the Expert Panel's activities as provided in the Operational Services Agreement and this Expert Panel Agreement, not to solicit advice or consultation from the Expert Panel or its members on matters that might compromise the Expert Panel's ability to impartially resolve future References;

(ii) to furnish to each Expert Panel member, one copy of all pertinent documents; and

(iii) to cooperate with the Expert Panel to facilitate prevention of References and the timely and impartial resolution of References.

3. COMMENCEMENT AND COMPLETING EXPERT PANEL ACTIVITIES:

The Expert Panel's jurisdiction under this Agreement shall commence when Metrolinx, the TTC and each Member has executed this Agreement and shall continue until substantial completion of the SLA, unless terminated earlier by mutual agreement of Metrolinx and TTC. The Expert Panel is required to perform its duties within the time prescribed by and otherwise in accordance with the Operational Services Agreement and the provisions of this Agreement. This Agreement shall survive the termination, resignation or death of any of its members, and on the happening of any such event, a new Member shall be chosen by the Party which selected the Member who resigned, died or is no longer able to act, who shall execute a counterpart of this Agreement and thereby be bound by it. In addition to the foregoing, any of Metrolinx and TTC terminate and replace the member appointed by it, and replace such Member with a new member, in which case the new member so appointed will execute a counterpart of this Agreement and thereby be bound by it.

4. **PAYMENT:**

The following provisions shall apply to payments to the Members for services hereunder:

(a) Payments made to the Members shall constitute full compensation for work performed, travel time and services rendered, and for all materials, supplies and incidentals necessary to serve on the Expert Panel.

(b) Payment for services rendered by the Members shall be at the rate and conditions agreed to between Metrolinx, TTC and each Member.

(c) Members shall be reimbursed for actual direct, non-salary expenses which may include automobile mileage, parking, travel expenses from point of departure to the initial point of arrival, automobile rental, taxi fares, food and lodging, printing long distance telephone, postage and courier delivery, as determined by the Parties.

(d) Payment made to Members in the form of bonus, commission, or consideration of any nature other than that specified above for performance and service provided under this Agreement, before, during or after the period that this Agreement is in effect, is prohibited.

(e) Members shall individually submit invoices for work completed to Metrolinx and TTC: (i) not more often than once per month, (ii) based on the agreed billing rate and conditions and on the number of hours expended or other agreed upon method, together with direct, non-salary expenses including an itemized listing supported by copies of original bills, invoices and expense accounts, and (iii) accompanied by a description of activities performed daily during that period.

(f) Metrolinx shall pay approved invoices within 90 days of receipt.

(g) TTC shall reimburse Metrolinx for its share of the payments made by Metrolinx to Members on the basis that all such payments are to be shared equally by Metrolinx and the TTC.

5. CONFIDENTIALITY AND RECORD KEEPING:

No Member shall divulge information identified as confidential that has been acquired during Expert Panel activities or made available to him/her by Metrolinx or TTC or anyone acting on their behalf without obtaining the consent of Metrolinx and TTC in writing. Members shall maintain cost records pertaining to this Agreement for inspection by Metrolinx and TTC for a period of six years following the termination of this Agreement.

6. SUCCESSORS AND ASSIGNS:

This Agreement enures to the benefit of the Parties to it and their respective successors and permitted assigns. This Agreement is not assignable by any Party to it without the consent of the other Parties save and except that any of Metrolinx and TTC may assign it only in conjunction with an assignment of the Operational Services Agreement.

7. LEGAL RELATIONSHIP:

The Parties to this Agreement expressly acknowledge that each Member in the performance of his/her duties on the Expert Panel, is acting in the capacity of an independent contractor and not as employee or agent of the Party that appointed him/her. Member shall be precluded from

participating in subsequent proceedings regarding References in respect of the Projects or pertaining to the Operational Services Agreement.

8. GOVERNING LAW AND ATTORNMENT:

This Agreement is an Ontario contract, governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein. Each Party consents and attorns to the jurisdiction of the courts of Ontario and acknowledges and agrees that any right or obligation under this Agreement shall be initiated and brought in the Courts of Ontario.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this Agreement.

METROLINX	TORONTO TRANSIT COMMISSION
By:	By:
	Name:
Title:	Title:
By:	By:
	Name:
Title:	Title:
We have the authority to bind the corporation	We have the authority to bind the corporation
[MEMBER]	
Name:	Witness:
[MEMBER]	
Name:	Witness:
[MEMBER]	
Name:	Witness:

SCHEDULE 2.2(B) TERMS AND CONDITIONS FOR SUSPENSION

1. Suspension

- (a) Upon its determination that the criteria and failure thresholds for suspension as set out in SLA exist, TTC may provide Metrolinx a written notice of its intent to suspend. Such notice of intent to suspension shall set out in sufficient detail the basis for its determination that the criteria and failure thresholds have been exceeded. Within 24 hours of receipt of any such notice, Metrolinx shall provide its acknowledgement of receipt. Metrolinx shall promptly, but no later than five (5) Business Days after receipt, develop a remedial plan to remedy all material defects identified in the notice of suspension within a reasonable period and shall seek TTC's consent to such remedial plan, which shall not be unreasonably withheld or unduly delayed. If the Parties are unable to agree upon such remedial plan within five (5) Business Days of its delivery to the TTC, TTC may provide a written notice of suspension.
- (b) Suspension under this Schedule 2.2(b) shall be exercised by the TTC in good faith and as a last resort, and shall only occur if:
 - (i) Metrolinx has been given ample opportunity to remedy any defects in implementation or operation;
 - (ii) the TTC has cooperated, if applicable, with Metrolinx in attempting to resolve the issues giving rise to TTC's right to suspend;
 - (iii) exceeding such criteria and failure thresholds is not due to a TTC Dependency; and
 - (iv) exceeding such criteria and failure thresholds is not the result of Force Majeure.
- (c) Any suspension shall not affect such portion of the Operational Services as have not exceeded the criteria and failure thresholds. The suspension shall only be effective for such period of time as is required to make the suspended portions of the system operational to the satisfaction of the TTC, acting reasonably.

2. Orderly Suspension

(a) In connection with the exercise of TTC's right to suspend the Operational Services, TTC shall cooperate in good faith with Metrolinx to implement the suspension in a manner which reduces the disruption that will be caused to the Provincial PRESTO Service. Metrolinx and TTC shall work together to develop a suspension plan and timeline setting forth the respective tasks to be accomplished by each Party in connection with the orderly suspension and a schedule pursuant to which the tasks are to be completed; (b) For so long as the suspension remains in effect, Metrolinx shall continue to provide the Managed Services other than the Operational Services that have been suspended hereunder, and shall continue to collect its fees for such continued Managed Services in accordance with the terms hereof.

SCHEDULE 2.5 SERVICE LEVEL AGREEMENTS AND APPROPRIATE COMPENSATION

To be attached once settled by the Parties and once approval has been received under section 28 of the *Financial Administration Act*.

SCHEDULE 2.6 INCIDENT/PROBLEM MANAGEMENT PROCEDURE

The PRESTO NG Incident/Problem Management Procedure as outlined in this Schedule 2.6 will be used, where applicable, in conjunction with the SLA Incident process as set out in Schedule 2.2 attached to this Operational Services Agreement.

IT Service Management

The Metrolinx PRESTO operations team receives and processes service requests, incidents and problems which originate from three (3) sources – Cardholders, SPs and other automated and manual events. Metrolinx leverages IT service management to govern the delivery of support services. Two core processes implemented are defined and described under the Incident and Problem Management sections below:

- 1. Incident Management (focus on service continuity and restoration); and
- 2. Problem Management (focus on root cause and prevention of known error).

This section describes Metrolinx's PRESTO Incident/Problem Management Procedure. It describes the core processes and activities involved. The implementation of the PRESTO Incident/Problem Management Procedure follows <u>standard industry</u> best practices and includes the following phases:

- 1. Incident Detection and Recording
- 2. Classification and Initial Support
- 3. Investigation and Diagnosis
- 4. Resolution and Recovery
- 5. Incident Closure

The PRESTO Incident/Problem Management Procedure is used by Metrolinx's PRESTO Service Desk to restore services as soon as possible following an incident.

Incident Management

An "**Incident**" is defined as any event which is not part of the standard operation of the Operational Services and which causes, or may cause, an interruption to, or a reduction in, the quality of such services. Incidents may be detected by PRESTO NG support stakeholders or monitoring tools.

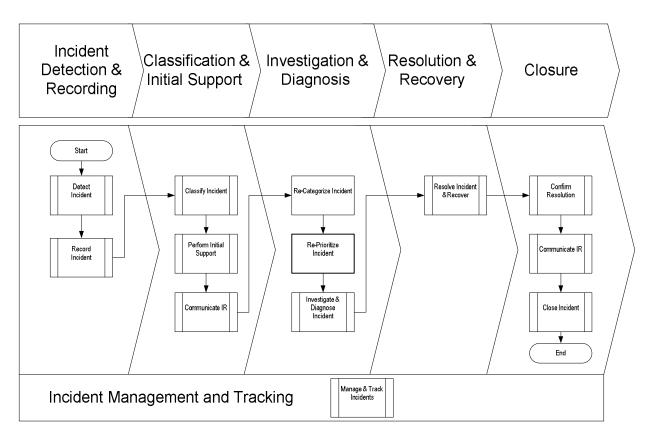


Figure 1 – Incident Management Process

An incident may cause, or have the potential to cause, interruption or degradation in business operations or result in deviation from expected Service Levels. These incidents may involve the Central System, network, areas of the infrastructure, devices, and Metrolinx business aspects.

Metrolinx's PRESTO Incident Management Process will handle any of the following types of incidents:

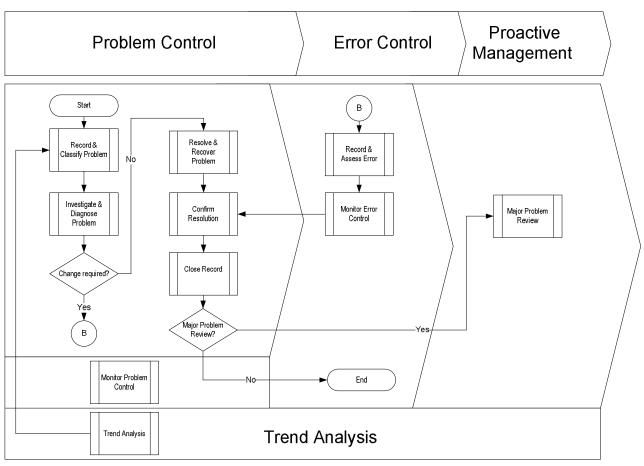
- An operational event detected by monitoring tools;
- An operational event reported by an SP;
- An operational event detected by a Metrolinx supplier;
- An Incident assigned from another Metrolinx and supplier support team structure;

- Work request for information or service that is not part of day to day operations activity;
- Requests for user management updates or password resets; or
- Requests for 1st line maintenance support and on-call maintenance.

Problem Management

"Problem Management" is the activity of minimizing the adverse impact of incidents and problems on the business that is caused within the IT infrastructure, and to prevent recurrence of incidents related to these errors. In order to achieve this goal, Problem Management seeks to get to the root cause of incidents and then initiate actions to improve or correct the situation. The reactive aspect of Problem Management is concerned with solving problems in response to one or more incidents. Proactive Problem Management is concerned with identifying and solving problems and known errors before incidents occur in the first place.

Figure 2 – Metrolinx's PRESTO Problem Management Process



The objectives of the Problem Management process are:

- Identifying the root cause of incidents;
- Identifying known errors and their permanent fixes and/or temporary workarounds, associated with incidents;
- Tracking and maintaining relationships between known errors and existing incidents; and
- Identifying problem trends to assess the performance of the Problem Management process and the quality of PRESTO operations IT services.

Provincial PRESTO Service Priority Definitions

Below is an industry-standard guideline of an Incident Priority matrix. This matrix is not definitive and is subject to the finalized SLA.

Priority Description

1 – Critical*	Affected System Availability, Customers and Financial Integrity System failure or data integrity issues. Devices / SPOS not able to service fare card holders. Restoration of service and permanent solution is required as soon as possible.							
	 Equipment determined not be operational and requires replacement 							
	• Customer-facing devices							
	• Data Processing systems (central/station processing servers or data concentrator servers)							
	 Critical or multiple sites down (e.g., Union Station) 							
	 Widespread station outage / requires Service Provider's support monitoring to verify equipment has restarted correctly and is working after outage 							
	 Safety-related situation affecting one or more riders / workers 							
	 Possible security situation involving fraudulent use of cards, data, or equipment. 							
2 – High Priority	IMMEDIATE RESPONSE & RESTORE – ALL HANDS ON DECK. Affected system functionality and stability Reports of intermittent technical issues to critical parts of the system or incorrect transactions. Controlling measures may be required to mitigate risks to system availability and integrity.							
	 Service degradation affecting localized sites or devices 							
	 Intermittent problems with device connectivity to PRESTO NG 							
	 Transactions unable to be resolved by exception handling processes; affecting settlement and file transfers to SPs 							
	 Loss of services not mission-critical 							
3 – Medium Priority	RESPONSE & RESTORE AS QUICKLY AS POSSIBLE – WITHIN ONE BUSINESS DAY Affected System Functionality (non-critical) Affected system functionality but not affecting critical parts of the system. Reports of batch tasks not completing and explainable incorrect transactions. Standard workarounds may be required to resolve incident.							
	 Operational Services (system + processes) office procedures not performed (e.g., failure to receive a file, issue with generating a report) 							
	 Operations maintenance tasks not completed during normal maintenance windows (server monitoring, data backups) 							
4 – Low Priority / Service Requests	RESPONSE & RESTORE WITHIN 5 BUSINESS DAYS Standard and Ad Hoc Work Requests Requests from SPs that are not part of the normal services / outputs.							
	 Ad hoc reporting 							
	 Management reports 							
	 New reports - do not currently exist 							
	RESPOND WITHIN REASONABLE EFFORTS OR BUSINESS NEED							

SCHEDULE 3.1 TTC DEPENDENCIES (OPERATIONAL)

Together with the TTC roles and responsibilities set out in the Master Agreement, Schedule 2.1(b) (RASCI for PRESTO System Development) and Schedule 2.1(c) (RASCI for Civil Works Requirements) to the Project Management Agreement, and Schedule 3.2(b) (RASCI - PRESTO System Operations) to this Operational Services Agreement, the following are TTC Dependencies in respect of the Operational Services:

- o To provide to Metrolinx a Designated TTC Service Management Contact(s) for service management items and issue resolution;
- o To provide to Metrolinx the name and contact information for a TTC Call Centre Contact(s) for coordinating customer care items;
- o To provide necessary power and access to communications demarcation point for PRESTO NG devices pursuant to the Project Management Agreement;
- o To provide to Metrolinx a TTC contact(s) for coordination/approval of maintenance and change window requirements. When upgrades or system changes are scheduled to occur, this contact must have the authority to approve the maintenance and the timing of the change or upgrade;
- o TTC will provide Metrolinx with complete and up-to-date operational information, including fare rules, transfer rules, business rules, user rights management (e.g. a list of the TTC staff authorized to do various actions in the system, user credentials etc.) and such other information as agreed to by the Parties. TTC shall provide such operational information in an agreed-upon format and configuration; and
- o Timely response to reasonable requests for information or approval.

SCHEDULE 3.2(B) RASCI - PRESTO SYSTEM OPERATIONS

Roles and Responsibilities for PRESTO System Operations

Definitions

For the purposes of this Schedule 3.2(b), the following definitions are used. The roles and responsibilities have been cast in a standard RASCI notation where for each activity stated, both TTC and PRESTO roles are defined. Specifically the following Role definitions are used:

Role	Description					
Responsible	The Party that is identified as being responsible shall carry out the work/activity.					
Accountable	The Party that is identified as being accountable shall delegate the work to the party that is identified as being Responsible but shall remain Accountable for the correct and thorough completion of the activity.					
Consulted	The Party that is identified as being consulted must be consulted before a decision is taken. Consultation is a two way conversation but the consent of the Consulted Party is not required.					
Informed	The Party that is identified as being informed must be updated on progress of an activity. This is a one way conversation and the consent of the Informed Party is not required.					
Support	The Party that is identified as supporting the activity is to be involved, in some capacity in the activity. The degree of involvement will be mutually agreed upon by all Parties. Support includes both Consulted and Informed.					
Mutual Agreement	Where an activity is said to require Mutual Agreement, the Parties involved (TTC and PRESTO) must agree on the result of the activity and agree to proceed to the next step (i.e. it represents a gate in the process). Mutual Agreement must be documented.					
Sign Off	Where an activity is said to require Sign-Off, an Acceptance/Approval of a completed (end state) activity or deliverable is required from the Party having Sign Off authority. Sign Off must be documented.					

RASCI for the PRESTO System Operations

	of the TRESTO System Operatio					
		PRESTO		Mutual		
ID	Operations Phase - Activity	Role	TTC Role	Agreement	TTC BR Reference	Details
1.0	Field System - Electronic Fare Rev	venue Collection	/ Processing			
1.1	Collection of fare data (i.e. taps) processed through PRESTO Equipment and Services from all electronic fare products.	Responsible, Accountable	Informed			Fare data includes all transfers, fare payment, sales, etc.
1.2	 Processing of all electronic fares (i.e. all taps at PRESTO Equipment) electronic payment transactions (purchases, refunds etc.) from all PRESTO Equipment and Services 	Responsible, Accountable	Informed			
1.3	 Reporting of all electronic fares (i.e. all taps at PRESTO Equipment) electronic payment transactions (purchases, refunds etc.) from all PRESTO and Services 	Responsible, Accountable	Informed		TTC BR Schedule C	
2.0	Field System - Maintenance and R	epair				
2.1	Development of a Maintenance Plan	Responsible, Accountable	Support		Sections: Business Intelligence: BIN-XXX and Data Management: DMG-XXX	The Maintenance Plan includes all processes, protocols, procedures etc. (e.g. advising TTC when on TTC Property).
2.2	Acceptance of Maintenance Plan			✓	Field System - Maintenance and Repair	
2.3	Perform Finger Tip Maintenance including but not limited to equipment resets, power recycling, reconfigurations etc. on all	Responsible, Accountable	Informed			TTC is informed of any and all Service and Maintenance activities. TTC is alerted immediately if service and /or maintenance affect TTC operations.

	PRESTO Equipment and Services			
2.4	Perform Preventative Maintenance on all PRESTO Equipment and Services	Responsible, Accountable	Informed	TTC is informed of any and all Service and Maintenance activities. TTC is alerted immediately if service and /or maintenance affect TTC operations.
2.5	Perform Corrective Maintenance on all PRESTO Equipment and Services	Responsible, Accountable	Informed	TTC is informed of any and all Service and Maintenance activities. TTC is alerted immediately if service and /or maintenance affect TTC operations.
2.6	Perform PRESTO Equipment and Services Swap Outs, Installations	Responsible, Accountable	Informed	TTC is informed of any and all Service and Maintenance activates. TTC is alerted immediately if service and /or maintenance affect TTC operations.
2.7	Perform Service / Maintenance (Finger Tip, Preventative, Corrective, Replacement etc.) of Fareboxes, Turnstiles, Faregates and all other TTC Equipment.	Informed	Responsible, Accountable	PRESTO informed when the servicing/maintenance may affe PRESTO Equipment
2.8	 Roles, Responsibilities, Processes and Services for a Maintenance Management System as per TTC Business Requirements. This includes a Device Management and Monitoring System; a Work Order system; 	Responsible, Accountable	Informed	
	 an Application and Services Management and Monitoring System; an Inventory System; an Ordering System; 			

	• a Problem Incident and					
	Management System; and					
	• a Payment Device					
	Management System.					
2.9	Roles, Responsibilities, Processes and Services for Maintenance of Field System as per TTC Business Requirements	Responsible, Accountable	Informed			
2.10	Determination of Maintenance and Servicing of PRESTO-TTC Device Interface	Responsible, Accountable	Informed, Consulted		TTC BR Schedule C	PRESTO is responsible for determining whether or not the PRESTO-TTC Device interface (e.g. Turnstile Interface Board and PRESTO Reader Assembly) requires servicing / maintenance due to PRESTO incidents or PRESTO service / device upgrades. (i.e. First Level Maintenance)
2.11	Servicing / Maintenance of PRESTO-TTC Device Interface			√	Services	Servicing / Maintenance dependant on findings of First Level Maintenance. PRESTO and TTC are responsible and accountable for their own equipment and mutually responsible for the PRESTO-TTC Devices working together.
3.0	Field System - Revenue Servicing					
3.1	Development of a Revenue Servicing Plan	Responsible, Accountable	Informed, Consulted		Requirements: FSM-XXX	
3.2	Agreement of a Revenue Servicing Plan			✓	TTC BR Schedule C	
3.3	Perform Revenue Servicing of all PRESTO Equipment (e.g. replenishment of PRESTO Equipment including load paper, PRESTO Media Stock, LUMs, Change, bills etc.)	Responsible, Accountable	Informed		Services	
3.4	Roles, Responsibilities, Processes and Services for Revenue Servicing of Field System as per TTC Business Requirements	Responsible, Accountable	Informed		Section: Field System Management	

4.0	Field System - Revenue Collection					
4.1	Development of a Revenue Collection Plan	Responsible, Accountable	Informed, Consulted			
4.2	Agreement of a Revenue Collection Plan			✓		
4.3	 Perform Revenue Collection (Bills/Coins) of all PRESTO Equipment including Removing currency, cash and bills Deposit currency in portable vault and Deliver currency for Processing 	Responsible, Accountable	Informed		Field System - Revenue Servicing	
4.4	Processing of Revenue (Bills/Coins) collected from PRESTO Equipment	Responsible, Accountable	Informed			
4.5	Collection of all cash fares placed in a TTC farebox.		Responsible, Accountable			
4.6	Roles, Responsibilities, Processes and Services for Revenue Collection of Field System as per TTC Business Requirements	Responsible, Accountable	Informed			
4.7	Collection of Tokens in SRVM during the Transition Phase	Responsible, Accountable	Support		TTC BR Schedule C	
5.0	System					· · · · · · · · · · · · · · · · · · ·
5.1	All PRESTO system interfaces (e.g. SP Website, Data Mart, Business Intelligence, etc.) will be	Responsible, Accountable	Informed, Consulted		Section: Field System Management	

	operated, serviced, refreshed and maintained by PRESTO.				
6.0	Customer Management		I		
6.1	Providing TTC customer support through the PRESTO system communication channels i.e. web, call centre, IVR, mail, etc.	Responsible, Accountable	Informed, Consulted	Field System - Revenue Collection	
6.2	Management of customer account activities including media replacement, processing refunds, sales, reloads, reporting/recording lost or stolen media, registrations, customer related PRESTO complaints and commendations.	Responsible, Accountable	Support		TTC is involved in all Customer activities associated with the TTC Customer Service Centre. (e.g. Refunds, complaints etc.). PRESTO can consult and/or involve TTC for TTC related Customer issues.
6.3	Roles, Responsibilities, Processes and Services for Customer Management as per TTC Business Requirements	Responsible, Accountable	Informed		
7.0	Business Intelligence				
7.1	Timely and accurate reporting of mutually agreed to TTC information elements	Responsible, Accountable	Informed		
7.2	Roles, Responsibilities, Processes and Services associated with the Provision, Installation, Operation and Maintenance of a Business Intelligence System / Service as per TTC Business Requirements	Responsible, Accountable	Informed		

8.0	Data Management							
8.1	Ensure Privacy of all information collected through the PRESTO system	Responsible, Accountable	Informed		Services			
8.2	Development of Data Universe	Responsible, Accountable	Support		Section: Field System Management			
8.3	Agreement on Data Universe			✓	Requirements: FSM-XXX			
8.4	Roles, Responsibilities, Processes and Services associated with the Provision, Installation, Operation and Maintenance of a Data Mart for TTC PRESTO Data as per TTC Business Requirements	Responsible, Accountable	Informed					
9.0								
9.1	Development of TTC Fare Policies / Rules / Pricing / Range of Fare Products	Informed, Consulted	Responsible, Accountable					
9.2	Development of a process for fare policy and fare rule changes.	Responsible, Accountable	Support		Customer Management			
9.3	Agreement of Process for fare policy and fare rule changes			✓				
9.4	Introducing new TTC Fare Products	Informed, Consulted	Responsible, Accountable					
9.5	Defining Fare Groups as outlined in TTC Business Requirements	Informed, Consulted	Responsible, Accountable		TTC BR Schedule C			
9.6	Development of a Process for Fare Group Management	Responsible, Accountable	Support		Services			

9.7	Agreement of a Process for Fare Group Management			✓	Section: Customer Management
9.8	Enabling Managing Fare Groups as outlined in TTC Business Requirements	Responsible, Accountable	Informed, Consulted		Requirements: CMG-XXX
9.9	Roles, Responsibilities, Processes and Services associated with TTC Fare Rules and Policy as per TTC Business Requirements	Informed, Consulted	Responsible, Accountable		Business Intelligence
10.0	Revenue Management				
10.1	Provide revenue transaction information (sales and usage) and financial clearing services as per TTC Business Requirements	Responsible, Accountable	Informed		TTC BR Schedule C
10.2	Development of an Exception Processing Method	Responsible, Accountable	Support		Services
10.3	Agreement of Exception Processing Method			✓	Section: Business Intelligence
	Roles, Responsibilities, Processes and Services associated with the PRESTO System Revenue Management as per TTC Business Requirements	Responsible, Accountable	Informed		Requirements: BIN-XXX
11.0	System Management				
11.1	Risk Mitigation for all Services, Systems, Devices, Networks etc. in the PRESTO System	Responsible, Accountable	Informed		

11.2	Roles and Responsibilities associated with the PRESTO System Fraud Detection and Analysis as per TTC Business Requirements.	Responsible, Accountable	Support		
11.3	Roles, Responsibilities, Processes and Services associated with the PRESTO System Audit as per TTC Business Requirements.	Responsible, Accountable	Support		
12.0	Order and Distribution Manageme	ent			
12.1	Managing, Operating, Maintaining the PRESTO media ordering / management / delivery process.	Responsible, Accountable	Informed	Services	
12.2	Placing orders/managing TTC Private Fare Cards.	Support	Responsible, Accountable	Section: Data Management	
12.3	Placing orders/managing the TTC's "in-school", community centre program.	Support	Responsible, Accountable	Requirements: DMG-XXX	
12.4	Defining the TTC VIP (Volume Incentive Program) and MDP (Metropass Discount Program).	Informed, Consulted	Responsible, Accountable	Fare Management	
12.5	Enabling, Managing, Placing orders/managing the TTC VIP (Volume Incentive Program) and MDP (Metropass Discount Program).	Responsible, Accountable	Support		
12.6	Ordering, distribution, management, and maintaining of the third party ticket agent network.	Responsible, Accountable	Informed, Consulted		
12.7	Card distribution and collection mechanisms for all PRESTO distribution channels	Responsible, Accountable	Informed, Consulted		

12.8 13.0	Roles, Responsibilities, Processes and Services associated with Order and Distribution Management as per TTC Business Requirements. Training	Responsible, Accountable	Informed, Consulted			
13.1	Develop Training Plan	Responsible, Accountable	Support			
13.2	Agreement of Training Plan			✓		
13.3	Roles, Responsibilities, Processes and Services in accordance with the Training Plan as per TTC Business Requirements	Responsible, Accountable	Informed, Consulted			
14.0	Performance Management					
14.1	Performance Management and Monitoring	Responsible, Accountable	Informed, Consulted		Services	
14.2	and Services associated with maintaining Performance Levels as per TTC Business Requirements and mutually agreed upon Performance Levels	Responsible, Accountable	Informed, Consulted		Section: Fare Management	
15.0	PRESTO Open Payments					
15.1	Roles, Responsibilities, Processes and Services associated with PRESTO Open Payments as per TTC Business Requirements.	Responsible, Accountable	Informed, Consulted		Revenue Management	

ATTACHMENT A DESCRIPTION OF PRESTO EQUIPMENT

PRESTO Devices & Equipment

Metrolinx shall provide all PRESTO Equipment and Services necessary to provide the Managed Services in accordance with TTC Business Requirements. PRESTO Equipment and Services **excludes** the following:

- (a) TTC turnstiles in subway except as the Parties may agree on a case-by-case basis;
- (b) Provision or modification of TTC turnstile interface boards required for TTC subway turnstiles;
- (c) Non-PRESTO devices used for non-PRESTO fare media and legacy TTC fare media, including Token Acceptors (as defined in the TTC Business Requirements), ticket validation equipment for non-PRESTO fare media, ticket printers for non-PRESTO fare media;
- (d) Devices and communications systems on TTC surface vehicles, except those for the dedicated and exclusive use of the PRESTO devices; and
- (e) Parking gates for TTC parking lots.

PRESTO Equipment and Services quantities

- Quantities can be based on estimates provided by TTC
- Quantities, including spares, will be based on TTC Business Requirements, , concept of operations and business demands and Performance Requirements
- Metrolinx will work with TTC to provide device quantities required to support the TTC customer and operational needs

Device Ownership

- Metrolinx will maintain ownership of PRESTO Equipment and Services.
- TTC will maintain ownership of TTC devices and equipment.

Device Maintenance & Support

• Maintenance and support shall be provided in accordance with Schedule 3.2(b) (RASCI - PRESTO System Operations) of this Operational Services Agreement.

ATTACHMENT B BUSINESS CONTINUITY PLAN AND DISASTER RECOVERY

See Master Agreement Attachment 4.